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D.3.3.2 PUBLIC FUNDING SCREENING SERVICE AND TESTING REPORT

Work Package 3	**Final version**
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Contents

1. Introduction

Small and Medium Enterprises (SMEs) are the backbones of most modern economies by generating employment and advanced local technologies. Despite SMEs' importance in numbers and employment, their performance indicators do not live to society's expectations. This happens due to many factors, out of which one of the most notable are financial constraints.

Raising and acquiring the necessary financial resources presents the biggest challenge for most companies. These difficulties are more pressing for smaller companies. In fact, the smaller a company is the less access to stable and sufficient funding it has. SMEs can access funds from private and public streams through direct investment, lending, debt or equity financing, and grants, but their availability and accessibility prove to be an issue for the companies. This leads to stagnation of the growth and competitiveness of companies, as well as negative effects on their internationalization possibilities, leaving most of them isolated in their local markets. These consequences are most noticeable in new technologies, which present new products and services that are not well known and used among consumers.

Public funding for SMEs presents an untapped potential that can help them overcome their growth issues and help position them on local and international markets. Hence, public funding for SMEs has been addressed lately by most global development organization and presents one of the subjects of the Green mind project.

a. The Green Mind Project

The Green Mind project transnational challenge is the development of economic competitiveness and innovation in the green and smart mobility industry, by strengthening regional and transnational cooperation between businesses, research bodies and authorities. In this project 8 MED territorial contexts, Emilia Romagna, Central Macedonia, Andalucía, Occitanie, Jadranska Hravtska, County of Istria, Sarajevo, and Vzhonda Slovenija, cooperate for the purposes of the project.

The objective of the Green mind is to strengthen the transnational activities of clusters and agencies to support SMEs systems in exploiting the market opportunities of the rising demand for green & smart mobility products and services. More in detail, Green mind aims at:

- testing new market intelligence, public funding screening, B2B matchmaking services for SMEs;
- building a transferable model of the tested services for clusters and agencies;
- setting up a transnational innovation network involving authorities, business and research;
- implementing a transfer programme targeted to clusters and agencies to foster their transnational activities; and
- delivering a policy support programme to mainstream the project results based on the Smart Specialization Strategies of the involved regions

More specifically, Green mind focuses on green and smart mobility (GSM) industry and more specifically the areas of:

- TRANSPORT INFRASTRUCTURE / INFRASTRUCTURE TECHNOLOGIES are support systems for all types of transportation. The traffic infrastructure of an area consists of all roads, railways, waterways, airports, sea streams, pipelines and telecommunications (Biehl, 1993; in Rietveld and Bruinsma, 1998) and their related services (i.e. telematics systems, detection systems, traffic signals , smart bus stations, ticketing machines and ticketing machines, automated payment machines, tollbooths, electric charging stations, refueling facilities, etc.).

- ENVIRONMENTALLY ACCEPTABLE (CLEAN) FUELS are biofuels, hydrogen, natural gas (LNG, CNG) alternative fuels or environmentally friendly fuels, used as a substitute for fossil fuels (and other greenhouse gas) because they generally produce less pollution (Gupta et al ., 2010). They are usually produced from renewable energy sources or from waste treatment, leading to low carbon footprint.

- LOW CARBON ECONOMY refers to various industrial fields such as production, processing, construction, energy and transport, which by their activity do not increase the production of greenhouse gases or contribute to their reduction (European Commission, 2018).

- GREEN / ECO-FRIENDLY OR CLEAN VEHICLES are clean fuel vehicles and are therefore more environmentally friendly than vehicles that occupy major production trends (internal combustion engine vehicles). A prominent example is electric vehicles (hybrid electric, with high-capacity electric batteries, long-life electric batteries) (Mazur et al., 2015).

- INTELLIGENT TRANSPORT SYSTEMs (ITS) consists of a set of integrated solutions covering a wide range of potential applications of information and computer technologies in road and transport networks, to improve transport efficiency and reduce all dilemmas (automatic traffic management, smart traffic lights, congestion management, ticketing systems, information systems about travelers, etc.).

- COOPERATIVE ITS (C-ITS) are intelligent transport systems that „allow traffic users and traffic managers to share information and use it to coordinate their activities" as they improve "communication between vehicles, elements of traffic infrastructure and other road users" and aim at the full integration of the transportation system.

- MOBILITY AS A SERVICE (MaaS) OR TRANSPORT AS A SERVICE (TaaS) refers to the transition from privately owned transportation vehicles to integrated, mobility technology services. For example, it could be "a digital platform that integrates travel planning, booking, electronic ticket sales and payment services in all modes of transport," Last mile delivery - "Last mile delivery" and associated systems (Goodall et al., 2017, s .114).

- AUTOMATED VEHICLES are the modern concept of vehicles that, through their own sensor system, observe the environment, manage and make decisions using advanced algorithms, more or less based on artificial intelligence technologies, thus replacing the classic vehicle with the driver. This sector includes the digital sector (interconnected vehicles V2V, etc.), autonomous cars, rolling stock - car pools, and smart driving systems such as passenger car related systems (i.e., smart navigation, smart parking or travel management, etc.).

- PLANING AND EDCATION IN MOBILITY SECTOR represents the sector of small and medium-sized enterprises (SMEs) engaged in geographic mobility management, urban planning, development of mobility plans and development of GIS digital systems, development of embedded systems and sustainable transport systems, and education in these fields.

b. Purpose of the Testing Work Package

The aim of The Testing Work Package (WP3) is to shape and demonstrate new services for SMEs active in the green and smart mobility industry in the MED area. These services will benefit SMEs in multiple levels, as they intend to support their competitiveness, innovation capacities, and international visibility at the same time.

WP3 is responsible for the conceptualization, development, implementation, and evaluation of Green-mind's most important outputs, the service pilots, the model, and the transnational network. This package consists of five distinct activities. These are:

A.3.1 Methodology for Pilots Implementation - refers to developing structured guidelines for the set-up, running, and coordination of the pilot activities,

A.3.2 Pilots Preparation and Planning – is formulation of the necessary knowledge background upon which Green-mind will develop its processes, which includes exchanging information about experience in different regions, identification of the needs of the SMEs, analysis of the market, identification existing public funding and matching opportunities, and beginning of involving the necessary stakeholders,

A.3.3 Testing SMEs Services – SME support plan is tested in each country in close collaboration with selected green and smart mobility SMEs and a transnational innovation networked is formulated,

A.3.4 Pilots Evaluation and Service Model – the impact of services is evaluated, in terms of produced results, and used for constructing a transferable model for general use in the MED and EU areas,

A.3.5 Green-mind Transnational Innovation Network - refers to online and physical events in regards to the transnational network and the exchange of information between project partners and stakeholders.

Upon the completion of WP3, three main outputs should be delivered. These outputs are:

Output 3.1: the delivery of three types of services to 200 hundred MED SMEs

Output 3.2: the development of a transferable model of transnational services for SMEs

Output 3.3: the creation of a transnational innovation network for SMEs

c. Scope of Pilot Testing

Testing of the pilot services (A3.3) is a crucial process to the development of the project as it tests the services that combined will form the transferable service model (D3.4.4). During pilot testing the partners provide the services to MED SMEs in fields of green and smart mobility industry. A3.3 draws information from Pilots preparation and planning (A3.2) to develop services in three core business areas: market intelligence, B2B matching and public funding screening.

To this end, A3.3 consists of five deliverables. The former three refer to the testing of selected actions; the fourth refers to the capitalization of the pilot testing processes and knowledge; while the latter deliverable is about the formalization of a transnational network that connects the SMEs that engaged at local level across the participating countries. These deliverables are the following:

D3.3.1 Market intelligence service and testing report

D3.3.2 Public funding screening service and testing report

D3.3.3 B2B matching service and testing report

D3.3.4 Local green & smart mobility stakeholders' capitalization

D3.3.5 Formalization of the "green mind" transnational innovation network in green & smart mobility

In every step of the process, each action for each service is developed and tested in all partner countries in close collaboration with selected GSM SMEs.

d. Focus of Deliverable 3.3.2

The D.3.3.2 deliverable focuses on presenting the structure and results of the public funding screening pilot service that each partner provided in their territorial contexts. The pilots consisted of specific steps and tools that aim at enhancing the competitive and innovation capabilities of SMEs. This document presents the details of each pilot activity, their scope, topics and outcomes, as well as impact on beneficiary SMEs. Finally, it includes additional information in the form of photos, links, agendas, etc.

e. Document's targeted audience

Public funding screening pilot service and its testing results focus on the following audiences and the accomplishment of the respective relevant objectives:

- Green-mind consortium partners: as a tool for the optimal coordination and proper development of all pilot related activities in each Green-mind region,
- Stakeholders, and more specifically the SMEs: as a guide through-out the implementation of pilot development and testing.

f. Document structure

After the introductory part, the comparison of the pilot services and detailed description of pilot and activities implemented among MED region partners is presented. The comparison chapter consists of methodology and three different tables in which key information about each pilot service is presented per partner. After the comparison, in each sub-section, the pilot service of each partner is described and action report is presented.

The description includes the following information:

1. The name of the pilot (if there is one)
2. How the pilot was developed as it is (i.e. refer to market analysis desk research etc.)?
3. How and why the specific actions were chosen?
4. How and why the SMEs were identified and engaged?
5. A list of engaged SMEs, the sector they operate in and a short description of their activities
6. Timeline
7. A list of the actions that have been taken during the service pilot
8. Other information that is relevant.

Action reports provide descriptions (text, photos, links, highlights) for each action(s) per partner, delivered or planned to be deliver. The action reports consist of the following:

1. Brief presentation of the action, the topic(s) covered and the participating SMEs
2. Description when and where the action(s) was implemented (time frame, location)
3. Description of the scope and objectives of the action(s) regarding the project and the participating SMEs
4. Description of interconnections and interrelations between this action and other actions (if there are any).

2. The Pilot Comparison Tables

The comparative analysis of the pilot services for public funding screening aims to cover all of the key information and impacts of the implemented pilots. Thus, the analysis is divided into two segments.

The first segment of the comparison analysis aims to answer to the questions that cover the compatibility of pilot services with suggested content of pilot services defined in the methodology for pilot service implementation and testing (D.3.1.1):

- What is Public Funding Screening?
- How an SME can benefit from public funding?
- Where can an SME search for opportunities for public funding?
- How to find public funding screening sources and initiatives?
- Are the identified funding opportunities relevant to SMEs operations and geographical areas?
- Are the specific prerequisites of these opportunities identified?
- Are SMEs enrolled into specific mailing lists and newsletters?
- Did the pilot connect SMEs with other stakeholders?

The answers to these questions have been in given in the table, indicated with tick and cross symbols. The tick symbol indicates that the pilot service has successfully covered the suggested segment. The cross symbol indicates that the observed pilot service hasn't included this segment, due to results of preliminary needs assessment that showed the segment won't have the wanted effect on the SMEs or due to external factors that project can't influence.

The second segment of comparison analysis is focused on assessment of overall pilot implementation and achieved results in each partner region, covering the following:

- Geographical relevancy: local (regional), national (country level), European (including MED area)
- Industry relevancy: Which of above-mentioned GSM sectors does the pilot service cover
- Number of actions: Number of activities within pilot service
- Type of action(s): Activities are grouped into transfer of know-how, transfer of information, advisory and assistance.
- Number of participants per action: Indicates the number of beneficiaries per each action taken within pilot service per region.
- Short description of actions: Gives out details about the content of each pilot action and activities conducted within.
- Outputs: Final products of each of the actions per pilot service
- Impact on SMEs: Definition of influence on SMEs, in terms of accessing the funds, applying and using.
- Connection with other pilot services: Defines if the action within this pilot is connected to any other pilot service; for example, a workshop can be used for both public funding screening and market intelligence pilot service.

In the following tables are presented the results of comparison analysis.

Table 1: Comparison of pilot services based on D 3.3.1.

MED region / Questions that pilot answers:	BIH	CRO (IDA)	CRO (SDC)	FR	GR	IT	SL	SP
What is Public Funding Screening?	✓	✓	✓	✓	✓	✓	✓	✓
How an SME can benefit from public funding?	✓	✓	✓	✓	✓	✓	✓	✓
Where can an SME search for opportunities for public funding?	✓	✓	✓	✓	✓	✓	✓	✓
How to find public funding screening sources and initiatives?	✓	✓	✓	✓	✓	✓	✓	✓
Are the identified funding opportunities relevant to SMEs operations and geographical areas?	✓	✓	✓	✓	✓	✓	✓	✓
Are the specific prerequisites of these opportunities identified?	✓	✓	✓	✓	✓	✓	✓	✓
Are SMEs enrolled into specific mailing lists and newsletters?	✗	✗	✗	✗	✓	✗	✓	✗
Did the pilot connect SMEs with other stakeholders?	✗	✗	✗	✗	✓	✓	✓	✓

Table 2: Comparison of pilot services based on overall pilot implementation and achieved results – BIH, CRO (IDA), CRO (SDC) and FR

MED region	BIH	CRO (IDA)	CRO (SDC)	FR
Geographical relevancy	Local and national	Local and national	Local	Local
Industry relevancy	Relevant to all 9 GSM industry sectors	Relevant to all 9 GSM industry sectors	Relevant to all 9 GSM industry sectors	Relevant to all 9 GSM industry sectors
Number of actions	2 actions	2 actions	1 action	3 actions
Type of actions	1. transfer of know-how 2. transfer of information and advisory	1. transfer of information 2. advisory	1. transfer of information and advisory	1. advisory 2. transfer of information 3. transfer of know-how
Number of participants per action	1. Yet to be determined 2. 9 SMEs	1. 6 SMEs 2. 6 SMEs	1. 7 SMEs	1. 5 SMEs 2. 15 SMEs 3. 6 SMEs
Short description of actions	1. Specialized practical education for writing project proposals based on LFA and PCM methodology 2. Written information about EU funds and workshop – Q&A about funds	1. Research and report on public funding opportunities in EU 2. Workshop for Q&A and information dissemination about public funding opportunities	1. Research and report on public funding opportunities for local micro and SMEs	1. Individual advice about public funding opportunities to SMEs from the T&L sector 2. Presentation of the public funding sources, advantages and inconveniences of different programmes at a workshop 3. Tailored support to some of the most engaged SMEs to create consortia able to apply for calls
Outputs	1. Project Academy 2. Handbook for EU funds	1. Public Funding report for Croatia 2. Workshop on Public funding screening in Croatia	1. Public screening reports for each company and guide called “Sources of Public Funding for	1. Advisory support to 5 SMEs 2. Workshop on Public funding opportunities

			Small and Medium-Sized Enterprises"	3. Technical support on two project applications
Impact on SMEs	• Increased capacities for writing proposals of X SMEs • Informed 9 SMEs about EU funds and produced a Handbook for wider group of SMEs (beneficiaries)	• Informed 6 SMEs about funding opportunities • Created a report valuable and useful for all Croatian SMEs	• Public screening reports for each of seven company • Guide for all local micro and SMEs	• Advisory support on local and national funding opportunities for 5 SMEs • Informed 15 SMEs about funding opportunities • Technical support/improving capacities for project applications
Connection with other pilot services	• Four out of nine SMEs have been part of MI pilot service testing. • Workshop enabled local cooperation and networking • Preparation and presentation workshops for all pilot services have been held jointly allowing transfer of information to wider group of SMEs.	• Workshop enabled local cooperation and networking		• The public funding screening pilot service capitalized on the results from the MI and B2B pilots • The action no.3 enabled local cooperation of SMEs

Table 3: Comparison of pilot services based on overall pilot implementation and achieved results – BIH, CRO (IDA), CRO (SDC) and FR

MED region	GR	IT	SL	SP
Geographical relevancy	Local, national and EU	Local and national	Local and national	Local
Industry relevancy	Relevant to all 9 GSM industry sectors	Relevant to all 9 GSM industry sectors	Relevant to all 9 GSM industry sectors	Relevant to all 9 GSM industry sectors
Number of actions	5 actions	3 actions	3 actions	2 actions

Type of actions	1. transfer of information 2. transfer of know-how 3. advisory 4. transfer of know-how 5. transfer of information	1. assistance 2. assistance 3. transfer of know-how	1. advisory and transfer of information 2. transfer of know-how	1. advisory and transfer of information 2. transfer of information and transfer of know-how
Number of participants per action	1. 15 SMEs 2. 15 SMEs 3. 3 SMEs 4. 10 SMEs 5. 15 SMEs	1. 8 SMEs 2. 4 SME 3. 1 SME	1. 2 SMEs 2. 1 SMEs 3. 2 SMEs	1. 25 and individually 5 SMEs 2. 13 SMEs
Short description of actions	1. Mapping of available funding tools and programs 2. Seminar and training on seeking funding opportunities and partners to form consortiums for call for proposals 3. Administrative support and consulting for a national call for proposals 4. Proposal writing for funding the formation of an innovation cluster on green and smart mobility 5. Presentation of VC funds	1. Presentation of activities of SMEs to external investors 2. Presentation of projects to identified investor 3. Technical support and monitoring of offered innovation and project development	1. Screening public funds and guiding SMEs to utilize them 2. Utilizing Slovenia's Climate Change Fund to transition city passenger transport to low carbon services 3. Public Funding Screening transnational network	1. Advisory support about public funding opportunities to SMEs 2. Workshop on H2020 funding opportunities and application procedure
Outputs	1. List of funding opportunities 2. Seminar and training on Public funding opportunities identification 3. Advisory on project applications 4. Network of enterprises	1. Event for presentation of activities to external investors 2. Contest for presentation of project to identified investor 3. Technical support and monitoring of proposed project	1. Guidelines on Slovenian Eco Fund 2. Guidelines for utilization of Slovenia's Climate Change Fund 3. Transnational Network	1. Dissemination of information on public funding opportunities for 25 SMEs and advisory support on decision making to 5 SMEs

	5. Workshop on VC funds			2. Workshop on H2020 funding opportunities and application procedure to 13 SMEs
Impact on SMEs	• Informing 15 SMEs of funding opportunities • Informing 15 SMEs of tools for identification of funding opportunities • Advisory support on national call for proposals for 3 SMEs • Informed 15 SMEs about funding opportunities • Network of 10 SMEs that will improve networking and cooperation on funding opportunities and enable transfer of know-how • Informing 15 SMEs on available VC funds	• Informing 40 SMEs of opportunity to show-case their activities • Enabling presentation of 8 SMEs activities within GSM sector • Enabling direct pitching of project and ideas for 4 SMEs • Supporting and monitoring development of project for 1 SME • Presented and promoted SMEs in a new market	• Enabling more efficient and effective usage of Slovenian ECO fund • Enabling more efficient and effective usage of Slovenia's Climate Change Fund for transition to low carbon services in passenger transport • Technical support/improving capacities for project applications	• Informed 25 SMEs on public funding opportunities • Advised 5 SMEs on which call for proposals to apply • Informed 13 SMEs about funding opportunities and application procedure for H2020
Connection with other pilot services	• The action no.4 enables networking and cooperation • Other activities improved local cooperation on calls for proposals	• The action enables entering new markets for SMEs and improving their competitiveness	• The action no.3 enables cooperation and networking on calls for proposals	• The public funding screening pilot service enabled establishing cooperation among included SMEs in pilot testing

3. Pilot and Action Description

a. BiH Pilot

Description of the BiH Pilot

The name of the pilot (if there is one)

"Handbook for application to EU funds"

Pilot development

The Public Funding pilot service has been designed taking into account the previous experience of SERDA staff regarding the access to public funding for SMEs; taking into account the difficulties the SMEs have to apply for public funding due mainly to their limited resources more than their innovative capacity. To develop this pilot SERDA has been working with external experts. Sectors related to GSM industry and innovations in BIH were researched (for the first time), their relevance, functioning (whether they exist at all) and impact on the economy of BIH (focus on Canton Sarajevo, but also the rest of the country).

Additionally, from market analysis, analysis of SME needs (produced earlier within the GM project), and sectoral focused research in recognized GSM sectors in BIH, the results from SMEs targeting level of information and use of available EU and regional grants and credits by SMEs in Sarajevo, showed that:

- 76% of companies are not familiar with available grants or loans within the EU and the region,
- 81% of companies do not use sources of grant or credit information and calls within the EU and the region,
- 76% of companies do not possess the needed knowledge to apply for EU and regional calls for funds and projects,
- All companies (100%) agree and see the need to create a guide for grant / fund applications.

How and why the specific actions were chosen

Therefore, the pilot aimed to develop a rich in information catalog (handbook), and consultancy educational service to strengthen SMEs capacities and in second step, facilitate most advanced SMEs to apply for public funds supporting them to turn their ideas (if they have technical-economic viability) into good proposals to be presented to open calls.

SMEs identification and engagement process

This identification process was conducted in three steps:
In the phase of sectorial identification, also were identified all active companies in GSM sectors in BIH (website), circular mailing).
Accessible (contactable) companies were informed of our pilot service development, and interested SMEs get on the wider list (individual invitation).
Upon confirmation of each individual SME from the wider list we concluded list of SMEs that take active part in all three-pilot services testing.

A list of engaged SMEs, the sector they operate in and a short description of their activities

No.	Name	Activity description
1	STEP d.d. Sarajevo	Transport and communications http://www.step.ba/
2	Global GPS BH	Information Technology and Services http://www.global-gps.ba/
3	Centrotrans-Eurolines d.d.	Public Transport Company http://www.centrotrans.com/
4	MABB Solutions_ voznipark.ba	Transport and communications https://voznipark.ba/
5	Udruženje – Centar za edukaciju i podizanje svijesti o potrebi povećanja energetske efikasnosti - ENERGIS	Green and Smart Solutions info@energis.ba
6	Udruženje inžinjera saobraćaja i komunikacija u BiH	Green and Smart Traffic Solutions www.uiskbh.ba
7	NTSI-INSTITUT d.o.o. Sarajevo	Traffic Engineering and Business Consulting https://ntsi-institut.webs.com/
8	Institut za saobraćaj i komunikacije – ISIK	Traffic Engineering and Business Consulting http://www.isik.ba/
9	Razvojni edukativni centar BMT d.o.o.	Education and development; Incubator and small technology park for Smart City
10	Cromex d.o.o.	Design, development and manufacturing fully electric bike, sales and distribution on smaller scale www.cromex.ba
11	MEGAELEKTRA d.o.o.	Consulting services in the field of digital transformation transport sector; digitalisation of transport infrastructure and smart traffic management;
12	Automotive center – Centar za vozila d.o.o. Sarajevo	Vehicle certification, engineering and design in the field of motor vehicles info@automotivecenter.ba
13	Mervik d.o.o Sarajevo	Supervision of the work of vehicles technical inspection stations, engineering and design in the field of motor vehicles info@mervik.ba
14	JP Međunarodni aerodrom Sarajevo	Airtraffic and transportation
15	Eplan d.o.o. Sarajevo	E-bike production info@eplan.ba

Timeline

The pilot service has been developed parallel with other two services, between March and August 2019.

A list of the actions taken during the service pilot

Identification and mapping of GSM ecosystem was carred out by:

-Mapping of the relevant capacities of the innovative supporting organizations;

-Survey of the needs of SMEs in the GSM sectors. Interviews were conducted with previously mapped scientific research organizations, associations, organizations in order to gain insight to their perspective on the green and smart industry of mobility in BIH; 29 SMEs participated in the survey and expressed their readiness to continue cooperating testing phase of the pilot services.

- Two engagement workshop was organized in March and July 2019 where stakeholders from SMEs, academia, authorities and supportive organizations discussed about their needs, priorities and potential synergies. Also, on site visits and online meeting were organized during July and August 2019 (see D3.3.4 for more details).

BiH Action Reports

Action reports delivered

Survey of the needs of SMEs in the GSM sectors.
Interviews were conducted with previously mapped scientific research organizations, associations, organizations in order to gain insight to their perspective on the green and smart industry of mobility in BIH; Upon 1st workshop for stakeholders, 29 SMEs participated in the survey and expressed their readiness to continue cooperating testing phase of the pilot services.
Two engagement workshops were organized in March and July 2019 where stakeholders from SMEs, academia, authorities and supportive organizations discussed about their needs, priorities and potential synergies. The first workshop was held on March 28, 2019 in SERDA premises. During the workshop stakeholders were introduced with results of analysis of the current situation in GSM sector, research results of the needs and capacities of SMSs for innovation and development and innovative services for SMSs (full details in D3.3.4).

The pilot activity has been conducted with the following companies:

- Global GPS BH – Looking for calls for financing innovative solutions
- Udruženje – Centar za edukaciju i podizanje svijesti o potrebi povećanja energetske efikasnosti – ENERGIS - Looking for calls for financing innovative solutions
- Razvojni edukativni centar BMT d.o.o. - Looking for calls for financing innovative solutions
- Cromex d.o.o. - Looking for calls for financing innovative products
- MEGAELEKTRA d.o.o. - Looking for calls for financing innovative products
- Automotive center – Centar za vozila d.o.o. Sarajevo - Looking for calls for financing innovative products
- Mervik d.o.o Sarajevo - Looking for calls for financing innovative products
- JP Međunarodni aerodrom Sarajevo - Looking for calls for financing innovative solutions

- Eplan d.o.o. Sarajevo - Looking for calls for financing innovative products

The pilot testing has been conducted by expert team via meetings 1on1 with the companies, skype conference call and one group discussion at the premises of Westport Consulting d.o.o. Sarajevo. Before these events, the developed Handbook has been distributed to the SMEs, so at the meetings they came with concrete questions and ideas. At the events, we answered their questions and went through the active calls for proposals of EBRD BAS and EU4Buisness – we analysed the application form, requirements, budget and evaluation criteria, and gave out advices for improving their chances for successful application. The representatives of the companies, expressed their lack of available advices on applying to funds and their satisfaction with the events and the Handbook overall. The most notable questions and our answers, Beside Horizon, were on locally active programs:

Questions revolved around Horizon 2020

- What will happen after the Horizon 2020 ends? A new framework program (FP9) is underway, which the EU is actively working on.
- Is there any companies from BiH that have been users of Horizon 2020 funds and could they get in contact with them? I am not sure, You can contact Mr. Ammar Miraščija as the national NCP coordinator to get the info about the companies that have used H 2020 and get their contact info.

Question revolved around EBRD BAS

- How can we apply for EBRD funds? The positive side of EBRDs way of financing projects is the fact that you do not have to wait for a special time call for funding, the so-called call (CALL), and especially in a specific area. You just need to have a project idea and apply to the EBRD Fund website https://www.ebrd.com/ebrd-in-bosnia-and-herzegovina.html. For the project idea you need to fill out the form that is really simple consisting of description of services needed, experience, expertise, timeframe and financial resources needed for implementation. After that we went in detailed through the application form – each line.

Questions regarding EU4Business

- Does the project allow the inclusion of lead applicant or partners staff as experts which will provide services or goods needed for project implementation? The budget for staff costs is limited at 25% and the services and goods are to be provided by exterior experts or companies which are put into the segment 5 of the budget. The role of partners is to contribute to project implementation and not to be treated as subcontractors for services and goods.
- Is the VAT eligible cost in the budget? The applicant and partners, if their project gets approved, will be exempt from VAT payment for costs incurred under the project.
- What supporting documentation do we have to deliver with full applications? For full applications, the supporting documentation is not needed. The supporting documentation listed in segment 2.4. SUBMISSION OF SUPPORTING DOCUMENTS FOR PROVISIONALLY SELECTED APPLICATIONS, will be requested after the evaluation of full applications for applications that have been provisionally selected or placed on the reserve list.
- Could the concept note be modified and how much? The Concept note could be slightly modified when it comes to presented results and activities in sense to clarify them more. For any significant changes (especially changes of the objectives), EU4BUS should be consulted directly. When it comes to budget, there could be modification of 20% up or down from the requested amount.

- Can we change the partnerships? No, the partnership cannot be changed after the concept phase.
- How many SMEs we should have as final beneficiaries? It depends on how many you can influence on. We cannot give more precise reply because we did not read your concept notes.
- What could be used for co-funding costs (cash, in kind, salaries)? Co funding has to be in "real money" (not in kind). The sources of co-funding can be various but it depends on the structure and possibilities of the partnership to provide co-funding costs.

Action reports that are planned to be deliver

Specialized practical education (following handbook) on “How to find appropriate Fund, and turn innovative idea in the Project Proposal”. It will be based on LFA and PCM methodology (widely implemented in EU). SERDA is conducting Project Academy and will include SMEs in one of following five day cycles.
Also for participating SMEs with highly potential ideas and interest to go in process we will provide support through application process within some of a/m interesting programs (all required information will be presented upon fnish).

Briefly present the action, the topic(s) covered and the participating SMEs
Most of events (workshops, presentations, discussions with more SME’ representatives covered multiple service pilots at the same time (a seminar for B2B and Market Intelligence), but also acted as means to a larger outcome.

Describe when and where the action was implemented (time frame, location)
The actions were implemented in the span from first workshop (March), to the finalization of education / support actions (till the end of year)

Describe the scope and objectives of the action regarding the project and the participating SMEs
The key elements of the EU Funds Application Handbook are:
- Information on EU funds, EU objectives and funding mechanisms;
- Establishing a list of EU funds and available programs;

Presentation of key elements of the EU Call for Proposals to fill the application form
During the pilot service testing discussions and visits, together with participating SMEs, we find that, specialized practical education (following handbook) on “How to find appropriate Fund, and turn innovative idea in the Project Proposal”. It will be based on LFA and PCM methodology (widely implemented in EU). SERDA is conducting Project Academy and will include SMEs in one of following five day cycles.
Also for participating SMEs with highly potential ideas and interest to go in process we will provide support through application process.

Describe interconnections and interrelations between this action and other actions (if there are any)
–

b. CRO (IDA) Pilot

Description of the CRO (IDA) Pilot

The main objective of the Green Mind project is to foster the innovation capacities and competitiveness of public and private bodies in the green and smart mobility industry in the MED area. IDA d.o.o. as involved partner developed and tested transnational service – *Public funding* for 6 involved SMEs in Istrian County. Chosen SMEs operate within IT & transport industry:

- Labin 2000 d.o.o.
- Penta d.o.o.
- Ute d.o.o.
- Bazgin d.o.o.
- Infobip d.o.o.
- U-Scoot d.o.o.

Activities that Labin 2000 d.o.o. deals with, and in accordance with the Decision on Communal Activities include maintenance and collection of parking lots: Maintenance and charging of parking lots means maintenance, organization, management, supervision of use and parking charge, and maintenance of cleanliness, horizontal and vertical signaling at the parking lot at which the billing is carried out.

Advertising: Advertising means the installation, maintenance and management of City-owned advertising spots, posters, advertisements and other announcements of information, tourist and other signaling (all but traffic) in the City.

Maintenance of sports facilities owned by the City: Under the maintenance of sports facilities owned by the City, maintenance of lawns of football fields, surrounding green areas and facilities within the playground and sports hall. Vision of Labin d.o.o. is socially responsible city-based company that continuously carries out the established activities by promoting modern and sustainable solutions for the business segments in which it participates - traffic and parking, property management, sports facilities, which results in higher quality of life for all inhabitants of the city of Labin.

PENTA d.o.o., a Croatian IT company was founded in 1990. with primary goal to position itself among the leading companies which are developing people and goods Auto ID systems. Identification is achieved through specific peripheral devices such as barcode readers, magnetic and contactless cards and label readers, fingerprint, or an eye scanner, etc. The development process has been conducted in the direction where PENTA after years of research and advanced technology monitoring has grown into a leading system integrator providing high-quality and socially useful solutions in the area of automatic identification systems such as the time attendance and access control, e-ticketing fare systems, parking management and access control system. Penta produced smart digital parking solution called ''Spark Sense'' as example of new and green technologies in public urban transport.

UTE - ULJANIK TESU ELECTRONICS, is private limited company for the design, manufacture and sale of electric and electronic devices. From 1975. - 1997. the company was presented on the world market as the manufacturer of electric and electronic equipment in the Shipyard Uljanik as a member of the

Electric Machines and Equipment Works. Since 1997 the company has continued its own production activities and it is now an independent private limited company. Main fields involve renewable energy, marine electrical systems, industrial automation, parking machines and e-bikes. UTE in cooperation with Penta d.o.o. from Pula in 2014, developed the brand go2bike. The system is the automatic bicycle rental of simple deployment and mode of use.

Company BAZGIN d.o.o. was founded in 1993. With years of experience in the field of energy, focus is on new technologies, the environment and renewable energy sources. One of the biggest problems today is related to environmental pollution, steady rise in electricity prices and warming up of the atmosphere. With growing problems, the conscience of citizens is growing on "green" technologies, renewable energy sources. Sun's energy is still new, therefore the goal of the company is to help drive the public on the use of renewable energy sources and to increase the energy efficiency of production and energy consumption.

Infobip is an international IT and telecommunications company. Infobip operates one of the world's leading proprietary messaging and communications platforms, designed to connect mobile network operators with enterprises as a Service with private cloud infrastructure and zero-hop connectivity to telecoms globally. Founded by two young developers, Infobip grew into an international business with offices on 6 continents and proprietary, in-house developed communications platform with the capacity to reach 6 billion mobile devices connected to over 800 telecoms networks.

Company U-Scoot designs and manufactures electric scooters with strong lightweight frame using high grade aluminum for the main frame, foot plate and rear forks. The handlebars, stem and front forks are made of carbon fiber. Battery, 36v 10AH lithium battery is fitted inside the foot plate, giving U-Scoot excellent balance and secure storage for the battery and control unit. With this product, company offers the solution to breaking the car's habit, and saving high travel costs by taking care of nature and environment. Business is based on three main factors which include e-scooters to be environmentally friendly which means helping to reduce carbon emission, products are being made to a very high level of engineering standards using the latest high quality components and the new scooter named U-Scoot represents a new interesting mode of transport for life in busy cities.

The study aimed at supporting the County in improving IT and transport sector through:

- *Identification and analysis of previous experience and knowledge of public funding in chosen sectors;*
- Prepared *Public funding screening sources report*;
- *Held workshop on public funding possibilities for stakeholders involved.*

Timeline – Public funding pilot

ACTIVITY TIMETABLE - GREEN MIND PROJECT						
ACTIVITIES 3.3.	**May-19**	**June-19**	**July-19**	**Aug-19**	**Sept-19**	**Oct-19**
2. Public Funding Screening						
Public funding analysis of sources in Croatia						
Public funding report for stakeholders						
Public funding testing						
Workshop						
Output results on Public Funding Screening Pilot						
3. B2B Matching Service						

After Market intelligence pilot, SMEs involved were presented with public funding opportunities in Croatia. Through the survey on all three pilots, IDA d.o.o. got insight in current knowledge of SMEs about public funding in Croatia and based on that knowledge prepared the public funding report and workshop. All activates were accomplished within planned timeframe, beginning of August until end of September 2019.

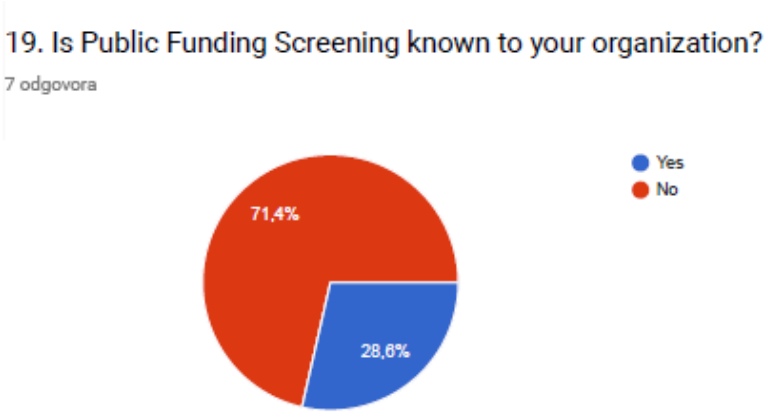
CRO (IDA) Action Reports

Identification and analysis of previous experience IT and transport sector

Based on the survey results, companies involved in Green Mind project don't have experience related with application for EU funds, however Penta d.o.o. and Ute d.o.o. were involved in MoveSmart project funded by European Union as bidders for the realization of the project for the client, city of Pula. SMEs interviewed underlined the need to have support to apply to the funds as they never applied to public funding and they are financing their activities without any other support. The main problem is lack of information which are poorly accessible and clear for them.

Output: Survey for 3 pilots within Green Mind project

Results of previous knowing of public funding



Public funding screening sources report

During research, available EU funds were collected for stakeholders of the Green Mind project with purpose to present them with possibilities for fundraising possibilities of their products and services. With collected fundraising opportunities, enterprises can contribute to an increase in exports and competitiveness of the Croatian economy on the global market, can present and place their innovative products and services on the global market and thus increase their revenues and sales across the market, make partnerships and developed connections with cross border worldwide as well. Chosen tenders that were collected for this projects are funded by European Regional Development fund (ERDF) within operational program Competitiveness and Cohesion with focus on innovations, recognizability of Croatian products and services in the open market through implementation of quality signs, support to MSPs for the costs of testing, research, development and demonstration activities for the needs of commercialization of innovation products and services. As well, focus of this fund is on implementation of business process management in accordance with requirements of internationally accepted standard in international trade.

Output: Public funding report for Croatia

Example of chosen tender within Public funding report

Field	Entrepreneurship
Fund	European Regional Development fund (ERDF)
Operational programme	Competitiveness and Cohesion
Status	Open from 15.02.-29.06.2020.
Project	**Innovations of newly established MSPs -phase II**

Summary

The call is aimed at newly-established micro, small and medium-sized businesses with a goal to fostering the successful launch of new and emerging market-leading products and services with an emphasis on radical innovation and significant improvements in the commercialization of products and services. This Call will stimulate the innovation of newly established MSPs to introduce innovations resulting in a product / service that is a novelty in the market.

Workshop on public funding possibilities

By attending the workshop, involved SMEs got insight in sources where funding opportunities can be found, and all details with regard to the collected fundraising opportunities in Croatia related with their business. All possibilities were presented and explained by EU funding consultant expert for Istrian County who has long experience in EU funding since Croatia entered European Union.

Workshop at Istrian Development Agency held on 10th of September

Workshop included introduction in fundraising possibilities, acceptable applicants, intensity of support for each project, explanation of the subject of each call, acceptable activities and costs and brief guidelines for application and further process of monitoring after EU funds are approved and authorized by governing bodies of Croatia. Presented opportunities are connected with, business competitiveness, connectivity and mobility, promoting energy efficiency and renewable energy choices, environmental protection and resource sustainability and the use of communication and information technologies. Enterprises involved in Green Mind project showed very high interest in funding possibilities by entering the discussions and asking variety of questions concerned with application and funds they can raise within presented tenders. Public funding screening pilot within the Green Mind project proved to be successful and of use for future planning of enterprises in consideration for application to EU funds as the information's were clearly presented and explained.

Workshop on Public funding screening pilot service was held on Tuesday, September 10th at the Istrian Development Agency. Workshop information was published on following Istrian Development Agency website and as well:

- **https://ida.hr/hr/tn/novosti-481/detail/2150/istarskim-poduzetnicima-predstavljene-mogucnosti-za-financiranje-projekata-u-domeni-zelene-i-pametne-mobilnosti/**

Output: Workshop on Public funding screening in Croatia

c. CRO (SDC) Pilot

Description of the CRO (SDC) Pilot

In January 2019, the Split-Dalmatia County conducted a workshop, a survey among entrepreneurs and a preliminary analysis on the state of the needs of entrepreneurs in green and smart mobility for public services in the areas:

• Market intelligence
• Public funding sources i
• B2B matchmaking.

In the period 18.02.2019. to 4.6.2019. the following actions were performed:

- Research on SME needs (3.3.1., 3.3.2., 3.3.3.)
- Report on the conducted SME research (3.3.1., 3.3.2., 3.3.3.)
- 3.3.1. Market analysis for all MPS involved in the pilot project
- 3.3.2. Scanning funding sources for all MPS involved in the pilot project
- 3.3.3. A B2B Connectivity Preparation Guide for all MPS involved in the pilot project
- 3.3.1. Self-Assessment Guide to Market Analysis
- 3.3.2. Sources of Public Funding for Micro, Small and Medium-Sized Entrepreneurs
- 3.3.3. B2B Connectivity Guide
- 3.3.1. Market Intelligence Support Institutions
- 3.3.2. Supporting Institutions for Public Funding
- 3.3.3. B2B matching support institutions
- Final workshop for stakeholders in Split, 29.5.2019.

The results of these services are presented in following documents:

- Research on SME needs (3.3.1., 3.3.2., 3.3.3.)
- Report on the conducted SME survey (3.3.1., 3.3.2., 3.3.3.)
- 3.3.1. Market Analysis - Alpha Saggittarius
- 3.3.1. Market Analysis - Amplifico
- 3.3.1. Market Analysis - Enel
- 3.3.1. Market Analysis - Locastic
- 3.3.1. Market Analysis - Net Media Systems
- 3.3.1. Market Analysis - Newton
- 3.3.1. Market Analysis - Statim
- 3.3.2. Scanning Public Funding - Alpha Saggittarius
- 3.3.2. Scanning Public Funding - Amplifico
- 3.3.2. Scanning Public Funding - Enel
- 3.3.2. Scanning Public Funding - Locastic
- 3.3.2. Scanning Public Funding - Net Media Systems
- 3.3.2. Scanning Public Funding - Newton
- 3.3.2. Scanning Public Funding - Statim
- 3.3.1. A Market Analysis Self-Assessment Guide

- 3.3.2. Sources of public funding for micro, small and medium-sized enterprises
- 3.3.3. B2B Connectivity Guide
- 3.3.1. Market Intelligence Support Institutions
- 3.3.2. Supporting institutions for Public Funding
- 3.3.3. B2B matching support institutions

The analysis showed that in the area of public sources of funding, entrepreneurs need a more detailed information service on the possibilities of applying for tenders of public sources of funding, as well as a tool that would enable them to use public sources of information and independently identify the potential for applying for projects.
In addition, the Split-Dalmatia County conduced a pilot project in the field of public funding sources in such a way that for entrepreneurs who have responded to participate in the project, a brief analysis of public funding sources are personalized for their company and roadmap is prepared for self analysis for potential for public funding. The aforementioned roadmap is publicly available on the pages of Split-Dalmatia County.

CRO (SDC) Action Reports

The pilot project involved 7 SMEs in the field of green and smart mobility. Public funding analysis was made for each of the listed companies.

The above resulted in 7 documents:
1. Public funding screening - Alpha Saggittarius
2. Public funding screening - Amplifico
3. Public funding screening - Enel
4. Public funding screening - Locastic
5. Public funding screening - Net Media Systems
6. Public funding screening - Newton
7. Public funding screening - Statim

The document "Sources of Public Funding for Small and Medium-Sized Enterprises" is a guide aimed at facilitating the finding of sources of public funding for micro, small and medium-sized enterprises in the area of Split-Dalmatia County.
All entrepreneurs were provided with documents. The guide and the databases are published on the website.
https://www.dalmacija.hr/programi-gospodarstva/eu-projekti/novosti/artmid/2894/articleid/18223/poduzetnicima-uruceni-dokumenti-alati-za-jacanje-konkurentnosti

d. FR Pilot

Description of the FR Pilot

1. *The name of the pilot (if there is one)*

There is no specific title of the pilot in the Occitanie region.

2. *How the pilot was developed as it is (i.e. refer to market analysis desk research etc.)?*

AFT is a French sectoral association in the transport and logistics (T&L) sector which made it naturally important for AFT to engage SMEs from the T&L sector in the Green mind project. Through their implication, AFT aims to:

- Identify (new) opportunities for innovative projects, products, services, etc. for SMEs in the T&L sector
- Engage SMEs in the T&L sector to develop more sustainable transport solutions for both, passengers and goods
- Strengthen SMEs in the T&L sector
- Improve the image and attractiveness of the T&L sector

AFT organised the three pilot services closely linked one to each other. The Market intelligence (MI) service targeted SMEs from the T&L sector and allowed identifying with them innovative project ideas linked to green and smart mobility. As a second step, AFT organised the B2B matching service test based on the results from the MI service:

- Identification and selection of solution providers able to answer the needs that were identified and analysed during the MI service
- Matchings and meetings with the SMEs from the T&L sector:
    - One physical B2B event with several thematic workshops was organised in Montpellier on 16th of April 2019
    - For those companies not able to join the meeting, additional bilateral meetings and conference calls were organised

In a third step, AFT implemented the public funding screening service with those SMEs that were most advanced on their ideas for innovative GSM projects and motivated to collaborate in order to set up a project proposal to be submitted to a call for proposals.

3. How and why the specific actions were chosen?

AFT and its external experts organised the three Green mind pilot activities connected one to each other. This means that the objective of the first pilot service about Market intelligence was to identify possible opportunities for innovative projects, products or services through individual diagnostics of the T&L SMEs to analyse their market situation, their current initiatives/projects and their interest in specific solutions, services, tools, etc. to propose greener and smarter transport solutions.

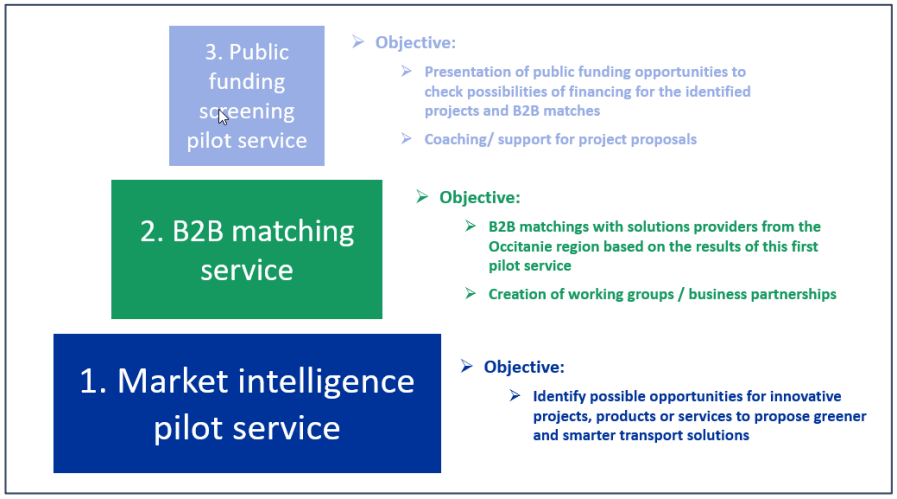


Figure 1: Methodology for the French SMEs services testing

Based on the results of this first pilot service, a B2B matching phase was organised with solutions providers from the Occitanie region (and possibly from the other participating European regions later on) and public funding opportunities were screened to check possibilities of financing for the identified projects and set up working groups/consortia.

This progressive approach was chosen in order to engage a maximum of SMEs in the beginning of the pilot services testing and move on with the most relevant ones in terms of motivation and capacity for the launch of innovative projects for greener and smarter mobility.

4. How and why the SMEs were identified and engaged?

As explained here above, in a third step, AFT implemented the public funding screening service with those SMEs that were most advanced on their ideas for innovative GSM projects and motivated to collaborate in order to set up a project proposal to be submitted to a call for proposals. Another aspect that was of course taken into account was the availability of a suitable call for the identified projects. In addition to this, AFT published the information about the Green mind project and the services that were tested on its website to ensure public evidence and enable any interested company to their interest.

5. A list of engaged SMEs, the sector they operate in and a short description of their activities

	Company name	Number of employees	Sector	Main activity of the company
1	RUIZ & fils	95	Transport & Logistics	Road freight transport
2	POUX SAS	25	Transport & Logistics	Road freight transport

3	Transports Salva	40	Transport & Logistics	Road freight transport
4	LEA Logistique	22	Transport & Logistics	Road freight transport and logistics
5	Transports Barrière	90	Transport & Logistics	Passenger transport by coach
6	SEV SERVICES ECUSSON VERT	8	Transport & Logistics	Logistics & urban delivery in Montpellier
7	COBRANE	Start-up	Manufacturing industry	Manufacturer of vehicles for urban deliveries
8	ZE COMBI	Start-up	Manufacturing industry	Manufacturer of containers & vehicles for urban deliveries
9	SAFRA	SME	Manufacturing industry	Manufacturing of hydrogen buses
10	Synox / Automotech	SME / Reg. cluster	ICT	IoT solutions provider
11	Applicolis	SME	Service provider	Online platform to match transporters with retailers
12	GRDF Montpellier	Enterprise	Energy provider	Energy provider (gas)
13	MarkoPilot	SME	Service provider	Innovative applications for driver trainings on the job (improvement of behaviour) and for sourcing candidates for T&L companies
14	CLS	Enterprise: 750 employees	ICT	Operator for satellite systems and products and services
15	COBRANE	Start-up	Manufacturing industry	Manufacturer of vehicles for urban deliveries

6. Timeline

The Public funding screening pilot service was implemented in the Occitanie region from January until September 2019.

7. A list of the actions you have taken during the service pilot

- Individual advice about public funding opportunities to SMEs from the T&L sector
- Presentation of the public funding sources, advantages and inconveniences of different programmes at a workshop
- Tailored support to some of the most engaged SMEs to create consortia able to apply for calls

FR Action Reports

1. *Briefly present the action, the topic(s) covered and the participating SMEs*

The objective of the Public funding screening service in Occitanie region was to capitalise on the results from the two other services (Market intelligence and B2B matching) and to support some of the most engaged and advanced SMEs with the creation of a consortium and eventually the submission of a project proposal. In addition to this challenging objective, some of the SMEs were informed and guided by the external experts about relevant sources of public funding for their individual needs of investment regarding greener and smarter mobility initiatives.

The Public funding screening service was implemented in three steps in the Occitanie region:

1/ Individual advice about public funding opportunities to SMEs from the T&L sector

During the diagnostic meetings that were implemented with 12 SMEs in the Occitanie region as a part of the Market intelligence pilot service testing (for more information see Market intelligence report D3.3.1), the external experts used the opportunity to consult the SMEs about public funding sources. The experts selected funding possibilities of interest for the SMEs in relation with their respective economic activities and market position and their interest in specific GSM projects or planned investments (e.g. changing of fleets, etc.).

The following table presents the results of this action:

	Company name	Main activity of the company	Consulting about public funding screening
1	RUIZ & fils	Road freight transport	▪ Consulting about public funding sources to (partially) finance the investment in new NGV trucks ▪ National funding programme of ADEME (French Environment and Energy Management Agency) ▪ Private funding programme of GRDF (gaz provider)
2	POUX SAS	Road freight transport	
3	Transports Salva	Road freight transport	
4	*LEA Logistique*	Road freight transport and logistics	▪ *Consulting about public funding sources to finance experts / coaches working about ergonomics with the employees (topic out of the scope of Green mind)*

5	Transports Barrière	Passenger transport by coach	▪ Consulting about the "CIR" which is a French tax credit for research (tax reduction calculated on the basis of R&D expenditure incurred by companies. It is deductible from corporate income tax due by the companies in the year in which the expenses were incurred.) ▪ Transports Barrière envisaged a research about alternative possibilities to make its service offer more sustainable (e.g. transport of packages in rural areas with school buses to avoid additional truck kilometres, etc.)

2/ Presentation of the public funding sources, advantages and inconveniences of different programmes at a workshop

During the second Green mind workshop in the Occitanie region on 16th of April 2019, the external experts held a presentation about public funding sources for projects linked to topics of green and smart mobility. They explained to the participating SMEs the inherent opportunities and risks of such funding and highlighted advantages and inconveniences of the different regional, national and EU programmes. The presentation is available for download on the AFT website: https://www.aft-dev.com/projets/green-mind.

Figure 2: Presentation about public funding opportunities for GSM projects in Montpellier

3/ Tailored support to some of the most engaged SMEs to create consortia able to apply for calls

As already explained here above, the objective of the Public funding screening service in the Occitanie region was to capitalise on the results from the two other services (Market intelligence and B2B matching) and to support some of the most engaged and advanced SMEs with the creation of consortia and eventually the submission of a project proposal.

This challenging objective could be reached with the identification of public funding opportunities for two projects initiated at the workshop in Montpellier: one project tackling cleaner and smarter delivery of the last kilometre in urban areas (A) and the second one targeting innovative hydrogen mobility solutions (B).

A/ Call for projects of the ADEME (French Environment and Energy Management Agency)

- This call was published on 25/04/2019 with a deadline on 09/07/2019.
- Topic: this call for projects of the ADEME financed research projects aiming to develop digital technologies (big data - IoT - Embedded systems) and robotics or cobotics (for deliveries, warehouses, or even automation of port operations) for the delivery of the last km.
- AFT and the external experts contacted the two working groups from 16th of April that had worked on the topics of urban logistics and deliveries.
- A conference call was organised on 24th of May animated by one of the external experts
- As a result of this conference call, a group of 5 SMEs (APPLICOLIS, Cobrane, SEV, SYNOX, ZeCombi) started to cooperate in order to submit a project proposal.
- This group was led by the President of SYNOX who is also one of the representatives of the Automotech Cluster in the Occitanie region (this cluster was one of the first stakeholders engaged by AFT and its external experts: first meeting to present the project in November 2018, they participated in all Green mind workshops and supported the recruitment campaign and B2B matching actively).
- Due to the reason that the deadline for this proposal was very short, the consortium was unfortunately not able to finalise and submit a project proposal. In addition, the low funding rate was a problem, which led two of the SMEs to leave the consortium. However, since the exchanges were fruitful, the relations between manufacturers (Cobrane, Ze Combi, Synox) and operators (Ecusson Vert, Applicolis) could be extended to other future opportunities.

ADEME
Agence de l'Environnement et de la Maîtrise de l'Energie

B/ Project on hydrogen solutions for sustainable mobility

- SAFRA (manufacturer of hydrogen buses), one of the companies participating in the B2B matching service, launched the idea at the Green mind workshop in Montpellier to participate in a European project in order to test its hydrogen buses in cities outside of France.

- AFT and its external experts identified the LIFE programme as a suitable opportunity: LIFE call for traditional projects – Climate action; deadline: 12/09/2019.
- The project idea was presented at the Green mind consortium meeting in Malaga in the beginning of May 2019 and a project note and call for interest was drafted and sent to all Green mind partners and other European partners of AFT that received some notifications of interest (SIPRO from the Green mind consortium and some other partners of AFT).
- In the beginning of July, AFT decided to take the lead on this strategic project and managed to set up a consortium of 6 partners from three countries (France, Greece and Italy). The "HYDROMOBLIFE" proposal was submitted successfully on 12/09/2019. The results about the projects selected for funding will be published in February 2020.
- It is necessary to explain that SAFRA is finally not part of the project consortium. The SME withdrew from the project due to the low funding rate. However, they can act as an associated partner and benefit from the project results. Through the process of setting up a consortium and jointly held conference calls, SAFRA also had the opportunity to get into contact with stakeholders in other European countries. In addition, SAFRA might also be the manufacturer providing the Municipality of Heraklion (one of the consortium partners) with a hydrogen bus to be tested within the HYDROMOBLIFE project.

2. Describe when and where the action was implemented (time frame, location)

The Public funding screening pilot service was implemented in the Occitanie region from January until September 2019:

- January to March 2019: Individual advice about public funding opportunities to SMEs from the T&L sector
- April 2019: Presentation of the public funding sources, advantages and inconveniences of different programmes at a workshop
- April to September 2019: Tailored support to some of the most engaged SMEs to create consortia able to apply for calls

3. Describe the scope and objectives of the action regarding the project and the participating SMEs

The Green mind project aims to identify relevant public funding sources for SMEs in the green and smart mobility industry and to guide them towards these opportunities. Through the individual advice, the support for the creation of consortia and the eventual submission of a project proposal, AFT contributed to this Green mind objective and fostered the innovation capacities and competitiveness of regional SMEs.

4. Describe interconnections and interrelations between this action and other actions (if there are any)

The Public funding screening service in Occitanie region was clasely connected and interrelated with the two other services (Market intelligence and B2B matching). This last pilot service that was implemented in the Occitanie region indeed capitalised on the results from the MI and B2B pilots.

e. GR Pilot

Description of the GR Pilot

Pilot development

The Public Funding Screening pilot interventions are developed in three support levels supplemented by a horizontal online application:

- Presentation of current regional, national and EU calls for public funding and tools to capitalize on them (i.e. call presentation platforms, networking platforms and so on) – in collaboration with external experts
- Administrative support in response to specific calls – operated by HIT/CERTH
- Proposal writing in anticipation of a cluster related national call – operated by HIT/CERTH
- Online platform that collects public funding information and presents current calls
- Organization of a meeting between the SMEs and local venture capitalists

Public Funding Screening		
Type of intervention	**Tool of intervention**	**Performed by**
(1) Presentation of calls and tools	Seminar & training - (10-14 SMEs)	HIT/CERTH & External Experts
(2) Administrative support in proposal writing	Vis-à-vis meetings and support – (3-5 SMEs)	HIT/CERTH & External Experts
(3) Proposal writing	Engages every interested stakeholders and companies in the local eco-system to write a cluster related proposal in anticipation of a national call	HIT/CERTH & External Experts
(5) Meeting with VC funds	Under consideration	HIT/CERTH & External Experts
Expected lasting Outcome - Service	The joint proposal for the development of a regional green and smart mobility cluster A guide that presents all regional, national & EU calls relevant to green and smart mobility A document that presents the results and the evaluation of the public funding screening pilot interventions by the SMEs	HIT/CERTH & External Experts

How and why the specific actions were chosen

Desk-research that was conducted during Market Intelligence pilot execution and analysis through questionnaires of the needs of enterprises evinced enterprises' weakness to be kept informed for EU or national calls or other initiatives and tools that can finance their activities.

For this reason, the first priority that was set from HIT/CERTH for the public funding screening pilot was to form a framework under which enterprises can have access to customized information about new programs and projects and in second place be able to seek opportunities using the appropriate tools.

Also, HIT/CERTH decided that for the public funding screening pilot it would be efficient to exploit its experience in proposal writing and offer support to enterprises so that can compose a valuable proposal.

As a final step, the unofficial network that was expected to be formed among participating enterprises of the Green mind project was decided to be exploited to form the local ecosystem of green and smart mobility in a more formal way and the composition of memorandum of understanding among interested stakeholders and enterprises.

SMEs identification and engagement process

All actions under public funding screening pilot were notified publicly through a website, that was developed in order to provide regular information to SMEs, so that every interested enterprise can take part in. Beside this, 14 SMEs that are considered to be the core of the local Green Mind eco-system through the analysis that was conducted under market intelligence pilot execution were contacted personally through email.

A list of engaged SMEs, the sector they operate in and a short description of their activities

No.	Name	Activity description
1	ELEKTRONIO WHEELS	Bicycle Manufacturing https://elektroniowheels.gr/en/
2	LINK TECHNOLOGIES	Telematics http://link-tech.gr/
3	INFALIA	Smart cities solutions https://www.infalia.com/
4	ECOSUN	Electric cars https://ecosun.gr/
5	SBOING	Navigation https://www.sboing.net/en/page/home
6	DOTSOFT	Smart cities solutions https://www.dotsoft.gr/
7	TRAFFIC TECHNIQUE	Traffic management http://www.traffictech.gr/?lang=en
9	GEOSENSE	Drones http://www.geosense.gr/
10	OTOPARKING	Bike-sharing systems https://www.otoparking.gr/

No.	Name	Activity description
11	TAXIWAY	Urban mobility https://www.taxiway.gr/index.asp?lang=gr
12	RHOE URBAN TECHNOLOGIES	Sustainable mobility solutions https://rhoe.gr/
13	BRAINBOX	Bike-sharing systems http://www.brainbox.gr/
14	WAVENET	Fleet management https://wavenet.gr/en/
15	SKYTRACK	Fleet management https://skytrack.gr/el/installation/

Timeline

The nature of public funding screening pilot led to a more extended period of implementation between March and November 2019 as call for proposal writing to form an innovation cluster of SMEs was available from September until November.

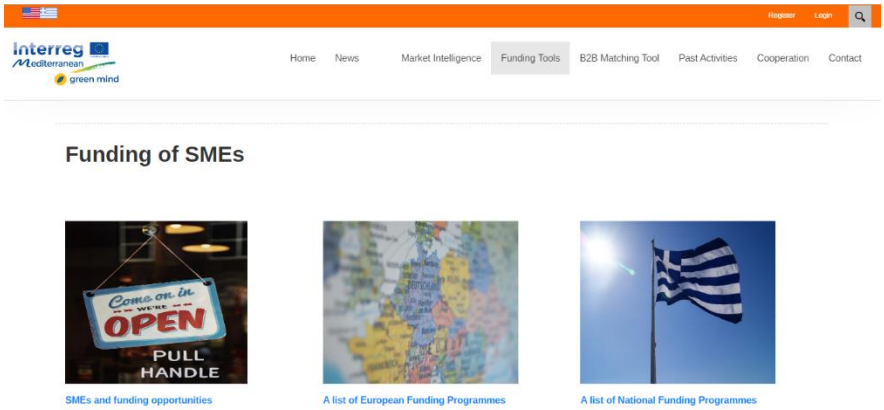
A list of the actions taken during the service pilot

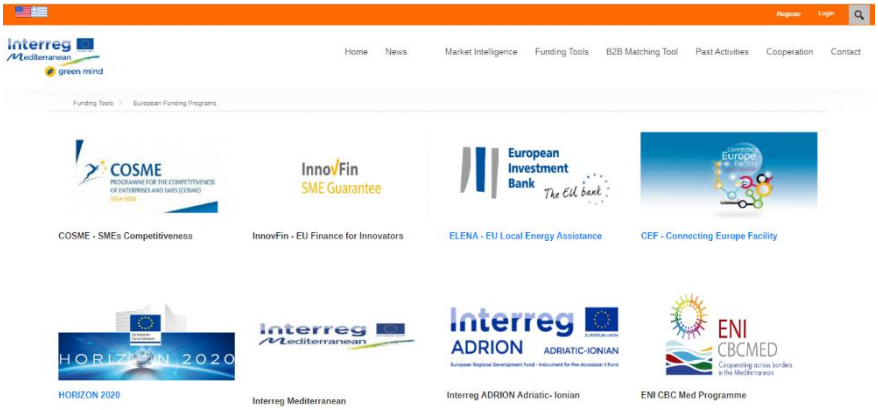
- Mapping of available funding tools and programs
- Seminar and training on seeking funding opportunities and partners to form consortiums for call for proposals
- Administrative support and consulting for a national call for proposals to 3 SMEs
- Proposal writing for funding the formation of an innovation cluster on green and smart mobility
- Presentation of VC funds

GR Action Reports

Mapping of available funding tools and programs

An extended list of available funding tools, programs and open calls was conducted in order to provide overall information to SMEs. for achieving better and easier access to relevant to green and smart mobility calls all opportunities were presented on the green mind project website as shown below.





Seminar and training on seeking funding opportunities and partners to form consortiums for call for proposals

CERTH/HIT organized a seminar where representatives of Institute of Enterpreneurship Development which is an Organization promoting innovation and the enhancing of entrepreneurship presented general guidance on what actions can be funded through programs, the types of funding, national and European funding sources and the EUcalls platform (EUcalls.net) which is an intelligent networking platform for EU funding opportunities. Building a profile on this platform gives an enterprise the opportunity to use multiple filters to find EU calls that fit their interests and exploring collaboration with other partners that are also active on this platform.

Administrative support and consulting for a national call for proposals to 4 SMEs

On May 2019 there was a call for proposals called "Research-Create-Innovate" funded by the Operational Programme Competitiveness, Entrepreneurship and Innovation 2014-2020. CERTH/HIT took advantage of its long experience in order to support the process of conducting three proposals for four SMEs. The proposals and their themes are presented below. For all proposals the results are expected.

Title	Short Description	Company Name
DEVELOPMENT	Development of a demand sensing and added Value assessment toolkit using	DOTSOFT

	machine Learning and operations Management algorithms	
eMicromobilityVR	Use of Virtual Reality technologies for the users' education and training on sustainable and safe mobility with emphasis on the safe use of micro-mobility services	BRAINBOX
MaaS4all	Development of Technical & Institutional Framework for the implementation of Mobility as a Service (MaaS) Technology Platforms and Business Ecosystem in Greece	DOTSOFT, LINK TECHNOLOGIES

Proposal writing for funding the formation of an innovation cluster on green and smart mobility

General Secretariat of Research and Technology Hellas published a call for proposals for Innovation clusters and HIT/CERTH developed a proposal that includes 10 SMEs of the core network that was developed during Green mind project to form an official network of enterprises. This innovation cluster is going to offer services such as regular information for SMEs, training workshops and co-working space but also targets on participating on EU strategic partnerships for clusters.
Evaluation results for the proposal are expected.

Presentation of VC funds

During the workshop in which funding opportunities were presented there was also a presentation for Venture Capitals from the representative of Incubation 4 Growth which is an Incubator running also a seed investment fund for tech and science startups. This representative presented their intention to invest on new and innovative ideas on the Region of Central Macedonia through a venture capital fund.

f. IT Pilot

Description of the IT Pilot

Road Show Australia is a free event organized by YON (www.yon.it) from 2nd to 8th May 2019 with Regency Corporate partners (www.regencycorporate.com.au), an Australian advisory company which works with quotations of P.M.I. at the Australian Stock Exchange of Sydney (ASX Sydney). The pilot action is dedicated to enterprises and start-ups oriented to international market.

The preparatory activity for the implementation of the pilot project included:

- Identification of 40 companies in the province of Ferrara operating in the «Green and Smart Mobility» sector;
- Direct contacts with identified responsibles;
- Selection of available funds for SMSs (European, national, regional) and predisposal of a list with details and links. The table has been submitted to the identified companies
- Organization and implementation of dedicated meetings;
- Technical assistance where required.

Funding list

Id	Body	Funding	Type of funding	Beneficiary	Project budget	Deadline	Relevant policy framework	Total budget	Link
1	Italian Ministry of economic development	Consultancy for technology and digital transformation	Voucher	Micro, small and medium enterprises	up to €40.000 (50% of eligible costs)	N/A Duration: 2019-2020-2021 Innovation manager registration (27/09/2019 - 25/10/2019)	*Piano nazionale impresa 4.0*	75 M€	https://www.gazzettaufficiale.it/atto/serie_generale/caricaDettaglioAtto/originario;jsessionid=kZGSCipmQcoeBNEPPZLfsQ__.ntc-as2-guri2a?atto.dataPubblicazioneGazzetta=2019-07-01&atto.codiceRedazionale=19A04242&elenco30giorni=false

Id	Body	Funding	Type of funding	Beneficiary	Project budget	Deadline	Relevant policy framework	Total budget	Link
2	Emilia-Romagna Region	Innovative start-ups	Grant for investments	Micro and small enterprises	Up to €100.000 or €250.000 depending on type of project (60% of eligible investment costs)	11/10/2019	Emilia-Romagna RIS3 and Regional Operational Programme	2.4 M€	http://www.emiliaromagnastartup.it/it/innovative/bandi/bando-regione-emilia-romagna-startup-innovative-2019
3	Invitalia	Innovative start-ups	Mortgage without interests	Start-ups in the digital economy industry	€100.000 - 1.5 M€ (70% or 80% of eligible costs)	First come, first served	National Operational Programme business and competitiveness	57 M€ (at 01/02/2018)	http://www.smartstart.invitalia.it/site/smart/home/smartstart-italia.html
4	European Investment Bank	InnovFin - EU Finance for Innovators	Loans, guarantees and equity for research and innovation	No specific restrictions (businesses, research, universities), depending on type of funding product	Funding typically between 35% and 50% of the project or investment cost	-	Horizon 2020	-	https://www.eib.org/attachments/thematic/innovfin_eu_finance_for_innovators_en.pdf https://www.eib.org/en/products/blending/innovfin/index.htm https://www.eib.org/en/products/blending/innovfin/products/index.htm

Id	Body	Funding	Type of funding	Beneficiary	Project budget	Deadline	Relevant policy framework	Total budget	Link
5	European Investment Bank	ELENA - European Local Energy Assistance	Grant for technical assistance in energy and transport projects (project preparation)	Public and private	Up to 90% of the eligible costs (technical assistance) for investment projects typically >30m€	First come, first served	Horizon 2020	40-50 M€ per year	https://www.eib.org/en/products/advising/elena/index.htm https://www.eib.org/attachments/documents/elena_faq_en.pdf
6	European Commission	Horizon 2020 - Fast Track to Innovation	Grant	Industry-driven consortia	Maximum EU contribution 3M€ (70% of eligible costs)	Cut off dates: 22/10/2019 19/02/2020 09/06/2020 27/10/2020	H2020 - Societal Challenges - Leadership in Enabling and Industrial Technologies	300 M€	https://ec.europa.eu/programmes/horizon2020/en/h2020-section/fast-track-innovation-pilot

The 40 SMEs contacted had also the possibility to present their activities to external investors.
During the event in Milan, SIPRO involved 8 innovative startups on the province of Ferrara dealing with IT solutions, sustainable innovative system, mobility solutions for smart cities (4E-consulting, AllF, Alga & Zyme Factory, AT Project, Gate, Helixpharma, Wear, Zuna) but only 4 were selected to participate at the contest:

- Alga & zyme (Unife spin off)
- AllF All Italian Food
- Naiad Biotech
- 4E-consulting

IT Action Reports

YON is a company specialized in M&A operations for SMEs, composed by freelancers, experts in business, financial, tax, legal and corporate matters, who have been operating throughout the country for over 20 years with a confidential and independent approach.

Its objective is to identify, choose and carry out operations of acquisition or sale of companies, share packages, company shares and productive assets.
Sipro is the Development Agency of Ferrara, active since 1975 in the economic development of the territory. The exhibition took place on 2nd May in Milano as several start ups were selected from all over Italy.
The SMEs had 30 minutes each one to present their project with the purpose of a possible listing on the Australian Stock Exchange, particularly interested in innovative ideas by "young" enterprises or Start-Ups.
The Australian representatives of Regency Corporate appreciated the quality of the proposed projects, most of them were considered positively however further studies were required.
One of the enterprises was chosen as most promising especially in relation with the innovation offered: 4E CONSULTING S.r.l – engines design and development, from scratch to engine production line commissioning, powertrain integration, calibration and testing.
Nevertheless a re-evaluation was required late during the year, especially in relation with the assessment of the project scalability
Therefore this enterprise is monitored and supported jointly by Sipro and Yon.
The objectives is to identify enterprises and start-ups which are oriented to international market, but doesn't have the strength or the internal competences to open to new markets. Therefore the aim is to provide them with the main tools and relationships necessary to assess their capacities to enter the international market, exploit the already existent regional network supporting internationalisation processes and promote new financial supporting schemes, in addition to the fundings already available (enterprise Europe Network, APRE offices, Unioncamere Emilia Romagna..) .
Networking with national and European venture capital, or other international organization (e.g. Australian Stock Exchanges)
The results are a possible listing of their project on the Australian Securities Exchange, particularly interested in innovative ideas by "young" enterprises or Start-Ups.
The results is the support to sector-focused companies in their international development, benefitting from the informal clusters established at regional level, such as Clust-ER.
Clust-ER Associations are communities of public and private bodies (research centres, businesses, training bodies) that share ideas, skills, tools, and resources to support the competitiveness of the most important production systems in Emilia-Romagna. Among the others: Clust-ER Mech and Clust-ER Innovate.
Joining a Clust-ER means contributing to strengthening the region's research and innovation system, encouraging a more effective interaction between laboratories and businesses
The specific result is the possible listing of their project on the Australian Securities Exchange, particularly interested in innovative ideas by "young" enterprises or Start-Ups.
The action is coherent with Green Mind as it's directly aimed at promoting services for the innovation and the promotion of enterprises in new markets, which are based on the innovation eco-system active in the Emilia Romagna region, but which might be transferred in other Med regions.


allf
all Italian Food

SL Pilot

Description of the SL Pilot

- **Introduction**

As part of market intelligence pilot, the following activities have been undertaken:

- State of art analysis on e-mobility funding in Slovenia
- Local SME's and municipalities engagement via workshops and meetings to identify key challenges
- Data collection (directly from companies engaged and other relevant sources)

- Pilot intervention- Pilot intervention- Tool development comprising of the following:

Pilot 3 – Private and Public Funding Tool:

1. Methodology for financing e-mobility projects for SMEs
2. Tool for preparing the financial analysis of the project (financial part of the business plan) - see Pilot testing 2 under Market Intelligence
3. Tool for preparing the substantive part of the project (substantive part of the business plan) - see Pilot testing 2 under Market Intelligence
4. A tool that represents the funding available for projects aimed at financing e-mobility (e-vehicles and services)
5. A practical example of testing the content and financial tools to prepare a business plan for enterprises under points 2 and 3.

Pilot 4 – Public Funding Tool:

1. Methodology for financing the projects of public utility companies in the field of low carbon mobility
2. A tool for preparing a financial analysis of the project
3. Tool for preparing the substantive part of the project
4. Practical example of tool testing under points 2 and 3.

The methodologies and tools will be developed in local language and disseminated to target groups.

Pilot testing #3: Screening public funds and guiding SME's to utilizes them

- Introduction: presentation of the pilot scope and of the report contents;

The #3 pilot scope is focusing on public funding support service for lightweight e-vehicles and business fleet e-vehicles (vans).
Interested SME's received as part of Green Mind project support in identifying available pubic funds that could support their operations. Companies also received guidance on how to access these funds.
As part of this pilot key barriers and opportunities for the concerning sector in obtaining public funding support were identified. With the purpose to ensure the benefits of this work are applied broadly across the sector, practical and concise guideline based on learnings from service testing are being developed.

The aim is to enable SME's in this sector to more efficiently use public funding for business strengthening and as such strengthening of the green and smart mobility sector.

- Sectoral focus and issues: description of the specific industry addressed and short description of the (type of) companies involved; short description of the state of the art and of the issues the pilot addresses;

The focus is on innovation enterprises in automotive and transport sector (e-mobility services, e-mobility lightweight vehicles retail and e-transport).
Good Vibe company is bringing lightweight e-vehicle (currently motorbike and scooters) to Slovenian market. Slovenian market on light e-vehicles is currently still under-developed in comparison to other EU countries and has a significant potential to grow.
The social enterprise ETRI is trying to position themselves in the market as an innovation company in transport operations for their employees.
Both companies have received support in identifying available funding options and guidance on how to access viable public funds for their business.
Both companies are acting as test beds for the development of the public funding guideline that will be made publicly available for the benefit of other companies seeking support in this field of practice.
Key challenges for innovation companies is that they are opening up a new market in a given locality that comes with many uncertainties related but not limited to investments possibilities, customers attitude towards new service or product, capacities to plan the new type of business well, etc. For this purpose, being able to access public funding to support at least the emerging stages of the business is very important. On one hand it gives validation that the service/product is valued and needed by society (since it is publicly funded) and on the other it gives the financial support that is crucial for positioning emerging innovation of a SME in a given market.

- Service description and results: description of the pilot activities and of the main technical outcomes / results;

As part of GREEN MIND promotion process (workshops, meetings, emails), we were contacted by Good Vibe and ETRI company, that were seeking to improve their e-mobility focused business model and operations with the support of public co-financing. We have offered to support them with the identification of suitable funding opportunities and guidance about application requirements. Their feed-back and lessons learned as part of this process, are being integrated into a guideline that will be publicly available. The aim of this guideline is to enable better uptake of the public funding opportunities for all other companies of the same sector in Slovenia.
Companies key constrains in gaining public funding are the identification of suitable funding options and understanding the detailed requirements of the call given the formulaic language. Documents and application preparation can be complicated and time consuming for companies that don't have staff with relevant competencies. Furthermore, the decision process to approve funds is long.

The lessons learned from the feed-back and technical process assessment are now being processes to develop a guideline for other companies of this sector to support their public funding pursuits and increase the uptake of low carbon mobility options.

- Conclusions: summary of outcomes.

The Slovenian Eco Fund is offering a crucial opportunity to companies dealing with e-mobility vehicles to obtain financial support in obtaining such vehicles.

However, the companies need to be aware which types of funding are applicable for a given vehicle and its use and the process that needs to be undertaken to access the funds. As part of green mind pilot, we are aiming to overcome these barriers by providing SME companies with practical and concise guidelines, based on outcomes of real case testing of the application process within this specific transport sector. The guidelines will help the sector to better prepare their cases and capture the co-financing opportunity.

Pilot testing #4 - Utilizing Slovenia's Climate Change Fund to transition city passenger transport fleets to low carbon services.

- Introduction: presentation of the pilot scope and of the report contents;

The #4 pilot scope is focusing on public funding support service for city passenger transportation companies, by providing detailed support services to the city transportation company MARPORM Ltd. to obtain the public funding available as part of the Climate Change Fund, which offers a great potential to initiate the process of converting the passenger bus fleet into e-fleets.
The main objective of the pilot is to, through real case testing, identify the key barriers and opportunities for the concerning sector in obtaining public funding support. For this purpose, practical and concise guideline will be developed, for the companies operating in this sector in order to better position them to use the public funding for the transition of their fossil-fuel based fleet to low carbon fleet options on one hand, as well as provide input on how such public calls could be improved.

- Sectoral focus and issues: description of the specific industry addressed and short description of the (type of) companies involved; short description of the state of the art and of the issues the pilot addresses;

The focus is on transportation industry that works with city passenger transport services. The companies involved are transportation public utility companies. MARPROM Ltd. is acting as the test bed company for the development of the guideline that will be shared with all city passenger transport companies.
The key issues of this sector are outdated and fossil-fuel based fleets that struggle to meet increasingly stringent EU regulations, are not in line with cities Sustainable Mobility Strategies as well as EU level directives and priorities, and last but not least struggle to meet customer expectations for a quality service.

- Service description and results: description of the pilot activities and of the main technical outcomes / results;

As part of GREEN MIND promotion process (workshops, meetings, emails), we were contacted by the MARPROM Ltd. company, that was seeking to improve their bus fleet with the support of public co-financing. We have offered to support them with the identification of suitable funding opportunities and development of the application related documentation in exchange for their feed-back on lessons learned as part of this process, for the purpose of Green Mind project, with the aim to enable better uptake of the public funding opportunities for all other companies of the same sector in Slovenia.
E-zavod provided MARPORM, city passenger transport company with on-going support in development of their application form and supporting documentation for public funding of 5 e-buses, co-financed through Slovenian Climate Change Fund. In parallel e-zavod was obtaining direct feed-back on key issues, challenges and opportunities while going through the application process.

The assistance was in the form of preparation of documentation and financial part of the application for the grant. The investment documentation for the purchase of 5 new electrically operated buses for public transport was developed. Their total value is EUR 2,430,000.00. The investor can obtain EUR 1,500,000.00 grants from the Climate Change Fund in 2019.

Companies' key constrains in gaining public funding are that the process of understanding the detailed requirements of the call, documents and application preparation is complicated and time consuming for companies. They also don't have staff with relevant competencies; therefore, they need support in planning the expert technical support as part of their business model. In addition, the decision process to approve funds is very long.

The lessons learned from the feed-back and technical process assessment are now being processes to develop a guideline for other companies of this sector to support their public funding pursuits and increase the uptake of low carbon mobility options in city passenger transport.

- Conclusions: summary of outcomes.

The Slovenian Climate Change Fund (National Gazette 13258 / No. 83 / 24. 12. 2018) is offering a crucial opportunity to companies dealing with city passenger transport to obtain financial support in converting outdated, carbon intensive vehicle (bus) fleets into low carbon ones in line with global efforts, such as Paris Agreement, to combat climate change.
However, the companies need to undergo a rigorous application process that often stalls their ambition of transitioning to green mobility. This is generally due to lack awareness of the opportunity and/or lack of technical and expert capacities to deliver the required funding documentation.
As part of green mind pilot, we are aiming to overcome these barriers by providing all eligible companies with practical and concise guidelines, based on outcomes of real case testing of the application process within this specific transport sector. The guidelines will help the sector to better prepare their cases and capture the Clime Change Fund co-financing opportunity.

Pilot testing #5: Public funding screening transnational network

- Introduction: presentation of the pilot scope and of the report contents;

Pilot #5 was oriented at facilitating the interaction between EU funding body EIT Climate KIC and Slovenian automotive cluster and EDISON partnership to develop a working relationship and start exploring potential synergies in the green and smart mobility sector scope.

- Sectoral focus and issues: description of the specific industry addressed and short description of the (type of) companies involved; short description of the state of the art and of the issues the pilot addresses;

EIT Climate KIC is a Knowledge and Innovation Community (KIC), working to accelerate the transition to a zero-carbon economy. Supported by the European Institute of Innovation and Technology (EIT), they identify, support and fund innovation that helps society mitigate and adapt to climate change.
EIT Climate KIC identify, source and place public and private funds that stimulate innovation. They track progress and outcomes and draw out learning and insight so that their funding partners can effectively invest their resources for maximum impact. Climate KIC are leveraging grants by bringing together those with vision, with ideas, with low-carbon products and services, and with finance.

SRIP ACS + The Strategic Development Innovation Partnership in the field of mobility brings together members of two associations, the ACS Slovenian Automobile Cluster and the Transport Association of the Slovenian Chamber of Commerce. It brings together over 100 members of from 12 different mobility branches, that represent 30% of national export and 17% of GDP.
EDISON partnership is an initiative that brings together actors in green mobility. Its focus lies in connecting supply and demand in this field; connecting companies to develop new solutions together; connecting institutions for joint R&D efforts and for development of new capacities for deployment of new technologies. It connects about Slovenian 80 organisations working in mobility sector.
The pilot service is testing the impact of connecting key mobility associations with an EU funding provider to help establish relationships and support mutual understanding of partners needs and ambitions in order to facilitate collaborative project development and access to public funding.
Service description and results: description of the pilot activities and of the main technical outcomes / results;
The pilot service is testing the facilitation of the interaction between EU funding body EIT Climate KIC and Slovenian automotive cluster and EDISON partnership to develop a working relationship, support mutual understanding of partners needs and ambitions, and to start exploring potential synergies in the green and smart mobility sector scope.

A meeting was organised between the three parties in Ljubljana, supported by Green Mind team where representatives of each organisations presented their organizations ambitions, aims, purpose and key projects.
The SRIP ACS+ and representatives outlined some interesting green and smart mobility SME initiatives that are currently happening within their networks (corporate car-share business formation, e-scooter sharing start-up, Mango-green procurement project, greening of office travel for businesses)
The representative of Climate KIC presented new Transformation in Time strategy of the organisation and outlined the types of projects they would be interest to work with and financially support in the coming period.
An effort was made by all parties to outline some of the opportunities for addressing green and smart mobility challenges in Slovenian context, linking to SME's capacities and barriers.
In conclusion an agreement was reached that SRIP ACS and EDISON representatives will present the opportunities discussed to their members with a view to engage their members and encourage formation of synergies around active shared green mobility ideas with the purpose of strategic project cluster formation that can collaborate with Climate KIC and other support and funding bodies for acceleration of green and smart mobility.

- Conclusions: summary of outcomes.

While this pilot action has been seen a positive start, the amount of time available for pilot service testing did not allow for further development of activities. In the future if the timeline gets extended we will organise further meetings to progress on initial ideas and synergies.

SL Action Reports

A business plan is a document helping company analyses all aspects of its business and evaluates its business prospects. The content of the business plan depend on the field of work and company needs. The entrepreneurs can use a standardized template that are tailor to your needs.

A business plan is the most important document. You need it first and foremost for yourself, as the investor usually decides whether to invest, based on the management and presentation summary. The business plan is the document the entrepreneur should be prepared as objectively as possible. A good business plan represents a clear vision of the company and is very useful in finding investors, partners, associates… The length of a business plan should not exceed 25 pages without attachments.

Source: CC BY-SA-NC

Pilot 3 – Private and Public Funding Tool:

6. Methodology for financing e-mobility projects for SMEs provided in Annex
7. Tool for preparing the financial analysis of the project (financial part of the business plan) - see Pilot testing 2 under Market Intelligence
8. Tool for preparing the substantive part of the project (substantive part of the business plan) - see Pilot testing 2 under Market Intelligence
9. A tool that represents the funding available for projects aimed at financing e-mobility (e-vehicles and services) provided in Annex
10. A practical example of testing the content and financial tools to prepare a business plan for enterprises provided in Annex.

Pilot 4 – Public Funding Tool:

This tool provides the methodology and toolkit for projects funded in the areas of green and smart mobile products and services in key sectors of mobility (transport and logistics, automotive, energy and information technology) from public funds by public institutions.
The investment documentation needs to be prepared for investment projects planned within the public sector as well as for investment projects planned within the private sector co-finaced by public funds. .
The investment documentation determines the investment intentions by selecting the optimal scenario in terms of meeting the economic, financial, technical, technological, location and personnel goals of the investment project.

The preparation the content of documentation for investment projects financed from various sources in Slovenia must be prepared by regulation of the Decree on a uniform methodology for the preparation and treatment of investment documentation in the field of public finances (Official Gazette RS, No. 60 / 06, 54/10 and 27/16) for the following forms of investment documentation:

- identification document of the investment project,
- pre-investment document and
- investment program.

The effectiveness of investments project is judged by financial, cost & benefits and development criteria. The financial indicators reflect the impact of the investment on the business of the investor. Economic indicators measure the impact of the effectiveness of the investment from the point of view of the whole company, and the development criteria reflect the effects of non-monetary effects.
This document is developed for Slovenian market and therefore in local language.

g. SP Pilot

Description of the SP Pilot

1. The name of the pilot (if there is one)
2.
3. **How the pilot was developed as it is (i.e. refer to market analysis desk research etc.)?**

The Public Funding pilot service has been designed taking into account the previous experience of Andalucia Smart City Staff regarding the access to public funding for SMEs as far as taking into account the difficulties the ones the SMEs have to apply for public funding due mainly to their limited resources more than their innovative capacity.

So, the pilot has been developing as a consultancy service to facilitate SMEs to apply for public funds supporting them to turn their ideas (if they have technical-economic viability) into good proposals to be presented to open calls.

4. **How and why the specific actions were chosen?**

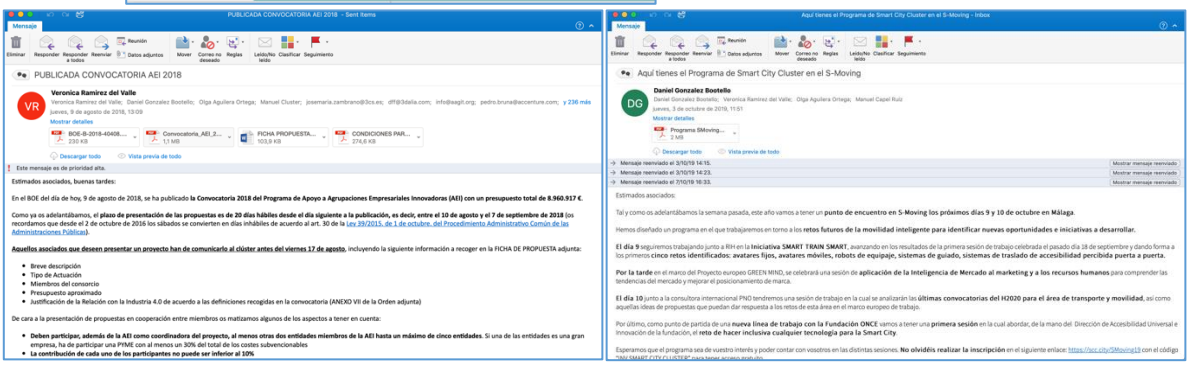
The actions were chosen by the feedback from companies within our experience and using data from previous analysis made within the project. The action described as a support for SMEs from the conception of the IDEA to the presentation of a good proposal in a real need that companies have. Among other difficulties, the SMEs currently unaware of the existence of many public funding calls that could help them and also how to arise them.

5. **How and why the SMEs were identified and engaged?**

SMEs have been identified from previous participation in several events such as SMART CITY EXPO WORLD CONGRESS (November 2018, Barcelona), GREENCITIES (April 2018, Malaga; March 2019, Malaga) and TRANSFIERE (February 2019, Malaga). To engage SMEs it has been used several measures:

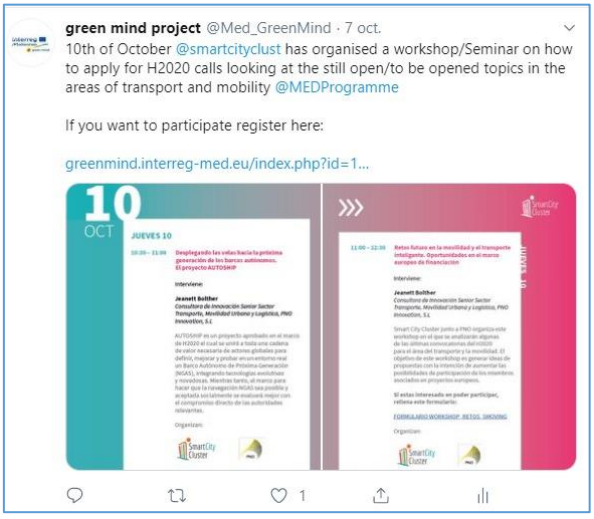
- Notice on the website:

- Mailing with Open calls for funding:



- Meetings/seminars on Open calls for funding :

- Diffusion on the social media :



6. A list of engaged SMEs, the sector they operate in and a short description of their activities

SMEs	Sector	Short description
Nosolosoftware	ICT for Urban sustainable mobility	Mobile applications

ASIMOB	ICT for Urban sustainable mobility	AI & IoT Solutions for Smart Roads
Actisa	ICT for Urban sustainable mobility; E-mobility (electric recharging point / electric vehicle)	Electrical vehicle recharging, Software AI
Scoobic Urban Mobility	E-mobility (electric recharging point / electric vehicle)	Sale and manufacture of all types of electric vehicles
Amura	ICT for Urban sustainable mobility; E-mobility (electric recharging point / electric vehicle); Interurban mobility; Car sharing	Platform of Carsharing, scooter sharing, renting Sustainable mobility solutions for Local Entities and the Tourism Sector Mobility as a service
Iertec	Geographical Mobility Management; Car sensors	Development of a radar that allows the vehicle to have a perception of its surroundings
Top Digital	ICT for Urban sustainable mobility	Cration of real-time image recognition analysis models
ByEvolution	ICT for Urban sustainable mobility	Application of disruptive technologies such as blockchain, VR, AI Cybersecurity systems for autonomous driving and Smart Grids.
Revive 3.0.	Urban mobility	Urban Mobility Planification
Softcrits	ICT for Urban sustainable mobility	Cration of real-time image recognition analysis models
Wifi rent a car	Car-Sharing	Car Sharing
Gecor System	ICT for Urban sustainable mobility	Last Mile Mobility
Geographica	Geographical Mobility Management	Urban Mobility Planification
Mobidrive	Urban mobility	Urban Mobility Planification
Paythunder	ICT for Urban sustainable mobility	Mobile applications
Sosteco	ICT for Urban sustainable mobility; E-mobility (electric recharging point / electric vehicle)	Mobile applications; Electrical bikes
Centraliza	ICT for Urban sustainable mobility	Mobile applications
Proconsult	E-mobility (electric recharging point / electric vehicle)	Electrical vehicle recharging, Software AI

7. Timeline

From the beginning to the end of the project, because the fact of finding public funding for the development of new projects is an activity that the cluster has been doing since its beginnings.

8. A list of the actions you have taken during the service pilot

A) Public funding Support in the identification of public funds

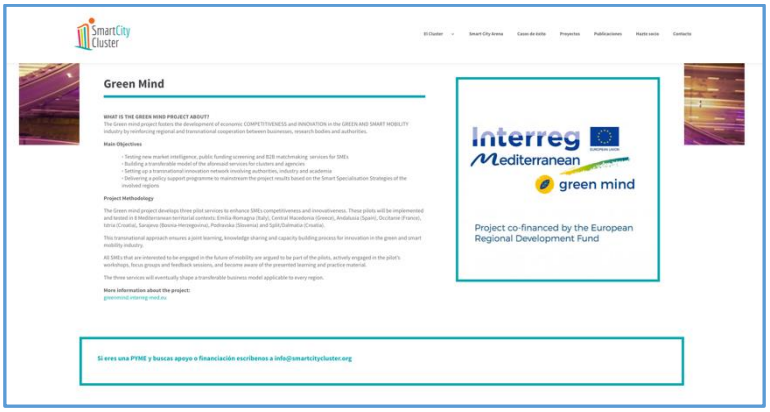
B) Workshop "Retos futuros en la movilidad y el transporte inteligente. Oportunidades en el marco europeo de financiación" (Future challenges on mobility and Smart transport. Opportunities in the European funding framework)

SP Action Reports

A) Public funding Support in the identification of public funds

1. Briefly present the action, the topic(s) covered and the participating SMEs

The fact of finding public funding for the development of new projects is an activity that the cluster has been doing since its beginnings. However, when Green Mind project was launched, we have focussed our attention on finding funding for all those projects related with mobility. All our members were informed about the opportunity to get our support on all the procedure needed to get public funds to develop their initiatives. Moreover, we place a call on our website for mobility companies to receive support on public funding.



ASCC has designed an internal procedure to turn ideas into real projects the ones will take a product/service to the market.

IDEAS can arrive to ASCC from two different channels: directly from a SME/Company (associated or non-associated member) or indirectly as a need from a City (Market). ASCC has also a bank of ideas, all those the once is mainly waiting for a suitable call to be applied.

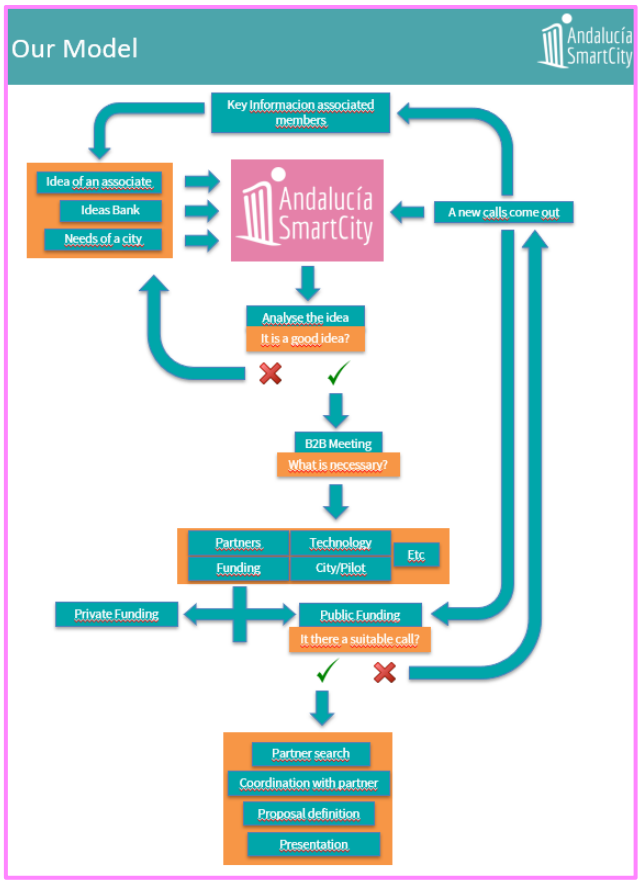
Staff from the cluster analyses IDEAS (technical and economic viability, state of innovation, state of the market-competitors) with external experts if it is necessary. If the IDEA is "good" a first meeting is kept with the owner of the IDEA to start working to turn it into a Project. So, we discuss on the needs of the IDEA: partners, funds, technology, … as well as other requirements such as a scenario to develop a possible pilot (City, Scientific Park, Neighbourhood, Building, …). Once the needs and requirements are set and collected in a document, we start looking for them. At the same time, ASCC staff has continuous

meetings with the company/ies involved to advance on the way to have a written proposal (application form). This procedure has a different speed depending on the financing needs, mainly if the IDEA needs or doesn´t need public funds to be developed. If the IDEA needs public funds, the steps will be marked by the scenario of calls.

Within the pilot we have given support to more than 25 SMEs (information on public funds mainly; IDEA analysis).
Between the 25 SMEs, after the IDEA analysis we have continued working on 2 ideas to give all the support to apply for public funding. So, two proposals were presented to two different National Calls, being one of them (CARCIS) approved with a budget of 1.648.000,00 €. The most important information is placed in the following table:

Company (SMES)	Call for public funding	Title of the project	Description of the project	Result
Iertec Actisa Softcrits	FEDER INTERCONECTA 2018	CARCIS – Car assisted with radar and camera intelligent sensors	The CARCIS Project aims to respond to the cost problems associated with the implementation of a panoramic sensor of the environment in a level 4 autonomous vehicle.	In execution (01/07/2018 – 31/12/2020)
Amura WiFi Rent a Car	Programa de apoyo a las AEIS con objeto de mejorar la competitividad de las PYMES (2018) (National call for improving competitiveness in SMEs)	Intelligent Corporate Mobility Platform based on blockchain	The Project pursues the development of a platform for access and shared use of corporate (light) vehicles. Through the registration of operations in the blockchain, an improvement in visibility and traceability is achieved for the different stakeholders involved (manufacturer, operators, customers …). The vehicle in turn converts the trunk into a space for delivery/collection of the products among the different stakeholders (through the authenticated transmission of a digital ephemeral key).	Not approved

When a new call appears the internal procedure to turn ideas into real projects the ones will take a product/service to the market is activated. This procedure has been collected in an image to help any Company to see easily the way IDEA_PROJECT_PRODUCT/SERVICE/PROTOTIPE.



2. Describe when and where the action was implemented (time frame, location)

Actions have been implemented from May 2018 to September 2019 (although this activity will be kept during all the project duration) in both ASCC office and SMEs offices.

3. Describe the scope and objectives of the action regarding the project and the participating SMEs

The main pilot project objective is to support SMEs to get public funds to develop their ideas on Smart and Green Mobility Sector. This support implies all the steps required from initial step, the conception of the idea to the final one, written application form/proposal.
The Green mind project aims to develop and strengthen SMEs´s economic competitiveness. By supporting SMEs on getting funds to develop their innovation solutions for the Green and Smart Mobility Market, SMEs are getting a competitive position in the market.
The project CARCIS approved in the framework of a national call (FEDER INTERCONNECTA 2018) is being developed by three SMEs (plus a Big company and an University) and will have a final result for the autonomous vehicle market.

4. Describe interconnections and interrelations between this action and other actions (if there are any)

This action is directly related and interconnected with the actions held within the B2B meetings service since the information on real needs in the railway mobility area were the topic used for the B2B sessions in order to work under a collaborative model to design future market solutions

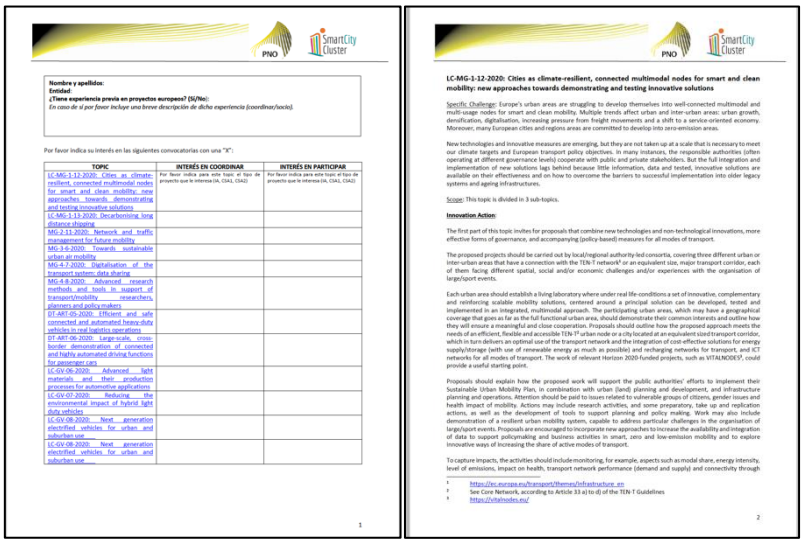
B) Workshop "Retos futuros en la movilidad y el transporte inteligente. Oportunidades en el marco europeo de financiación" (Future challenges on mobility and Smart transport. Opportunities in the European funding framework)

1. Briefly present the action, the topic(s) covered and the participating SMEs

ASCC will participate with the GREEN MIND Project in the **International Forum "S-Moving, Smart, Autonomous and Unmanned vehicles"** during the days 9th and 10th of October. S-Moving is a forum dedicated to share the technologies applied to intelligent, autonomous and connected mobility by land, sea and aerospace and its infrastructure. This forum is a transversal and multi-sectorial scenario in the one it will be possible for the GREEN MIND project to establish synergies, make contacts, find business opportunities and know the latest in these sectors.

In this framework and taking advantage of a collaboration contract set with an international consultant PNO with a huge experience on European funds the **10th of October** it is going to be celebrated a **workshop/Seminar on how to apply for H2020 calls looking at the still open/to be opened topics in the areas of transport and mobility**.

Previous to the workshop it has been sent to the companies a form with the different topics in order them to select their interest on participating in possible consortiums to apply as a partner or as a leader. Together with the form there is a summary of each of these topics (To download: https://andsc.eu/GREENMIND_PILOTS_PUBLICFUNDING)



Nombre y apellidos:
Entidad:
¿Tiene experiencia previa en proyectos europeos? (Si/No):
En caso de si por favor incluye una breve descripción de dicha experiencia (coordinar/socio).

Por favor indica su interés en las siguientes convocatorias con una "X":

TOPIC	INTERÉS EN COORDINAR	INTERÉS EN PARTICIPAR
LC-MG-1-12-2020: Cities as climate-resilient, connected multimodal nodes for smart and clean mobility: new approaches towards demonstrating and testing innovative solutions	Por favor indica para este topic el tipo de proyecto que te interesa (IA, CSA1, CSA2)	Por favor indica para este topic el tipo de proyecto que te interesa (IA, CSA1, CSA2)
LC-MG-1-13-2020: Decarbonising long distance shipping		
MG-2-11-2020: Network and traffic management for future mobility		
MG-3-6-2020: Towards sustainable urban air mobility		
MG-4-7-2020: Digitalisation of the transport system: data sharing		
MG-4-8-2020: Advanced research methods and tools in support of transport/mobility researchers, planners and policy makers		
DT-ART-05-2020: Efficient and safe connected and automated heavy-duty vehicles in real logistics operations		
DT-ART-06-2020: Large-scale, cross-border demonstration of connected and highly automated driving functions for passenger cars		
LC-GV-06-2020: Advanced light materials and their production processes for automotive applications		
LC-GV-07-2020: Reducing the environmental impact of hybrid light duty vehicles		
LC-GV-08-2020: Next generation electrified vehicles for urban and suburban use		
LC-GV-08-2020: Next generation electrified vehicles for urban and suburban use		

1

LC-MG-1-12-2020: Cities as climate-resilient, connected multimodal nodes for smart and clean mobility: new approaches towards demonstrating and testing innovative solutions

Specific Challenge: Europe's urban areas are struggling to develop themselves into well-connected multimodal and multi-usage nodes for smart and clean mobility. Multiple trends affect urban and inter-urban areas: urban growth, densification, digitalisation, increasing pressure from freight movements and a shift to a service-oriented economy. Moreover, many European cities and regions areas are committed to develop into zero-emission areas.

New technologies and innovative measures are emerging, but they are not taken up at a scale that is necessary to meet our climate targets and European transport policy objectives. In many instances, the responsible authorities (often operating at different governance levels) cooperate with public and private stakeholders. But the full integration and implementation of new solutions lags behind because little information, data and tested, innovative solutions are available on their effectiveness and on how to overcome the barriers to successful implementation into older legacy systems and ageing infrastructures.

Scope: This topic is divided in 3 sub-topics.

Innovation Action:

The first part of this topic invites for proposals that combine new technologies and non-technological innovations, more effective forms of governance, and accompanying (policy-based) measures for all modes of transport.

The proposed projects should be carried out by local/regional authority-led consortia, covering three different urban or inter-urban areas that have a connection with the TEN-T network[6] or an equivalent size, major transport corridor, each of them facing different spatial, social and/or economic challenges and/or experiences with the organisation of large/sport events.

Each urban area should establish a living laboratory where under real life-conditions a set of innovative, complementary and reinforcing scalable mobility solutions, centered around a principal solution can be developed, tested and implemented in an integrated, multimodal approach. The participating urban areas, which may have a geographical coverage that goes as far as the full functional urban area, should demonstrate their common interests and outline how they will ensure a meaningful and close cooperation. Proposals should outline how the proposed approach meets the needs of an efficient, flexible and accessible TEN-T[7] urban node or a city located at an equivalent sized transport corridor, which in turn delivers an optimal use of the transport network and the integration of cost-effective solutions for energy supply/storage (with use of renewable energy as much as possible) and recharging networks for transport, and ICT networks for all modes of transport. The work of relevant Horizon 2020-funded projects, such as VITALNODES[8], could provide a useful starting point.

Proposals should explain how the proposed work will support the public authorities' efforts to implement their Sustainable Urban Mobility Plan, in combination with urban (land) planning and development, and infrastructure planning and operations. Attention should be paid to issues related to vulnerable groups of citizens, gender issues and health impact of mobility. Actions may include research activities, and some preparatory, take up and replication actions, as well as the development of tools to support planning and policy making. Work may also include demonstration of a resilient urban mobility system, capable to address particular challenges in the organisation of large/sport events. Proposals are encouraged to incorporate new approaches to increase the availability and integration of data to support policymaking and business activities in smart, zero and low-emission mobility and to explore innovative ways of increasing the share of active modes of transport.

To capture impacts, the activities should include monitoring, for example, aspects such as modal share, energy intensity, level of emissions, impact on health, transport network performance (demand and supply) and connectivity through

6 https://ec.europa.eu/transport/themes/infrastructure_en
7 See Core Network, according to Article 33 a) to d) of the TEN-T Guidelines
8 https://vitalnodes.eu/

2

During the workshop PNO Consultant will explain how to apply to H2020 Funding Scheme and will travel through the different topics open on mobility and transport:

- LC-MG-1-12-2020: Cities as climate-resilient, connected multimodal nodes for smart and clean mobility: new approaches towards demonstrating and testing innovative solutions
- LC-MG-1-13-2020: Decarbonising long distance shipping
- MG-2-11-2020: Network and traffic management for future mobility
- MG-3-6-2020: Towards sustainable urban air mobility
- MG-4-7-2020: Digitalisation of the transport system: data sharing
- MG-4-8-2020: Advanced research methods and tools in support of transport/mobility researchers, planners and policy maker

Andalucía SmartCity

Interreg Mediterranean green mind
Project co-financed by the European Regional Development Fund

"RETOS FUTURO DE LA MOVILIDAD Y EL TRANSPORTE INTELIGENTE. OPORTUNIDADES EN EL MARCO EUROPEO DE FINANCIACIÓN" ON OCTOBER 10TH2019

PILOT ANDALUCIA SMART CITY

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Andalucía SmartCity

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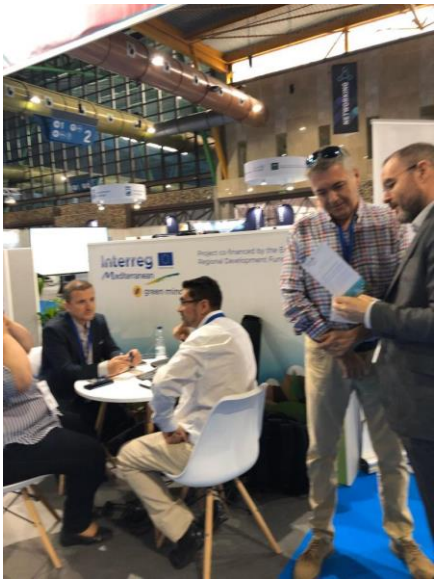
2. Describe when and where the action was implemented (time frame, location)

10th of October a workshop/Seminar on how to apply for H2020 calls looking at the still open/to be opened topics in the areas of transport and mobility was celebrated in S-Moving Forum in Malaga.



Photos taken during the Workshop

3. Describe the scope and objectives of the action regarding the project and the participating SMEs

The main pilot project objective is to give SMEs updated information on the H2020 funding scheme: topics open until December 2020 and how to apply. SMEs will have the opportunity before assisting to the Seminar to choose those topics of its interest.

As a second objective we expected to identify any potential IDEA to work together with PNO in order to present a Full Proposal to any of the topics on transport and mobility area.

The Green mind project aims to develop and strengthen SMEs´s economic competitiveness and innovation capacities. Giving SMEs updated information on European public funds (H2020 topics on mobility and transport area) as far as some keys to apply for European public funds we are providing them with tools to help them to develop innovative products/services demanding by the European Market.

4. Annex

Project co-financed by the European Regional Development Fund

Business Plan toolkit

Version 1.0

Nov 2019

1 Introduction

A business plan is a document helping company analyses all aspects of its business and evaluates its business prospects. The content of the business plan depend on the field of work and company needs. The entrepreneurs can use a standardized template that are tailor to your needs.

A business plan is the most important document. You need it first and foremost for yourself, as the investor usually decides whether to invest, based on the management and presentation summary. The business plan is the document the entrepreneur should be prepared as objectively as possible. A good business plan represents a clear vision of the company and is very useful in finding investors, partners, associates... The length of a business plan should not exceed 25 pages without attachments.

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2 Vsebina

3 Uvod v poslovni načrt

Poslovni načrt je dokument v katerem podjetje analizira vse vidike poslovanja in oceni svoje poslovne možnosti. Poslovni načrti se navadno razlikujejo glede na panogo in potrebe podjetja, vseeno pa si lahko izdelavo olajšamo z uporabo standardiziranih predlog, ki jih priredimo svojim potrebam. Razlogov za izdelavo poslovnega načrta je mnogo, saj lahko s pomočjo analiz in pridobljenih podatkov določite cilj poslovanja, ugotovite svoje prednosti in slabosti, uporaben pa je tudi pri pridobivanju investitorjev... Pri izdelavi se osredotočamo na kratkoročne projekcije in cilje ter načrte svojega poslovanja.

Poslovni načrt je najpomembnejši dokument. Potrebujete ga predvsem zase, saj se investitor običajno odloči, ali bo vložil, že na podlagi povzetka za vodstvo in predstavitve. Poslovni načrt naj bo vaše razmišljanje zlito na papir, ki naj bo čim bolj objektivno. Dober poslovni načrt predstavlja jasno vizijo podjetja in je zelo uporaben pri iskanju investitorjev, partnerjev, sodelavcev... Dolžina poslovnega načrta naj ne presega 25 strani brez prilog.

3.1 Kratka predstavitev vsebine poslovnega načrta

3.1.1 Povzetek

Povzetek poslovnega načrta naj bo pripravljen jasno in jedrnato. Na kratko povejte kaj želite doseči z vašo podjetniško idejo oz. Investicijo. Na kratko predstavite svoje poslovanje, vaše izdelke oz. storitve (vašo ponudbo) in kako nameravate financirati vašo idejo.

3.1.2 Analiza trga

Definirajte vaše ciljno tržišče, kdo so kupci vaših proizvodov ali storitev, njihove značilnosti in obseg potencialnega tržišča Tržna analiza spodbuja podjetnika, da se seznani z vsemi vidiki trga, zato lahko jasno opredeli in razume svoj ciljni trg.

Začnete lahko z opredelitvijo trga glede na velikost, strukturo, možnosti rasti, trende in prodajni potencial. Temeljita tržna analiza vam bo dala vpogled v stanje izbrane panoge in potencial rasti vašega podjetja, z njo pa boste lažje načrtovali tudi razvoj in prihodnje poslovanje vaše organizacije.

Analizirajte tudi vaše konkurente (vsaj 5 ali tiste v neposredni bližini), njihove prednosti in slabosti - v primerjavi z vami oz. vašim podjetjem.

Izdelajte tudi SWOT analizo, kjer analizirajte in opišite svoje tržne priložnosti in ovire ter lastne prednosti in slabosti (sebe in svojega podjetja).

3.1.3 Marketinške in prodajne strategije

Strategije predstavljajo gonilno silo vašega podjetja. Predstavite jasno tržno strategijo vašega podjetja (nabave in podaje). Pričnite s tržnim deležem in željenimi težnimi segmenti, s prodajnimi strategijami, taktikami in kanali. V analizo vključite tudi cenovno politiko, politiko marketinške kulture itd. Področje marketinga se bo v vašem podjetju nenehno razvijalo, saj mora vaše podjetje stalno iskati nove načine uspešnega poslovanja. V poglavju opredelite tudi svoje nabavno tržišče.

3.1.4 Management

V tem poglavju predstavite vaše vodstvo podjetja in zaposlene. Predstavite tudi tveganja in probleme, ki se pojavljajo pri uvajanju dejavnosti, začetku poslovanja in pri poslovanju v prihodnosti.

3.1.5 Finančna analiza podjetja

Finančni načrt razvijete, ko določite jasne cilje in analizirate trg. ločili jasne cilje. Vključiti morate tri do pet let podatkov.

4 Poslovni načrta

4.1 Vsebinski del poslovnega načrta

1. Povzetek
2. Tržišče in panoga
    a. Viri podatkov in informacij,
    b. Sekundarni in primarni viri / informacije,
    c. Razvojne možnosti panoge
    d. Podatki in informacije na makro nivoju
    e. Podatki in informacije na mikro nivoju
3. Podjetje, proizvodi in storitve
    a. Opis podjetja oz. poslovne ideje,
    b. Glavna dejavnost oz. dejavnosti podjetja,
    c. Osnovni podatki,
    d. Opis proizvodov in storitev,
    e. Drugi podatki o proizvodih / storitvah oz. procesih v podjetju
    f. Tržene strategije in cilji
4. Kupci in dobavitelji s SWOT analizo
    a. Kupci (odjemalci, potrošniki, stranke), proizvodov / storitev podjetja,
    b. Dobavitelji podjetja (naziv, pogoji, vsi drugi podatki, …),
    c. Konkurenca podjetja (naziv, prednosti in slabosti konkurentov podjetja
    d. SWOT analiza
        i. NOTRANJE ZNAČILNOSTI (na katere imamo vpliv):
        ii. Prednosti (S):
            1. V čem smo dobri? Kaj imamo? Kaj obvladamo?
        iii. Slabosti (W):
            1. Kje smo slabi? Česa ne obvladamo? Šibke točke
        iv. ZUNANJE ZNAČILNOSTI (nanje nimamo vpliva, se jim prilagajamo):
        v. Priložnosti (O):
            1. Kaj ponuja okolje? Kaj v okolju lahko izkoristimo?
        vi. Nevarnosti (T):
            1. Kaj bi nam preprečilo uresničitev naših načrtov?
5. Management, organizacija, lastništvo
    a. Vodstvo, direktor,
    b. Zaposleni,
    c. Organizacija,
    d. Oblika,
    e. Lastništvo
6. Ekonomika poslovanja in finančni načrt

7. Kritična tveganja in problemi
8. Terminski načrt
9. Zagotovitev sredstev
10. Dodatki

4.2 Finančni del

V nadaljevanju podajamo razlago nekaterih finančnih kategorij.

Osnovna sredstva in amortizacija

- Podjetje mora imeti za svoje poslovanje osnovna sredstva, s katerimi lahko proizvaja, prodaja oz. vodi poslovanje. Osnovna sredstva morajo biti vknjižena v poslovne knjige podjetja, od njih se obračunava amortizacija.
- Amortizacija je delni odpis osnovnih sredstev. Lastnosti osnovnih sredstev so, da je njihova nabavna vrednost zelo visoka in da jih skozi delovni proces uporabljamo daljše časovno obdobje (več let). Preko delnega odpisa oziroma amortizacije jih vsako leto, kot strošek amortizacije, prikazujemo v stroških poslovanja podjetja.

Stroški poslovanja podjetja

- Poleg nabave blaga, amortizacije in stroškov dela se pri poslovanju podjetja pojavljajo tudi drugi stroški,
- to so npr.: najemnina prostora, ogrevanje, elektrika, voda, vzdrževanje opreme, zavarovanje prostorov, računovodske storitve, telefon in internet, kilometrina, reklama, pisarniški material, drugi stroški poslovanja.
- Vse te stroške mora podjetje skrbno načrtovati, pokriva pa jih s prodajo svojih proizvodov in storitev.

Izkaz poslovnega izida

- Za načrt uspešnosti poslovanja vse prej navedene podatke in izračune:
    - načrtovano vrednost prodaje,
    - načrtovano vrednost nabave,
    - amortizacijo osnovnih sredstev,
    - stroške dela zaposlenih in
    - stroške poslovanja podjetja

- Združimo podatke v načrtovani poslovni izid podjetja, ki podjetniku pove kako uspešno bo njegovo načrtovano poslovanje, prikazano v poslovnem načrtu.
- Pripravimo še: bilanco stanja, izkaz denarnega toka, kazalnike uspešnosti poslovanja (ekonomičnost, rentabilnost, …).

5 Orodje za pripravo poslovnega načrta

Priloga k temi dokumentu je obrazec za pripravo poslovnega načrta, ki se nahaja v Wordovem dokumentu in finančni del, ki se nahaja v Excelovem dokumentu.

NASLOV DOKUMENTA

Poslovni načrt

Poslovni načrt vsebuje informacije, ki predstavljajo poslovno skrivnost in jih brez izrecnega pisnega soglasja podjetnika ni dovoljeno kopirati, posredovati tretjim osebam ali kako drugače objaviti.

Orodje za izdelavo dokumenta je pripravljeno in sofinancirano s programa Interreg Mediteran, projekt GREEN MIND

Kraj, 5. 1. 2018

Orodje za izdelavo investicijske dokumentacije je sofinancirano iz evropskega transnacionalnega programa Interreg Mediteran, katerega cilj je izboljšanje trajnostne in zelene mobilnosti.

KAZALO VSEBINE

KAZALO TABEL

1 POVZETEK POSLOVNEGA NAČRTA

1. *Kratka predstavitev ustanovitelja in poslovne zamisli*
2. *Kratka predstavitev podjetja (osnovni podatki)*
3. *Predstavitev panoge, dejavnosti*
4. *Jasna predstavitev ideje, zakaj je poslovna priložnost, konkurenčne prednosti podjetja, kako si bo podjetje zagotovilo vstop na trg*
5. *Ciljni trgi, glavne skupine kupcev, obseg in rast tržnih segmentov*
6. *Pričakovana (načrtovana) vrednost pričakovane prodaje*
7. *Predstavitev podjetnika(ce) in njegove izkušnje, ostali člani tima (zaposleni)*
8. *Pridobivanje finančnih sredstev, glavna uporaba tega financiranja*
9. *Namen poslovnega načrta je pridobitev sredstev za realizacijo samozaposlitve na javnem razpisu MOM.*

2 TRŽIŠČE, PANOGA IN RAZVOJNE MOŽNOSTI

1. *Stanje panoge, trendi, napovedi za naslednja leta, novi proizvodi, nova dogajanja,*
2. *Zunanji dejavniki, ki bodo vplivali na poslovanje*

3 PODJETJE, PROIZVODI / STORITVE

1. *Ustanovitev podjetja in začetek dejavnosti:*
2. *Sedež podjetja:*
3. *Pravno organizacijska oblika podjetja:*
4. *Ustanovitelj(i) in njihovi deleži:*
5. *Poslovno področje delovanja podjetja:*
6. *Cilji pri razvoju podjetja:*
7. *Poslanstvo podjetja:*

3.1 Analiza povpraševanja - kupci

Opredelite katere potrebe zadovoljujete in katere so vaše ciljne skupine kupcev, kakšna je njihova kupna moč… Iz statističnih podatkov opredelite velikost vaših ciljnih kupcev.

Definirajte vaše ciljno tržišče (obseg trga, dejavnost trga v preteklosti, napovedana rast/padec, ovire za vstop na trg), kdo so kupci vaših proizvodov ali storitev, njihove značilnosti in obseg potencialnega tržišča.

3.2 Dobavitelji

Analiza dobaviteljev (kdo so, pod kakšnimi pogoji bomo kupovali: plačilni pogoji, dobavni pogoji, drugi pogoji, …)

Tabela 1: Dobavitelji podjetja

Dobavitelj	Plačilni pogoji	Dobavni pogoji	Drugi pogoji

3.3 Konkurenti

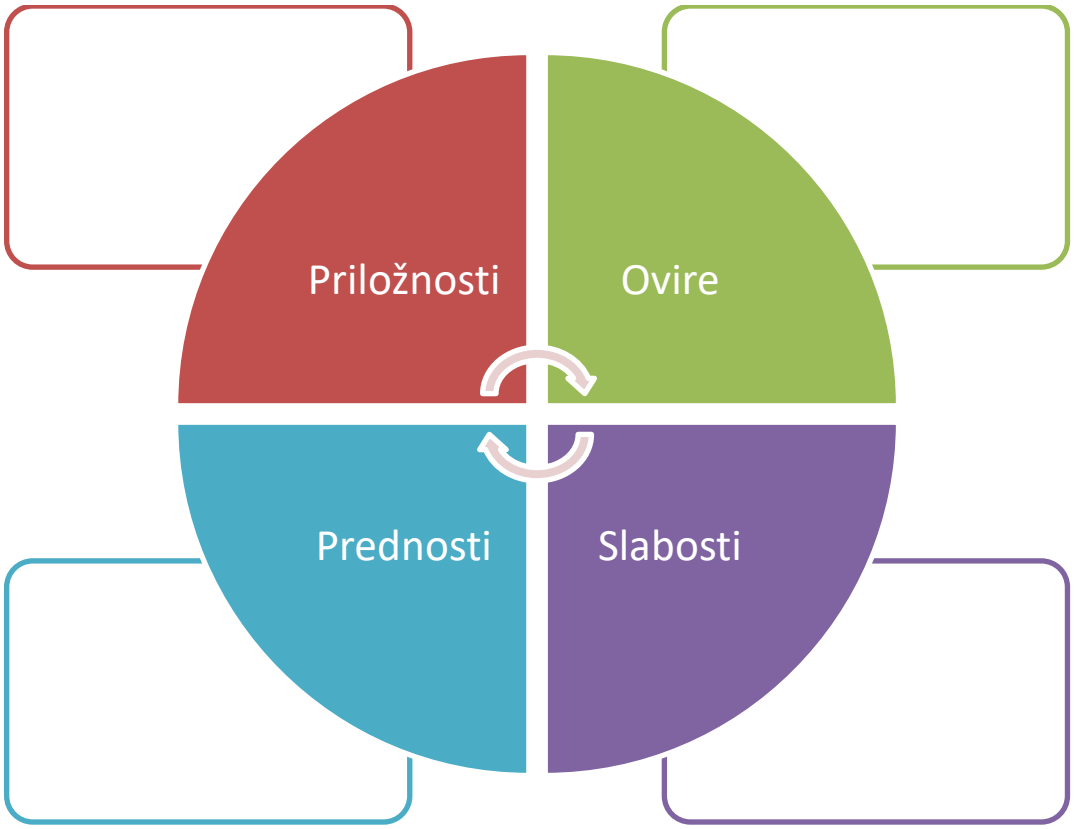
Analiza konkurence (kdo so glavni konkurenti, analiza prednosti in slabosti konkurentov, vstop novih konkurentov na ciljni trg)

Tabela 2: Prednosti in slabosti konkurentov

Ime konkurence	Prednosti	Slabosti

3.4 Načrt trženja (SWOT analiza, cilji, strategije)

Tabela 3: SWOT analiza



3.5 Cilji podjetja

Opredelite zaključke iz SWOT analize: Cilji podjetja so (opisno) – kaj:

3.6 Strategije podjetja

Opredelite zaključke iz SWOT analize: strategije so (opisno) – kako:

Opis marketinške strategije in strategije podjetja: vstop na tržišče, obvladovanje trga, širitev; ciljne skupine na začetku in kasneje; inovativni in drugi marketinški pristopi; poudarek na proizvodu oz. storitvi (lastnosti, cena, kvaliteta, način dostave, način dobave, garancija, …)

Opis trženjskega spleta (marketing miks podjetja!)

- *izdelek (proizvod / storitev): natančen opis, vrednost za kupca, garancije, druge poprodajne aktivnosti ter obdržanje strank / kupcev, servisna mreža, rezervni deli, ipd.*
- *cena (kalkulacija, primerjava s konkurenti, …),*
- *distribucija (prodajne poti, kanali, stroški prodaje, prodajna politika, kje se bo prodajalo, prodajni pogoji, metode prodaje, …),*
- *promocija (tržno komuniciranje – osebna prodaja, ekonomska propaganda, pospeševanje prodaje, odnosi z javnostmi in publiciteta) kateri mediji, kako pogosto, cene oz. proračun, druge oblike promocije, …*

4 MANAGEMENT, ORGANIZACIJA, LASTNIŠTVO

- *Management, vodstvo podjetja*
- *Organizacijska shema*
- *Nagrajevanje zaposlenih*
- *Lastništvo (udeležba v dobičku, solastništvo, …)*
- *Družbeno odgovornost*

5 FINANČNI DEL POSLOVNEGA NAČRTA

5.1 Načrt prodaje

V alinejah navedite, kaj bo podjetje prodajalo in pripravite količinski načrt prodaje.

Tabela 4: Količinski načrt prodaje

Oz.	Vrsta izdelkov / storitev	EM	1. leto	2. leto	3. leto
1					
2					
3					
4					
5					
6					
7					

Na osnovi predvidenih prodajnih količin in povprečnih cen izdelkov / storitev je pripravljen vrednostni načrt prodaje.

Tabela 5: Vrednostni načrt prodaje

Oz.	Vrsta izdelkov / storitev	EM	1. leto	2. leto	3. leto
1					
2					
3					
4	0				
5	0				
6	0				
7	0				
	Skupaj		**0,00**	**0,00**	**0,00**

5.2 Načrt nabave

Podjetje bo nabavljalo naslednji material oziroma izdelke:

- ...
- ...

V nadaljevanju je pripravljen količinski načrt nabave po izdelkih oziroma skupinah izdelkov.

Tabela 6: Količinski načrt nabave materiala oz. blaga

Oz.	Vrsta materiala/polizdelka/izdelka	EM	1. leto	2. leto	3. leto
1					
2					
3					
4					
5					
6					
7					

Na osnovi povprečnih nabavnih cen je pripravljen vrednostni načrt nabave.

Tabela 7: Vrednostni načrt nabave materiala oz. blaga

Oz.	Vrsta materiala/polizdelka/izdelka	EM	1. leto	2. leto	3. leto
1					
2					
3					
4					
5					
6					
7					
Skupaj			**0,00**	**0,00**	**0,00**

5.3 Nakup osnovnih sredstev - amortizacija

Podjetje bo za poslovanje potrebovala naslednja osnovna sredstva, nabavljena po okvirnih cenah iz naslednje tabele.

Tabela 8: Osnovna sredstva

Oz.	Osnovno sredstvo	1. leto	2. leto	3. leto	4. leto
1					
2					
3					
4					
5					
6					
7					
	Skupaj	-	-	-	-

Letni stroški amortizacije osnovnih sredstev so prikazani v naslednji tabeli.

Tabela 9: Izračun amortizacije osnovnih sredstev

Oz.	Osnovno sredstvo	Vrednost	Am.st.	1. leto	2. leto	3. leto
1		-	0,00%	0	0	0
2		-	0,00%	0	0	0
3		-	0,00%	0	0	0
4		-	0,00%	0	0	0
5		-	0,00%	0	0	0
6		-	0,00%	0	0	0
7		-	0,00%	0	0	0
	Skupaj	-		-	-	-

5.4 Zaposlovanje delavcev – stroški dela

V podjetju bo zaposlenih ….. delavcev.

Tabela 10: Načrt zaposlovanja delavcev (št. zaposlenih)

Delovno mesto	1. leto	2. leto	3. leto	4. leto

Skupaj				

5.5 Stroški poslovanja

Ostali stroški poslovanja podjetja so naslednji:

Tabela 11: Stroški poslovanja podjetja

Stroški poslovanja	Mesec	1. leto	2. leto	3. leto	4. leto
Najemnina z ogrevanjem, elektriko, vodo					
Stroški dela - plača delavca					
Malica, prevoz na delo					
Računovodske storitve					
Nabavna vrednost blaga					
Telefon, internet					
Reklama					
Pisarniški material					
Ostali stroški					
….					
Skupaj					

5.6 Načrt uspešnosti poslovanja – izkaz poslovnega izida

Uspešnost načrtovanega poslovanja podjetja je prikazana v naslednji tabeli

Tabela 12: Načrtovani poslovni izid podjetja

Oz.	Postavke	1. leto	2. leto	3. leto	4. leto
A.	PRIHODKI				
1	Čisti prihodki od prodaje				
2	Drugi poslovni prihodki				
	Skupaj prihodki (1 + 2)				

B.	ODHODKI				
3	Stroški materiala in nabavna vrednost blaga				
4	Stroški storitev				
5	Stroški dela zaposlenih				
6	Amortizacija osnovnih sredstev				
7	Drugi stroški				
	Skupaj odhodki (3+4+5+6+7)				
C.	**Poslovni izid poslovanja**				

6 KRITIČNA TVEGANJA IN PROBLEMI

Opis kritičnih tveganj po posameznih področjih (intenzivnost tveganja in možni ukrepi, …)

7 TERMINSKI NAČRT

Temeljni mejniki ali roki, ki so kritičnega pomena za uspeh posla, …
(kaj je potrebno storiti, kdo bo to naredil, kdaj izvesti, …)

Tabela 13: Terminski načrt izvedbe

Aktivnosti	Termini
Ustanovitev podjetja	
Izdelava poslovnega načrta	
Nabava, priprava, organizacija	
Začetek poslovanja	
Samozaposlitev	
Dodatne zaposlitve	

8 PREDVIDENA ZAGOTOVITEV SREDSTEV ZA POSLOVANJE PODJETJA

Načrtovane potrebe oz. investicije za zagon podjetja

Koliko finančnih sredstev je potrebnih za nemoteno poslovanje

Viri finančnih sredstev

Kraj, mesec, leto: Avtor/ica poslovnega načrta:

GREEN MIND

GREEN AND SMART MOBILITY STUDY

November 2019

Content

Introduction

The guiding principle of sustainable mobility is to meet the needs of all people for mobility, while reducing traffic and its harmful effects. Transport accounts for nine percent of the EU's gross value added, with total EU investment of € 20.3 billion in 2018. Across the EU, both passenger and freight traffic are increasing year by year. Transport is directly responsible for around 20 million jobs in the EU; more than two million companies are associated with it. Transport is also one of the most influential sectors in achieving the national goal of reducing greenhouse gas emissions and the associated transition to a low carbon society.

In Slovenia, car use is often a necessity, there is not of good quality and sometimes nonexistent public transport, the country is also sparsely populated. A resident of Slovenia makes 7200 kilometers in a year, which is as much as if he made his way from the capital three times to Paris and back. According to the Statistical Office of Republic of Slovenia, our most important means of transportation remains a passenger car - over 1.1 million at the end of 2017. The car was the main mean of transport on 68 percent of the route, which, according to research, ranks us third in the European Union, we exceeded 21.3 percent of the route, the bicycle was the main means of transport on 4.5 percent of the route, and public transport on 4.3 percent of the route.

Slovenians make more than seven thousand kilometers a year on daily routes, with more than 83 percent of the routes being made by car. Almost 350,000 trips are made daily from the Ljubljana area alone, of which only about nine percent are by means of public passenger transport. According to the Statistical Office of the Republic of Slovenia, in 2000 almost 60 percent of the active population had a job in the municipality of residence, but today they are well below half.[1]

It is no surprise, that we are at the very top of our family income share that is spent for mobility: sixteen percent or two percent more than food. Only Luxembourg is spending more on transport, while our neighbors are well behind us - in Croatia, 12.6 per cent, 11.9 per cent in Italy, 13 per cent in Hungary and 12.8 per cent in Austria. At the same time as motorization, Slovenia experienced a sharp decline in the demand for public transport. If, in 1981, 64 percent of people drove to a public passenger service, only one tenth of them drive today.[2]

De-carbonization of road transport is key to limiting the global rise in atmospheric temperatures by two degrees to 2050. Today, the transport sector is completely dependent on fossil fuels and emits more than 20 percent of all carbon dioxide into the air. And it is certain that this proportion will continue to grow in the coming years. According to forecasts, it will rise to about 35 percent by 2050, leading to a four-degree increase in temperature, unless, of course, action is taken. The scenario is that by 2050, the atmosphere will only warm up by two degrees, requiring a 40 percent reduction in carbon dioxide emissions over the same period. Average emissions per kilometer should be reduced by more than 70

[1] https://pro.finance.si/8942563, 7. 11. 2019
[2] https://www.dnevnik.si/1042753377, 29. 10. 2019

percent, despite increases in carbon intensive road freight and air transport. To limit global warming to only two degrees by 2050, the equivalent of 160 million low-emission vehicles - 80 million zero-emission vehicles and 80 million electric hybrid vehicles - would be needed on the roads by 2030. To reach the ambitious goal, we will need a wide range of technologies. As the range of vehicles, their adaptability and capacity vary greatly between segments, battery electric vehicles, fuel cell vehicles, biofuels and synthetic fuels will be required in different segments in different proportions.

It is even better to talk about de-fossilization. It is important to look at the big picture from the production, use, to the decomposition of a vehicle. We have a good chance in Slovenia, since only about a third of our electricity is generated from fossil fuels. The use of e-vehicles therefore results in fewer greenhouse gas emissions than the use of comparable internal combustion engine vehicles.[3]

Market inteligence

Overview of the current state of Green and Smart Mobility (GSM) in Slovenia

In early June 2019, the Government of the Republic of Slovenia adopted a three-year "Action Program for Alternative Fuels in Transport". On the basis of the "Strategy for the Development of the Market for the Establishment of an Appropriate Infrastructure in alternative fuels in the Transport Sector"[4] (hereinafter referred to as the Strategy), Slovenia committed itself to the preparation of the "Action Program for Alternative Fuels in Transport for the Implementation of the Strategy"[5]. The Government of the Republic of Slovenia also defines CNG vehicles and biomethane, biofuels and hydrogen as an alternative fuel. In addition to the use of ecological vehicles, the measures also require the construction of a charging station network.

The Government of the Republic of Slovenia will subsidize the installation of CNG filling stations in regional centers, with the aim of establishing a comprehensive network of charging infrastructure by 2020. Slovenia is also obliged to do so by Directive 2014/94/EU, which requires the construction of a filling infrastructure by 2020. Due to its reliable and diversified pipeline system, this is a solution for Slovenia to reduce transport emissions quickly and efficiently. CNG is a precursor to the use of renewable gas in transport (biomethane, synthetic gas, hydrogen). These are fuels for which existing gas infrastructure can be used, which is another proof that gas infrastructure will continue to play an important role in transport in the future. One example is the introduction of biomethane in Sweden, where 90 per cent of CNG is made up of

[3] https://oe.finance.si/8947722, 22. 11. 2019

[4] Strategija na področju razvoja trga za vzpostavitev ustrezne infrastrukture v zvezi z alternativnimi gorivi v prometnem sektorju v Republiki Sloveniji, Republika Slovenija Ministrstvo za infrastrukturo, 2017

[5] Akcijski program za alternativna goriva v prometu, Vlada Republike Slovenije, 2018

biomethane. Replacing natural gas with biomethane is extremely straightforward, with methane being the main constituent of both gases. This means that when replacing CNG with biomethane, everything else (infrastructure, vehicles) stays the same, only the power source changes. Biomethane is a motor fuel that currently has the lowest CO_2 emissions, so its rapid introduction into the transport sector is particularly sensible.

The Statistical Office of the Republic of Slovenia collected data revealing the travel habits of Slovenes. As they say, transportation can be divided in several ways: bike-sharing, carpooling and car-sharing.

Despite the shared mobility options offered, the most commonly used means of transport is passenger cars in Slovenian land passenger transport. According to Eurostat, 86 per cent of all passenger kilometers were carried out in 2014 with passenger cars. To a much lesser extent, routes were made by bus (12 per cent of passenger kilometers) and trains (2 per cent of passenger kilometers). Almost every other Slovenian has a car.

The number of passenger cars in Slovenia has increased by 11 per cent in the last 10 years, which means that 1,096,523 cars were in Slovenia in 2018. Almost every other resident in 2016 owned a car. Thus, on a European scale, Slovenia ranked 9th with 523 vehicles in terms of the number of vehicles per thousand inhabitants. In 2015, Luxembourg had the most cars per thousand inhabitants.

Slovenian households are also in terms of expenditure on personal mobility at the very top in Europe, as they ranked second in 2015, just behind Luxembourg. At that time, 16 per cent of all its expenditure was spent on vehicle purchases, the operation of personal transport and public transport, which was 3 percentage points more than the European average.

Since the turn of the millennium, the average age of passenger cars has been rising. It was 6.8 years in 2000 and 9.7 in 2015. The share of passenger cars under the age of 3 has been falling, while the share of passenger cars over the age of 12 has doubled in the last 16 years.

From the point of view of environmental pollution and traffic safety, it is encouraging that the number of new passenger cars registered in Slovenia for the first time since 2012 has increased. At the end of 2016, 65,000 new passenger cars were registered for the first time, which is 7 per cent more than in 2015.

Unfortunately, the share of alternative-powered passenger cars in Slovenia is negligible, while it is on the rise in the EU. In addition to new vehicle technology, less pollution is also being fueled by alternative-drive vehicles (not petrol or diesel). The share of new registered alternative-powered passenger cars in the Member States of the European Union is slowly increasing (EU average in 2012: 2.2 per cent, in 2015: 3 per cent). The largest number of registered alternative-powered passenger cars is in Poland (in 2015: 16 per cent of all passenger cars - 90 per cent of which were LNG-converted cars), half less in Latvia and Italy (in 2015: in each 8 per cent of all passenger cars). In Slovenia, such vehicles were only one percent.

At the end of 2015, 288 electric vehicles were registered, including plug-in hybrid and commercial vehicles, with about 600 registered.

Slovenia is already actively incorporating sustainable mobility measures within the framework of the measures of the European cohesion policy on e-mobility. Examples of good practice already being implemented are sustainable parking policy, drawing up mobility plans for institutions, green urban logistics and sustainable mobility education activities. Within the framework of the Slovenia - Green Reference Country in Digital Europe initiative, the Ministries for Infrastructure and Public Administration are already implementing a pilot project on the sharing of Avant2Go electric vehicles.

The Energy Concept of Slovenia (EIR) 6 envisages that only electric cars will drive around Slovenia by 2055.

The current situation in the field of electric vehicles in Slovenia is assessed as the state, or the moment of final breakthrough. Not so long ago, one could not imagine the advertising campaigns of leading car dealers in Slovenia with exposure to electric mobility. This is the most direct and tangible proof of the state of mind we have witnessed today. Some countries are lagging behind, some are overtaking.

In Slovenia, Renault-Nissan, BMW and Volkswagen are currently among the global providers of electric vehicles with an organized, trained and equipped sales service network for the sale and servicing of electric vehicles, with long-term sales plans. Other manufacturers of electric cars are also present to a lesser extent, including Tesla Motors, Tazzari. These are also trademarks of the wider industry groups, which work best with the Slovenian (and European) supply chain. That is why, with this year's momentum, mass mobility is gaining ground for the broader macroeconomic benefits. Some brands are passively present in the market, and the performance of business car rental and vehicle rental providers that include electric vehicles is also evident. The Slovenian market is part of the wider European and global market, which means that individuals can also buy an electric car abroad, which is not on the regular offer of the manufacturer in Slovenia. For example, cars of brands such as Nissan and Tesla.

In addition, electric vehicles were also opposed by the state of Slovenia, which, under the auspices of the Eco Fund, offers non-refundable financial incentives to citizens for electric vehicles. This could be a purchase of a new vehicle, a conversion of a vehicle or the purchase of a redefined category, or the purchase of a new plug-in hybrid or a new electrically powered vehicle with a range extender.

[6] The Energy Concept of Slovenia (EIR) is the basic development document in the field of energy, which, in accordance with the Energy Act (EZ-1), determines the goals of a reliable, sustainable and competitive energy supply on the basis of projections of economic, environmental and social development of the country and on the basis of accepted international commitments for the next 20 years and approximately 40 years.

On the proposal of the Government of the Republic of Slovenia, the EIR is adopted by a resolution of the National Assembly of the Republic of Slovenia.

In addition, we expect that Slovenia will choose to follow the example of some European countries and promote the purchase of environmentally friendly electric vehicles with appropriate tax incentives.

There are about 110 public charging stations in Slovenia, which are mostly equipped with 2 two sockets and allow two vehicles to be charged at the same time. Adding to this the charges for privately owned company electric vehicles, there are an estimated 300 charging stations in Slovenia.

Figure 1: Public charging stations at Petrol in Slovenia[7]

Given the number of electric vehicles in traffic and the size of the country, the coverage of electric vehicle charging stations in Slovenia is good. In preparation for the arrival on the Slovenian market of leading brands, the experts of the parent factories performed tests and advised the Slovenian experts on how to upgrade the charging infrastructure. Thus, it is now in good working order in accordance with the most stringent criteria for state-of-the-art electric vehicles. In addition to the CEGC network, our country is also on the map of super-fast Tesla Motors car chargers. The existing 22 kW charger network for relatively fast three phase charging via the standard Type 2 car connector is also satisfactory.

But with all the investment in this infrastructure of public charging stations, which is very important, experience teaches us that only five to eight percent of the energy in electric cars will be recharged at these stations. Most electricity is charged at home or at the destination of the electric car owner is going

[7] https://www.petrol.si/na-poti/e-mobilnost/javne-elektricne-polnilnice, 22. 11. 2019

to. Eles - the public network system operator - wants to set up a system called E8 in Slovenia, a smart charging system, which means that we will be charging EVs when it is most convenient for the system, when enough energy is available, the charging station will receive a signal and start charging the EV. At E8, the smart charger will obey the operators and think instead of the user. The user will still plug in his EV as soon as he comes home, but this will only start charging when the power consumption drops, and the system has enough power. And then that energy will be cheaper. Charging an electric car will then be cheaper than using electricity for household purposes during peak hours. So smart charging stations will have to be provided at work. Not just the charging stations, but also the permanent parking spaces. And users will have to get used to connecting their EV every day. The policy must focus on addressing the challenges of private charging stations. Intelligent private charging stations will have a much greater public interest than public charging station when a proportion of e-vehicles will be high enough.[8]

In the period June to July 2015, company SODO conducted a comparative survey between business customers of electricity - companies in Slovenia (the survey included 519 companies of different sizes and activities from all Slovenian regions), including their intentions to use electric vehicles in official purposes and about extending your fleet to electric vehicles.

This research showed that there are almost 80 per cent of companies in Slovenia with fleet, which is very similar to the situation in 2012. In 2015, SODO found that most companies (38 per cent), have less than three vehicles, 33 per cent of companies have 4 to 9 vehicles, 17 per cent of 10 to 20 vehicles and 12 per cent of companies own more than 21 vehicles in their fleet. In 2012, they asked respondents for the first time the average distances travelled by their employees in one business trip.

In 2015, we can see minor changes from the previous measurement. Businesses indicate that business trips are most often between 51 and 150 km (26 per cent), followed by distances of up to 25 km (20 per cent) and up to 26 to 50 km (17 per cent) and 151 to 350 km (17 per cent)). We therefore see an increase of 6 percentage points at a distance of 51 to 150 km. The least often employees on a business trip travel an average distance of 351 km or more.

The share of companies that already own alternative vehicles has not changed significantly compared to previous years, at 2.5 per cent. On the other hand, there is a slight increase in companies considering such a purchase in the future. We see that compared to the measurement of two years ago, we are talking about an increase of two percentage points to 24 per cent, but if we compare this figure with the first measurement in 2009, we see that it is an increase of 10 percentage points. At the same time, the share of companies that do not think about such a purchase is decreasing, but the share is still relatively high (69 per cent). No significant differences were detected with respect to region and type of business, while statistically significant differences were detected with respect to firm size. Many small businesses are among the companies considering this type of purchase in the future. The research further inquired about the type of propulsion of these vehicles by the companies owning alternative drive vehicles. In

[8] https://www.avto-magazin.si/plugin/mag-uros-salobir-direktor-podrocja-za-strateske-inovacije-v-eles-u-elektricni-avtomobili-so-za-omrezje-lahko-izredno-koristni/, 25. 11. 2019

2012, gas-powered vehicles were the most common vehicles, and so were in 2015. Such vehicles are owned by 6 companies, as are electric-powered vehicles, and one company cites a hybrid vehicle. For the first time this year, SODO asked the companies with electric vehicles (6 companies in 2015) about the frequency of charging vehicles. 3 companies fill vehicles once a day, 2 companies once a week and one company several times a week.

If employees had electrical vehicles, they could only be filled during the work time by a good 1 per cent of the companies surveyed in 2010, and today, this percentage has increased to 3.5 per cent of companies. The proportion of companies considering installing charging points in the future is increasing from year to year, reaching 42 per cent in 2015, while at the same time 40 per cent of companies do not think about it.

There are no differences between the regions, but we can see differences in the size of the business, where small businesses stand out among those companies that state that they are considering installing charging points. In 2015, the share of enterprises with one dock (4 companies) increased compared to the previous measurement, followed by 3 companies with two charging points and 2 companies with three charging points. In 2015, they added a new question as part of our vehicle fleet questions and were interested in the impact on the purchase of electric vehicles if more fast charging points would be installed. 31 per cent of companies say that their company is likely to be influenced the purchase of electric vehicles if that was the case. It is also encouraging that in 18 per cent of companies, a larger number of charging stations would have an influence on the purchase of such vehicles. In total, as many as 49 per cent of companies give positive answers.

The objectives of the country and the wider EU by 2020 and 2030 are clear. Also, environmental, climate and energy independence and resource conservation issues we face, both locally and globally. There is still the broadest possible consensus that achieving these goals can only be achieved through decarbonisation. We use as much as 40 percent of our energy in transport. Therefore, electro mobility is one of the most important, if not the most important means of decarbonising traffic and the most efficient. The direction of further development is determined, but much depends on the further development of technologies, markets, pricing policies and geopolitical developments. It is clear, however, that not only electric vehicles will bring us to our destination. There will also be increasing digitization, intelligent traffic management and vehicle-to-vehicle communication systems and infrastructure. Ensuring transport efficiency and energy efficiency in transport is becoming more and more complex and demanding. Electric mobility, however, is only part of this, which in turn offers many answers to the most pressing problems related to traffic and quality of life. Even more so by conserving resources and ensuring sustainability.

On October 10th 2019 the Ministry of Infrastructure has announced that they will introduce free public transport for seniors which will be able to ride next year (2020) by train and bus.[9] Registered athletes will ride free of charge, and young registered and categorized athletes with student status will be able to use

[9] https://www.gov.si/novice/2019-10-10-brezplacna-uporaba-javnega-prevoza-za-upokojence/, 11. 10. 2019

the subsidized ticket from their residence to the place of training. The law has so far lacked the possibility for students and students with disabilities to be provided with free, personalized transportation.

The proposed improvements to the law aim to increase the number of passengers in public passenger transport at the Ministry of Infrastructure in order to reduce the environmental burden of transport.

The trend of growth in the use of passenger cars in Slovenia has not stopped, but at the same time as the number of passenger cars is increasing, the number of passengers on buses and trains is decreasing. At the Ministry, they want to reverse the trends.

In the past year (2018), therefore, they have introduced a single public passenger transport pass which allows all passengers to take a bus or train of any carrier on a specific connection.

They also introduced high-speed bus connections between major cities and the capital, which significantly improved public transport. These fast buses have a small number of stops, so travel is comparable to that of a passenger car.

Best available techniques in the field of Green and Smart Mobility

Electric automobile

All-electric vehicles (EVs) use a battery pack to store the electrical energy that powers the motor. EVs are sometimes referred to as battery electric vehicles (BEVs). EV batteries are charged by plugging the vehicle in to an electric power source. Electricity production may contribute to air pollution. EVs are typically more expensive than similar conventional and hybrid vehicles, although some cost can be recovered through fuel savings, a tax credit, or state incentives. Today's EVs generally have a shorter range (per charge) than comparable conventional vehicles have (per tank of gas). The efficiency and driving range of EVs varies substantially based on driving conditions. Extreme outside temperatures tend to reduce range, because more energy must be used to heat or cool the cabin. High driving speeds reduce range because of the energy required to overcome increased drag. Compared with gradual acceleration, rapid acceleration reduces range. Hauling heavy loads or driving up significant inclines also reduces range.

Charging equipment for plug-in electric vehicles (PHEVs or EVs) is classified by the rate at which the batteries are charged. Charging times vary based on how depleted the battery is, how much energy it holds, the type of battery, and the type of charging equipment. The charging time can range from less than 20 minutes to 20 hours or more, depending on these factors.

The seven electric cars were compared cost-wise with comparable petrol and diesel variants by Slovenian journal Finance and its partners (PRIMA test). Wherever possible, the comparison included

models with an automatic transmission common to all electric cars. The calculations are interesting and partly in favor of the electric car, although despite the high subsidy from the Eco Fund (€ 7,500), they are much more expensive than the classically driven ones. But it is less expensive to maintain, but especially energy. That's why: the more you drive, the sooner you get your investment in an electric car.

Cars were compared by actual measured consumption. For electric, this oscillator ranges between 16 and 17 kilowatt hours per hundred kilometers, which costs you about € 1.4 per hundred kilometers when charging home. The exception with much lower consumption is only the Hyundai ioniq electric, which consumed only a good 12-kilowatt hours. For gasoline and diesel, we took the test, which is also real consumption, which ranged between 5.5 and 7.5 liters per hundred kilometers.

All in all, the test planned a five-year period and divided it into two parts: for average users, who travel approximately 40 kilometers daily, for a total of 75,000 miles in five years, and those who really make good use of the car with an average of 110 kilometers per day or 200 thousand in five years.

If you charge a car in Slovenia, says Uroš Salobir, director of strategic innovation at Eles - public network system operator, only two-thirds of electricity is from non-fossil fuels.[10]

In the future, the domestic experts are not the only ones who are providing sufficient quantities at the chargers, says Salobir, but according to him, with a comprehensive approach to smart chargers it will be possible to develop e-mobility in Slovenia without any major shocks and without serious investments and to prepare users for different dynamic tariffs. He said that At Eles, they are struggling to foster the knowledge and sociological acceptability of smart chargers in the environment. If we manage to catch the wave of mass transition to e-mobility that is expected to happen in two years, we can manage it in three to five years. However, if we miss it and build the charging infrastructure on the wrong footing, problems will start in five to seven years, he predicts.

Nearly four hundred public chargers show that we are still malnourished. What is pulling in is the energy they are offering for free for now; its consumption is rising sharply: it has increased 14-fold in five years. According to Elektra Ljubljana, in 2017 alone in the wider Ljubljana area more than 1440 users were registered, filling their vehicles more than 10,000 times, with consumption exceeding 90,500 kilowatt hours. Thus, it was three times larger than in 2016.[11]

In Slovenia, the registration of purely electric vehicles does not even represent the percentage of new vehicle sales in Slovenia.[12]

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[10] Nearly 40% is produced from nuclear energy (half of which belongs to Slovenia and the other half to Croatia), and 25% from hydropower. Other sources (mainly biomass, solar and geothermal energy) contribute less than 3% to the structure of sources for electricity production in Slovenia.
https://www.esvet.si/energetska-oskrba-slovenije, 25. 11. 2019

[11] https://www.delo.si/prosti-cas/avtomobilno/elektricnih-avtov-vec-a-je-njihov-delez-v-eu-se-zelo-majhen-136350.html, 8. 10. 2019

[12] https://www.rtvslo.si/zivljenjski-slog/avtomobilnost/boste-zaradi-nacrtovanih-spodbud-izbrali-elektricni-avto/492291, 8. 10. 2019

Electric car sales will continue to grow, with a more significant breakthrough in their market share expected in 2020 or 2021, when automakers will have to reach the next noticeably lower carbon dioxide emission limit of 95 g/km.

Government measures by 2025 include limiting the sale or registration of new vehicles that would release more than 100 grams per kilometer into the air, and by 2030 the CO_2 emission limit should be as low as 50 grams per kilometer. This could be achieved with purely electric cars, which today receive EUR 7,500 in state subsidies and plug-in hybrids, where financial assistance has been reduced this year (2019) from EUR 4,500 to EUR 2,000. But, as we have seen so far, generous subsidies are not yet a reason for Slovenes to replace diesel or gasoline cars more massively with electric ones. Therefore, the Ministry has prepared additional incentives for owners of electric vehicles. Namely, they will be able to drive in yellow lanes, they will be provided with free parking in city centers, where it is most difficult to get free parking space, even with special license plates, even more money will be allocated for subsidies for the purchase of an electric vehicle, but only up to a certain price of a new vehicle. Changes are promised with benefits in the area of increased use of electric vehicles for business purposes. The establishment of a network of public charging stations should be accelerated to this end.

Hydrogen-powered automobile

The use of hydrogen and fuel cells in transport is in line with the proposal for an energy concept that will unite hitherto separate energy and transport sectors into a whole new sector. Hydrogen fuel cell vehicles are perfectly comparable to battery electric vehicles and will play a key role in decarbonising traffic along with them. The biggest obstacle to faster expansion of hydrogen use in transport is currently the modest supply of charging infrastructure and vehicles. At the same time, these cars are at least twice as expensive as comparable cars with internal combustion engines. In September 2013, the first public hydrogen filling station was installed at the Petrol filling station in Lesce (300/350 bar). The filling station was set up as a "demo project", the aim of which was to gain the necessary experience for the construction of such facilities, as well as to prepare the appropriate legislation for the placement of such facilities in the space. Hydrogen will become an increasingly important fuel in transport but will need to be introduced gradually and through demonstration projects, also to meet the needs of the TEN-T network.

Hydrogen technologies are still a major challenge for the automotive industry, so research and the search for innovations that will reduce the cost of vehicles and charging infrastructure is essential. Slovenia will encourage industry-related research to maintain its place among manufacturers and suppliers in the automotive industry.

Slovenia has a hydrogen filling station installed. According to the technology chosen, four to eight hydrogen filling stations are planned to be installed. Subsidies for the construction of charging stations / infrastructure are needed in full (mainly EU grants - in the past, only strong EU consortia and major bus manufacturers have acquired this type of funding). By 2020, a pilot project is envisaged to prepare and execute a comprehensive solution to the entire process from hydrogen provision, appropriate charging infrastructure to users (public transportation, public services) to verify the overall business model of fuel

cell technology utilization. The demonstration project envisages measures to encourage the purchase of vehicles, the removal of administrative barriers, the preparation of educational programs and promotion campaigns. The one filling station does not work at the moment, after Petrol claims that it has not been used.

Advantages and disadvantages:

Hydrogen stored in the car has a much higher energy density per mass (about 2.3 MJ per kg) than batteries, so fuel cell powered cars can travel longer distances. In particular, heavier cars perform better, for which the batteries are too impractical and inefficient. However, the energy efficiency of hydrogen-powered cars is less than battery-operated (roughly 30 percent 'source-to-consumer' if hydrogen is produced by electricity). Using cost estimates for 2030, a 30kW battery pack electric car (such as the 2016 Nissan Leaf) could be about 35 percent cheaper than a fuel cell car with a similar energy storage capability. However, as capacity increases, cars will become cheaper on fuel cells, as adding the volume of hydrogen containers costs less than adding batteries. At about 55 kilowatt hours, both drives will cost the same, which means 300 kilometers in range. Above that, fuel cell cars will probably be cheaper than battery electric ones. At around 1,000 miles, fuel cell cars will have a cost advantage of about 55 percent.

Improvements in fuel cell efficiency will reduce fuel consumption by 20-35 percent by 2030. The price of a kilogram of hydrogen is also expected to fall as infrastructure for its distribution and sale increases. As a result of these improvements, fuel cells could gain an advantage over diesel in all segments, even if oil prices remain at today's low values. This will be particularly important for consumers who regularly drive long distances and for commercial vehicles that are in regular use.

The cost of setting up a hydrogen pump infrastructure is similar to the cost of setting up an infrastructure to power battery electric vehicles.

Robert Dominko, the Head of Modern Battery Systems at the Institute of Chemistry, noted in one of his interviews at MMC, that the problem will always be fuel storage. Even if fuel cells were assembled based on cheaper material (not platinum), they would still need to store liquid hydrogen at 700 bar pressure, which brings great logistical and security puzzles.[13]

In 2018, there were around 375 hydrogen pumps worldwide, their number should triple to 1,100 in the next two years, reach 2,800 in 2025 and 5,300 in 2030, the Hydrogen Council[14] is planning. At the moment, customers can only decide between three fuel cell cars. The first is the hit Toyota Mirai, which sold 5,400 units since its launch two years ago, the second is the Honda Clarity, introduced in 2017 and sold 642 units, the latest being the Hyundai Nexo, which was introduced in the first half of 2018, and they would like to sell it in the amount of 2,000-3,000 copies a year.

The Hydrogen Council also conducted several studies showing that the hydrogen economy needs $ 20-25 billion in annual inputs, a total of $ 280 billion by 2030. Of this, 110 billion (40 percent) would be spent

[13] https://www.rtvslo.si/zivljenjski-slog/avtomobilnost/vodik-gorivo-prihodnosti/459588, 8. 10. 2019

[14] In 2017, the Hydrogen Council was formed in Davos, a group formed by automakers (Audi, BMW, Honda, Toyota and Hyundai) that are leading the development of using hydrogen as a vehicle to drive vehicles and hydrogen distributors (Linde, Shell, Total, Air Liquide among other companies).

on hydrogen production, 80 billion (33 percent) on storage / transport / distribution, and 70 billion (25 percent) on product and production development. The remaining 20 billion would be spent on establishing new business models (fleets of taxis, distribution schemes, 'on-demand delivery', etc.).[15]

Hydrogen Technology is already well known, but such huge investments and increased production would allow us to move from the eight EJs produced to 80 EJs by 2050, equivalent to 18 percent of all energy consumed this year after worldwide, or enough to supply the planet's global needs for two and a half months (1 EJ = 1018 J, an energy package similar to 7 million tonnes of hydrogen or 278 TWh of electricity or 170 million barrels of crude oil). That would then have 400 million hydrogen cars in traffic (a quarter of all) - plus 15-20 million trucks and buses (about a quarter of all), 20 percent of trains and five percent of planes and cargo ships, which could reduce crude oil production 20 million barrels a year, and 3.2 gigatons less carbon dioxide would be released into the air a year.

According to the International Energy Agency (IEA), at the end of 2018, 11,000 hydrogen and fuel cell vehicles were in use worldwide, more than half of them in the US state of California, as many as in Japan, in South Korea and in Europe in Germany. Although in absolute terms, their sales increased markedly last year (+ 40 percent), the figure is still an extremely small fraction of what is being driven on the roads today (1.14 billion vehicles).[16]

Gas powered car

The use of alternative gas fuels in transport has significant potential for reducing CO_2 emissions. We are talking about liquefied petroleum gas (LPG) and natural gas in both forms of storage, compressed (CNG) and liquefied (LNG).

Liquefied petroleum gas (LPG)

Slovenia is one of the countries where the LPG charging infrastructure is well developed and covers the entire road network fairly satisfactorily. In Slovenia LPG is available in more than 100 locations (115, February 2017), both on the motorway cross, in cities and in the countryside. There is no major place in Slovenia without an LPG sales outlet. Therefore, it is possible to achieve the short- and medium-term goals of reducing the carbon footprint of transport with this alternative fuel, while increasing energy efficiency and reducing the pollution of the environment by transport pollutants. This is especially true for the period during which the refueling infrastructure for other alternative fuels is yet to be established or supplemented. LPG is even more important since the number of alternative fuel vehicles is lagging behind the OP GHG projections[17].

[15] https://www.avto-magazin.si/aktualno/kam-nas-vodi-vodik-so-gorivne-celice-dolgorocna-resitev-za-cisto-mobilnost/, 8. 10. 2019
[16] https://www.delo.si/prosti-cas/avtomobilno/avtomobili-na-vodik-preboja-se-vedno-ni-199332.html, 8. 10. 2019
[17] Operational Programme of measures for Reducing GHG Emissions until 2020. The Government of the Republic of Slovenia adopted the OP GHG 2020 Operational Program for Measures to Reduce Greenhouse Gas Emissions at its regular session on 17 December 2014.

Compared to gasoline cars, LPG cars have about 14 per cent less emissions. Thus, with the help of thousands of new LPG vehicles, or with conversion of gasoline vehicle into gas powered vehicle, we can achieve the same effect as with 142 electric cars. The effect of reducing GHG emissions in the traffic of seven cars on LPG is therefore equal to the effect of one electric car. At the same time, LPG vehicle users can achieve fuel savings without resorting to motor technologies that are unaffordable for many. Considering the purchasing power of the population, the promotion of LPG use in a period when the price differential between electric and hydrogen cars and classic internal combustion engines is even greater, to a greater extent, to achieve the objectives of OP GHG. Considering that the age of Slovenian fleet is constantly increasing, the purchase of a new internal combustion engine car is financially difficult for a relatively large part of the population, which is all the more true for the purchase of significantly more expensive electric cars. Therefore, the use of LPG for vehicle propulsion will represent one of the major transport alternatives for achieving the goals related to reducing CO_2 emissions and pollutants from transport during the period until the use of electric cars, including the establishment of adequate charging infrastructure for electricity and other alternative fuels the required volume. Compressed natural gas (CNG)

According to Directive 2014/94 / EU, one of Slovenia's more challenging commitments in the field of establishing alternative fuel infrastructure is to establish a network of compressed natural gas filling stations in urban areas by 31 December 2020. The obligation is even more demanding because few vehicles on this drive are currently in use in Slovenia, as is the poor supply of CNG filling stations. Today, only four charging plants are operating in Slovenia, namely Ljubljana, Maribor and Jesenice. The supply of automobiles with this alternative fuel is relatively modest among the leading car suppliers in Slovenia, which is certainly due to the lack of filling infrastructure. With the establishment of an adequate number of publicly available CNG supply points in agglomerated urban / suburban settlements and other densely populated areas, it may also be expected to make greater use of this alternative fuel in public passenger transport and in utility vehicles and other urban services. Currently, only Municipality of Ljubljana has more vehicles in the CNG. The LPP public bus company has 65 vehicles on CNG in the fleet, and other companies in the Holding also use vehicles on CNG.

LPG vehicles are said to have a CO_2 emissions reduction of 20 to 25 per cent compared to gasoline vehicles. Today, with a very modest supply of vehicles in the LPG, the price difference between the comparable variants on the petrol motor vehicle and the vehicles on the CNG is approximately EUR 2,000. It should be borne in mind that CNG per unit of energy is cheaper than competing energy sources, which allows users to achieve savings in the use of LPG cars. LPG is an alternative fuel that is particularly suitable for buses and commercial vehicles, which is important in establishing sustainable business models for managing the charging infrastructure. In addition to public passenger transport (PPP) vehicles and individual utility vehicles and other urban services in Municipality of Ljubljana, in fact, there were no compressed natural gas vehicles in Slovenia. The price of buses and other heavy commercial vehicles in the LPG is today about 15 per cent higher than for diesel vehicles. The cost of converting a personal diesel vehicle to a "dual fuel" system (a combination of CNG and diesel) costs about € 2500, and the cost of this kind of conversion of heavy goods vehicles and buses costs about € 10,000).

Compressed natural gas (CNG)

By December 31, 2020, public access points for CNG will be established in the following municipalities in Slovenia: Ljubljana, Maribor, Ptuj, Celje, Kranj, Novo mesto, Nova Gorica, Koper, Murska Sobota, Slovenj Gradec and Velenje, and in Zasavje as degraded area with air pollutants. The number of CNG supply points may be increased in accordance with the interests of the local communities in order to provide the CNG charging infrastructure in other areas in the Republic of Slovenia. Subsidies for the provision of CNG supply points are foreseen. This establishes an adequate number of public access points for CNG, in accordance with the provision of the Directive, which requires that motor vehicles on CNGs must circulate unobstructed in agglomerated urban and suburban settlements and other densely populated areas from that date. By placing supply points of the CNG, it also fulfills the objective of establishing an infrastructure for alternative fuels for public passenger transport services and for utility vehicles and other urban activities. As the use of CNG in passenger cars is also economically attractive, while also having an environmental impact, the establishment of a charging network is crucial to breakthrough of CNG use.

By 31 December 2025, an adequate network of publicly available CNG supply points shall be established in the existing TEN-T core network. In the Mediterranean corridor, this means three locations with charging stations and in the Baltic-Adriatic corridor two locations. At the same time, it will be necessary to coordinate the locations with the neighboring countries in order to ensure the smooth circulation of vehicles on the CNG across the TEN-T trans-European network.

The conversion of vehicles to ensure the effects of reducing greenhouse gas emissions requires the establishment of appropriate legislation and the additional training of type-approval authorities. Any bureaucratic obstacles that make it difficult for professional, quality installation contractors to obstruct type-approval procedures should also be removed. Measures to control the conduct of roadworthiness tests in terms of emissions measurements are also important in order to encourage the conversion and purchase of vehicles in the CNG.

Liquefied natural gas (LNG)

For international road haulage trucks, LNG currently represents the only realistic alternative to diesel. LNG enables the achievement of both indicative OP GHG targets and targets related to the reduction of air pollutant emissions from transport. Currently, we do not have filling infrastructure in Slovenia for this type of fuel.

In accordance with EU Directive 2014/94, the Republic of Slovenia, like other EU Member States, must establish a network of publicly available LNG supply points for heavy motor vehicles at least on the existing TEN-T core network. This should take into account the minimum reach of heavy motor vehicles on LNG, meaning that the average distance between supply points should be approximately 400 km. By 31 December 2025, an adequate number of publicly available LNG supply points should be established at least on the existing TEN-T core network and later on other parts of the TEN-T network accessible to vehicles.

LNG charging infrastructure will be established by road in Slovenia by 2019 at the latest. European projects SiLNGT (2015-EU-TM-0104-S Mediterranean Corridor) and cHAMeleon, in which Butan plin and ENOS cooperate, will enable Slovenia to establish an LNG infrastructure network well in advance of the deadline set by the Directive. As part of both projects, three LNG filling stations will operate in Slovenia in the second half of 2019, which is sufficient to meet the criterion set out in EU Directive 2009/94, which states that a LNG filling station must be available every 400 kilometers of the TRN-T core network.

In accordance with EU Directive 2014/94, the Republic of Slovenia, like other EU Member States, must establish a network of publicly available LNG supply points for heavy motor vehicles at least on the existing TEN-T core network. This should take into account the minimum reach of heavy motor vehicles on LNG, meaning that the average distance between supply points should be approximately 400 km. By 31 December 2025, an adequate number of publicly available LNG supply points should be established at least on the existing TEN-T core network and later on other parts of the TEN-T network accessible to vehicles.

In 2019, financial incentives are provided for 100 LNG vehicles. In line with the responses of the beneficiaries, the measure will also be implemented in 2020.[18]

The problem is also in price. The excise duty on natural gas for driving vehicles is even five times higher than the excise duty on natural gas for heating. There are also differences between Slovenia and neighboring countries. The difference in taxation between ours and Italian natural gas as fuel is as much as $ 170 per tonne. If we want the trucks to stop with us, we have to offer a competitive price, otherwise they will be transported to a cheaper charging station across the border says Mitja Štoka, director of LNG at the company Butan plin.[19]

Biofuels powered cars

Biofuels as a renewable energy source are a direct substitute for most fossil fuels and can make a significant contribution to improving energy security, reducing greenhouse gas emissions and creating new sustainable development opportunities. As fossil fuel stocks are decreasing or not renewing as quickly as they are consumed, biofuels are currently a viable alternative.

Biofuels are defined in Directive 2009/28 / EC as transport alternative fuels and, if produced sustainably, can help reduce overall CO_2 emissions. At the same time, they represent a clean source of energy for all forms of transport.

The most important and most developed types of biofuels are biodiesel, vegetable oil (liquid biofuels), biogas, bioethanol (gaseous biofuels) and wood biomass (solid biofuels). Currently biodiesel is considered to be the most suitable biofuel, since almost all engines powered by mineral diesel are suitable for its use, and the range of raw materials for its production is very wide. Biodiesel can be obtained from crude or used vegetable oil or animal fats. The most important raw material in European

[18] Akcijski program za alternativna goriva v prometu, Vlada Republike Slovenije, 2018

[19] https://www.amzs.si/motorevija/mobilnost/promet/2018-03-16-zakaj-se-zemeljski-plin-pri-nas-ne-more-uveljaviti, 9. 10. 2019

countries is rapeseed with 82.82 per cent, followed by sunflower with 12.50 per cent and other raw materials.

One of the most promising plants for biodiesel production in Slovenia is winter oilseed rape (rapeseed), which can thrive throughout Slovenia (we can produce about 3 tonnes of produce per hectare) and is even more abundant than sunflower or soybeans.

New knowledge about biofuels and changing market conditions have led to the realization that promoting the use of biofuels in transport is not an easy task. Even though biofuels have undergone rapid changes in the last three years (especially in terms of material suitability, understanding of the sustainability of energy, its potential and economics), biofuel production is still not competitive with fossil fuel production.

Advantages of biofuels:

- They are from renewable sources and are non-toxic.
- They are clean and blended with fossil fuels, risk-free for all vehicles.
- They have a very low sulfur content, so they produce 100 percent less sulfur dioxide than oil.
- Allow lower greenhouse gas emissions, lower SO_2 and CO emissions.
- Contribute to improving energy security, reducing dependency on fossil fuels and oil imports, and to sustainable rural development.
- The higher point of the breeding ground enables safe storage.
- Considering the total greenhouse gas emissions, biofuels are "cleaner" compared to conventional motor fuels (oil, natural gas) and so more environmentally friendly.

Disadvantages of biofuels:

- Without intensive agriculture, using large quantities of fertilizers, pesticides and high-water consumption, it is not possible to produce enough quantities of raw materials that would be economically interesting to produce biofuels.
- Limited production potential of biofuels in Slovenia (limited production areas for oilseed rape production, no bioethanol production plants, etc.).
- The multiannual use of biofuels has shown that, from a technical point of view, they represent a very demanding group of products that must be carefully monitored from the point of view of quality assurance and availability, which is associated with large investments in equipment, control and quality monitoring processes. Car manufacturers have also developed stricter criteria and requirements for the ability to use biofuels in individual vehicles and identified the risks of their improper use.
- There are huge stocks of biodiesel on the market at too high a price, causing the production plants to close temporarily.[20]

[20] http://www.trajnostnaenergija.si/Trajnostna-energija/Ohranite-okolje-%C4%8Disto/Energetika-in-promet/Biogoriva, 8. 10. 2019

- Experts have demonstrated that from a material (raw material) perspective, the production of first-generation biofuels in many segments is comparable to the production of fossil fuels and is not sufficiently sustainable.
- If biofuels are to be more environmentally friendly compared to fossil fuels, there are criticisms of carbon dioxide emissions into the atmosphere from the production and transport of biofuels themselves.
- In terms of economics, biofuels are difficult to compete with fossil fuels (the abolition of tax breaks for biofuels across many EU countries has further jeopardized the production and trading of biofuels, notably biodiesel).
- There is growing support for the thesis that the production of raw materials for first-generation biofuels raises food prices as the share of available land for food production decreases.
- Environmentalists fear that the production of large crops for biofuels will endanger biodiversity and severely tax regional water resources.
- The share of produced Slovenian biofuels is very small, since the only source is the production of rapeseed biofuels, which in turn has a direct impact on the food industry.

An evaluation of the potential to achieve the indicative targets of OP TPG in Slovenia by 2020 and 2030 showed that these cannot be achieved without the use of biofuels. Slovenia has a specific position in this respect, since it has no production or processing capacities in the field of fossil fuel production as well as biofuels. In both areas, therefore, it is entirely dependent on imports and therefore on current market prices. Since the production price of biofuels is higher than conventional fossil fuels, which applies to all types of biofuels, and in particular to biofuels produced from sustainable raw materials or advanced generation biofuels, it is necessary to achieve the emission reduction targets by using biofuels and increasing their use by: appropriate deregulation of fuel prices, inclusion of actual costs in the market price model for fuel, or appropriate price subsidization. Without these measures, it is impossible to achieve the set goals.

Biofuels are used in alternative motor fuel in different forms. The most common uses today is Biodiesel - in addition to existing fossil diesel (Bx).

Biodiesel can be added to conventional fossil diesel in different proportions. If the biodiesel content is up to 7 per cent vol. such mixture may be used under conditions the same as those applicable to pure fossil diesel (thus the biofuel content is allowed by the diesel standard (EN590). If the content is higher than 7 per cent (B10, B20, B30, etc.), such blend may only be used in vehicles specially adapted for the use of biodiesel and under the same conditions as otherwise apply to pure biodiesel (B100).

Biodiesel is expected to add to conventional diesel in the ratio of 7 per cent by 2020.

Hybrid

A hybrid in the context of the automobile means that it's powered by both an electric motor and an internal combustion engine. Hybrid car uses two different energy sources to maximize efficiency. This

usually means combining electrical energy stored in batteries, with the combustion energy of petrol or diesel fuel.

Sometimes the electric motor does all the work, sometimes it's the gas engine, and sometimes they work together. The result is less gasoline burned and, therefore, better fuel economy.

While the technology has existed since the early 1900's, it has only been in the past decade or so that the price of manufacturing them has brought them into the range of possibility for the average driver.

The most obvious example of a hybrid vehicle is the Toyota Prius, which was the first modern, mass-produced hybrid car when it made its debut on the Japanese market in 1997. The Prius is now well into its fourth generation.

Better fuel economy is the primary motivation behind hybridization. But, more recently, automakers are noticing that hybridization also benefits performance.

More recently, manufacturers also began realizing that hybrids also benefit performance and thus, they have engineered various types of hybrid vehicles. That's because electric motors deliver instant power, whereas internal combustion engines by contrast have to spool up before hitting their power peaks.

There are different types of hybrid cars.[21]

Parallel Hybrid

In this most common design, the electric motor(s) and gasoline engine are connected in a common transmission that blends the two power sources. That transmission can be an automatic, a manual, or a continuously variable transmission (CVT). One very popular hybrid transmission is a power split CVT, which is used by the Toyota Prius and Chevrolet Volt. Transmission type and the size of the gasoline engine are the main factors that determine how a parallel hybrid will accelerate, sound, and feel. Brands that use the parallel design include Toyota, Lexus, Hyundai, Kia, Ford, Honda, Lincoln, Nissan and Infiniti.

Series Hybrid

In this design, the electric motor(s) provides all the thrust, and there is never a physical mechanical connection between the engine and the wheels. The gasoline engine is just there to recharge the battery. This results in a driving experience that's more indicative of an electric car, with smoother, powerful acceleration. There's typically less vibration when the gasoline engine engages. However, that engagement doesn't always happen in concert with what your right foot is doing (the battery is making the demands), so the engine might be revving up while the car is cruising at a steady speed. Some find this behaviour disconcerting. The BMW i3 with the range extender is an example of a series hybrid.

Plug-In Hybrid

A plug-in hybrid enhances the conventional hybrid concept with a much larger battery pack that, like an electric car's, must be fully recharged using an external electricity source—from your home, office, or public charging station. This greater amount of energy storage is like a larger gas tank: It allows for

[21] https://www.caranddriver.com/features/a26390899/what-is-hybrid-car/, 16. 10. 2019

extended all-electric driving (between 15 and 55 miles depending on the model) and can significantly reduce fuel consumption. In fact, if you have a short commute and recharge nightly, you'll be running on electricity most of the time. Should you deplete the all-electric range, the car basically reverts to be a conventional parallel hybrid.

Mild Hybrids

All the above are considered "full hybrids," which means that the electric motor is capable of moving the car by itself, even if it's for a short distance. In a "mild" hybrid, it cannot. Just as in a full hybrid, a mild hybrid's electric motor is there to assist the gasoline engine for the purposes of improving fuel economy, increasing performance, or both. It also serves as the starter for the automatic start-stop system, which shuts down the engine when the car comes to rest in order to save fuel.

Originally envisioned as a simpler and cheaper means of bringing hybrid technology to market, mild hybrids don't improve fuel economy to the extent that full hybrid systems can. As such, they never enjoyed the same popularity. Recently, however, mild hybrid powertrains are making a comeback, as evidenced by the adoption of 48-volt electrical subsystems in vehicles such as the Ram 1500, Mercedes-Benz E-class, and Audi A6, A7, and A8.

Advantages of a hybrid car are:

1. Environmentally friendly: One of the biggest advantage of hybrid car over gasoline powered car is that it runs cleaner and has better gas mileage which makes it environmentally friendly. A hybrid vehicle runs on twin powered engine (gasoline engine and electric motor) that cuts fuel consumption and conserves energy.[22]

2. Financial benefits: Hybrid cars are supported by many credits and incentives that help to make them affordable. Lower annual tax bills and exemption from congestion charges comes in the form of less amount of money spent on the fuel.

3. Less dependence on fossil fuels: A Hybrid car is much cleaner and requires less fuel to run which means less emissions and less dependence on fossil fuels. This in turn also helps to reduce the price of gasoline in domestic market.

4. Regenerative braking system: Each time you apply brake while driving a hybrid vehicle helps you to recharge your battery a little. An internal mechanism kicks in that captures the energy released and uses it to charge the battery which in turn eliminates the amount of time and need for stopping to recharge the battery periodically.

5. Built from light materials: Hybrid vehicles are made up of lighter materials which means less energy is required to run. The engine is also smaller and lighter which also saves much energy.

[22] It's important to remember that EV mode might cut pollution in town, but the electricity you're using is mainly generated by burning fuel in the engine. That means driving in electric-only mode is actually less efficient than letting the hybrid system do its thing, selecting the best mix of ICE and electric power for the driving conditions.

6. Higher resale value: With continuous increase in price of gasoline, more and more people are turning towards hybrid cars. The result is that these green vehicles have started commanding higher than average resale values. So, in case you are not satisfied with your vehicle, you can always sell it at a premium price to buyers looking for it.

Disadvantages of a hybrid car:

1. Less power: Hybrid cars are twin powered engine. The gasoline engine which is primary source of power is much smaller as compared to what you get in single engine powered car and electric motor is low power. The combined power of both is often less than that of gas-powered engine. It is therefore suited for city driving and not for speed and acceleration.

2. Can be expensive: The biggest drawback of having a hybrid car is the price. Hybrid cars are comparatively expensive than a regular petrol car and can cost $5000 to $10000 more than a standard version. However, that extra amount can be offset with lower running cost and tax exemptions.

3. Poorer handling: A hybrid car houses and gasoline powered engine, a lighter electric engine and a pack of powerful batteries. This adds weight and eats up the extra space in the car. Extra weight results in fuel inefficiency and manufacturers cut down weight which has resulted in motor and battery downsizing and less support in the suspension and body.

4. Higher maintenance costs: The presence of dual engine, continuous improvement in technology, and higher maintenance cost can make it difficult for mechanics to repair the car. It is also difficult to find a mechanic with such an expertise.

5. Presence of high voltage in batteries: In case of an accident, the high voltage present inside the batteries can prove lethal for you. There is a high chance of you getting electrocuted in such cases which can also make the task difficult for rescuers to get other passengers and driver out of the car.

There is no real winner among the powertrains. All current options (conventional units, hybrid and electric drives, etc.) will drive as vehicles on our roads until 2040. New technologies will require customized legislation, thus significantly affecting road traffic regulations.

Comparison of Slovenia state of the art of GSM with Mediterranean and other EU countries

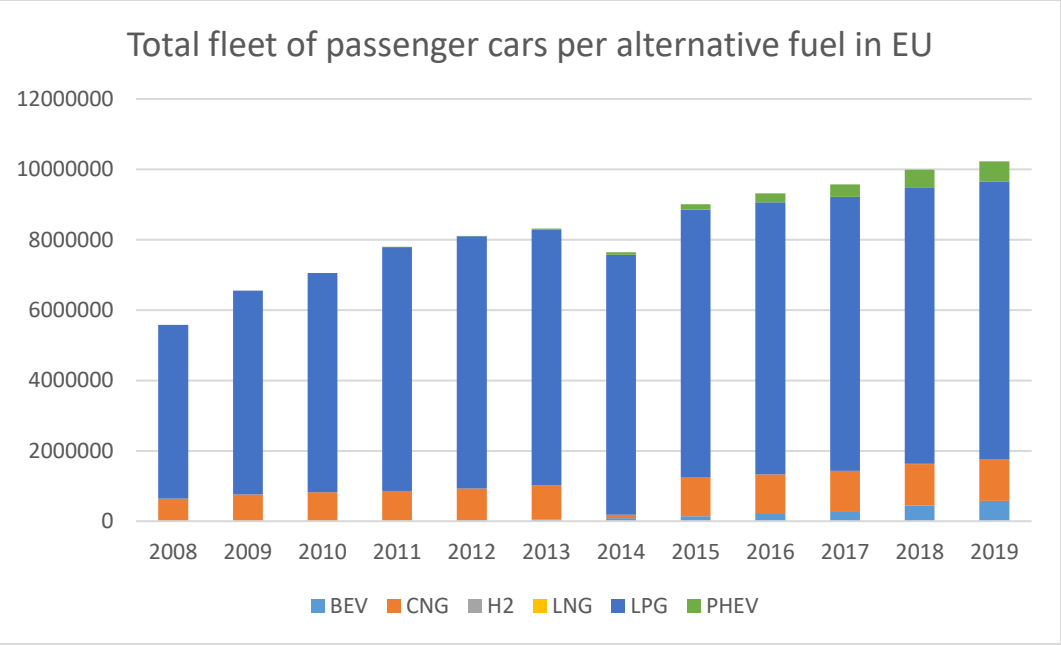
Electric mobility is expanding at a rapid pace. In 2018, the global electric car fleet exceeded 5.1 million, up 2 million from the previous year and almost doubling the number of new electric car sales. The People's Republic of China remains the world's largest electric car market, followed by Europe and the United States. Norway is the global leader in terms of electric car market share.[23]

In 2017 there were 262 million cars registered in the European Union (EU) Member States. Around 2 million (0.8 per cent) of these were classified as either electric cars or hybrid electric cars that can be driven in combination with a petrol or diesel engine.

[23] https://www.iea.org/publications/reports/globalevoutlook2019/, 29. 10. 2019

There has been a steady increase in the number of electric and hybrid electric cars registered across the EU in recent years. In particular, the number of hybrid electric-petrol cars in 2017 (1.5 million) was almost seven times the number recorded in 2013 (0.2 million).[24] According to the European Automobile Manufacturers' Association (ACEA), the market share of electric cars in the EU was about 2 % in the third quarter of 2018, around 30 % higher than in 2017. While most of these cars are in use in a few northern and western Member States, their largest sales growth in recent years has been registered in southern and eastern ones. In most Member States, hybrid car sales exceed fully electric car sales.[25]

Figure 2: Total fleet of passenger cars per alternative fuel in the EU from 2008 to 2019[26]



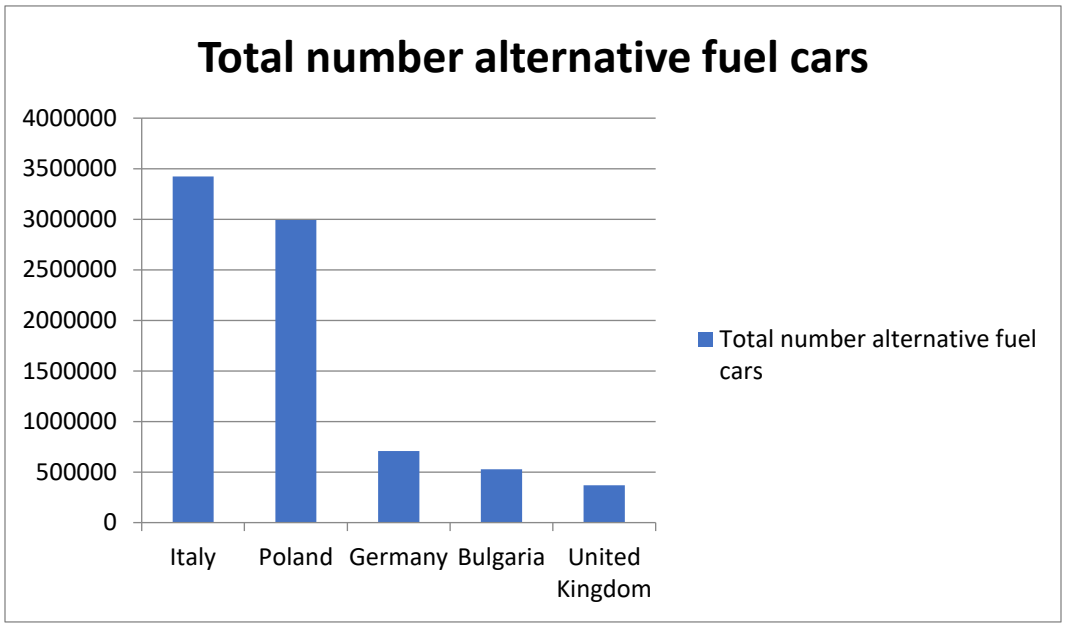
The total number of alternative vehicles in passenger cars has risen from 5.582.036 in 2008 to 10.228.466 in 2019. In the type of alternative vehicles LPG - Liquefied petroleum gas (7.868.273) and CNG - Compressed natural gas (1.190.817) have the biggest share. The smallest share has LNG - Liquefied natural gas (there are only 20 in 2019) and H2 - Hydrogen (only 804 in 2019) vehicles. PHEV - Plug-in hybrid electric vehicle has risen from 0 in 2008, 2009 and 2010 to 587.770 vehicles in 2019.

[24] https://ec.europa.eu/eurostat/web/products-eurostat-news/-/DDN-20190507-1?inheritRedirect=true, 29. 10. 2019

[25] http://www.europarl.europa.eu/RegData/etudes/BRIE/2019/637895/EPRS_BRI(2019)637895_EN.pdf, 26. 11. 2019

[26] Data gathered by the European Alternative Fuels Observatory, commissioned by contract by the European Commission. -DG Mobility and Transport- https://www.eafo.eu/alternative-fuels/electricity/charging-infra-stats, 5. 11. 2019

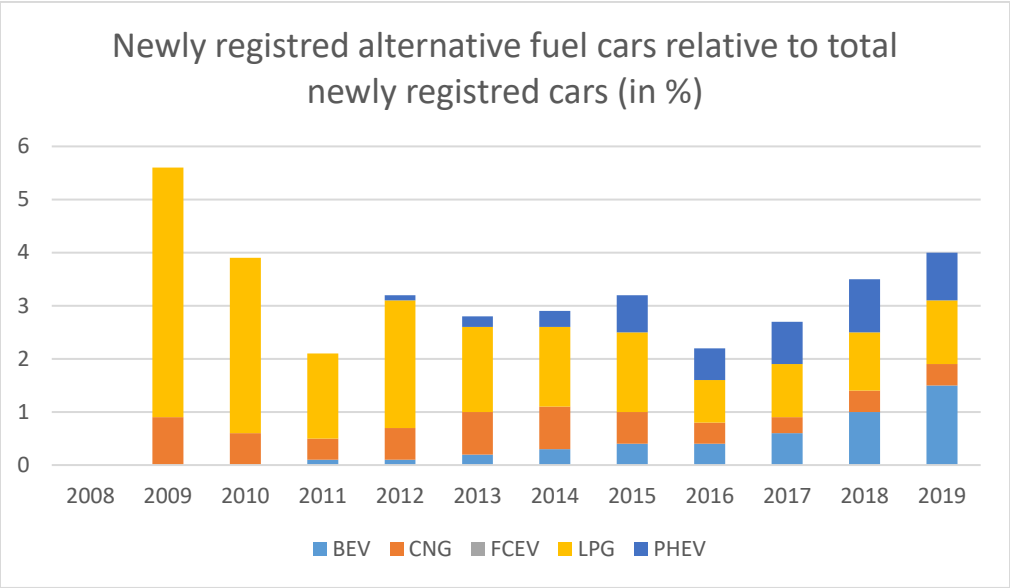
Figure 3: Top 5 EU countries alternative fuel fleet[27]



Top 5 EU countries with alternative fuel passenger cars are in order: Italy with 3.422.207, Poland with 2.992.804, Germany with 706.634, Bulgaria with 526.271 and UK with 368.809 cars.

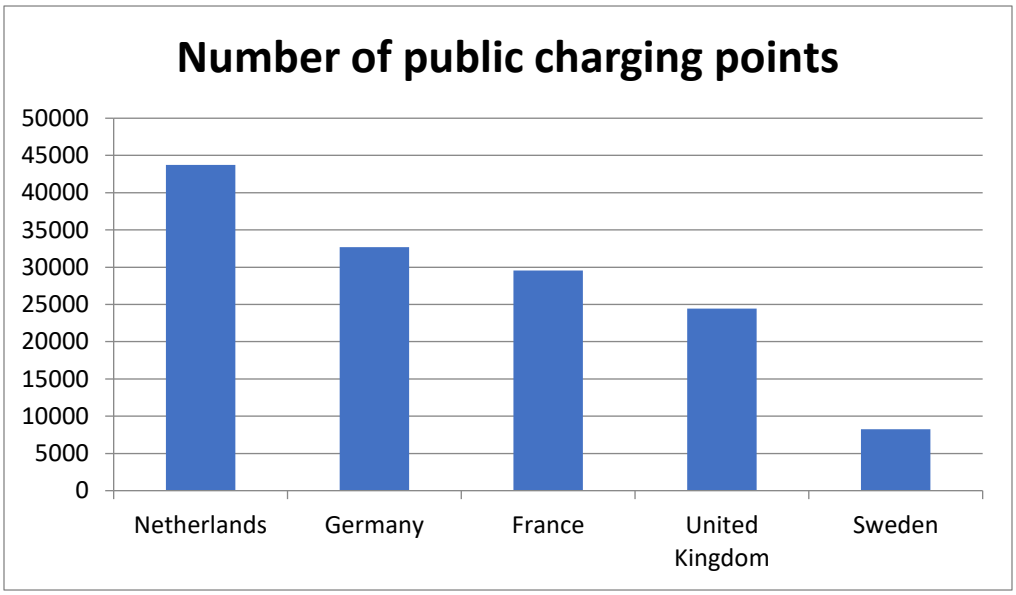
Figure 4: Newly registered alternative fuels cars relative total newly registered cars in EU countries (in %)

[27] https://www.eafo.eu/alternative-fuels/electricity/charging-infra-stats, 5. 11. 2019



Newly registered alternative fuels cars are still very low in comparison to all newly registered cars in EU countries and is about 4 - 6 per cent. In 2011 only 2 per cent of all newly registered cars were on alternative fuels.

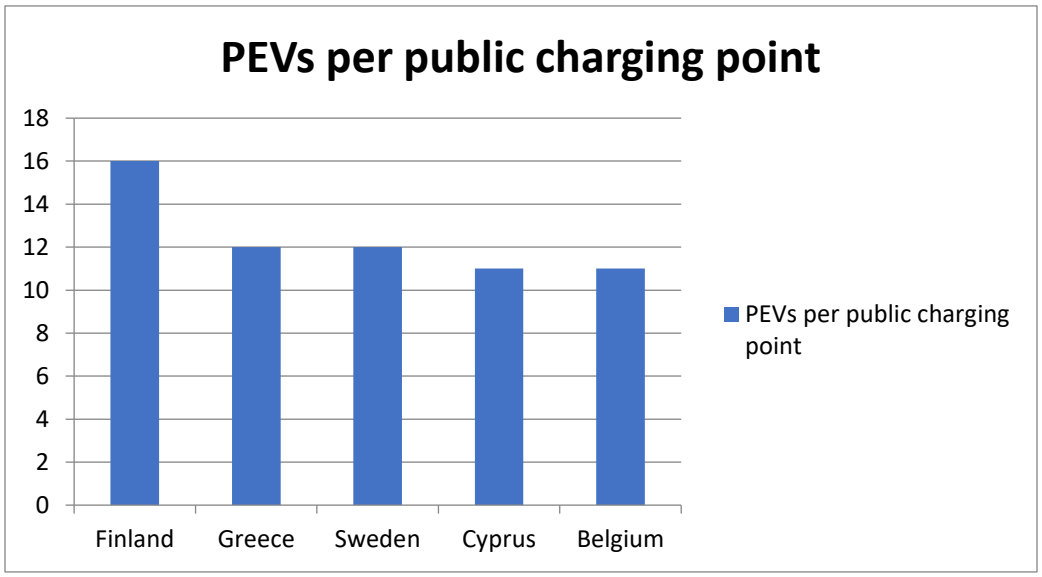
Figure 5: Top 5 EU countries with the highest number of public charging points[28]



Top 5 EU countries with the highest number of public charging points are in order: Netherlands with 43.730, followed by Germany with 32.704, France with 29.538, UK with 24.445 and Sweden with 8.239 charging points.

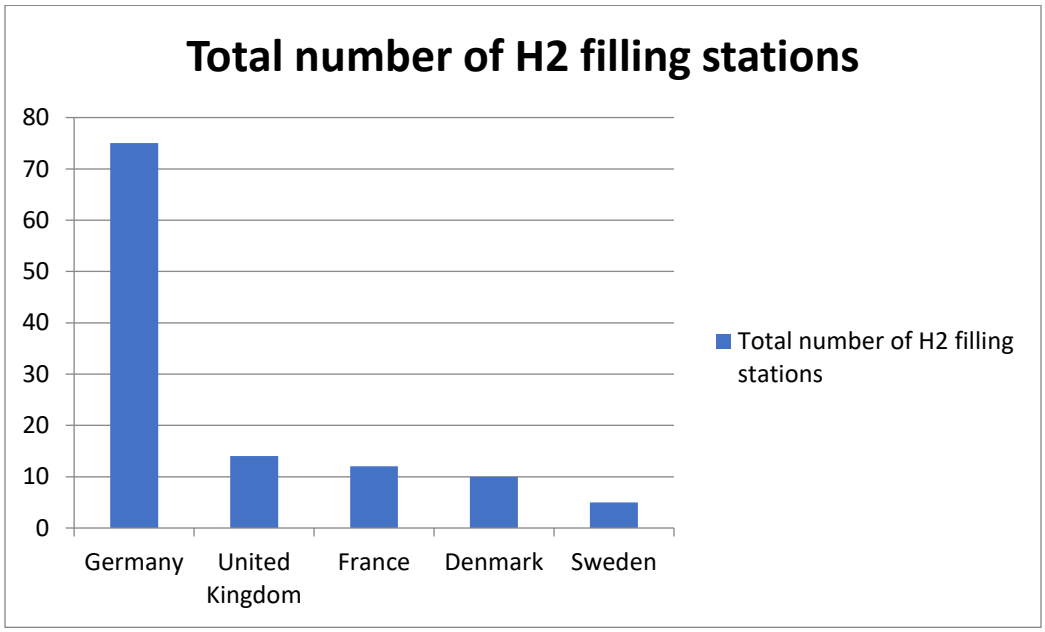
Figure 5: Top 5 EU countries with the highest number of public charging point per PEV (plug in electric vehicle)[29]

[28] https://www.eafo.eu/alternative-fuels/electricity/charging-infra-stats, 5. 11. 2019



Top 5 EU countries with the highest number of public charging point per PEV (plug in electric vehicle) are in order: Finland, Greece, Sweden, Cyprus and Belgium.

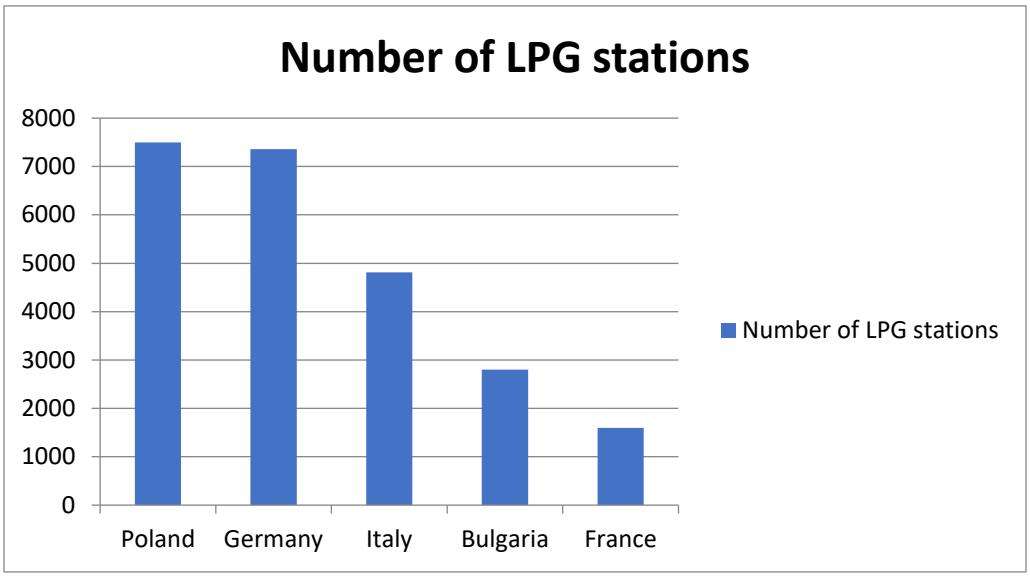
Figure 6: Top 5 EU countries with the highest number of Hydrogen filling stations[30]



The top 5 EU countries with the highest number of Hydrogen filling stations are in that order: by far most leads Germany with 75, UK with 14, France with 12, Denmark with 10 and Sweden with 5 fillings stations.

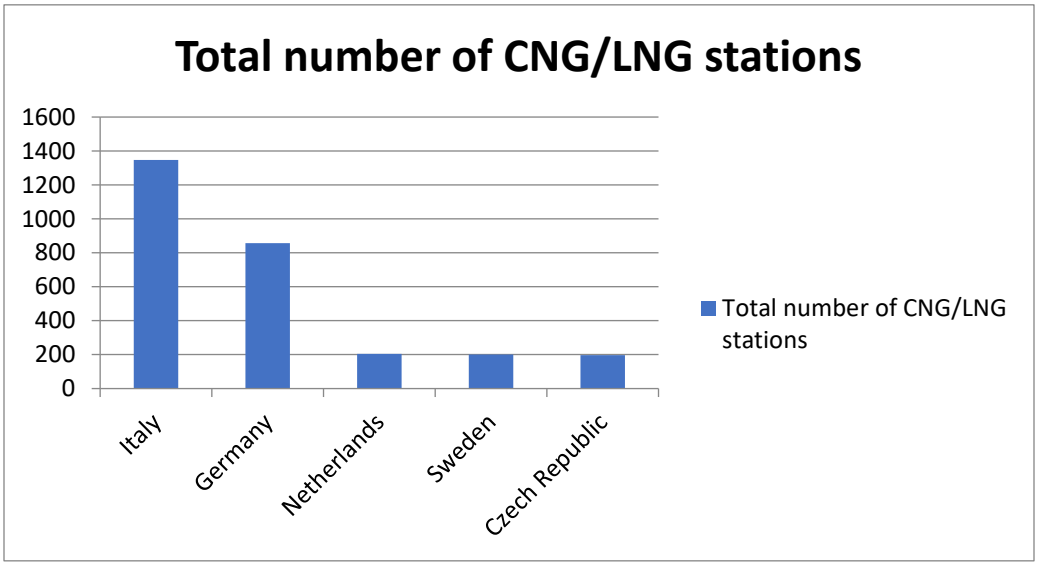
Figure 7: Top 5 EU countries with the highest amount of LPG stations[31]

[29] https://www.eafo.eu/alternative-fuels/electricity/charging-infra-stats, 5. 11. 2019
[30] https://www.eafo.eu/alternative-fuels/electricity/charging-infra-stats, 5. 11. 2019



Top 5 EU countries with the highest amount of LPG stations are in order: Poland with 7500, Germany with 7361, Italy with 4814, Bulgaria with 2800 and France with 1600 LPG stations.

Figure 7: Top 5 EU countries with the highest number of CNG/LNG stations[32]



Top 5 EU countries with the highest number of CNG/LNG stations are in order: Italy with 1347, Germany with 857, Netherlands with 204, Sweden with 201 and Czech Republic with 196 CNG/LNG stations.

[31] https://www.eafo.eu/alternative-fuels/electricity/charging-infra-stats, 5. 11. 2019
[32] https://www.eafo.eu/alternative-fuels/electricity/charging-infra-stats, 5. 11. 2019

There are only three countries in the EU where e-vehicles are not financially stimulated: Croatia, Estonia and Lithuania. Most countries, however, practice various forms of duty relief, whether e-vehicle buyers are partially or fully exempted from annual road user fees, vehicle registration taxes, ownership taxes for private or business electric vehicles, and pay the lowest charges for using electric business vehicles for private matters. The trend observed when reviewing the arrangements is clear: reliefs and incentives are limited in time.

List and description of some best practices of GSM in Slovenia

Table 1: Best practices of GSM in Slovenia

Project	Short description
The Edison (Eco Driving Innovative Solutions and Networking) project	Is an innovative platform for green mobility of the future. The project brings together more than 40 strategic partners, companies, research institutions, municipalities and Rotary clubs. With it, Slovenia is rapidly developing a model of efficient transfer of accessible and user-friendly green mobility technologies on the market. Through the demonstration projects, the project partners will transform Slovenia into a natural green mobility laboratory and a testing ground for testing innovative green technologies. The project is supported by the Slovenian Government and is in line with key EU strategic orientations as it is focused on the development of new technologies, products and services that enable green mobility. The partners will establish in the municipalities the interconnected concept of urban green mobility with e-buses, urban and inter-urban e-car sharing, e-bikes and other digitally connected intermodal forms of green traffic, thus transforming Slovenia into a natural green mobility laboratory and model polygon to test innovative green technologies. This also ensures additional economic growth, new quality jobs, prevents brain drain and attracts foreign investors and professionals to us. Edison, which is a strategic mobility project for Slovenia and the wider region, responds to all key EU strategic challenges and orientations to ensure its future competitiveness - introducing green transport supported by renewable energy sources and combining various forms of green transport with smart digital applications. The green mobility of the future raises many questions in the automotive industry as well. The Slovenian industry is well integrated into the supply chains of the European and global automotive industries, and its opportunities are also reflected in changes related to autonomous driving. The Edison project was created on the basis of previously successfully implemented projects, the Green Balkans, the Green Celtics and the Adriatic. They are the result of cooperation between the Idrija Rotary Club, the 1912 Rotary District of Slovenia and the Summit 100 (Business Leaders of South East Europe). It is a concept of electrification of 2400 kilometers of motorways, which includes the establishment of e-car sharing in the capital cities and e-bus connections between the capital cities. The Edison eCity project introduces a comprehensive concept of electromobility to Slovenian municipalities.

Avant2go	Ljubljana-based Avant2Go is considered one of the pioneers in the field of sharing (electric) cars in Slovenia. And as it seems that interest in this kind of services is growing in Slovenia, their offer is constantly expanding. All over the country, vehicles are offered in a total of 60 locations. Now they are adding a significant innovation to their 'portfolio' of services, as they will offer customers the opportunity to rent electric vehicles for several days. The so-called electric Rent-a-car will be set up at the request of many users who wanted to rent this kind of vehicle for a longer period of time and, in addition to jumping into the city or to various tasks, use it for several days excursion or business trips at home and abroad. However, the process of renting a car for a few days is no more demanding or different than renting a car for a day or just a few hours. Avant2Go introduced a blockage on the billing system to introduce daily or multi-day rentals. These will be limited upwards and will only depend on the type of vehicle the customer will hire. If you rent a Smart Electric Drive, it will cost $ 39, Renault Zoe $ 49, e-Golf $ 59, and the most expensive will be a BMW i3, which will have to be deducted $ 69 per day. An important point is that the mileage will be unlimited.
Research Innitiative Battery 2030+	to take a step forward in battery science and technology. National Institute for Chemistry is the project developer. The aim of the initiative is: • to invent the batteries of the future • to provide breakthrough technologies to the European battery industry across the full value chain • to enable long-term European leadership in both existing markets (road transport, stationary energy storage) and future emerging applications (robotics, aerospace, medical devices, internet of things, …)
Tuktuk three-wheeled vehicle	An interesting prototype of the Tuktuk three-wheeled vehicle, the Slovenian company GEM motors d.o.o. from Kamnik, mainly used in Asia. The company develops vehicles that are specifically suited for wheel drive. The advantage of a simple vehicle is its low cost and ease of manufacture. This vehicle is especially suitable as a taxi vehicle or for renting tourists on holiday during the year. The solution of the mentioned summer public transport as a taxi or as a way of renting is a successful and interesting solution because it does not pollute the environment, which is very problematic for the environment, especially during the mass arrival of visitors. Mediterranean cities and islands are interesting for vehicle use because the large altitudinal differences are some 100m and allow for optimal energy consumption. We have in mind cities such as Gorizia, Brda, Grado, Trieste, Rijeka, Split, Dubrovnik and Budva, and islands such as Krk, Cres, Losinj, Vis, Crete, Corfu and Malta.

Pipistrel aircrafts	In 2007, Pipistrel produced the world's first fully electric two-seat Taurus Electro aircraft (completely inaudible and producing no CO_2 emissions), followed in 2011 by the Taurus G4, the world's first fully electric four-seat aircraft to give Pipistrel its third victory in the competition agencies of the NASA Green Flight Challenge. The latest aircraft is the Panthera, the world's first four-seater airplane available with modular propulsion: the buyer will be able to choose between a fully electric, hybrid or engine variant. It is also the first hybrid four-seater aircraft in the world. The Hydrogeniuss aircraft is powered by hydrogen fuel cells. All Pipistrel airplanes follow the so-called "glider philosophy" - the airplane must have aerodynamically clean lines and smooth surfaces that allow as little drag and much lift as possible so that the aircraft can fly without engine. In this way, the aircraft consumes much less fuel than all other comparable aircraft, and consequently produces less noise and less CO_2 emissions and less environmental pollution. 2007 and 2008 - Pipistrel wins the NASA2008 Centennial Challenge Competition twice in a row - Ranked among the top ten most innovative companies in the Slovenian Innovation Forum2008 - Influential American magazine Popular Science ranks Electro Taurus among the 10 Most Interesting Innovations of the Year in the 2009 Aerospace Technology Category keeping the air clean in the competition Earth was lent to us by children 2010 - European Business Award - winner of the UKTI Award for Innovation for the most innovative company2011 - Pipistrel's first fully electric four-seat aircraft in the world wins the NASA Agency Competition for the third time-Taurus Electro receives the Lindberg Award for Best Electric aircraft.
Alpine pearls	Alpine Pearls is an umbrella brand that brings together 29 tourist destinations in six Alpine countries: Slovenia, Austria, Switzerland, Germany, France and Italy. The brand was established in 2006 as a result of two European projects - the Alps Mobility and the Alps Mobility II, initiated by the Austrian Ministry of Agriculture, Forestry, Environment and Water Management. The main purpose was to create an innovative, sustainable and climate-friendly tourist offer in the Alpine region. The Slovenian Alpine pearl is Bled. In the area of sustainable mobility, they offer train arrivals, walking paths, bicycle rentals, tourist trains, tourist buses, carriages, traditional boats (so called “pletne”) and rowing equipment rental. Alpine pearls are also places that already achieve the vision of a car-free tourist destination (e.g. Werfenweng in Austria, Chamois in Italy). Alpine Pearls resorts offer tourists an environmentally and climate-friendly, culturally diverse experience of nature.29 holiday destinations in the most beautiful Alpine regions have set specific goals:

	• a more environmentally friendly vacation • accessibility by train and bus • a diverse range of sustainable mobility that enhances the tourist experience • preserving regional specialties and beauty of nature • energy efficiency and renewable energy sources • sustainable mobility demonstration site (rental of electric vehicles, mountain bikes, electric bikes) • pedestrian comfort – reduction of motorized traffic, noise and exhaust gases • justification of the culinary and cultural diversity offered • cooperation with protected areas - parks • set an example for other tourist destinations around the world On other information, www.alpine-pearls.com offers a simple calculator for calculating the carbon footprint of holidays from mobility sources and accommodation. Alpine pearls include protected alpine areas (parks, reserves) and thus promote their magnificent beauty while at the same time pointing to the fragility and threat of the Alpine region. With their philosophy of natural, more environmentally friendly holidaying, based on sustainable mobility, they make a significant contribution to protecting the Alpine environment. The Alpine Pearls brand addresses mobility, which is the most environmentally problematic segment of tourism. In addition to directly reducing greenhouse gas emissions in tourist destinations, the brand also makes a significant contribution to promoting and promoting sustainable mobility. Tourists who try different forms of environmentally friendly transportation or hiking on holidays often transfer these practices into their daily lives. Last but not least, local residents in tourist destinations are encouraged to make sustainable mobility a reality.

Free Local Transportation - Cavalier	Cavalier is a free mini electric vehicle for passenger transport on call. It operates in the city center in the pedestrian area and in the central part of Slovenska street in Ljubljana (common traffic area). It has no fixed lines. It can be called over the phone or caught on the street. In the winter two glazed vehicles drive and in the summer two more open ones. The cavalier is used to transport passengers inside the pedestrian area and to the desired bus stop. It is mainly used by the elderly and, more recently, by tourists with luggage, but also by people with mobility difficulties. It can carry up to five passengers at a time. Call responses are 5-20 minutes or more depending on demand. The vehicle's speed is an average of 8 km/h, sometimes speeding up to 15 km/h (maximum 25 km/h). It drives daily from 8am to 8pm. The Cavaliers are driven by Ljubljana Passenger Transport (LPP) drivers. According to the LPP, 900,000 people were transported between 2008 and 2015. On the busiest Sundays, they also carry 75 km.
Project NEXT-e	E-mobility has tremendous potential in Slovenia, and people are increasingly aware of its many benefits and want to take advantage of it. The EU promotes projects developing smart mobility services in which the company Petrol is actively involved. The first such project is the NEXT-E project, which represents a good model of a one-off collaboration between leading groups in the electricity, oil and gas sectors, who have joined forces with OEMs (car manufacturers) to create an interoperable and non-discriminatory electric vehicle power grid as a viable alternative an existing network of internal combustion engine vehicles. The consortium consists of Petrol, E.ON Group, MOL Group, Croatian Electricity Industry, Nissan and BMW. The EU-funded project will partner with partners to build a network of 222 high-speed charging stations and 30 ultra-fast electric vehicle charging stations in the region. As part of this project, Petrol will build 16 fast charging stations and 4 ultra-fast charging stations in Slovenia, and 12 fast and 1 ultra-fast charging stations in Croatia. At the same time, the project will identify the best strategy and cost-effective approaches to charging infrastructure and service delivery, supporting greater use of electric vehicles in the region, connecting the West and Cohesion Europe and promoting smooth and comfortable long-distance travel, percent based on electricity. The project activities will end on 31 December 2020.

Project URBAN-E	Another major project in which Petrol is involved is the URBAN-E project, which focuses on intermodality in transport by deploying electric vehicles. This is an international project under which Petrol and partners - municipalities of Ljubljana, Zagreb and Bratislava - will build the necessary charging infrastructure for the development of alternative forms of mobility using electric vehicles. As part of the project, intermodal hubs (public urban passenger transport, railway station, airport, etc.) will be established and upgraded. Specifically, a central hub with up to 50 electric vehicle charging stations and some smaller charging stations on the main city roads will be erected in Ljubljana. This will fill the fleets of electric vehicles (e-taxis, e-vans, etc.) providing alternative mobility services. Customers who come to the city will be able to use on-call vehicles. These will connect the city centre to the intermodal hub, including the airport. In Ljubljana, such centres will be located along the train station and on the outskirts of the city. An intermodal hub will grow when the user is able to get to Ljubljana by train and the other end by electric vehicles. A similar project will be implemented in Zagreb and Bratislava, in Ljubljana and Zagreb we will introduce an online intermodal platform for sustainable mobility. What does this mean for passengers? The model represents an intermodal transport services market. The user will receive all the information in one place and choose the most favourable combination of transport services: Ljubljanski potniški promet - LPP - Ljubljana passenger traffic, train, e-taxi, shared transport with vans or any other form of sustainable transport. In one place, they will allow the traveller to view transportation solutions to their needs, how much they cost and the ability to book. For example, if you are coming to the city and want to get to the other end of the city, if you want to go to a certain place together with other passengers, or if you are prepared to use different means of transport from point A to point B, such as from Nova Gorica to Vienna airport.
BicikeLJ	Within the city's BicikeLJ self-service bike rental system, you can rent bicycles at automatic stations. The bikes are particularly suitable for shorter rides (up to an hour). Every first hour of renting is free. Five minutes from the return of the bike, it is already possible to rent a new one at any of the stations. There are 60 stops and 590 bikes within the BicikeLJ system, which are approximately 300 to 500 meters apart. The stops are easily accessible and ideal for overcoming short distances. They have already made about 5.9 million rides to date. Which means that on average, every bike is used eight times every day. Due to continuous improvements in this area, Ljubljana ranked 13th in the 2015 list of the 20 most friendly cities in the world in 2015, and even ranked eighth last year in the Copenhagenize Bicycle Friendly Cities Index 2017.

Prevozi.org	The very popular Slovenian version of world carpooling or the German “mitfahrzentrale” basically came out of the hands of students who were looking for a more comfortable and faster solution for their weekly mobility. Prevoz.org is an online platform for "carpooling," where drivers write, where they go, how much space they have in their vehicle, and how much stranger it will cost if they arrive. The driver does not need to be licensed to carry passenger services as long as he only requires passengers to cover a proportionate share of the cost of fuel and tolls.
Sopotnik	The Sopotniki Institute, an institute for intergenerational solidarity, it was created with the aim of helping the elderly to participate in active social life. Through intergenerational cooperation, they want to prevent or break the isolation and loneliness of the elderly from mostly smaller, more remote places. Elderly due to the distance, absence of a car or poor transport links, almost don’t leave home. Free transportation allows the elderly to attend cultural events, visit their friends, go to the doctor, shop, etc. Not only can they do the necessary tasks on their own and without worry, they can also make new acquaintances and friendships and maintain social contacts with the wider surrounding area, which is otherwise too far away and thus unreachable. At Sopotnik are volunteer drivers of different ages and professions. We have allocated our study, work and leisure responsibilities in such a way that we can ensure regular service with alternate on-call duty, and from morning until the last passenger arrives at his destination. Sopotnik covers smaller and larger towns in the municipalities of Hrpelje - Kozina, Divača, Sežana, Sevnica, Brežice, Krško, Kočevje, Postojna, Pivka, Ajdovščina, Ankaran, Litija and Smartno near Litija, Slovenj Gradec and Cerknica.
Prostofer	That sustainable mobility is not just the domain of larger companies is evidenced by the story of the Golden Network Institute, in which volunteers enrolled in the Prostofer program assist the elderly in door-to-door daily transport. Due to their low cost, they use an electric car. The company Petrol helped the institute to by the electric car.
Municipality of Ljubljana – ecological zone	A project of Municipality of Ljubljana - an ecological zone in the city centre, created in 2007 with the closure of the old city centre for all motor traffic. Pedestrian areas have thus increased 6.6-fold to more than 10 hectares, with Trubar's redevelopment even greater. In co-financing with the EU, the capital will carry out a major project to build new cycling infrastructure, as well as refurbish the roads with a focus on improving cycling conditions.

Ljubljana Passenger Transport LPP - Eurban	Ljubljana Passenger Transport LPP uses 20 Eurban electric cars to provide on-call transport services (boasting the title of the best eco transport in Ljubljana).
Free public buses	Free public buses were introduced in municipalities of: Murska Sobota, Velenje, Nova Gorica, Ptuj, Piran).
Free parking for e-cars	Free parking zone was organized in the municipality Maribor.
E-car renting	Public institution Ljudska univerza Slovenska Bistrica gives its e-car for rent when it is not needing it itself.
Elektro Ljubljana	Elektro Ljubljana, a pioneer in this field, which already installed the first electric charging station in 2010, and to date, about 70,000 charging activities have been done at their charging infrastructure.
Eles	Eles has introduced the concept of integrated development of e-vehicle bulking infrastructure.
Renault Nissan Slovenija	The company has presented electric cars to Slovenian market of both brands.
Autocommerce	The company presented the achievements of the Mercedes-Benz brand in the field of e-mobility
Petrol E-mobility for cities	The company introduced comprehensive e-mobility solutions for cities.
rVbikes	Their biggest innovation is a modular electric vehicle for flexible use in communities.
Pošta Slovenije	The company is maintaining a growing fleet of electric vehicles in its fleet for several years.

Identification of the needs of Slovenian cities (municipalities) in the field of GSM

The wishes and needs for mobility in Slovenia are as defined by SRIP ACS[33]:

1. Road connections - regular traffic

2. Local development - tourism development

3. Sustainable Green Mobility

On 18th April 2018 the IV. Urban Forum: Slovenian cities, smart green and safe was organized in Ljubljana. Many mayors and city, town representatives, ministries and administrative units, regional development centers, the economy, public agencies and public companies, societies and institutes, associations, experts from related professional fields, non-governmental organizations, academia, the general public and the media took part in the forum. The highlights of the debates were that every city should adopt the Green Capital Strategy, that it must be human and nature first, and that cooperation, co-decision and co-creation are important. They emphasized that many activities are being carried out in the areas of waste management, sustainable mobility, resource management, municipal infrastructure, as well as cross-border and regional co-operation.

The second part of the roundtable at the forum highlighted cooperation between municipalities and the government, where the main initiative of the mayors was the desire to be partners in the process of defining new development priorities and drafting guidelines for a new financial perspective. However, cooperation between urban municipalities and government representatives is desirable in a regular form.

Slovenia has been running European Mobility Week since 2002, and for the first time this year (2019) was attended by 80 municipalities promoting sustainable mobility and the use of travel modes such as public passenger transport, cycling and walking. As traffic in Slovenia is the largest contributor to all sectors of greenhouse gas, most of which is motorized road transport, the increasing participation of local environments in the European Mobility Week is encouraging. Municipalities prepared a variety of activities in September.[34]

Slovenia is divided into twelve statistical regions and 212 municipalities[35]. Below are in short described some examples of biggest Slovenian municipalities in all regions and their practices on green and e-mobility.

With the accession to the EU, the implementation of an integrated approach to transport planning in Slovenia has begun. More and more municipalities are responding to the incentives of the EU and the

[33] SRIP ACS+ Strategic research and innovation partnership in field of mobility joins two association members, Business interest association ACS Automotive cluster of Slovenia and Transport Association at the Chamber of Commerce and Industry of Slovenia.

[34] https://www.gov.si/novice/2019-10-16-trajnostno-mobilnost-sta-letos-najbolj-aktivno-promovirali-obcini-maribor-in-kocevje/, 16. 10. 2019

[35] https://www.stat.si/StatWeb/news/Index/7323, 9. 10. 2019

Ministry of Infrastructure (MZI) and are preparing and implementing Sustainable Urban Mobility Plan (SUMP) which help the municipality outline its vision and goals in the field of transport and the effective sequence of measures, which during its implementation help it to achieve holistic changes and consequently higher quality of life. The implementation of strategies has already produced significant results for some municipalities in addressing traffic problems, which is a good incentive for other municipalities.

Ljubljana (MOL)

The goal of sustainable mobility is fully followed by Ljubljana; they plan to change their travel habits so that one third of the routes will be made by public transport, one third by bicycle and on foot, and one third by private vehicle. In the overall transport strategy of the city, this objective is already set in 2020, but it is still a long way off, despite its hard work and active approach.

One of the most important achievements towards green mobility at MOL is the ecological zone in the city center, which was created in 2007 with the closure of the old city center for all motor transport.

Ljubljana is also strong in promoting e-mobility. It is embedded in transport policies at various levels. Special mention should be made of the car-sharing system - Avant2Go electric car sharing, which uses only electric vehicles. The system is designed in accordance with the principles of sustainable coexistence and is one of the first in Europe to be developed by Avant car with the support of a private company Comtrade and other partners. The number of parking spaces or pick-up points is expanding.

There are six Kavalir electric vehicles in the pedestrian area of the city center, Ljubljana passengers traffic LPP uses 20 Eurban electric cars (boasting the title of the best eco transport in Ljubljana), as well as the Urban Urban Electric Tourist Train. City and public utility vehicles are powered by methane or electricity.

This year, the city's passenger fleet will be enhanced with 17 new, environmentally friendly hybrid buses. MOL is also participating in the Urban-e project, which will install 167 electric charging stations in Ljubljana, Zagreb and Bratislava. The first Slovenian public mini hub for fast charging of electric vehicles was recently opened.

The use of P + R parking is increasingly popular. The user leaves his or her car in the parking lot on the outskirts of Ljubljana and then takes the bus to the city center. There are currently six such parking lots in Ljubljana, namely at the Dolgi most, Bar, Stožice, Studenec, Ježica and Sinja Gorica (Vrhnika). The price for one day parking is 1,20 €.

Cycling is increasingly popular in Ljubljana. The hugely popular BicikeLJ - a Bicycle Rental System, which currently has 590 bicycles at 59 stations around the city, also contributed greatly. They have already made about 5.9 million rides to date. Which means that on average, every bike is used eight times every day. Due to continuous improvements in this area, Ljubljana ranked 13th in the list of the 20 most

friendly cities in the world in 2015, and even ranked 8th last year in the Copenhagenize Bicycle Friendly Cities Index 2017.

It is updating and expanding its cycling infrastructure by redeveloping major busy roads and introducing cyclist-friendly innovations such as mixed-traffic lanes, eliminating black bike spots, setting up new bike racks. It also regulates new recreational areas for playing and practicing skills with on bicycles, scooters, skateboards, roller skates and rollers to runners - KoloPark in Šiška, Bežigrad, Novi Fužine and Podutik.

Maribor (MOM)

Maribor could hardly be said to be significantly different from other interviewed municipalities but boasts that Maribor's passengers' traffic - MPP fleet also complements the electric mini-vehicle, Maister, which drives around the pedestrian area and the center of Maribor and is free. You can order a mini electric vehicle with up to 6 passengers at one time by calling 030 700 035 and the driver will come to you at the agreed location. You can also stop it if you meet it downtown and ask the driver to drive you to your desired destination. The electric mini vehicle is primarily intended for downtown residents, the elderly and the disabled, parents with young children and visitors to the city and tourists.[36]. Integration into e-mobility also includes Avantcar's electric car sharing offer.

The number of passengers in MPPs has been increasing in recent years, but very, very slowly. They attribute the growth to various improvements in traffic, fleet modernization as well as promotion.

The adopted Integrated Transport Strategy in Maribor foresees primarily the reorganization of bus routes, increasing the frequency of buses on certain routes and the use of passengers and environmentally friendly vehicles. They renovate bus stops, adapt them to the needs of passengers, install roofs and urban equipment. They move lanes in such a way as to give buses an absolute advantage over other motor traffic. Parking policy abolishes free parking in the city center, modifies parking arrangements, and is supplemented by horticultural planting.

The plan is to set up e-vehicle charging stations - as their own investment and as a public invitation to those interested in investing in charging stations in public areas - and electrifying public urban passenger transport (purely electric-powered buses with charging infrastructure).

Maribor should finally become friendlier to electric vehicles. At the April 2019 city council meeting, they passed a first reading of an ordinance that stipulates the use of public land so that the municipality can publish a public call for the installation of electric chargers in the city. At the municipality they are saying that in the past, it has been shown that businesses that are registered to sell electricity build charging stations along municipal roads and parking lots. After the ordinance is amended, the private person will also be able to set up an outlet in the public area. They also said that controlled use of the public area is enabled, and the investment will be borne by the one who will sell the electricity for cars. Until now, this

[36] http://www.marprom.si/o-podjetju/mestno-mini-vozilo-maister/, 26. 11. 2019

was not allowed, and it was a cost to the municipality, which is senseless and too expensive. The charging stations will be installed in publicly accessible parking lots, presumably in Pohorska Street, Loška Street, Jadranska Street, Preradovičeva Street and General Maister Square.[37]

Kranj

Kranj is one of the municipalities with the widest range of electric bike rentals. This type of transportation has been well received by the townspeople, and the use of the system called KRsKOLESOM is growing rapidly and contributes greatly to reducing air pollution and reducing the need for parking spaces. Stations for ordinary and electric bicycles are near several stops. The townspeople can also use electric minibus Kranvaj on call for the transport in the city center.

Cycling, walking and public passenger transport are increasingly expected to replace passenger cars, but more secure cycling links between the city and the countryside will be needed, adjusting public transport links and frequencies within the municipality, between the railway, bus station and airport and to nearby tourist destinations. For this purpose, they have arranged, inter alia, motorhome parking areas (e.g. Sava otok) and tourist bus parking areas. Users are also motivated by the low cost of an urban passenger transport (MPP) ticket.

The opportunity is also in the expansion of the urban passenger transport network and the extension of suburban settlements. There is considerable room for maneuver in improving infrastructure, which would further popularize public transport.

Koper

Concerns for slowing down urban transport and increasing the safety of its participants have driven municipal investment in public passenger transport, increasing the frequency of buses and adapting lines to users' preferences. They have significantly reduced the prices of monthly tickets for citizens. The effect was a dramatic increase in the number of passengers (tripled since 2002). 5 years ago, the bus fleet was upgraded with cleaner buses (EURO 6 standard), and since last year (2018) a new electric bus has been operating across the wider urban area.

Preparations are underway to establish an electric bicycle rental system, one of the key measures to promote alternative forms of short-haul transport, and a vertical mobile link between the coast and the higher-lying Semedela. In 2019 four electric vehicles similar to the Ljubljana Kavalir are expected to be purchased for driving around the old town. The plan also includes the purchase of new electric buses and the construction of additional P + R and P + B parking lots, respectively.

As part of the Edison project, Petrol will launch an electric bus pilot line and public transport between Izola and Koper with autonomous vehicles. All municipal administrations and services will use electric

[37] https://www.vecer.com/elektricna-mobilnost-v-mariboru-se-polni-na-obrobju-mesta-6694530, 11. 10. 2019

vehicles, for which they will install additional charging stations in the city and neighborhoods. They intend to present and test all Slovenian products and technologies, including electric bicycles and outboard motors, in Koper as soon as possible.

Nova Gorica

A feature of Nova Gorica is the free city passenger traffic - MPP and the international line between the two Goricas (between Nova Gorica Bus Station and Gorizia Railway Station in Italy). Its use is therefore much more widespread. Users are: half of the schooling population, one fifth of pensioners, an equal share of persons in employment and one tenth of the rest. A tender for the selection of a new MMP concessionaire is underway in 2019, and a new concession is envisaged to update the lines, timetables and fleet. The cost of the municipality is 500.000 EUR.[38]

The municipality of Nova Gorica also counts on e-mobility, for which it received a non-refundable € 129,000 in the tender for co-financing the establishment of a bicycle, electric and ordinary bicycle rental system. In the first phase, six locations will be arranged. They intend to set up a Mobility Center, which will be a supportive environment for the development, coordination and promotion of sustainable mobility. They will build electric charging stations and, when replacing fleet for their own needs, will favor environmentally friendly vehicles.

7 kilometers of missing sections of cycling trails will be built in the wider urban area. By next year, they will build a footbridge across the Soča River and connect to the existing Solkan-Plave national cycle path, thus completing the cycling network in the Gorica region. An important commitment is also the renewal of the parking policy by 2020.

“Nova Gorica has a cohesive role both at the level of the region and internationally, so Nova Gorica and Gorica (Italy) are cooperating, which is an advantage and a challenge. The regulation of infrastructure, economic zones and electro-mobility are important. In the hinterland, they have their own power plants and smart solution companies. Smart specialization and efficient use of renewable resources are important. They are introducing smart cards and want to connect new technologies with the public.[39]

Idrija

In 2017, the Municipality of Idrija has the Integrated Transport Strategy (CPS), which was unanimously approved by the Idrija Municipal Council in March 2017.

There are eight electric chargers on the Celtic (road between Bovec and Idrija) going to be build. The first five have been opened in Idrija and Lower Idrija as part of the Green Mobility of the Future project by

[38] https://www.dnevnik.si/1042753377, 29. 10. 2019
[39] Poročilo IV. Urbani forum, Slovenska mesta: pametna, zelena in varna, Ljubljana, 2018

2016. In doing so, they established an important infrastructure network for all users of electric vehicles and put Slovenia on the map of modern green mobility.

Ptuj

Ptuj has an electric vehicle named "Zapeljivec", a system for renting bicycles and cycling connections with neighboring municipalities.

Company Tenzor that equips and transforms parking lots into smart ones, made a pilot project on smart parking in Ptuj. The smart parking spot is equipped with a sensor located about 10 centimeters below the surface and detects a change in the Earth's magnetic field. It passes this information to the data collector, who then passes it on to info-table drivers and platforms.

Postojna

Postojna municipality has in 2017 prepared Integrated Transport Strategy where they stated five strategic goals: establishment of integrated transport planning, more walking, using the potential of cycling, attractive public passenger transport, changing the habits of users of motorized traffic. Within those strategic goals here are some specific operative goals: adopt such municipal budgets by 2022, which will balance the resources between traffic systems: 30 per cent for sustainable forms of mobility: cycling, hiking, public passenger transport; since 2017 regular involvement in the European projects on sustainable mobility; increase the proportion of walking to school and work by 2022 to 20 per cent (15 per cent in 2016; increase pedestrian presence in centers of settlements by 20 per cent compared to 2016; establish and mark by 2022 missing bike connections in the city and in connection with networks of neighboring municipalities; provide bicycle parking by 2022 beside all public buildings; reach 100 per cent of public passenger transport providers, integrated into the single ticket system, by 2022; maintain or reduce motorization rate by year 2022 compared to 2015 (546 vehicles / 1,000 people).[40]

Novo mesto

Novo mesto is introducing electric bikes. They already have a bike sharing system where they have 14 bike station, 25 bikes, they are adding in 2019 additional 45 electric bikes. 300 users currently use the system, they expect this year the number to double. One-year hire costs 25 EUR, a day bike hire is 5 EUR. The municipality is in concluding phase with the supplies to set up car sharing system with electric vehicles. [41]

[40] Celostna prometna strategija Občine Postojna, Občina Postojna, 2017

[41] https://www.dolenjskilist.si/2019/06/13/220864/novice/dolenjska/GoNM_Elektricna_kolesa_vse_bolj_popularna__kdaj_se_vozila/, 29. 10. 2019

Velenje

In Velenje, the concern for ecology is very high, namely they are the city of the first ecological protests in Slovenia. The Šoštanj Thermal Power Plant, among other things, generates hydrogen, which can be used for transport purposes, and presents us with a challenge for sustainable mobility said deputy mayor at the IV. Urban Forum in Ljubljana.[42] Velenje has introduced free public bus lines. Due to the transparency of the routes and the frequent departures of buses running at peak times for 15 minutes, the model was well gripped and 1500 people a day were traveling on the main route. This costs the municipality 330.000 EUR.[43]

For many years, the Municipality of Velenje has been working to raise the awareness of the local population, visitors, excursionists and tourists about the principles of sustainable mobility, which was supported by the establishment of the bicycle rental system Bicy. A group of 10 promoters of a sustainable mobility / cycling / bicycle rental system will be set up.[44]

Krško

In line with the Integrated Transport Strategy, the municipality of Krško strives for sustainable transport planning and provides citizens with as many opportunities for cycling, walking and using public passenger transport as possible. Thus, they were able to obtain European aid for the Krško-Kostanjevica-Krka cycle link, which is planned to be built by the end of 2022. At Senovo they will begin to build a multi-purpose route from Spar to an existing multi-purpose route. The automated free bike rental system will be richer for four new stations at the Spar store in Videm, at the Krško Health Center, at the two-level car park on Dalmatinova Street in the Old Town, and at the new Park & Ride car park near the Vipap plant. The Municipality of Krško has allocated around € 200,000 to invest in all seven bicycle rental stations, while the Ministry of Infrastructure has added € 105,000. As part of the project Related with Sava, another free bike rental station was erected in the parking lot at the Pečnik Inn in Brestanica.

Pedestrians are given a new overpass over the railway line in Videm, and the plans include a pedestrian bridge over the Sava River from Videm to the old town. Last year's “Pešbus” project was attended by students of elementary schools of Jurij Dalmatin Krško, XIV. divisions of Senovo and Leskovec near Krško, and in the new school year the other elementary school children in the municipality will use it. They will also continue to set up signs indicating the place from which children can continue their journey to school on foot. Two boards will be put up in the vicinity of the elementary school Jurij Dalmatin Krško and one in the vicinity of the elementary school Adam Bohorič Brestanica. In Rozno and Zdole, the municipality will set up bus stops. For the construction of the Park & Ride parking lot in the immediate vicinity of the train station, which will cost € 459,000, the municipality of Krško received € 240,000 of European aid.

[42] Poročilo IV. Urbani forum, Slovenska mesta: pametna, zelena in varna, Ljubljana, 2018
[43] https://www.dnevnik.si/1042753377, 29. 10. 2019
[44] https://www.velenje.si/uprava-organi-obcine/11822, 26. 11. 2019

For the second year in the municipality of Krško, within the framework of the Sopotnik project, the elderly are being transported free of charge in cooperation with the Sopotnik Institute and the Posavje Krško Center for Social Work. In total, as of January 2018, volunteers have completed 874 transfers for a total of 198 users. Of which, in 2019, 408 transports, an average of 51 per month, covered 13,842 kilometers and performed 1,044 hours of volunteer work.[45]

Celje

The Celje municipality is one of the active members of the Edison project. Celje Mayor Bojan Šrot explains that changing people's habits is one of the hardest things. The local community needs to set an example, thus migrating citizens to green mobility. Celje is currently in the phase of actively building green mobility with several projects. A city bus project will be launched at the end of the year, which will operate on compressed natural gas and allow citizens easier transportation. A system for renting bicycles, including electric ones, is under construction, and the city center is slowly closing for traffic.[46] In the coming years they will gradually transform the entire municipal fleet, comprising about 20 vehicles, into electric vehicles. They are also working intensively on the introduction of e-taxis.

In Celje there is a public rental system KolesCE, there are 17 rentals with 100 bicycles available, and the number can be increased in the interest of different companies. Currently active lending facilities where electric bicycles are also available: Celje Hospital, Dečkova cesta, Zlatorog Hall, Museum Square, Prešernova Street, Krekov trg, Main Bus Station, Ljubljana Road. The annual tariff is valid for 12 months from the date of purchase and costs € 10 for renting ordinary bicycles and € 20 for renting bicycles. The first 30 minutes of each rental are free.[47]

Slovenj Gradec and other towns in Carinthia region

In Carinthia, municipalities have charging stations, which already exist in all three Carinthian valleys, from Mežica all the way to Slovenj Gradec and Radlje ob Dravi. The municipality of Ravne in Carinthia has invested in three charging stations in different locations throughout the municipality. The charging stations are managed by the Institute for Culture, Sport, Tourism and Youth, and is free of charge. In Mežica, charging stations are a donation from Elektro Celje to the municipality of Mežica, and the owner is now the municipality. Just like in Ravne, the charge is free of charge in Mežica, only the identification card is required for charging at both charging stations. In Mežica you can find identification cards at nearby inns and restaurants, because, as explained by Mežica Mayor Dušan Krebel, the municipality contributes to a greater number of local caterers.[48]

[45] https://www.dolenjskilist.si/2019/09/12/224932/novice/posavje/V_Krskem_vse_lazje_s_kolesom_in_pes/, 29. 10. 2019
[46] https://ce-sejem.si/sporocila-za-javnost/zelja-po-udobju-povzroca-najvec-emisij/, 10. 10. 2019
[47] https://www.celje.info/aktualno/koncno-zazivel-sistem-javne-izposoje-koles-kolesce/, 29. 10. 2019
[48] https://e-koroska.si/na-koroskem-lahko-elektricna-vozila-polnijo-zastonj-v-prihodnje-se-nove-polnilne-postaje/, 29. 10. 2019

In town Mežica, the ME-CIKL Electric Bicycle Rental System was officially opened in September 2019 as part of the project "Sustainable Mobility and Wheeled Tourism".

There are four electric bicycles available at one charging station, which citizens can rent for free upon prior registration with the Municipality of Mežica. The system, which has been in operation since late May, with about 60 residents registered. The total investment is about 22,000 euros and is co-financed by the European Agricultural Fund for Rural Development.[49]

Murska Sobota

Municipality of Murska Sobota promotes green mobility, as evidenced by the fact that it already has seven electric car chargers (in September 2018) and boasts of completing Phase 1 of the renovation of the city center (parking arrangement on square Trg zmage and gateway on Slovenska Street). They also have free public passenger transport. In the center of Murska Sobota they are adopting Slovenska Street which will be on one level, friendly to pedestrians and bikers and with threes. They have introduced mobility center and bike-sharing system called Soboški Biciklin[50]. The police in Murska Sobota is using electric bikes. The municipality also introduced free public bus lines which costs them about € 250.000.[51]

In 2019 the following cities were selected as the best in the field of e-mobility: 1. Ljubljana, 2. Maribor and 3. Novo mesto. Between smaller municipalities are: Bled, Sežana and Piran.[52]

[49] https://www.vecerkoroska.com/mezicanom-na-voljo-brezplacna-elektricna-kolesa-10066590?ADVERTApredogled=pr&sifra=93A103A189A189-18A9A2019C2B01B19, 29. 10. 2019
[50] https://www.soboskibiciklin.si/, 28. 10. 2019
[51] https://www.dnevnik.si/1042753377, 29. 10. 2019
[52] https://www.avto-magazin.si/plugin/e-mobility/konferenca-e-mobilnost-v-obcinah-2019-med-mestnimi-obcinami-najboljsa-ljubljana-med-obcinami-bled/, 7. 11. 2019

List of main stakeholders of GSM

Table 2: Main stakeholders of GSM in Slovenia

Organisation	Description	Contact address
Ministries/Agencies/Municipalities/Hubs		
Ministry for infrastructure	The Ministry of Infrastructure is responsible for continuous improvement of Slovenian infrastructure in the field of transport and energy. They maintain, plan, regulate and improve the field of rail, road, air, cableway and maritime transport and inland navigation. They are striving for sustainable mobility or transport that is safer, more economical and greener. They ensure that the energy supply is reliable, and they are laying the groundwork for a transition to a society that will use energy more efficiently or draw mainly from renewable energy sources.	Langusova ulica 4 1535 Ljubljana gp.mzi@gov.si https://www.gov.si/drzavni-organi/ministrstva/ministrstvo-za-infrastrukturo/

Energy Agency	The mission of the Energy Agency as a national energy regulator is to ensure the transparency, impartiality and equal position of all participants in the energy markets. Ever since it was established in 2001, it has helped to co-create the appropriate conditions for the establishment and operation of electricity and gas markets in the Republic of Slovenia, while at the same time monitoring the situation on these markets. European and national energy policies have three basic starting points: promoting security of energy supply, establishing a competitive common energy market and combating climate change. Agency's tasks: • regulation of network activities, which includes the economic regulation of all operators of electricity and natural gas systems, as well as the regulation of the network itself in terms of giving consent to general acts • regulation of heat and other energy gases • ensuring a secure supply of natural gas • promotion of production from renewable sources and cogeneration • energy efficiency • monitoring the functioning of the electricity and natural gas markets • control over the legality of the work of energy operators • protection of customer rights	Strossmayerjeva ulica 30 2000 Maribor info@agen-rs.si www.agen-rs.si

Municipalities in Republic of Slovenia	In 2018 there were 212 municipalities in Slovenia. Most of them are connected in the Association of Municipalities and Towns of Slovenia.	Partizanska cesta 1 2000 Maribor info@skupnostobcin.si https://skupnostobcin.si/obcine/
Sekcija trajnostne mobilnosti CER - Institute for the Promotion of Innovative Solutions for Sustainable Development, Energy Efficiency and Low Carbon	The mission of CER is to promote an innovative climate-neutral circular economy and green technologies that meet the environmental and energy challenges. CER has the role of a professional body. It participates in strategically important decisions in the interest of the wider society. Their activities are: • promoting tools to foster a climate-neutral economy and green technologies (innovation, business models, finance, regulatory environment, taxes, incentives, impact measurement) • cooperation, integration, openness, distributivity in the development of green technologies (linking different sectors, industries, players, competitors and partners) • raising awareness of the positive, multiplier effects of a climate-neutral economy (health, knowledge, education, green jobs, equity, GDP growth, security, the future) • promotion of Slovenian knowledge, scientific achievements, technological breakthroughs in the field of green technologies • Global networking and internationalization	Ameriška ulica 3 1000 Ljubljana info@cer-slo.si http://www.cer-slo.si/predstavitev.html

Slovenian automotive clusters (ACS)	ACS is an economic association of Slovenian suppliers to the automotive industry and motor vehicle manufacturers. They have joined the cluster to strengthen their competitiveness and increase added value. ACS activities: • It develops and maintains communications between members who manufacture components, modules and systems for the initial construction of passenger, commercial and specialty motor vehicles and for after-sales activities • it promotes research and development of more complex products and systems with higher added value • it also connects members who are important suppliers of machinery, tools, research, development, manufacturing, logistics and other services to the automotive supply and automotive industries • it promotes the joint action of members to improve their products and improve business in the areas of development, production and quality, and to achieve business excellence • it collects information on developments in the motor vehicle industry and in the automotive supplier business and provides it to members • it establishes, develops and maintains information, education, research development and other infrastructure for members' needs • it represents the interests of members and promotes their activities at home and abroad, especially with motor vehicle manufacturers • it monitors systemic, legal and economic issues of the activity and proposes appropriate measures to improve the economic environment and to adapt members to the ongoing development challenges of the automotive industry	Dimičeva 13 1000 Ljubljana info@acs-giz.si http://www.acs-giz.si/

SRIP ACS	SRIP ACS + The Strategic Development Innovation Partnership in the field of mobility brings together members of two associations, the ACS Slovenian Automobile Cluster and the Transport Association of the Slovenian Chamber of Commerce. The automotive industry in Slovenia contributes roughly 10 per cent to gross domestic product and more than 20 per cent to Slovenian exports, and all members of SRIP ACS +, including all areas of mobility, contribute more than 17 per cent to gross domestic product. The industry generates € 7.5 billion in annual revenue. In the Slovenian automotive industry, there are more than 100 suppliers of level 1 and level 2 and more than 600 sub-suppliers of lower levels of the supply chain. Annually, more than 25 per cent of the awarded Chamber of Commerce and Industry innovations come from the automotive industry.	Dimičeva 13 1000 Ljubljana info@acs-giz.si www.acs-giz.si/

SRIP Smart cities and Communities (SRIP PMiS)	The European Smart Cities 3.0. initiative (2014) defines a “Smart City” as a city built on a “smart” combination of activities of independent and aware citizens, performing well in 6 characteristics (Smart Governance, Smart Economy, Smart Mobility, Smart Environment, Smart People and Smart Living). The vision of partnership between the verticals in SRIP Smart Cities and Communities is to establish a globally recognised ecosystem of partners, permanently synergistically enhancing and linking their competence, as well as offering adequate capacities for R&D, production and marketing of globally competitive innovative high-tech solutions in all aspects of Smart cities and communities. The key objective of the research area Mobility, transport and logistics is to increase the mobility of people and goods by providing reliable, adaptable, accessible, safe, more streamlined and greener urban and suburban mobility, transport and logistics services. The architecture of the smart community system, which will enable modern, sustainable, efficient and accessible services of mobility, transport and logistics, contains the following three priority areas: • Infrastructure, smart algorithms, integration with ICT • Dimensions of digitized mobility in the smart community • Business models, platforms, cooperative economy, shared transport	A1 Slovenija, d.d. marjana.sencar.srdic@a1.si http://pmis.ijs.si/sl/

Chamber of commerce of Slovenia - Transport Association	The Transport Association is a recognized and pervasive representative of the interests of its members. Strategically, they have outlined accelerated action and lobbying to eliminate a number of administrative barriers and address accumulated problems in the broad field of logistics services, all types of transport, passenger transport and technical inspections that hinder business development in the transportation and logistics industry.	Dimičeva 13 1504 Ljubljana zpz@gzs.si https://www.gzs.si/zdruzenje_za_promet
Center odličnosti nizkoogljične tehnologije / Centre of Excellence for Low-Carbon Technologies – CoE LCT	CoE LCT wants to unite all the vital Slovenian potential in order to enable the harmonious, comprehensive and systematic development of advanced technologies designed to facilitate Slovenia's transformation into a low-carbon society.	Hajdrihova 19 1000 Ljubljana info@conot.si http://www.conot.si/

Energetska agencija za Podravje (EnergaP) – Energy Agency of Podravje	Local Energy Agency of Podravje was established in June 2006 by Municipality of Maribor. Energap covers area of 200.000 inhabitants and 17 municipalities around the city of Maribor. Their main activities are: • Support for the implementation of local/regional energy plans. • Energy audits of public and private buildings. • Raising awareness on energy efficiency, renewable energy sources and transport issues. • Search for energy-management incentive funds at national and international level and studies on innovative financial mechanisms. • Information, advice and training on energy management issues. • Energy and mobility management for local authorities, public and private companies. • We can give wide-ranging advice on all aspects of energy, as well as technical assistance in the design of energy projects, heritage and infrastructure and provision of public information on these topics. They are cooperating in many local, national and international projects. The main goal is to implement in practice all good ideas that are set in many different documents. As one of the first cities in Slovenia they have implemented the central energy management system for public buildings in Maribor.	Smetanova ulica 31 2000 Maribor info@energap.si https://www.energap.si/

Electricity companies		
Eles d.o.o.	ELES Public Company, d.o.o. has the exclusive right to perform public service activities of the transmission system operator in the territory of the Republic of Slovenia	Hajdrihova 2 1000 Ljubljana info@eles.si https://www.eles.si/
SODO d.o.o.	SODO d. o. o. performs the public utility service of the electricity distribution operator in the territory of the Republic of Slovenia. Almost 955,000 (955,693 as at December 31, 2018) provide reliable, secure and efficient electricity supply to users of the distribution network in Slovenia. Proper network development planning, construction, operation and operation, as well as maintenance, ensure long-term network performance that allows reasonable connection and access requirements to the network, taking into account standards in the quality of voltage and electricity supply.	Minařikova ulica 5 2000 Maribor sodo@sodo.si https://www.sodo.si/
Elektro Celje d.d.	The company's mission is to provide reliable, high-quality, cost-effective and environmentally friendly electricity supply to customers and the provision of related services.	Vrunčeva 2a 3000 Celje info@elektro-celje.si www.elektro-celje.si/si/
Elektro Gorenjska d.d.	Elektro Gorenjska Group is a modern, innovative and positively recognized public player in the development of the flexibility services market. In parallel with the growing dynamics of introducing and incorporating new technologies, they guarantee 100 per cent connectivity for all network users. In addition to the highest quality electricity supply in the Republic of Slovenia, they also provide their customers with a modern and comprehensive user experience. They generate clean energy for sustainable development. They value all participants in the value chain with a quality, trusted and desirable business partner. They are able to adapt quickly and efficiently to all contemporary challenges, trends and various external factors. They are increasing their presence in the market environment, thereby constantly improving their economic indicators and reducing business, development, security, regulatory and environmental risks.	Ul. Mirka Vadnova 3a 4000 Kranj info@elektro-gorenjska.si www.elektro-gorenjska.si/

Elektro Ljubljana d.d.	Elektro Ljubljana's core business is managing the infrastructure for electricity distribution. Elektro Ljubljana owns the electricity distribution infrastructure and leases it to SODO, the public utility service provider of the electricity distribution system operator. In addition, it also provides the following contractually agreed services for SODO: maintenance of electricity infrastructure and organization of on-call service, management and operation of the electricity distribution network, planning of network development, preparation and management of investments in electricity infrastructure, monitoring and determining the quality of electricity supply, implementation of electricity metering , providing distribution network access services and other services to users.	Slovenska cesta 56 1000 Ljubljana info@elektro-ljubljana.si https://www.elektro-ljubljana.si/
Elektro Maribor d.d.	Elektro Maribor company, electricity distribution company, d. d., is an integral part of the electric power system of the Republic of Slovenia and one of five electricity distribution companies in the Republic of Slovenia. In 2011, the E-Mobil brand was introduced in Elektro Maribor. Its primary purpose is to bring electric vehicle technology closer to future users and to enable them to gain their own experience and knowledge of using electric vehicles. To this end, Elektro Maribor, as the first company in Slovenia to include two fully electric cars in its fleet. The company owns 3 electrical charging stations in Maribor, Murska Sobota and Lendava and another 5 in partnership with Drava Power Plants in Maribor, Slovenska Bistrica, Ptuj, Ljutomer and Gornja Radgona.	Vetrinjska ulica 2 2000 Maribor, Slovenia e.mobil@elektro-maribor.si www.elektro-maribor.si

Elektro Primorska d.d.	Elektro Primorska d.d. is a company with a core activity of electricity distribution. The company's activities include also: • manufacture of metal structures and parts of structures • general mechanical work • manufacture of electricity distribution and control apparatus • manufacture of lighting equipment and electric lamps • production of electricity in HPP • other electricity production • electricity distribution • electricity trading • demolition and ground works • general construction work • other construction works, including those of specialty professionals • electrical installations	Erjavčeva 22 5000 Nova Gorica info@elektro-primorska.si www.elektro-primorska.si
BSP Energy Exchange d.o.o.	BSP provides its market participants with Day-ahead and Intraday trading on the Slovenian market. Only those companies, which have obtained the right to participate by way of an accepted application, are allowed to participate on market.	Dunajska 156 1000 Ljubljana info@bsp-southpool.com https://www.bsp-southpool.com/contact.html
Borzen d.o.o.	The company's principal activity is the implementation of public service obligation relating to the organisation of the electricity market that includes organisation of the electricity market in the strict sense and the activities of the Centre for RES/CHP Support. Borzen was founded on 28th March 2001 for the implementation of public utility service relating to the organization of the electricity market and many other important activities in the Slovenian energy field connected with stimulating the use of renewable sources and the efficient use of energy. Borzen, which was previously owned by Elektro Slovenija, passed into direct ownership of the Government of Slovenia in December 2007.	Dunajska cesta 156 1000 Ljubljana info@borzen.si https://www.borzen.si/sl/

Holding Slovenske Elektrarne d.o.o.	The company's operations are based on the sales and trade in electricity and thermal energy, CO_2 emission coupons, certificates of origin and other renewable energy certificates, on the optimization of the production of the HSE Group, provision of ancillary services needed for the functioning of the electricity system and on the management and implementation of energy projects. The HSE Group is the largest producer and seller of electricity from domestic sources on the wholesale market in Slovenia and the largest Slovenian producer of electricity from renewable sources. Part of the group are the following electricity producers: Drava Power Plants Maribor, Šoštanj Thermal Power Plant, Velenje Coal Mine, HSE Power Company Trbovlje, Central Sava Power Plants, Hydro Power Plants on the Lower Sava River and the Soča Power Plant Nova Gorica.	Koprska ulica 92 1000 Ljubljana info@hse.si https://www.hse.si/sl/
GEN energija d.o.o.	The mission shared by all the GEN Group companies is to provide a reliable, safe and competitive electricity supply to various consumer profiles. They generate electricity from sustainable, low-carbon energy sources: • nuclear power • hydropower and • solar power. The company trades in electricity. In the GEN Group are teh following electricity producers: Krško Nuclear Power Plant, Savska Power Plant Ljubljana, Spodnja Sava Hydro Power Plants and Brestanica Thermal Power Plant.	Vrbina 17 8270 Krško info@gen-energija.si https://www.gen-energija.si/

Energetika Ljubljana d.o.o.	Energetika Ljubljana is a company for the comprehensive provision of energy, with which it realizes its vision of a stable and environmentally responsible energy company. It manages two infrastructure systems for the remote energy supply, namely the district heating system and the gas supply system. Today, the network is one of the largest, most developed and most diverse systems for the district energy supply in this part of Europe. The district heating system supplies 64,000 households. The natural gas network supplies 64,000 households.	Verovškova ulica 62 1000 Ljubljana info@energetika-lj.si www.energetika-lj.si
GEN-I d.o.o.	GEN-I is the biggest retail electricity supplier in Slovenia. They operate in over 20 countries. According to the Ministry of Infrastructure was their market share in 2016 23,2 per cent. They supply energy to all end-customer segments, and within our brands we provide affordable prices and a reliable supply of electricity and natural gas within our brands.	Vrbina 17 8270 Krško info@gen-i.si www.gen-i.si
ECE d.o.o.	ECE is the second biggest retail electricity supplier in Slovenia. According to the Ministry of Infrastructure was their market share in 2016 19,2 per cent.[2] In their annual report for 2018 they are stating that they have sold: 2.729GWh of electrical energy, 104.9GWh of natural gas and 1.236ton wood biomass.	Vrunčeva 2 a 3000 Celje info@ece.si www.ece.si
Energija Plus d.o.o.	At Energija plus, a subsidiary of Elektra Maribor d.d., whose roots date back to 1914, they sell energy and services daily to household and business customers, develop advanced services and innovative packages, trade electricity, advise and mediate sales. According to the Ministry of Infrastructure was their market share in 2016 12,7 per cent.	Vetrinjska ulica 2 2000 Maribor info@energijaplus.si www.energijaplus.si

Elektro Energija d.o.o.	Electricity is based on a 120-year tradition of reliable supply of electricity to final customers. The company specializes in the sale of electricity and natural gas and other energy products to end customers, buy-in from producers and bilateral and stock exchange trading of standardized products in the wholesale market. According to the Ministry of Infrastructure was their market share in 2016 11.8 per cent	Slovenska c. 58 1000 Ljubljana moja@elektro-energija.si http://www.elektro-energija.si/
E3 d.o.o.	The company was established in 2004. It's a retail electricity supplier in Slovenia. According to the Ministry of Infrastructure was its market share in 2016 8 per cent.	Erjavčeva ulica 24 5000 Nova Gorica info@e3.si www.e3.si
Petrol d.d.	The core business of the company is trading in petroleum products, gas and other energy products. It is a business area in which Petrol generates more than 80 percent of all sales revenues, and in the Slovenian market it also holds a leading market share. At the same time, Petrol also trades in consumer goods and services, generating just under 20 percent of its revenue.	Dunajska cesta 50 1000 Ljubljana www.petrol.si
Geoplin d.o.o.	Geoplin is the largest natural gas trader and one of the key energy companies in Slovenia with a long tradition. Their market share is almost 70 per cent.[7] Geoplin trades, represents and mediates in the natural gas market in Slovenia and in neighboring countries. In 2018 they have sold 19,3TWh of natural gas, of which 34 per cent to domestic buyers.[8]	Cesta Ljubljanske brigade 11, p. p. 3706 1001 Ljubljana info@geoplin.si www.geoplin.si

Innovative companies in automotive industry		
ABC RENT A CAR IN TURIZEM d.o.o. - Europcar Slovenija	ABC rent a car d.o.o. - Europcar Slovenija is a quickly growing company. They offer a broad variety of different vehicles for hire.	https://www.europcar.si/pages/about-the-company
Avant car d.o.o.	Avant car is an established international mobility provider. Their key business areas are short-term leases, long-term business leases, fleet management and driver-car rentals. At the same time, they are already actively implementing the field of new, electric mobility, which their R&D department is engaged in, consisting of a team of experts with interdisciplinary skills.	Dunajska cesta 140 1000 Ljubljana avantcar@avantcar.si https://www.avantcar.si/sl/
CIMOS d.d.	CIMOS will be the leading European provider of mechanical components and modules for the automotive industry. The Cimos Group is a highly acclaimed international supplier and one of the largest groups in Slovenia. A history stretching back 45 years and its long running export orientation make the Cimos group also one of the largest groups in Central Europe.	C. Marežganskega upora 2 6000 Koper info@cimos.eu http://www.cimos.si/index.php?page=static&item=1
Comtrade d.o.o.	IT company that works with different sectors and industries.	Letališka cesta 29b 1000 Ljubljana info.si@comtrade.com https://www.comtrade.si/sl/
Elaphe Propulsion Technology d.o.o.	ELAPHE Propulsion Technology d.o.o. works in the field of innovation and development of electric motors for direct drive of electric vehicles. The company's key product is intellectual property, software and know-how in the electromagnetic circuit of synchronous motors. Elapha's electric motors are characterized by high energy efficiency, torque and power and low weight. As an accompanying activity, Elaphe is also engaged in strategic energy studies and in opening up the market for electric vehicles.	Litostrojska Cesta 44c 1000 Ljubljana gorazd@elaphe-ev.com https://in-wheel.com/

Električna vozila F, d.o.o.	The company deals with the conversion of diesel buses into electric ones.	Zgornji Duplek 91 2241 Spodnji Duplek
Emrax, razvoj in proizvodnja Elektromotorjev, Generatorjev ter drugih pogonskih sistemov, d.o.o.	The development of EMRAX electric motors dates back to year 2005, when Roman Sušnik (at that time the company ENSTROJ) made the first electric flight in Slovenia and the third in the world. He developed an electric propulsion system for his glider plane with the most suitable electric motor that was then available on the global market. Still, this motor had many irregularities, which caused a forced landing. They develop and manufacture advanced axial flux synchronous permanent magnet motors and generators that operate on the basis of patent pending technology. Company produces the EMRAX motor line, which consists of 5 motor sizes (diameter 188, 208, 228, 268 and 348 millimetres), and every motor can be made for 3 voltages (high/medium/low) and has a specific cooling option (air/liquid/combined).	Molkova pot 5 1241 Kamnik support@emrax.com https://emrax.com/
Emsiso d.o.o.	EMSISO d.o.o is development and research company, specialized in development variety of electronic products. This can be electronic/embedded software solution or complete product development cycle: specifications, electronic development, embedded software, construction of mechanical parts, manufacturing of prototypes, certifications, transfer to serial production. The company was established in 2005 by four leading engineers. In 2006, Emsiso formed a strategic alliance with Austrian company SVI (Seidel), where SVI provides EMS (electronic manufacturing) services and Emsiso provides development services. Currently Emsiso employs 26 engineers. Among them are 4 Ph. D., 4 M.Sc. the rest are mostly engineers from Electronic/Computer science field. Amog other sollutions they developed: Electric off-road motorcycle, Fully electric powered stand-up Jet Ski, Motor drive and BMS for Electric boat, Battery management system for electric bikes.	Pesnica pri Mariboru 20a 2211 Pesnica pri Mariboru https://www.emsiso.com/

Etrel d.o.o.	Etrel is a producer of electric car chargers.	Ukmarjeva ulica 2 1000 Ljubljana podpora@etrel.si http://vw.etrel.si/
GoOpti d.o.o.	GoOpti is a fast growing demand responsive transportation marketplace startup, providing innovative matching of passengers for shared and private transfers between airports and remote towns /cities.	Vilharjeva cesta 21 1000 Ljubljana https://www.goopti.com/sl/
Hella Saturnus Slovenija d.o.o.	HELLA Saturnus Slovenija, a company with a tradition of over 90 years, is a member of the international HELLA Group and one of the major Slovenian exporters. With our products and services we supply the most important global automotive industry manufacturers. Company's core activity comprises development and production of automotive lighting,	Letališka cesta 17 1001 Ljubljana https://www.hella.com/hella-si/sl/HELLA-Saturnus-Slovenija-61.html
Hidria Group	They are a company to develop innovative solutions for selected automotive and industrial applications. Their solutions for the automotive industry are used by all leading manufacturers of vehicles and their original equipment. Hydra's steering gears for safe, comfortable and efficient driving are part of every third European car. The Hidria Optymus PSG cold ignition system, the recipient of the Green Innovation of the Year Award, is built into every third modern diesel engine. Electric motor blades provide solutions for as much as 30 per cent of electric or hybrid vehicles produced.	Nazorjeva 6a 1000 Ljubljana info@hidria.com https://www.hidria.com/int/sl/
Implera d.o.o.	A company with headquartered in Slovenska Bistrica, where they are engaged in the production and installation of electric car chargers. Implera has set up and is now the custodian of about 150 bottling plants across Slovenia. Chargers are subsidized by the Eco Fund, slow and semi-fast in full, fast partly, so that the cost of the investor is just a sign of the charging station and electricity.	Trg Svobode 26 2310 Slovenska Bistrica sales@elevat.eu http://elevat.eu/

Kolektor Group	The Kolektor Group is a global supplier with a tradition in highly specialized industrial production. In more than 55 years of history, they have become a leading global provider of commutators and in the process of diversification and globalization have added programs outside the automotive industry and expanded to other continents. They offer the market key components and technologies for placing chargers. The core of the Collector Charging Station is a technologically innovative, patented solution, i.e. Pluto Power is a smart fuse that combines three elements in one device: measurement, control and protection.	Vojkova ulica 10 5280 Idrija https://www.kolektor.com/
Mahle-Letrika d.o.o.	The MAHLE Group is committed to making transportation more efficient, more environmentally friendly, and more comfortable. MAHLE is continuously optimizing the combustion engine, driving forward the use of alternative fuels, and laying the foundation for the widespread acceptance and worldwide introduction of e-mobility. Based on a broad systems competence consisting of Engine Systems and Components, Filtration, and Thermal Management, the group's product portfolio addresses all the crucial issues relating to the powertrain and air conditioning technology.	Polje 15 5290 Šempeter pri Gorici si.info@si.mahle.com https://www.mahle.com/en/about-mahle/locations/2179.jsp
Oven Elektro Maribor d.o.o.	Oven Elektro Maribor's main business is the production of electricity from renewable sources. They started to set up bicycle rentals and rent electric bikes in Maribor.	Vetrinjska ulica 2 2000 Maribor info@oven-emb.si https://www.oven-em.si/

Pipistrel d.o.o.	Pioneer of high technology in light aviation, unveiling revolutionary concepts such as electric flight and pursuing extreme aeroefficiency. The Ajdovščina-based aircraft maker Pipistrel has partnered with US-based Uber to operate a transportation ordering application to develop a vertical-flight electric aircraft for metropolitan transportation. A common goal of Uber and Pipistrel is to launch the first demonstration craft by 2020. The metropolitan Los Angeles County Infrastructure Management Service has deployed the first commercial electric aircraft charger in the country at Compton / Woodley Airport. It is a Skycharge charger made by Pipistrel. The organization purchased four chargers and two electric Pipistrel aircraft in total.	GORIŠKA CESTA 50a 5270 Ajdovščina info@pipistrel.si https://www.pipistrel-aircraft.com/
REC d.o.o.	The company is engaged in research and development in the field of high-tech solutions with the aim of improving technologies in the control of battery systems in hybrid and electric vehicles. In the course of its business, the company develops electronic devices that ensure the proper functioning of the battery cells of new technologies (e.g. LiPo, LiFe, etc.).Their customized solutions are implemented in diverse applications: planes, boats, hybrid and electric cars, test systems, motorcycles, PV systems, etc.	Novi trg 9 6230 Postojna maja@rec.bms.com http://www.rec-bms.com/
Revoz Renault Slovenija d.d.	Revoz is one of the largest Slovenian companies, the only car manufacturer and for many years the largest exporter. It accomplishes its mission within the world's largest automotive group - the Renault Nissan Mitsubishi. Thanks to the partnership with Daimler in Novo mesto, in addition to Renault's clio and twingo models, smart forfour and smart forfour EVs are also being created.	Belokranjska cesta 4 8000 Novo mesto info.revoz@renault.si https://revoz.si/sl/

SVP Avio d.o.o.	SVP Avio is a fast-growing manufacturer of green-line hybrid vessels.	Zapuže 10 A 4275 Begunje na Gorenjskem info@shipman-yachts.com http://www.shipman-yachts.com/Contact
TAM-EUROPE d.o.o.	TAM-Europe is a bus and commercial vehicle manufacturer with strong strategic commitment to product efficiency and environmental sustainability. Industrial production in Tam Maribor dates back in 1941 for manufacture component for aircrafts. In 1957 they started with the production of trucks. After the beak-up of Yugoslavia, TAM continued manufacturing busses and chassis. TAM- EUROPE has developed and produced the electric bus Vero which was awarded with "Best Premier Award" at the Warshaw Bus Expo 2018.	Cesta k Tamu 33 2000 Maribor info@tam-durabus.eu https://www.tam-motors.eu/
TPV Group d.o.o.	The company creates solutions that allow for the safer, more efficient and environmentally friendly mobility of people, goods and processes for the purpose ensuring a better future for colleagues, users and the environment. TPV supports startups and rewards innovative thinking in the areas of mobility and electrification.	Kandijska cesta 54 8000 Novo mesto tpv@tpv.si https://www.tpv.si/si/

Akrapovič d.d.	Akrapovič is recognized in the world as a very innovative and high-tech company, where they use the latest technology and high-quality materials in the design of exhaust systems. The Akrapovič brand is synonymous with the highest level of design, improved performance and the indispensable and unique sound of exhaust systems. With the help of the latest technology, manufacturing processes and the most precious materials, motorcycle and sports car products are designed and manufactured by over 1000 dedicated and highly qualified employees. The R&D Department of Racing works with dozens of winning racing teams. More than 100 world champions have made their titles with Akrapovič exhaust systems. Akrapovič is recognized in the world as a very innovative and high-tech company, where we use the latest technology and high-quality materials in the design of exhaust systems. The Akrapovič brand is synonymous with the highest level of design, improved performance and the indispensable and unique sound of exhaust systems. With the help of the latest technology, manufacturing processes and the most precious materials, motorcycle and sports car products are designed and manufactured by over 1000 dedicated and highly qualified employees. The R&D Department of Racing works with dozens of winning racing teams. More than 100 world champions have made their titles with Akrapovič exhaust systems.	Malo Hudo 8a 1295 Ivančna Gorica www.akrapovic.com
Quadrofoil d.o.o.	They are a hi-tech electrical engineering company with a mission to change the way society embraces water sports and transportation. The team of skilled engineers, nautical enthusiasts, and progressive visionaries designed and manufactured the revolutionary electric-powered and completely environmentally friendly personal hydrofoiling watercraft. From personal watercrafts to public and cargo transportation vessels, they strive to use our extensive knowledge for developing energy efficient, eco-friendly means of transport – focusing on exploiting the physics behind the hydrofoil technology.	Partizanska ulica 38 2310 Slovenska Bistrica info@quadrofoil.com https://quadrofoil.com/
Domel d.o.o.	Domel Automotive group is specialized in the development, design and construction of special drives aimed at the automotive market. They produce motors which are an excellent solution for hybrid and electric vehicles.	Otoki 21 4228 Železniki info@domel.com https://www.domel.com/

RTC d.o.o.	In 2011 the company was reformed into a private limited company (Ltd.) with the main focus on construction and forest machinery development. RTC gained also knowledge in the electric drive systems of buses and personal vehicles. RTC primarily develops all necessary documentation and manufacturing support for vehicles, machinery and equipment. Since 2019 they are developing a 3H battery that delivers high current power (up to a few minutes, high output power up to 50C) at the same time as high energy density of the battery pack (large range, over 175Wh / kg), which will allow it to be marketed in selected segments	Tržaška cesta 85, 2000 Maribor rtc@rtc.si http://www.rtc.si/
Piktronik d.o.o.	Piktronik is an Austrian-Slovenian company working on the research, development and production of components for electrical vehicles (EV) and boats. They are able to supply you with a complete EV control system based on a DC or AC drive system including chargers and battery management. Almost all of our components are based on the micro-controller core, which allows us to include a lot of diagnostic and protection functions.	Cesta k Tamu 17 2000 Maribor info@piktronik.com http://www.piktronik.com

Research organisations		
Faculty of Mechanical Engineering University of Ljubljana	On Thursday, May 31, 2018 students of mechanical engineering and other faculties of the University of Ljubljana revealed the first electrical formula car in Slovenia. The student campus transformed from a workshop where students designed and assembled a formula to a formal venue. Named Eldrax this year, the formula has emerged as a result of students' interdisciplinary collaboration with the help of professors and strong support from the economy. The formula consists of as much as 90 per cent of the components developed and made in Slovenia by students and sponsoring companies.	Aškerčeva cesta 6 1000 Ljubljana dekanat@fs.uni-lj.si www.fs.uni-lj.si
Faculty of Electrical Engineering at the University of Ljubljana	The main mission of the Faculty is the education of electrical engineering experts and research work, which are closely intertwined. The research activities of the Faculty of Electrical Engineering are very diverse. There are 32 active research labs at the faculty, undertaking 14 research programmes, 1 infrastructure programme and 34 research projects of the Slovenian Research Agency (ARRS); i.e. 24 fundamental projects, 8 applicative projects, 1 targeted research project and 1 postdoc project. The Faculty participates in 20 HORIZON 2020 projects and in 31 other projects involving cooperation with EU partners. Some on-going projects on E-mobility: Horizon 2020 Virtual Component and System Integration for Efficient Electrified Vehicle Development, ERDF - MOZART - More efficient electric motors With the development of an expert system and new technologies, Interreg Alpine Space - Sustainable Mobility Behaviours in the Alpine Region, Horizon 2020 Integrated Modular Distributed Drivetrain for Electric/Hybrid Vehicles, Horizon 2020 Optimization of scalaBle rEaltime modeLs and functIonal testing for e-drive ConceptS.	Tržaška cesta 25 1000 Ljubljana dekanat@fe.uni-lj.si http://www.fe.uni-lj.si/

Faculty of Civil and Geodetic Engineerign at the University of Ljubljana	Faculty of Civil and Geodetic Engineering (hereinafter FGG) is a public higher education institute and member of University of Ljubljana. The work is carried out in 21 educational-research units, 2 laboratories and 3 institutes. Researchers of UL FGG are increasingly involved in research work of international projects, mainly in the projects of the 7th Framework Programme and Horizon2020 of EU, projects of cross-border cooperation Alpine Space and SEE, Leonardo da Vinci, Espon, COST projects, bilateral projects and other European projects. So they have a Cross-border cooperation for sustainable and energy efficient mobility of universities (2017-2020), Interreg Italy-Slovenia.	Jamova cesta 2 p.p. 3422 1001 Ljubljana tajnistvo@fgg.uni-lj.si https://www.en.fgg.uni-lj.si/
Faculty of Electrical Engineering and Computer Science at the University of Maribor (UM FERI)	Students of Faculty of Electrical Engineering, Computer Science and Informatics (FERI) made electric race car. The FERI Student Electric Race Car is designed to participate in Formula Student international student competitions. The engine and inverter were developed in Slovenia. Maribor students, however, have not yet completed their development. Their goal is to make a vehicle capable of autonomous driving.	Koroška cesta 46 2000 Maribor feri@um.si https://feri.um.si/
Faculty for Logistics at University of Maribor	The Faculty of Logistics at the University of Maribor is the leading academic and research institution in the field of logistics in Slovenia. An important activity of the Faculty of Logistics of the University of Maribor is to create new knowledge for the benefit of present and future generations.	Mariborska cesta 7 3000 Celje info.fl@um.si http://fl.um.si/
The Faculty of Civil Engineering, Transportation Engineering and Architecture at the University of Maribor	They have several EU projects on green and smart transport, e.g.: H2020 - Safety tolerance zone calculation and interventions for driver-vehicle-environment interactions under challenging conditions; H2020 - Modular Approach to Hybrid Electric Propulsion Architecture, Interreg - Central Europe: Sustainable Urban Logistics PlannIng To Enhance Regional freight transport; Alpine Space: Alpine InnovaΘon for Combined Transport; Danube TransnaΘonal Programme: Electric, Electronic and Green Urban Transport Systems and others.	Smetanova ulica 17 2000 Maribor fgpa@um.si https://www.fgpa.um.si/

Faculty of Energy Technology at the University of Maribor	The Faculty is one of youngest members of University of Maribor. The faculty began regular operation immediately following its establishment with the Decision of the National Assembly on 22 June 2007. The pedagogic process at the Faculty of Energy Technology was first carried out during the academic year 2008/09.On-going project on E-mobility: Danube Transnational Programme - Electric, electronic and green urban transport systems,	Hočevarjev trg 1 8270 Krško fe@um.si https://www.fe.um.si/
National Institute of Chemistry	The Chemical Institute is a scientifically excellent, established and breakthrough research institution in the European area. With their cutting-edge research, they are enriching the global treasure trove of knowledge and working together to address the most pressing challenges of society. Health, sustainable energy, climate change, the circular economy and food security are the most important. Among others they are engaged in research in the field of electricity storage by developing new electrochemical materials and cells, and insight into their electrochemistry and properties. Their mission is a scientific and technological understanding of electrochemical energy storage in the context of a sustainable energy system, where electricity generated from renewable sources is transiently stored in batteries. Their research focuses on secondary battery systems such as lithium-ion, lithium-sulfur, magnesium batteries, and organic battery systems. As a research lab, they work in the area between basic science and applied techniques, combining both academically and industry-relevant issues. This is how they develop advanced diagnostic tools for insight into material properties and electrochemical processes, as well as new areas of electrochemical materials. Some of the current projects on green mobility: Battery 2030+, Obelics and Helis.	Hajdrihova 19, p.p. 660 1001 Ljubljana glavna.pisarna@ki.si https://www.ki.si/

Institute of Traffic and Transport Ljubljana d.o.o	It is a research organisation founded by Slovenian Railways with over 40 years of tradition.	Kolodvorska 11 1000 Ljubljana info@prometni-institut.si http://www.prometni-institut.si/?id=13&lang=sl#
Inštitut Metron	It is an Institute of Motor Vehicle Diagnostics and Maintenance. Their activities: conversion of batch vehicles into electric vehicles, development of new electric vehicles, prototyping of electric vehicles, development and manufacture of charge cables, training courses for converters and developers of electric vehicles, training for maintenance of electric, hybrid and classic vehicles, electric mobility studies and development and production of battery packs. Already in 2014, they have developed electric car which drove 726 km (at an average speed of 65 kilometers an hour) with one charging.	Alpska 43 4248 Lesce info@eauto.si https://eauto.si/sl/domov/
Prometno tehniški inštitut Ljubljana – Traffic Engineering Institute Ljubjana	The Traffic Engineering Institute operates within the Faculty of Civil and Geodetic Engineering in Ljubljana. It carries out scientific research and professional projects in the field of traffic engineering and carries out pedagogical activities in the field of transport within the Faculty.	Jamova 2 1000 Ljubljana peter.lipar@fgg.uni-lj.si https://www.fgg.uni-lj.si/organizacijske-enote/prometno-tehniski-institut/

SiEva	SiEVA Ltd., abbreviated as Synergy Ecologically Safe Car, is a company established to provide research and development services focused on strategic areas of electrification and vehicle safety. The company employs top-notch development staff who, with their competencies in vehicle electrification, internal combustion engines, comfort and safety, and the development of processes, technologies and production excellence, build on existing knowledge in SiEVA's partner companies. As a new development core of the Slovenian automotive industry, SiEVA represents a new step in the development of the Slovenian automotive industry in building competencies and competitive positioning in the global market.	Polje 15 5290 Šempeter pri Gorici info@sieva.si http://sieva.si/
Inštitut za politike prostora - Institute for spacial policies - IPoP	IPoP supports communities in sustainable spatial planning. They have several projects on sustainable mobility: Promoting sustainable mobility among teenagers, Sustainable mobility in kindergartens and schools, Active to school – programme for support schools and municipalities, LIFE CARE4CLIMATE – Campaigns for active mobility and others.	Tržaška 2 1000 Ljubljana ipop@ipop.si https://ipop.si/

Associations/NGOs/Innitiatives		
Društvo za e-mobilnost Slovenije – Association for e-mobility Slovenia	In the association are individuals who are supporters of electric vehicle. They promote e-mobility and raise public awareness on e-mobility, organize events, educational events, through its proposals, they advise regulators to make optimal decisions in the public interest and give advice on establishing the optimal charging infrastructure for electric vehicles.	Pokopališka pot 8 1270 Litija drustvoDeMS@gmail.com https://dems.si/
Regionalni center za okolje Slovenija – Regional center for environment Slovenia – REC Slovenija	It fulfills its mission by promoting cooperation between NGOs, governments, the economic sector and other target groups, by supporting the free flow of information, and by promoting a democratic culture and public participation in environmental decision-making. Area of work is among other also green transport.	Slovenska cesta 5 1000 Ljubljana info@rec-lj.si http://slovenia.rec.org/
Plan B - Initiative for a Sustainable Development	Project Plan B is a network of Slovenian environmental non-governmental organizations (NGOs) and experts, forming a broad civil society platform for sustainable development in Slovenia, along with other interested stakeholders. The primary objective of the NGO network within Plan B is to support long-term sustainable operation of environmental NGOs and to strengthen the qualification of environmental NGOs in Slovenia in two ways: by encouraging their active role in the democratic processes of policy formulation and in monitoring implementation of policies, and also by encouraging their participation and partnership. A secondary objective of the project is to improve the awareness of citizens and to encourage their engagement in environmentally oriented public matters. One of working areas is also: sustainable transport policy.	Trubarjeva 50 p.p. 4440, 1111 Ljubljana polona@planbzaslovenijo.si https://www.planbzaslovenijo.si/
Umanotera	Umanotera is Slovenian foundation for sustainable development. One of the areas of work is climate change. They organize various events to highlight environmental and sustainable development issues, design initiatives and open public debates. By confronting different opinions, publishing publications, reports and research, they publish alternatives to official documents, inform and raise awareness, thus changing public opinion.	Trubarjeva 50 1000 Ljubljana info@umanotera.org https://www.umanotera.org/

The Citizens' Initiative for an Integral Green Slovenia	The Citizens' Initiative for an Integral Green Slovenia, founded in April 2013 by a group of distinguished Slovenian experts and lead by Darja Piciga, is a pan-Slovenian and non-partisan initiative for a wholesome life in the internationally respected community of Slovenia.	integralnaslovenija@gmail.com http://integralna-zelena-slovenija.si/en/
Slovenska kolesarska mreža – Slovenian Cycling Network	The Slovenian Cycling Network (SKM) is committed to improving the systemic conditions for cycling in traffic and as a means of recreation. They are a non-profit and partly voluntary NGO. Their activities are focused on the development of cycling and sustainable transport, and consequently on other segments of society (economy, culture, housing, social, health, environment, etc.). The primary purpose of the Slovenian Cycling Network is to promote the development of cycling and sustainable transport, and to link societies with similar purposes and goals to the umbrella national organization. The long-term goal of SKM is to extend cycling as a means of transportation and recreation throughout Slovenia. SKM is a full member of the European Cycling Federation (ECF). The founders of SKM are the Ljubljana Cycling Network (LKM), the Maribor Cycling Network (MKM) and the Eko Humanitatis Institute (the Obala Cycling Network).	http://kolesarji.org/

Mariborska kolesarska mreža – Maribor Cycling Network	The Maribor Cycling Network (MKM) was established to encourage the development of cycling and sustainable transport. The Society is committed to more cyclists, better cycling infrastructure and an increase in the level of traffic culture in Slovenia. The main purpose of MKM is to promote cycling in Maribor and to influence the sustainable development of urban transport in favor of pedestrians, cyclists and public transport. • raise awareness that cycling, other non-motorized transport and public urban transport are the best ways to travel in cities; • influence the traffic policy in Maribor and its consistent implementation, in particular by striving to include cycling in all transport, urban and other relevant strategies, programs, plans, decrees, etc.; • strive to change the law on traffic safety in the direction of ensuring greater safety for cyclists and other vulnerable road users; • to advise and assist cyclists in the event of road accidents and other violations of their rights; • to ensure the continued presence of cycling and other traffic issues in the public.	Partizanska cesta 21 2000 Maribor mkm@kolesarji.org https://ibikemaribor.com/
Ljubljanska kolesarska mreža – Ljubljana Cycling Network	The overall objective of the Ljubljana Cycling Network is to extend cycling as a means of transportation and recreation everywhere in and around Ljubljana. They have the following specific goals: • raising awareness that cycling, in addition to walking and using public transport, is the most sensible way of mobility in urban areas; • improving cycling safety and comfort by upgrading existing and constructing missing cycling infrastructure and slowing down motor traffic; • ensuring that cycling is properly integrated in all relevant transport and spatial plans; • concern for the constant presence of this issue in the media.	Trubarjeva cesta 50 1000 Ljubljana lkm@kolesarji.org http://lkm.kolesarji.org/

One of the important stakeholders are also Regional Development Agencies (RDA). The Regional Development Agency carries out development tasks for the area of one or more statistical regions. RDAs are established by municipalities and bodies governed by public and private law. The RDA may also operate based on a contractual link between two or more local development organizations within the statistical region.

The RDA's development tasks are:

a) preparation of regional and joint development programs

b) coordinating the work of local development organizations involved in the preparation and implementation of the regional development program

c) monitoring and reporting on the implementation of regional development programs

d) advising and applying for projects for the award of regional development incentives

e) organizing and coordinating other tasks in the field of regional structural policy

f) participation in the preparation of national development planning documents; strategies for regional development of Slovenia and national development program.

In order to carry out the tasks of a regional development agency, municipalities may contract with an existing company or other organization.[53]

In Slovenia we have 12 regional agencies.[54]

[53] https://www.uradni-list.si/glasilo-uradni-list-rs/vsebina/2000-01-2455/pravilnik-o-organizaciji-in-pogojih-za-opravljanje-nalog-regionalne-razvojne-agencije, 29. 10. 2019

[54] https://podatki.gov.si/dataset/evidenca-regionalnih-razvojnih-agencij/resource/7e1491e1-2d65-4b60-97fe-a658c27ef2fe, 29. 10. 2019

Table 3: The list of regional agencies in Slovenia

Region	Regional Development Agency
1. Pomurska	**Razvojni center Murska Sobota Development Centre Murska Sobota** Address: Kardoševa ulica 2, 9000 Murska Sobota Legal form: public institute
2. Podravska	**Mariborska razvojna agencija p.o.** Address: Pobreška cesta 20, 2000 Maribor Legal form: public institute
3. Koroška	**RRA KOROŠKA regionalna razvojna agencija za Koroško regijo d.o.o.** Address: Meža 10, 2370 Dravograd Legal form: limited liability company
4. Savinjska	**RASR, Razvojna agencija savinjske regije d.o.o.** Address: Ulica XIV. divizije 12, 3000 Celje Legal form: limited liability company
5. Zasavska	**Regionalna razvojna agencija Zasavje** Address: Grajska ulica 2, 1410 Zagorje ob Savi Legal form: public institute
6. Posavska	**Regionalna razvojna agencija Posavje** Address: Cesta krških žrtev 2, 8270 Krško Legal form: public institute
7. Primorsko-notranjska	**RRA Zeleni kras, d.o.o.** Address: Prečna ulica 1, 6257 Pivka Legal form: limited liability company
8. Jugovzhodna Slovenija	**Razvojni center Novo mesto, Svetovanje in razvoj, d.o.o.** Address: Ljubljanska cesta 26, 8000 Novo mesto Legal form: limited liability company
9. Gorenjska	**BSC, poslovno podporni center, d.o.o., Kranj** Address: Cesta Staneta Žagarja 37, 4000 Kranj Legal form: limited liability company
10. Goriška	**Posoški razvojni center** Address: Trg tigrovcev 1, 5220 Tolmin Legal form: public institute

11. Obalno-kraška	**Regionalni razvojni center Koper - Centro regionale di sviluppo Capodistria** Address: Ulica 15. maja 19, 6000 Koper-Capodistria Legal form: institute
12. Osrednjeslovenska	**Regionalna razvojna agencija - Ljubljanske urbane regije** Address: Tehnološki park 19, 1000 Ljubljana Legal form: public institute

Roadmap on how to improve electromobility and alternative mobility in Slovenia

Slovenia is lagging behind many countries in Europe in the field of e-mobility development. There are 1,500 electric vehicles registered in Slovenia - combined hybrids and electric cars.[55] Also Europe is lagging behind the rest of the world. Some interesting project on e-mobility are going on in China, South Amerika, Africa and the Middle East.[56]

Daily migrants are specific to Slovenia. Due to the settlement pattern in Slovenia, there are more than 380,000 of them, and according to Željko Purgar, Electric Mobility Advisor at the Center for Excellence in Low Carbon Technologies, 200,000 to 250,000 of these users of passenger vehicles would be able to replace their daily mobility with electric cars.[57]

In Slovenia, we have long witnessed a vicious cycle in the field of electromobility - there are no electric car charging stations because there are no cars, no cars because there are no charging stations. The Ministry, with the active entry of leading providers of electric vehicles into the Slovenian market, began to promote electromobility more actively. At the end of November 2015, a network of fast charging stations was set up on the motorway cross. It is the installation of 26 fast charging stations within the Green Corridors of Slovenia, which is part of the international project Central European Green Corridors, which otherwise includes a total of 115 fast charging stations in the participating countries, such as Austria, Germany, Slovakia, Slovenia and Croatia.

After the initial fever, when Slovenia became the first country in the world to cover its motorway network with electric charging stations (Norway does not have it yet), the development has somehow stalled. In order to solve this problem, it is necessary to turn to the help of the first users of such technologies, listen to their needs and, based on their proposals, outline the future development.

Some challenges Slovenia is facing on e-mobility:

- Bureaucratic obstacles.

[55] https://www.vecer.com/elektricna-mobilnost-v-mariboru-se-polni-na-obrobju-mesta-6694530, 28. 10. 2019
[56] https://www.zurnal24.si/avto/e-mobilnost-evropa-v-srednjem-veku-slovenija-pa-v-kameni-dobi-310472, 6. 11. 2019
[57] http://www.acs-giz.si/novice/2015-04-07-potenciali-e-mobilnosti-v-sloveniji-in-po-svetu, 6. 11. 2019

- Not enough competent people.
- Bad experiences of customers with charging stations (bad billing system. Suggestion is to go from a system of time billing to billing by the quantity of energy streamed to the car at all charging stations regardless of type of energy.) Also, mobile applications could replace different cards for the use of public and other electric chargers relatively quickly and easily which would make better experiences for the customers.
- If companies buy electric vehicles, they not only pay higher purchased price, they also pay higher income tax that the employer then must pay when using the vehicle in personal purposes.
- Awareness raising of inhabitants of Slovenia.
- Common communication message from different stakeholders (at the moment we have situation where: The Slovenian Consumers Association informs users that their electric car will only pay off in 2025, or director of ELES misleads the public that the network infrastructure will not cope with the growth of electric vehicles).
- The best-selling vehicles on the world markets do not sell at all in Slovenia, or they can be difficult to obtain after long waiting times.
- Petroleum company Petrol says the management of publicly funded installed electric charging stations is not economical, on the other hand retail chain companies Lidl and Mercator are saying that their charging stations are economical although they have financed them themselves
- Better possibilities of parking in the cities.
- The possibility of charging electric cars for residents in multi-apartment buildings, which would be provided with a permanent parking space when purchasing an electric vehicle and the possibility of charging.

  The high cost of network charges, which could be lower in the case of urban charging points and on motorways, as this would greatly accelerate the development of e-mobility in practice.
- Bigger investments in renewable energy (solar, wind).
- Network of charging stations should be better, charging infrastructure in residential areas should also be regulated. The cars of most daily work migrants have been parked for more than eight hours during their working day. This needs to be used to develop slow charging infrastructure that does not require major infrastructure investments in the electricity grid. Slow charging stations are relatively inexpensive, and they do not have much operating costs. With imaginative solutions, they can be integrated with P + R systems and the like into an integrated sustainable transport system in major cities[58].
- The reliability of the charging stations.
- Petrol is a company which is a leading oil supplier in Slovenia and is also the manager of electric filling stations, which presents a conflict of interest. The calculation shows that with each purchase of an electric car the company loses between EUR 1000 and 3000 EUR of revenue.
- Strategic direction of the country.

[58] Between 200,000 and 250,000 car drivers in Slovenia travel fewer miles per day than the reach of today's more affordable electric vehicles. You could cover your needs exclusively by filling your e-car at night at home.

The Energy Concept of Slovenia[59], a document that sets out strategic orientations and sets the political framework for implementing energy projects in Slovenia, with goals by 2055, defines the following overarching goals:

- reducing energy-related greenhouse gas emissions by at least 40 per cent by 2035 from 1990 levels; and
- reducing energy-related greenhouse gas emissions by at least 80 per cent by 2055 from 1990 levels.

A key part is the transition from fossil fuels to renewable energy and gas, also in the field of transport. One of the key goals of the Energy Concept of Slovenia is to reduce greenhouse gas emissions in transport by at least 35 per cent by 2035 from levels in 2005 and by 70 per cent by 2055. The aim is to achieve 100 per cent electric mobility in personal and public transport. Do and how will we do it? How to provide adequate infrastructure, network capacity and electricity sources so they can provide power to all cars? Above all, how quickly will the gasoline and diesel car market adapt to the electric car market, accessible to all segments of the population?

Through strategic regulation of transport, notably through the preparation and implementation of Integrated Transport Strategies, cities have already achieved significant success. An important stakeholder in the planning and management of efficient urban transport, however, are small and large enterprises, health and educational institutions, trade centres, large event organizers and other institutions that have not been actively involved in transport management plans to date. In addition to their own requirements, some of them require special accessibility arrangements for users. The Ministry of Infrastructure has also developed national guidelines for the preparation of mobility plans, focusing on guidelines for facilities, parking and emergency mobility such as roadwork. The guidelines now favour cleaner, more sustainable forms of transport air, better health and greater satisfaction for all participants. They have also launched a renewed platform for sustainable mobility that will publish guidance and support for the development of transport in a comprehensive and lasting way. The Ministry of Infrastructure is also the promoter of the Soft Sustainable Mobility Measures project, which represents the implementation of various measures to promote sustainable mobility at horizontal level national level.

The purpose of the project, partly funded by the EU through the Cohesion Fund, is the comprehensive promotion of sustainable forms of mobility, which will include promotional and educational activities at national level and the preparation of professional guidelines for businesses, institutions and local communities. These will in future guide the development of local transport strategies and appropriate measures.

In addition to the appropriate infrastructure conditions for sustainable mobility, the measures will contribute to changing travel habits in Slovenia, in particular stopping the growth of the share of journeys made by private cars and reducing the number of kilometers traveled in urban centers.

[59] ENERGETSKI KONCEPT SLOVENIJE Strategija energetske politike do leta 2030 (in vizija do leta 2050), Ministry of Infrastructure of Republic of Slovenia, 2017

In addition to providing adequate infrastructure, moving towards sustainable mobility will also require people to become aware of and change their habits permanently. Consumers are skeptical, which can be borne out by the fact that their (dis) affection for autonomous vehicles inhibits the automotive industry's investment in advanced technologies. This is revealed by the recent Deloitt Automotive Consumer Survey for 2019. "Connected, electric and autonomous vehicles bring enormous value to society, but advanced technologies may not be adopted on a wider scale until these vehicles are significantly safer, cheaper and more practical and until they offer the ultimate user experience of a trusted brand, "says Mitja Kumar, a partner at Deloitte Slovenia and Head of Business Advisory for the Adriatic region.[60]

How to get sustainable and de-fossilized traffic:

- Road transport will be electrified, but not only electric, and hydrogen and other fuels derived from surplus electricity will be used.
- Electrification of road vehicles can only greatly reduce greenhouse gas emissions if the global energy sector is de-fossilized, thereby reducing actual emissions from vehicle use, production and decommissioning of vehicles.
- It is a misconception that global greenhouse gas emissions can only be reduced by intensive electrification of road vehicles.
- Reducing greenhouse gas emissions from transport also requires reducing the energy consumption per unit of transported people and freight, which requires intensive introduction of multimodality and related activities in infrastructure and logistics.
- All serious strategies therefore come from a systemic approach that is the only one that can achieve such goals. The system approach also includes high-speed rail links, which allow shorter travel times than individual transport, and sustainable mobility further requires the avoidance of individual transport by high-mass vehicles.
- Changes at the system level will also change our travel habits. Are we ready?

Public funding screening

Overview of Green and smart mobility in the Slovenian Smart Specialisation strategy

In Slovenian Strategy of Smart Specialization (S4) there have been identified 9 focus areas, one of them is also mobility.

The priorities were identified through an in-depth consultation process in the period 2014-2015, when three pillars and nine areas of use with focal areas and technologies were identified. The areas of joint development have been defined by the Strategic Development Innovation Partnerships (SRIPs) in their Action Plans, which, in addition to the activities of joint development, also define a way of acting

[60] https://www.delo.si/mobilnost/mobilnost-pred-najvecjimi-izzivi-doslej-154516.html, 10. 10. 2019

together when it comes to human resources development, internationalization, promotion of entrepreneurship and other joint activities.

Action plans are regularly upgraded and complemented and, as such, represent the dynamic part of S4 through which a further process of focusing innovation policy on the key niches is expected.

In addition, a further in-depth review and, if necessary, an amendment to S4 is foreseen in 2019.

Close cooperation between the state and SRIPs therefore constitutes the institutional basis for a new development model of stronger and complementary action between the economy, knowledge institutions, other actors and the state.

The Mobility Action Plan focuses on the development of new products, solutions and technologies in focus areas (with product lines):

1. Systems for e-mobility and energy storage
    - Systems and devices for the main electric drives of vehicles
    - Systems and devices for auxiliary electrical drives of vehicles
    - Energy management systems and devices and "thermal management"
2. Low-voltage components and systems for cleaner and more efficient internal combustion engines
    - Advanced data capture systems and devices
    - Advanced drives and actuators for environmentally friendly internal combustion engines
    - Advanced integrated components
3. Systems and components for safety and comfort
    - Actuator systems
    - Electronic and sensor systems
    - Active-passive structural components
4. Advanced transport and logistics including business models
    - Data driven collaborative economy
    - Fleet management, optimization of logistics systems and business and technological solutions that will be integrated into the systems of mobility and logistics
5. Advanced infrastructure
    - Digitized and integrated infrastructure
    - Rechargeable infrastructure
6. Digitization, new technologies and new materials to achieve higher competitiveness

In addition, this focus group will work on content related to human resources development, internationalization, support for small and medium-sized enterprises, and the common EDISON (Eco Driving Innovative Solutions and Networking) initiative, in order to achieve the ambitious goal of establishing Slovenia as the reference country of green mobility. In urban municipalities, the EDISON partners will establish an interconnected concept of urban green mobility with e-buses, urban and interurban e-car sharing, e-bikes and other digitally intermodal forms of green traffic, thus transforming Slovenia into a natural green mobility lab and a sample polygon for testing innovative green technologies.

The automotive supplier industry in Slovenia generates over 20 per cent of Slovenia's merchandise exports and over 10 per cent of GDP. Because of this, says Iztok Seljak, director of company Hidria Holding, mobility is one of the key pillars of the smart specialization strategy, where appropriate financial incentives will also be available. He added that with the right implementation of this strategy, they can double the size of this sector in the next 5-10 years, which can make a decisive contribution to Slovenia's economic growth.[61] The Ministry of Economic Development and Technology also says that companies in the field of electromobility will be able to run for public tenders for research and development, provided that the contents of the projects are appropriately placed in the priority areas of application of the Smart Specialization Strategy, including mobility[62]. The mobility objective, as defined in the Smart Specialization Strategy, is the transition from the development of individual components and materials to the development of more complex and energy-efficient, higher value-added products, in line with the new EU emission reduction standards (EURO 6c, EURO 7) and in the field of security (EURO NCAP); and strengthening the status of Slovenian producers as pre-development suppliers.

By 2023, the goals are also to increase the value added of companies in this field by 20 per cent and to increase the number of pre-development suppliers from 15 to 22, an increase of 45 per cent. This is primarily to be achieved through increased investment in the development, production and marketing of such products. For this purpose, it is envisaged to carry out five demonstration and pilot projects for the introduction of factories of the future with full automation of the production process and strengthening of the link between large and medium and small enterprises. It is a matter of at least 50 per cent of the partnership's flagship companies introducing an open business innovation model by 2020 that will strengthen and grow their supply chain. Focus areas and technologies include e-mobility and energy storage systems. As stated in the Smart Specialization Strategy, mobility is one of the key areas, since

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61 https://www.zelenaslovenija.si/revija-eol-/aktualna-stevilka/logistika/3556-slovenija-je-lahko-v-eu-vzorcni-primer-elektricne-mobilnosti-eol-104-105#do-konca-prihodnjega-leta-nacionalna-strategija, 6. 11. 2019

62 In 2016, 2017 and 2018, the implementation of S4 was supported by 87 calls for proposals and programs totaling € 982,856,431, namely: 49.6 percent and € 487,956,634 in R&D, 13.4 percent and € 131,532,826 in human resources and 37 percent or € 363,366,971 in entrepreneurship and internationalization. An equally important part of the package are non-financial measures such as economic diplomacy, innovative and green public procurement or the removal of regulatory barriers, most notably a more direct dialogue with SRIP when it comes to the way and content of managing development policy.
https://www.gov.si/zbirke/projekti-in-programi/izvajanje-slovenske-strategije-pametne-specializacije/, 27. 11. 2019

without the only car manufacturer in Slovenia the supply chain generates EUR 3.8 billion in turnover. These are more than 100 suppliers and more than 600 sub-suppliers of the lower levels of the supply chain. In order to continue the success of the Slovenian automotive supply industry, it is therefore necessary to win a higher place in the supply chain, which ensures direct delivery to vehicle manufacturers, or to acquire niche products and technologies that are adequately protected by patents.

Overview of possible national and international funding sources (calls for proposals, subventions, etc.)

Using ELENA instrument for smart mobility

ELENA is a joint initiative by the EIB and the European Commission under the Horizon 2020 programme. ELENA provides grants for technical assistance focused on the implementation of energy efficiency, distributed renewable energy and urban transport programmes.

ELENA supports programmes above € 30 million with a 3-year implementation period for energy efficiency and 4-year for urban transport and mobility. It can cover up to 90 per cent of technical assistance/project development costs. Smaller projects can be supported when they are integrated into larger investment programmes.

The annual grant budget is currently between € 40 and 50 million. Projects are evaluated and grants are allocated on a first-come-first-served basis.

ELENA may co-finance the preparation of investment programmes in the following fields:

- **Energy efficiency and building integrated renewable energy**
    - public and private buildings (including social housing), commercial and logistic properties and sites, and street and traffic lighting to support increased energy efficiency
    - integration of renewable energy sources (RES) into the built environment – e.g. solar photovoltaic (PV) on roof tops, solar thermal collectors and biomass
    - investments into renovating, extending or building new district heating/cooling networks, including networks based on combined heat and power (CHP), decentralised CHP systems
    - local infrastructure including smart grids, information and communication technology
    - infrastructure for energy efficiency, energy-efficient urban equipment and link with transport
- **Urban transport and mobility**

- investments to support the use and integration of innovative solutions for alternative fuels in urban mobility
- investments to introduce on a large-scale new, more energy-efficient transport and mobility measures in urban areas including passenger transport, freight transport, etc.

- **Residential sector**

Table 4: The list of on-going projects in Slovenia[63]

Project title	Short description
Preparation and Mobilization of Financing for Sustainable Energy Investments in Primorska Region Municipalities (PM4PM)	Investments will be located in 22 Municipalities of the Primorska Region, western Slovenia. There are 5 main components to the proposed PM4PM investment programme. Building Retrofit: includes improving the energy efficiency of 97 public buildings in at least 20 Municipalities which have been identified to have the most energy saving potential, primarily through deep renovation and including integration of renewable energy source heating and small scale building Combined Heat and Power (CHP) units. Proposed measures include improved building envelope, energy efficient indoor lighting, integration of small-scale CHP and renewable energy sources for heating (mainly woody biomass heating and heating pumps at building or neighborhood level), energy efficient ventilation and air conditioning systems, building management systems and water systems. District heating: includes the renovation of existing and the installation of new small-scale and building integrated district heating systems in 8 Municipalities. Streetlighting: includes improving energy efficiency of streetlighting systems in 14 Municipalities. Measures include changing mercury and sodium lamps to LEDs and retrofitting of luminaires and adding control systems. Clean transport: includes the introduction of electric vehicle charging stations, electrical vehicles for public services, and compressed natural gas stations. Local energy efficient utilities include installation of IT technology for energy management and optimization of infrastructure systems operation. The implementation of the PM4PM investment programme aims to contribute to reaching the following targets: • Energy savings of 17.6 GWh per year • CO_2 reduction of 5,314 tCO_2 per year • Renewable energy production of 13.1 GWh per year. Total budget: € 2,250,000 ELENA Contribution: € 2,025,000

[63] https://www.eib.org/en/products/advising/elena/projects/index.htm, 29. 10. 2019

GOVERNMENT DEEP ENERGY RENOVATION (GovDER)	The planned investment programme is designed to realize deep energy renovation under the GovDER programme in governmental buildings. The deep energy efficiency renovation shall be implemented through EPC/PPP where possible. Investments focus on: • the special sector of central government buildings, majority of them being located within the center of Ljubljana. Those buildings constitute over 771 000 m^2 of total floor area with over more than 500 buildings; and may include also • the wider public sector buildings (schools, health centers, hospitals, homes for elderly/ retirement homes etc.). Those buildings constitute over 231 000 m^2 of total floor area with over more than 150 buildings. Due to the duration of the ELENA project it is expected that the deep energy renovation can be implemented in 150 buildings with a total floor area per building of around 1 500 m^2 and the total floor area of around 230 000 m^2. Expected results: The total estimated contributions are: Energy Efficiency – Annual total energy saved 21.57 GWh. CO_2 reductions – Annual total reductions of 5 825 t CO_2 eq. Investment to be mobilized: € 48 million.

Table 5: The list of completed projects in Slovenia

Project title	Short description
Energetska obnova Ljubljane (EOL)	Main achievement of the EOL programme was launching two tenders for Energy Performance Contracts to retrofit 76 public buildings, including deep retrofits, using ESCO model. In addition, more than 170 smaller energy efficiency investments were implemented with ELENA technical assistance support. Total budget: € 1,098,011 ELENA Contribution: € 975,034

Overview of CIVITAS initiative for smart mobility

CIVITAS is a network of cities for cities dedicated to cleaner, better transport in Europe and beyond. Since it was launched by the European Commission in 2002, the CIVITAS Initiative has tested and implemented over 800 measures and urban transport solutions as part of demonstration projects in more than 80 Living Lab cities Europe-wide.

The project works on ten thematic areas, related to sustainable transport mobility covering: Car-Independent Lifestyles, Clean Fuels & Vehicles, Collective Passenger Transport, Demand Management Strategies, Integrated Planning, Mobility Management, Public Involvement, Safety & Security, Transport Telematics, Urban Freight Logistics.[64]

[64] https://civitas.eu/about, 29. 10. 2019

Table 6: The list of CIVITAS projects by cities

City/Project	Short description
Ljubljana: ELAN	As part of CIVITAS ELAN, Ljubljana implemented 17 measures to tackle congestion and reduce the share of journeys made by car in favour of sustainable modes of transport. A particular focus was the provision of a competitive, fast, effective, comfortable, customer-friendly, safe and less polluting bus service and promotion of non-motorized mobility of people. Since CIVITAS ELAN kicked off in late 2008, the city replaced many old buses with buses that meet Euro5 emission standards, 5 hybrid and 20 CNG buses were purchased. Six hybrid vehicles have been provided for the city administration as well. Real-time information on bus arrivals is provided at bus stops, and cameras have been installed on buses to increase passengers' safety. Based on satellite navigation, a public transport priority scheme reduced travel time. The introduction of a smart electronic city card created the conditions for an integrated payment system for local and regional public transport. As part of a comprehensive plan to improve walking and urban cycling, Ljubljana has in the past few years expanded pedestrian areas, reduced speed zones and one-way streets to 2.129 hectares (2013). Two electric "on-demand" vehicles offer free transport in the pedestrian zone. Ljubljana also created additional Park & Ride facilities with more than 1.600 parking spaces. These efforts have been accompanied by more than 130 public awareness-raising events. Ljubljana sees its participation in CIVITAS ELAN as the coordinating city of the project, as a step on its path to becoming a more sustainable, green city that offers a high quality of life to all citizens. Being the finalist in the competition for the European Green Capital 2015 and the finalist in the 2013 Eurocities reward in »Smart living« category suggests that Ljubljana is on a right way.
Maribor	At present, the city of Maribor has no specific data on modal split. Transportation-related targets are the increased modal share of public transport, cyclists and pedestrians; and reduced private-vehicle (car) use. Progress has been slow in this field and no innovative measures have been implemented. However, the city has launched a "children's cycling hour", during which pupils from primary schools are given cycling lessons in the city. In the field of clean fuels and vehicles, the city of Maribor has introduced small electric buses for public transportation in pedestrian zones. During the ongoing preparation of its sustainable transport policy, Maribor is cooperating with NGOs, the university, businesses, experts and other private and public stakeholders. In 2013, a plan for sustainable mobility in the city and its surroundings or an integrated transport strategy was drawn up.

	In 2019, a Sustainable Urban Logistics Plan (SULP) was prepared for the City of Maribor. The document aims to systematically manage the logistics of the city center.[65]
Nova Gorica	Currently there is no data readily available on modal split, and negligible data is available via the most readily accessible sources concerning urban mobility measures or plans, challenges facing progress in this regard and partnerships undertaken to this end. We hope to provide more information about the city in the future.
Ljutomer	The current SUMP (municipality transport strategy) is prepared for the period 2017-2022 and includes 64 measures in 5 topical sections (planning, walking, cycling, public transport and motorized traffic). The implementation is strongly focused on measures for improving walking and cycling conditions in Ljutomer. The 1st generation SUMP was adopted in 2012, while 2nd generation SUMP was adopted in 2017. Following the finalisation of the SUMP action plan, Ljutomer implemented a number of measures: • Some of these focused on “people friendly traffic”. A wooden footbridge was constructed that considerably improved the connection between the secondary school and the railway station, whilst a redesign and change of traffic rules improved access to the primary school. • Two strategic documents were also prepared: “Guidelines for cycling infrastructure design” and “Design of traffic surfaces in the city of Ljutomer”. • The implementation of the SUMP is monitored and encouraged by the "local support group for sustainable mobility”, which consists of local stakeholders.

H2020 and smart mobility

Efficient transport is a fundamental condition for sustainable prosperity in Europe. Transport provides citizens with essential means of mobility and contributes to employment, growth and global exports. The European transport industry represents 6.3 per cent of the Union's GDP and employs nearly 13 million people.

However, our transport systems and habits are too dependent on oil, which will become scarcer and is a serious polluter of our planet. Transport accounts for about 63 per cent of oil consumption and 29 per cent of all CO_2 emissions.

65 http://www.smartcitymaribor.si/si/Projekti/Pametna_mobilnost/Celostna_prometna_strategija_in_Celostna_logisticna_strategija_SUMP_in_SULP_/, 29. 10. 2019

Unless the present trends are corrected, the economic costs of traffic congestion will increase by about 50 per cent by 2050, the accessibility gap between central and peripheral areas will widen and the social costs of accidents and pollution will continue to rise.

European research aims to strengthen the competitiveness of our transport industries and to develop a better European transport system for the benefit of all.

In the transport sector, research is at the core of developing new technologies for greener, smarter, more efficient transport means and innovative solutions for safer, more sustainable and inclusive mobility.[66]

The forthcoming funding, grands and tenders of European Commission can be found on the following web site: https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-search;freeTextSearchKeyword=;typeCodes=1;statusCodes=31094501,31094502;programCode=H2020;programDivisionCode=31047956;focusAreaCode=null;crossCuttingPriorityCode=null;callCode=Default;sortQuery=openingDate;orderBy=asc;onlyTenders=false;topicListKey=topicSearchTablePageState

The funding and tenders are by program part (Smart, green and integrated transport) and are classified as Open or Forthcoming. End of November 2019 there are 30 Open or Forthcoming grand/tenders published under Smart, green and integrated transport.

ERDF and ESF funds

The European Regional Development Fund (ERDF) focuses its investments on several key priority areas. This is known as 'thematic concentration':

- Innovation and research
- The digital agenda
- Support for small and medium-sized enterprises (SMEs)
- The low-carbon economy[67]

European Social Fund (ESF) Across Europe and in Slovenia is supporting the labor market, helping people get better jobs and ensuring fairer living standards and more employment opportunities for all EU citizens. It is doing this by investing in Europe's human capital – its workers, its young people, disadvantaged groups and all those seeking a job. Tens of thousands of ESF projects are active in Europe's cities, towns, rural communities and neighborhoods. They are opening doors to better skills, work, qualifications and a more inclusive society for all Europeans.

ESF projects are also contributing to a big reduction in the number of Slovenians who are at risk of poverty – some 90 000 fewer by 2020 is the target. Active inclusion activities, access to good-quality health and social services and the promotion of social enterprise are examples of the measures

[66] https://ec.europa.eu/programmes/horizon2020/en/area/transport, 29. 10. 2019
[67] https://ec.europa.eu/regional_policy/en/funding/erdf/, 29. 10. 2019

underway, as seen in the Roma Café project in Maribor which offers jobs to local people. Such social inclusion initiatives support disadvantaged people – whether minorities or people with disabilities – and ensure they have access to the same social and job opportunities as others. [68]

The ESF is also helping improve the efficiency of Slovenia's legal and administrative system such that it can serve citizens better and contribute to a better business environment – thus boosting living standards and economic competitiveness.

[68] https://ec.europa.eu/esf/main.jsp?catId=399, 29. 10. 2019

Table 8: The projects that have been funded in Slovenia are:

Project	Short description
Construction of new premises for the Faculty of Chemistry and Chemical Technology and the Faculty of Computer and Information Science of the University of Ljubljana	With the addition of two new, state-of-the-art facilities for the faculties of chemistry and chemical technology and computer and information science at Slovenia's University of Ljubljana, this project helped the institution solidify its standing as a world-class research centre for the natural sciences and technology.
Geopark – promoting sustainable tourism via regional cooperation	The project protects and promotes the Austria-Slovenia cross-border region's intense geological history with new trails, information centres and a single brand identity in the established Geopark.
Anders ist normal — Grenzüberschreitender barrierefreier Tourismus / Drugačnost je normalna — čezmejni turizem brez ovir	Using a wheelchair or living with a sensory impairment doesn't mean you don't enjoy a holiday. But it may mean that you have more practical aspects to consider in choosing a destination than other travellers. A project involving partners in adjoining parts of Austria and Slovenia has smoothed the path for people with disabilities visiting their area.
RCERO Ljubljana	RCERO Ljubljana has upgraded waste management facilities serving 37 municipalities in central Slovenia by creating a new landfill area and building waste treatment facilities. The facilities treat mixed municipal and biological waste to create fuel, wood, compost and other materials, as well as to generate energy. They also help to cut ground water contamination, greenhouse gas emissions and landfill use.

The Slovenian government has announced a new ESF-funded project to help young graduates in Slovenia make the transition from university to employment.

The project will provide co-financing to the tune of € 6000 to private-sector employers hiring young graduates full-time for 12 months. They must be younger than 29 years and unemployed, looking for their first job.

The aim is to give 820 young people the work experience they need to break into the employment market, where they belong to one of the most vulnerable groups precisely due to lack of experience. At the same time, the project is intended to help meet employers' needs for skilled labour.

The total budget amounts to € 5 million with an EU contribution of € 4.25 million.

The full list of projects co-financed by the European Regional Development Fund, the European Social Fund and the Cohesion Fund in Slovenia in the period 2014- 2020 (4702 projects) can be found under the web page: https://www.eu-skladi.si/sl/seznam-projektov

Subventions in Slovenia

Slovenia is rapidly regulating a supportive environment for the expansion of the mass electric mobility, as the construction of the Slovenian branch of the international network of fast charging stations for electric vehicles is currently underway within the CEGC project. This is also evidenced by the establishment of an interdepartmental working group to develop a market development strategy for the establishment of adequate alternative fuels infrastructure, which will have to include, inter alia, objectives for the development of electric mobility. The dialogue established with the CER Sustainable Mobility Section at the beginning of September this year is just further evidence of proactive action in the field of electric mobility and cooperation with all those who drive the development of mass electric mobility in Slovenia. In addition, the state of Slovenia is offering non-refundable financial incentives to citizens for electric vehicles under the auspices of the Eco Fund. This could be a purchase of a new vehicle, a conversion of a vehicle or the purchase of a redefined category, or the purchase of a new plug-in hybrid or a new electrically powered vehicle with a range extender. One of the more prominent measures is definitely the subsidy for the purchase of an electric vehicle, which has been provided by the Eco Fund of the Republic of Slovenia since 2011.

We also expect that Slovenia will decide to follow the example of some European countries and promote the purchase of environmentally friendly electric vehicles with appropriate tax incentives.

Between 2011 and 2014, the Eco Fund provided half a million euros in grants for electric vehicles to eco-friendly vehicles to promote greater energy efficiency in transport, of which € 200,000 for persons and € 300,000 for legal entities in the form of state aid. There are two public calls for grants this year. For legal entities, sole proprietors and private individuals, a public tender of € 2 million was awarded for grants for electric vehicles and for citizens for € 500,000 grants for electric vehicles. A non-refundable financial incentive may be granted for the purchase of a new M1, N1, L7e or L6e electric vehicle with no CO_2 emissions at the discharge; for the conversion of a vehicle or the purchase of a converted category M1, N1, L7e or L6e, into electric, so that the internal combustion engine as standard will be replaced by a propulsion electric motor; for the purchase of a new plug-in hybrid or a new range-extender electric vehicle with CO_2 emissions of less than 50 g CO_2 / km, category M1, N1. The amount of the grant depends on the category of the vehicle and ranges from € 2,000 to € 5,000. In addition to the non-repayable financial assistance / incentive following a public call for the purchase of an electric vehicle, the eligible person is entitled to obtain Eco Fund credit following a public call for lending to environmental investments.

The Eco Fund said that the calls for tenders remained unallocated in 2011-2013, but in 2014 it was the first time that the calls had not been sufficient by the end of the year and both public calls for grants for

electric vehicles were prematurely closed. Next year, the Eco Fund will provide at least as much funding as this year to encourage investment in electric vehicles.

Table 9: Number of vehicles subsidized by Eco Fund from 2011 to 2018[69]

Year	CITIZENS		COMPANIES	
	e-vehicles	hybrids	e-vehicles	hybrids
2011	3	/	/	/
2012	30	4	12	5
2013	14	4	19	2
2014	23	6	69	/
2015	45	4	66	3
2016	71	28	102	6
2017	150	64	185	8
2018	190	54	339	18
TOTAL	**526**	**164**	**792**	**35**

The sums of subsidies increased year by year; last year (2018), a total of € 2.06 million was paid to citizens and € 2.18 million to businesses.

The percentage of the subsidy for citizens is higher than anywhere else in the EU except Romania (Romania gives subsidy in amount of € 10,000, plus another € 1,500 for scrapping a car over ten years old). For the purchase of a new or test emission-free electric vehicle, or for electrically reconditioning, it will be entitled to € 7,500 and € 4,500, respectively. The subsidy for the purchase of a new or test plug-in hybrid vehicle with a range extender and emissions below 80 grams of CO_2 per kilometer is also € 4,500. There are four other subsidy classes (€ 3,000, € 1,000, € 500 and € 200), broken down by category of new emission-free electric vehicle.

The amounts described have been in force since 2016, when the maximum incentive increased from € 5,000 to € 7,500 per car, so the influx of subsidy applications increased dramatically. The amount of subsidies is confirmed by the government. This year (2019), at the proposal of the Ministry of Infrastructure, they are expected to remain at last year's level. Interest in subsidies is growing. This year (2019), application for subsidy for 315 cars were received in the first three months.

The strategy for such subsidies envisages that they will be maintained until large-scale production and harmonization of the prices of electrically powered vehicles with other different-drive vehicles - with

[69] https://www.delo.si/mobilnost/za-nakup-e-vozila-slovenija-primakne-skoraj-najvec-v-eu-176569.html, 14. 10. 2019

comparable reach and use. The procedures for granting subsidies are expected to be simplified and the amounts will gradually decrease in line with the decline in the prices of electric vehicles.

In addition, electric vehicles in Slovenia are also exempted from paying an annual toll on road use. And this exemption, according to the strategy, is only foreseen during the period of promotion of the purchase and use of electric vehicles. When the number of registered electric vehicles reaches ten percent of the fleet, the said duty will be reintroduced and comparable to that for vehicles with the lowest emissions. Businesses and craftsmen can also claim a tax deduction of 40 percent of the amount invested in hybrid or electric passenger cars and hybrid or electric buses, but not more than the tax base.

Since 2004, the Eco Fund has been promoting the purchase of environmentally friendly electric or hybrid vehicles with CO_2 emissions in the combined driving mode not exceeding 110 grams per kilometer, also with loans. Credit for gas vehicles is also available for citizens. Only customers who buy a new or used vehicle from a registered vehicle dealer are eligible for the credit.

Table 10: Eco Fund Credits from 2008 to 2018:

Year	**Number**	**€**
2008	20	328.560
2009	19	309.596
2010	24	321.626
2011	13	231.666
2012	19	246.714
2013	19	288.466
2014	45	665.236
2015	56	986.013
2016	134	2.324.865
2017	321	6.202.438
2018	639	12.463.315
TOTAL		**24.367.496**

Data from the Eco Fund show that, since 2008, the country has approved a total of € 24 million in loans for the purchase of environmentally friendly vehicles, half of which is only in 2018. The number of credits granted is increasing rapidly, which proves that they are attractive. The current interest rate is 1.3 percent. For a ten-year loan of € 40,000, the cost of interest on the Eco Fund loan is about € 6,000 lower than with commercial banks.

Since 2011, the Eco Fund has also subsidized the electrification of public passenger transport. Municipalities are eligible for the grant, and incentives were awarded for the purchase of cleaner vehicles, from 2011 to 2014 for eight public passenger buses. In 2015 and 2016, they subsidized euro VI engines (24 for diesel-powered buses, four for gas-powered buses and three for hybrid buses). A year

later (2018), the conditions were tightened, and subsidies narrowed only to euro VI gas engines and electric and plug and electric buses. Last year (2018), incentives were granted for 33 compressed natural gas buses. In 2019, passenger incentives are only be available for electric and hydrogen vehicles.

This year, the fund issued two public calls. For the most part, the level of subsidies remains the same, but tender conditions changed slightly. The incentive for the test vehicle was the condition of being registered for the first time in Slovenia (in order to avoid double subsidization), the CO_2 emission threshold was reduced from 80 grams to 50 grams per kilometer, and due to high demand last year, the subsidy for trailer vehicles were slightly reduced this year for hybrids. This is because in the case of plug-in hybrids, in practice, only a small proportion of journeys are made solely by electric drive. For electric vehicles, the planned grant amount is an additional € 5 million.

Other funding sources

Ministry of Economic Development and Technology of Republic of Slovenia - From 2016 to date, the Ministry of Economic Development and Technology has issued 11 calls for proposals in the field of e-mobility with a total value of € 212 million and is currently involved in 30 different projects in this field.[70]

Innovative ideas and non-monetary incentives for the operation of the electricity mobility market:

- a common pair of license plates and one traffic permit for two vehicles
- free parking of electric cars in cities
- permits electric car driving in yellow lanes
- free electric car driving on highways
- tax deductions when purchasing an electric car
- development of charging infrastructure in line with the growth of the electric car market

Roadmap instructions for SMEs on how to use available tools for funding opportunities

A SME should, when looking for funding opportunities, do the following:

1. Identify the business idea

   The clearly the business idea is defined at the beginning by the SME the easier it is for the SME to achieve and realize it.

2. Choose the appropriate grand/subsidy/tender

[70] https://www.avto-magazin.si/plugin/e-mobility/konferenca-e-mobilnost-v-obcinah-2019-med-mestnimi-obcinami-najboljsa-ljubljana-med-obcinami-bled/, 7. 11. 2019

It is very important to choose the appropriate grand/subsidy/tender for the SME in order to support the SME's business idea and investment. Find out what kind of projects or investments are being supported in which amount (and %) and what are the timelines.
An SME should be aware that all the activities should be pre-financed by the SME (most of the time the finances from the grand/subsidy/tender are given to SME after the cost has been incurred and payed. The SME then proofs of the expense with the official invoice and bank proof of payment).

3. Carefully study the documents of the grands, subsidy, tender

When a call for a grand or subsidy is issued by Eco fund, Ministry or other institution the SME should study the documents very carefully and see if the project idea is eligible, which costs are eligible, what consortium partnership should be formed (if any), what are the deadlines, what documents should be provided with the application to the grand etc. Use the official templates for the application form. Often a check list is enclosed at the end.

4. Prepare a business plan

A Successful business plan helps SME to prepare for what the company is looking forward to in terms of content, organization and finances and set achievable goals.
It is often obligatory to add when asking for a grand or subsidy.

The chapters in the business plan are:

1.DESCRIPTION OF COMPANY, PRODUCT-SERVICE, NEW PROJECT
1.1. Basic information on SME
1.2. Management team presentation
1.3. Presentation of the company Presentation / company history / main products / main customers / main suppliers / previous 2 years of business operation / company references
1.4. Presentation of future business and development of the company Vision / mission / strategic plan of the company Demonstrating the core goals of business growth
1.5. Market analysis Market research Description of the competition Market SWOT analysis

1.6. Marketing strategy in conjunction with a new project Target markets Market positioning Marketing channels Marketing communication Advertising Sales promotion Market research Finances funds for marketing strategy
1.7. Project Description (Investments) Basic objectives of the project (investments) Detailed project description (investments) The type of technology Innovation Impact of the project on the environment Project location (investments) Assessment of project effectiveness - investments (expected project or investment effects)
1.8. Capital
2. EXPLANATION OF THE SALE
Sale on domestic market / sale on foreign markets
3. PLANNED NEW EMPLOYMENTS
4. INVENTORIES
5. BUSINESS RECEIVABLES (CUSTOMERS)
6. BUSINESS LIABILITIES (SUPPLIERS)
7. EXPLANATIONS TO THE FINANCIAL ANNEX OF THE BUSINESS PLAN
8. WHO PARTICIPATED IN MAKING A BUSINESS PLAN
9. ANNEXES OF THE BUSINESS PLAN
Part of the business plan is also a financial plan (balance sheet, income statement, cash flow, investment) with basic indicator for monitoring and evaluating company performance for the previous, for the current and for the next 3 years, which should be realistic.

5. Build a consortium of business partners (if required)

Some EU grands demand a consortium of international or national partners. SME should be able to build a consortium with reliable partners who are aware of the responsibility such partnership brings. The responsibilities of each partner should be clearly defined within such consortium of partners.

6. Prepare all the documents that a call for a grand/subsidy is asking for

   Often some documents (e.g., a bank statement that the SME has no blocks on bank accounts, or an official statement from Tax Administration that the SME payed all the taxes etc.) are obligatory to add to the official application form. SME should also consider that it would take some time to collect those official papers from other institutions as evidences so the application to obtain these documents should be given in on time. Sometimes SMEs already have such documents but are of older dates. SME should note that these evidence documents are not older as the call for a grand/subsidy is asking for (sometimes 6 months, sometimes less than that) (even though the data has not changed). At the end go through the check list of all documents.

7. Check the completed application form and documents (annexes) before sending them. Make sure all the data is consistent.

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Vodnik za B2B mreženje

1. Uvod

B2B mrežni dogodki so odličen način razširitve poslovnega omrežja podjetij, s spoznavanjem novih strank, najemnikov, partnerjev ali investitorjev. Za uspešno udejstvovanje podjetij na takšnih dogodkih, morajo biti podjetja vnaprej dobro pripravljena in pokazati najboljšo različico svojega podjetja

Udeležba na B2B dogodkih v sklopu sejmov, konferenc in ostalih namenskih dogodkov omogoča podjetjem da se izpostavijo večjemu občinstvu in različnim tržiščem. Ti dogodki so lahko učinkovita strategija za pridobivanje novih strank, ki jih v običajnem poslovnem okolju ne bi mogli doseči.

Preden se podjetje izbere dogodek, na katerem želite biti širiti svoje mreže in/ali biti razstavljavec, je potreben razmislek kaj podjetje želi na takšnem dogodku doseči ter temu primerno nastaviti strategijo B2B mreženja še pred dogodkom.

Ta vodnik predstavlja ključne majnike o katerih je treba razmišljati pri izbiri in načrtovanju mreženja, da bo le-to čim bolj uspešno.

2. Koraki za pripravo na uspešen B2B proces

2.1 Izbira dogodka

Če se želite osredotočiti na pridobivanje novih strank, se izogibajte izbiri dogodka, na katerem se razstavlja preveč potencialnih konkurentov.

Cena je še en pomemben dejavnik razmišljanja, preden se prijavite na udeležbo. Poskrbite, da bodo stroški za registracijo dogodkov, potne stroške in čas, ki je oddaljen od vašega podjetja. Želite, da je udeležba na sejmih korist za vaše podjetje in ne finančno breme.

Razmislite tudi o izbiri dogodka, ki bi se ga lahko redno udeleževali vsaj tri do pet let, saj je znana prisotnost na ponavljajočem se dogodku pomembna pri vzpostavljanju poslov. Znana prisotnost ponuja večje možnosti pridobivanja strank in njihovega zaupanja, hkrati pa obstajajo veče možnosti da se seznanite z novimi udeleženci.

2.2 Jasna definicija »tarč« (podjetij in njihovih predstavnikov, s katerimi želite vzpostaviti interakcijo)

Preden se odpravite na B2B dogodke, je pomembno narediti „ciljni seznam“ podjetij, ki bodo dogodka udeležile in ki bi lahko imela koristi od vašega izdelka/storitve.

Določeni dogodki predhodno poskrbijo za listo ali pa celo katalog udeležencev, pri nekaterih dogodkih pa je potrebno te informacije pridobiti preko dodatnih lastnih raziskav po internetu (linkedIn, družbeni mediji, itd.)

Na dogodkih je smiselno aktivnosti mreženja omejiti na manjše število ljudi, ki so na listi identificirani kot najpomembnejši akterji. Na primer, za dvodnevni dogodek je smiselno seznam omejiti na 5-10 ljudi, katerim boste posvetili dovolj časa za aktiven in dovolj poglobljen pogovor za vzpostavitev dobrega odnosa. Hkrati je potrebno nekaj časa nameniti tudi za mreženje z že obstoječimi stiki.

Priporočeno je tudi da predstavniki podjetja, podjetje in izdelke/storitve svojim »tarčam« predstavijo preko medijev kot so LinkedIn, e-pošta, Twitter, ipd., v tednu pred dogodkom. Takšen pristop pomaga pri bolj aktivnem sprožanju pogovorom med dogodkom. Prav tako se podjetja na ta način bolje »seznanijo«(npr. vpogled v sliko osebe omogoča lažjo identifikacijo te osebe na dogodku) z osebami, ki jih želijo srečati.

Kar se tiče kodeksa ravnanja pri vzpostavljanju odnosov s podjetji je pomembno, da predstavniki podjetja najdejo dobro ravnovesje med dolžino in globino pogovorov. Ti morajo biti prijateljsko formalni, s fokusom na predstavitvi izdelka/storitve, v luči potreb in dodane vrednosti za ciljano podjetje. Pogovori morajo biti dovolj dolgi da podjetje v jasni obliki predstavi svoje ključne točke, vendar ne predolgi, saj si vsako podjetje prizadeva za pridobivanje pozornost in vzpostavljanje odnosov z lastnimi »tarčami«.

2.3 Raziskava o potencialni dodani vrednosti za ciljna podjetja

Prednost priprave „ciljnega seznama“ pomeni, da si podjetje vzame čas, da se ustrezno pripravi na vsako ciljano „srečanje“.

Za vsako ciljno podjetje je potrebno narediti kratko raziskavo, ki je namenjena pripravi na poslovni predlog oz. »pitch«, v katerem podjetje ciljnim sogovorcem pokaže različne vidike lastnih storitev ali izdelkov, ki bi lahko bili uporabni za njihov poslovni model.

Čeprav predstavitev celotnega poslovnega predloga v realnosti večkrat ni mogoča, je kljub temu koristno, da ima podjetje ta predlog dobro razdelan in na voljo ko se priložnost ponudi. Poleg tega je pomembno, da lahko predstavnik podjetja hitro in jasno predstavi osnovne informacije o podjetju, strankah in obstoječih ponudnikih storitev, ter da lahko ponudi primere lastne ponudbe, ki so za ciljno podjetje pomembni. Priporočeno je imeti nekaj podatkov o zadovoljstvu strank, ki delujejo v isti panogi kot ciljno podjetje ali imajo podobne poslovne modele. Uporaba primera "tretje osebe", ki je podkrepljen s številkami, ciljnemu podjetju pokaže potencialno donosnost naložbe, ki bi jo lahko pridobili s poslovnim razmerjem z vašim podjetjem, hkrati pa ne izpade kot poskus direktna prodaja izdelka oziroma storitev.

2.4 Vprašanja so pomembna

Prva srečanja s ciljnimi podjetji, kot potencialnimi strankami, morajo biti usmerjena tako v prejemanje informacij, kot tudi njihovo posredovanje. Pomembno je, da se podjetja zavedajo, da je prvi in glavni cilj graditi odnose in usmeriti se takoj v posel.

Ena od prednosti raziskovanja ciljnih podjetij, preden se srečate z njihovimi predstavniki, je ta, da vam omogoči, postavljanje pravih vprašanj, ter tako tudi pridobivanje pravih odgovore. To pa omogoča boljšo pripravo na naslednje srečanje v bolj formalni, poslovni situaciji.

Ko začnete razpravljati s ciljnim podjetjem, je priporočeno nadzirati tok pogovorov tako, da se temu podjetju zastavljajo bolj ciljno zastavljena vprašanja na primer "Ko gre za X, kaj je največji izziv, frustracija, ovira ali ovira, s katero se vaše podjetje srečuje?", namesto generalnih vprašanj. Direktna vprašanja o konkurenci niso primerna. Potrebno je najti načine, kako lahko ciljnemu podjetju ponudite vrednost, naj bo to z vašim izdelkom, priporočilom, nasvetom ali kontaktom osebe, s katero bi lahko podjetje spodbudilo svoje poslovanje.

Na spletu obstaja več nasvetov kakšna vprašanja postavljati, da prebijete led in spodbudite sogovornika, da na sproščen način odkrije več o sebi in podjetju, ki ga zastopa.

2.5 Dodajte vrednost

Če se osredotočite na gradnjo mostu s sogovornikom, namesto da na njih gledate kot na odskočne kamne do vašega poslovnega cilja, boste na koncu lahko pridobili veliko več poslov.

Odličen način za odpiranje vrat za nadaljnje pogovore je, če naredite nekaj pozitivnega za drugo osebo. Delanje uslug in dajanje priporočil ali pomoč pri mreženju omogoča, da začnete svoj odnos v pozitivni luči. Takšne usluge so lahko na primer v obliki priporočila za nekaj, kar se lahko počnete v mestu, kjer se dogodek odvija, priporočilo za dobro poslovno besedilo, članek ali vir, pošiljanje povezave do uporabnega programa ali aplikacije ali navezovanje stikov z nekom, ki bi lahko bil sogovorniku v pomoč.

Takšen pozitiven odnos poveča možnost za razvoj resnične povezave, ki bo v pomoč v ključnem trenutku, ko boste pristopili k podajanju poslovnega predloga.

2.6 Ostanite povezani

Dandanes številni dogodki B2B mreženja, udeležencem olajšajo povezovanje na enostaven in interaktiven način, saj ponujajo interne aplikacije, ki uporabnikom omogočajo brskanje in pridobivanje informacij o drugih udeležencih, organizacijo sestankov in pošiljanje sporočil po spletu.

Kljub temu, da so te aplikacije izjemno koristne, morate vedno imeti rezervni načrt tudi za tiste, ki uporabljajo bolj tradicionalne načine povezovanja.

Poleg poslovnih vizitk, je trenutno še bolj aktualen pristop takojšnje povezave preko LinkedIn ali podobnih aplikacij za mreženje (digitalne vizitke, ipd.).

Vedno se prepričajte da ste zbrali kontaktne informacije ki jih potrebujete, da niste odvisni od tega da drugi kontaktirajo vas. Tekom dogodka ter po tem si lahko ogledate svoje nove stike ter jih po srečanju kontaktirate s prilagojenim sporočilom.

Priprava na B2B dogodke, zavedanje, s kom želite govoriti in kdaj pristopiti k njim, ter gradnja odnosa z dodano vrednost so najboljši načini za resnično povezavo, ki se lahko spremeni v resnično prodajo.

Project co-financed by the European Regional Development Fund

Public Funding Methodology and Toolkit

Version 1

Nov 2019

1 Introduction

The document presents the methodology and toolkit for projects funded in the areas of green and smart mobile products and services in key sectors of mobility (transport and logistics, automotive, energy and information technology) from public funds by public institutions..

The investment documentation needs to be prepared for investment projects planned within the public sector as well as for investment projects planned within the private sector co-finaced by public funds. .

The investment documentation determines the investment intentions by selecting the optimal scenario in terms of meeting the economic, financial, technical, technological, location and personnel goals of the investment project.

The preparation the content of documentation for investment projects financed from various sources in Slovenia must be prepared by regulation of the Decree on a uniform methodology for the preparation and treatment of investment documentation in the field of public finances (Official Gazette RS, No. 60 / 06, 54/10 and 27/16) for the following forms of investment documentation:

- identification document of the investment project,
- pre-investment document and
- investment program.

The effectiveness of investments project is judged by financial, cost & benefits and development criteria. The financial indicators reflect the impact of the investment on the business of the investor. Economic indicators measure the impact of the effectiveness of the investment from the point of view of the whole company, and the development criteria reflect the effects of non-monetary effects.

This document is developed for Slovenian market and therefore in local language.

Vsebina

2 Metodologije za projekte, ki se financirajo iz javnih sredstev

V dokumentu predstavljamo metodologijo in orodje za projekte, ki se financirajo na področju zelenih in pametnih mobilnih izdelkov in storitev v ključnih sektorjih mobilnosti (promet in logistika, avtomobilska industrija, energija in informacijska tehnologija) iz javnih sredstev s strani javnih institucij.

Investicijsko dokumentacijo je potrebno izdelati za investicijske projekte načrtovane v okviru javnega sektorja kot za investicijske projekte, načrtovane v okviru zasebnega sektorja v nekaterih primerih.

Investicijska dokumentacija določa investicijske namere z izbiro optimalne variante z vidika izpolnjevanja ekonomskih, finančnih, terminskih, tehnično-tehnoloških, lokacijskih in kadrovskih ciljev projekta.

Osrednji dokument v Sloveniji, katerega vsebino je potrebno upoštevati pri pripravi dokumentacije za investicijske projekte, ki se financirajo iz različnih postavk proračuna Slovenije, je Uredba o enotni metodologiji za pripravo in obravnavo investicijske dokumentacije na področju javnih financ (Uradni list RS, št. 60/06, 54/10 in 27/16), ki določa naslednje oblike investicijske dokumentacije:

- dokument identifikacije investicijskega projekta,
- predinvesticijsko zasnovo in
- investicijski program.

Učinkovitost investicij se presoja s finančnimi, ekonomskimi in razvojnimi merili. Finančni kazalci odražajo vpliv investicije na poslovanje investitorja oziroma upravljavca. Ekonomski kazalci merijo vpliv učinkovitosti investicije z vidika celotne družbe, razvojna merila pa odražajo vplive denarno neizmerljivih učinkov.

2.1 Predstavitev zakonodaje za financiranje projektov javnih institucij za področje mobilnosti[1]

Uredba o enotni metodologiji za pripravo in obravnavo investicijske dokumentacije na področju javnih financ (Uradni list RS, št. 60/06, 54/10 in 27/16) je osnovni dokument, ki ga je potrebno spoštovati pri pripravi investicijske dokumentacije.

Uredba določa pripravo in obravnavo investicijske dokumentacije za vse investicijske projekte in druge ukrepe, ki se financirajo po predpisih, ki urejajo javne finance. Enotna metodologija priprave in obravnave investicijske dokumentacije vsebuje:

- metodološke osnove za ocenjevanje in vrednotenje investicij;
- vrste in obvezno vsebino investicijske dokumentacije;
- postopke in udeležence pri pripravi in ocenjevanju investicijske dokumentacije ter odločanju o investicijah;
- minimum meril za ugotavljanje učinkovitosti projektov, ki se izvaja v vseh fazah projektnega cikla, in so podlaga za odločanje o investicijah ter njihovo uvrstitev v načrt razvojnih programov.

Uredba se uporablja za ugotavljanje prednosti in slabosti posameznih predlogov projektov oziroma pri odločanju o izbiri izvedljivih projektov, katerih rezultati bodo prispevali k vzdržnemu (trajnostnemu) razvoju družbe in jih bo mogoče nadzirati v vseh fazah projektnega cikla. Na podlagi izsledkov analiz vrednotenja učinkov teh projektov bo omogočila oblikovanje politike za koristno, gospodarno in učinkovito uporabo javnih sredstev.

Uredba se uporablja pri pripravi in obravnavi investicijske dokumentacije ter načrta razvojnih programov. Na tej podlagi se sprejemajo odločitve o:

a. investicijah v nakup, gradnjo, posodobitev, rekonstrukcijo in investicijsko vzdrževanje osnovnih sredstev (objektov, opreme, zemljišč, nematerialnega premoženja, blagovnih rezerv, strateških zalog);
b. drugih investicijah, ki prispevajo k trajnostnemu razvoju družbe, blaginji in kakovosti življenja državljanov Republike Slovenije (na primer izobraževanje, raziskovanje in razvijanje);
c. investicijah, ki zahtevajo državna poroštva;
d. ukrepih, ki imajo pomembne finančne posledice na proračun (predpisi in drugi ukrepi).

[1] *Uredba o enotni metodologiji za pripravo in obravnavo investicijske dokumentacije na področju javnih financ : Uradni list RS, št. 60/06, 54/10, NPB1, 27/16 in NPB2*

Mejne vrednosti, ki določajo pripravo in obravnavo posamezne vrste investicijske dokumentacije po stalnih cenah z vključenim in posebej prikazanim davkom na dodano vrednost, so:

1. za investicijske projekte z ocenjeno vrednostjo med 300.000 in 500.000 eurov najmanj dokument identifikacije investicijskega projekta;
2. za investicijske projekte nad vrednostjo 500.000 eurov dokument identifikacije investicijskega projekta in investicijski program;
3. za investicijske projekte nad vrednostjo 2.500.000 eurov dokument identifikacije investicijskega projekta, predinvesticijska zasnova in investicijski program;
4. za investicijske projekte pod vrednostjo 300.000 eurov je treba zagotoviti dokument identifikacije investicijskega projekta, in sicer:
    a. pri tehnološko zahtevnih investicijskih projektih;
    b. pri investicijah, ki imajo v svoji ekonomski dobi pomembne finančne posledice (na primer visoki stroški vzdrževanja);
    c. kadar se investicijski projekti (so)financirajo s proračunskimi sredstvi.

(Pri projektih z ocenjeno vrednostjo pod 100.000 eurov se vsebina investicijske dokumentacije lahko ustrezno prilagodi (poenostavi), vendar mora vsebovati vse ključne prvine, potrebne za odločanje o investiciji in zagotavljanje spremljanja učinkov.

Če gre za več podobnih investicij ali druge smiselno povezane posamične ukrepe manjših vrednosti oziroma aktivnosti, ki so po vsebini, zasnovi in obsegu zaključena celota, se jih lahko združi v program (načrt investicijskega vzdrževanja, izobraževanja, socialnega varstva in podobno), za katerega veljajo isti postopki in merila kot za posamičen investicijski projekt.

Če je bila izdelana in potrjena predinvesticijska zasnova za celovit projekt in so cilji in ključne predpostavke iz celovitega projekta ostali nespremenjeni, ni treba ponovno izdelovati predinvesticijske zasnove za posamezne investicijske projekte, čeprav njihova ocenjena vrednost presega 2.500.000 eurov.

Glede na vrsto investicijske dokumentacije je treba pri ocenjevanju smiselno uporabiti naslednje metodološke osnove:

1. Določitev ciljev:
    - cilji se določijo na podlagi predhodno izvedenih analiz, evidentiranja potreb in možnosti ter načinov njihovega uresničevanja,

- cilji morajo biti usklajeni s strategijami, nacionalnimi programi, programi Skupnosti ter zakoni in opredeljeni tako, da je mogoče ugotavljati in preverjati njihovo uresničevanje,
- cilji morajo biti določeni tako, da je mogoče identificirati ekonomične in izvedljive različice za njihovo izvedbo;

2. Priprava predlogov variant za uresničevanje ciljev:
   - variante se med seboj lahko razlikujejo po različnih mogočih lokacijah, tehnično-tehnoloških rešitvah, obsegu, virih in načinih financiranja, rokih in dinamiki izvedbe, rezultatih in drugih pomembnejših delih investicije,
   - upoštevajo se tudi variante, ki so posledica vsebinskih razlik pri oddaji del ali načinov financiranja (na primer fazna gradnja, koncesije in druge oblike javno-zasebnega partnerstva),
   - za presojo izvedljivosti ciljev investicije se pričakovani učinki za projekt predstavijo najmanj s primerjavami stroškov in koristi v pogojih »z« investicijo (scenarij upošteva obravnavano varianto) ter izhodiščnega scenarija »brez« investicije in/ali minimalne alternative z upoštevanjem delnih izboljšav;

3. Opredelitev vrednostnega in fizičnega obsega stroškov in koristi vsake variante:
   - v ovrednotenje so vključeni stroški in koristi posameznih udeležencev v celotnem projektnem ciklu,
   - ocena količin temelji na predpisani dokumentaciji (predhodne idejne rešitve in študije, projektna dokumentacija, standardi in normativi dejavnosti, prostorski akti in druge osnove),
   - stroški in koristi, ki jih upoštevamo pri ocenjevanju v ekonomski dobi investicije, so: investicijski stroški, investicijsko in tekoče vzdrževanje, stroški obratovanja ter koristi, ki jih lahko izrazimo v denarju, in nedenarne koristi (posredne in neposredne); stroški in koristi se ugotavljajo v finančni in ekonomski analizi po statični (za reprezentativno leto v ekonomski dobi) in dinamični metodi (za celotno ekonomsko dobo investicije) v obdobju, v katerem pričakujemo njihov nastanek,
   - izhodiščni podatki morajo biti usklajeni s podatki, s katerimi razpolagajo ali jih objavljajo nosilci javnih pooblastil,
   - predpostavke za projekcije morajo biti utemeljene in verodostojne,
   - vsi stroški in koristi, ki so izraženi v denarju, se obravnavajo na primerljivih osnovah (stalne cene, diskontiranje),
   - vsaka varianta vsebuje izračun finančnih, ekonomskih in drugih kazalnikov učinkovitosti investicij ter opis rezultatov na podlagi meril, ki jih ni mogoče izraziti v denarju,

- pri ocenjevanju investicijskih projektov se uporablja splošna diskontna stopnja iz 8. člena Uredbe;

4. Ugotavljanje občutljivosti variant:
   - z analizo občutljivosti se opredeli kritične parametre investicijskega projekta, pri katerih so projekcije manj zanesljive, in sicer po vrstnem redu vplivanja na končni rezultat investicije oziroma po stopnjah tveganja (z analizo tveganja), ter
   - izkaže ugotovitve analize o mogočih vplivih na pričakovan končni rezultat oziroma o mogočih odmikih od projekcij;
   - Izbor najboljše variante in predstavitev izsledkov:
   - vsako varianto je treba presojati tudi z vidika najpomembnejših omejitvenih dejavnikov (finančnih, zakonskih, regionalnih, okoljevarstvenih, institucionalnih in drugih dejavnikov),
   - pri predstavitvi izsledkov morajo biti navedeni cilji, opis obravnavanih variant, primerjava variant, razlogi za izbiro najboljše (optimalne) variante ter način ocenjevanja izbire najboljše variante.

2.1.1 Dokument identifikacije investicijskega projekta

Dokument identifikacije investicijskega projekta vsebuje podatke, potrebne za določitev investicijske namere in njenih ciljev v obliki funkcionalnih zahtev, ki jih bo morala investicija izpolnjevati. Dokument identifikacije investicijskega projekta vsebuje opise tehničnih, tehnoloških ali drugih prvin predlaganih rešitev in je podlaga za odločanje o nadaljnji izdelavi investicijske dokumentacije oziroma nadaljevanju investicije.

Pri izdelavi dokumenta identifikacije investicijskega projekta je za ocenjevanje treba smiselno uporabiti metodološke osnove iz 5. člena prej omenjene Uredbe.

Dokument identifikacije investicijskega projekta vsebuje najmanj naslednje podatke:

- navedbo investitorja, izdelovalca investicijske dokumentacije in upravljavca ter strokovnih delavcev oziroma služb, odgovornih za pripravo in nadzor nad pripravo ustrezne investicijske ter projektne in druge dokumentacije, z žigi in podpisi odgovornih oseb;
- analizo stanja z opisom razlogov za investicijsko namero;
- opredelitev razvojnih možnosti in ciljev investicije ter preveritev usklajenosti z razvojnimi strategijami in politikami;
- predstavitev variant;

- opredelitev vrste investicije, oceno investicijskih stroškov (za vse faze, če je predvidena delitev projekta) po stalnih cenah in tekočih cenah (če je predvidena dinamika investiranja daljša od enega leta), prikazano posebej za upravičene in preostale stroške in navedbo osnov za oceno vrednosti (najmanj na podlagi analize vrednosti že izvedenih investicij oziroma drugih verodostojnih izhodišč);
- opredelitev temeljnih prvin, ki določajo investicijo (predhodna idejna rešitev ali študija, opis lokacije, okvirni obseg in specifikacija investicijskih stroškov s časovnim načrtom izvedbe, varstvo okolja, kadrovsko organizacijska shema s prostorsko opredelitvijo, predvideni viri financiranja in drugi viri), skupaj z informacijo o pričakovani stopnji izrabe zmogljivosti oziroma ekonomski upravičenosti projekta;
- ugotovitev smiselnosti in možnosti nadaljnje priprave investicijske, projektne in druge dokumentacije s časovnim načrtom.

Kadar investicijski program iz prve in četrte alinee prvega odstavka 4. člena Uredbe ni obvezen in pri programih iz tretjega odstavka 4. člena Uredbe, se šteje dokument identifikacije investicijskega projekta za investicijski program ter predstavlja osnovo za odločitev o investiciji in vsebuje poleg smiselno povzete obvezne vsebine še:

- analizo stroškov in koristi, skupaj s predstavitvijo tistih stroškov in koristi, ki jih ni mogoče izraziti v denarnih enotah in/ali analizo stroškovne učinkovitosti za posamezne variante;
- obravnava variant na način iz drugega odstavka 12. člena Uredbe in predstavitev optimalne variante, ki temelji na dokumentaciji iz 13. člena Uredbe;
- prikaz rezultatov ocenjevanja z utemeljitvijo upravičenosti investicijskega projekta.

Če se priprava in izdelava predhodnih študij, projektne, investicijske in druge dokumentacije opredelita kot samostojna faza, zanjo ni treba posebej pripraviti dokumenta identifikacije investicijskega projekta v obsegu iz tretjega odstavka tega člena. V tem in drugih primerih, ko se investicijski projekt izvaja v fazah lahko, investitor na podlagi razpoložljivih podatkov oceni vrednost celotnega investicijskega projekta.

2.1.2 Predinvesticijska zasnova

Predinvesticijska zasnova se pripravi z upoštevanjem metodoloških osnov iz 5. člena prej omenjene Uredbe.

V predinvesticijski zasnovi so obravnavane vse variante, za katere je verjetno, da bi ekonomsko, finančno, časovno in tehnično-tehnološko sprejemljivo izpolnile cilje, zapisane v dokumentu identifikacije investicijskega projekta, in so predstavljene s projekcijami v scenarijih »z« investicijo ter projekcijami za minimalno alternativo in/ali scenarijem »brez« investicije. Pri tem se v analizi izvedljivosti upoštevajo tehnične, finančne, zakonske in druge omejitve in ugotovijo rezultati posameznih variant ter utemelji predlog optimalne variante.

Predinvesticijska zasnova vsebuje povzetke izsledkov predhodnih del, študij in analiz, med katere spadajo:

- študije in raziskave povpraševanja, upoštevaje statistične in druge uveljavljene zbirke podatkov, ekonomske analize in študije, ki utemeljujejo vrsto, potrebnost, smotrnost in koristnost investicije ter usklajenost s predvideno strategijo razvoja;
- tehnično-tehnološke raziskave in študije ter načrti z izbiro in pregledom potrebne opreme;
- idejne gradbene in druge rešitve;
- geološke, geomehanske, seizmološke, vodnogospodarske, ekološke in druge raziskave;
- analize mogočih lokacij objekta ter analize vplivov na okolje in drugih vplivov s predvidenimi ukrepi;
- analize vključitve javno-zasebnega partnerstva;
- analize vključitve v medregionalne, regionalne ali medobčinske sisteme oziroma povezave

Predinvesticijska zasnova obravnava posamezne variante tako podrobno, da je mogoče čim zanesljivejše izbrati in utemeljiti optimalno varianto. Pri tem so posamezne variante ocenjene na podlagi investicijske, projektne ter druge dokumentacije na primerljivi podlagi. Optimalno varianto se izbere z analizo stroškov in koristi ali drugimi primernimi metodami (na primer multikriterijsko analizo).

Predinvesticijska zasnove mora vključevati naslednja poglavja:

1. uvodno pojasnilo s povzetkom, osnovne podatke o investitorju ter navedbo ciljev oziroma strategije;

2. analizo stanja s prikazom obstoječih in predvidenih potreb po investiciji (projekcije povpraševanja) ter usklajenosti investicijskega projekta z državno strategijo razvoja Slovenije, usmeritvami Skupnosti, prostorskimi akti ter drugimi dolgoročnimi razvojnimi programi in usmeritvami, upoštevaje tudi medsebojno usklajenost področnih politik (energetika, promet in druge);
3. analizo tržnih možnosti skupaj z analizo za tiste dele dejavnosti, ki se tržijo ali izvajajo v okviru javne službe oziroma s katerimi se pridobivajo prihodki s prodajo proizvodov in/ali storitev;
4. analizo variant z oceno investicijskih stroškov in koristi ter izračuni učinkovitosti za ekonomsko dobo investicije;
5. analizo vplivov z opisom pomembnejših vplivov investicije z vidika okoljske sprejemljivosti (vplivov na okolje ob upoštevanju izvajanja načela, da onesnaževalec plača nastalo škodo, kadar je primerno), zagotavljanja učinkovite rabe prostora in skladnega regionalnega razvoja ter trajnostnega razvoja družbe;
6. analizo zaposlenih po posameznih variantah ter vpliva na zaposlovanje z vidika ekonomske in socialne strukture družbe;
7. okvirni časovni načrt izvedbe investicije z dinamiko investiranja po variantah;
8. okvirno finančno konstrukcijo posameznih variant z obvezno analizo o smiselnosti vključitve javno-zasebnega partnerstva;
9. izračun finančnih in ekonomskih kazalnikov (doba vračanja investicijskih sredstev, neto sedanja vrednost, interna stopnja donosnosti, relativna neto sedanja vrednost in/ali količnik relativne koristnosti) posameznih variant ter opis tistih stroškov in koristi, ki se ne dajo ovrednotiti z denarjem;
10. analizo tveganja in analizo občutljivosti za vsako varianto;
11. opis meril in uteži za izbiro optimalne variante;
12. primerjavo variant s predlogom in utemeljitvijo izbire optimalne variante.

2.1.3 Investicijski program

Investicijski program je s svojim tehnično-tehnološkim in ekonomskim delom strokovna podlaga za investicijsko odločitev.

Investicijski program je treba pripraviti z upoštevanjem metodoloških osnov iz 5. člena prej omenjene Uredbe.

Investicijski program obravnava podrobno razčlenjeno optimalno varianto, ki temelji na naslednji dokumentaciji:

- najmanj idejnem projektu po zakonu, ki ureja graditev objektov oziroma drugi idejni rešitvi kot tehnični, tehnološki ali drugi podlagi za pripravo investicijskega programa, ki mora vsebovati vse potrebne prvine in ugotovitve za čim realnejšo oceno vrednosti in izvedljivosti investicije;
- prostorskih aktih v primerih prostorskih ureditvenih pogojev (z opredeljenimi zahtevami za investicije, ki se nanašajo na optimalno varianto);
- tehnično-tehnološkem projektu s specifikacijo opreme;
- geoloških, geomehanskih, seizmoloških, vodnogospodarskih, ekoloških in drugih raziskavah ter analizah;
- dokazljivih virih financiranja.

Obvezna vsebina investicijskega programa vključuje:

1. uvodno pojasnilo s predstavitvijo investitorja in izdelovalcev investicijskega programa, namena in ciljev investicijskega projekta ter povzetkom iz dokumenta identifikacije investicijskega projekta oziroma predinvesticijske zasnove s pojasnili poteka aktivnosti in morebitnih sprememb (do priprave investicijskega programa);
2. povzetek investicijskega programa, ki vsebuje najmanj:
    - cilje investicije (v obliki fizičnih in finančnih kazalnikov, potrebnih za spremljanje njihovega uresničevanja),
    - spisek strokovnih podlag,
    - kratek opis upoštevanih variant ter utemeljitev izbire optimalne variante,
    - navedbo odgovorne osebe za izdelavo investicijskega programa, projektne in druge dokumentacije ter odgovornega vodje za izvedbo investicijskega projekta,
    - predvideno organizacijo in druge potrebne prvine za izvedbo in spremljanje učinkov investicije, če ni posebej izdelana študija izvedbe investicije,
    - prikaz ocenjene vrednosti investicije ter predvidene finančne konstrukcije z izračunanim deležem sofinanciranja investicije s sredstvi proračuna Republike Slovenije,
    - zbirni prikaz rezultatov izračunov ter utemeljitev upravičenosti investicijskega projekta;
3. osnovne podatke o investitorju, izdelovalcih investicijske dokumentacije in prihodnjem upravljavcu z žigi in podpisi odgovornih oseb;
4. analizo obstoječega stanja s prikazom potreb, ki jih bo zadovoljevala investicija, ter usklajenosti investicijskega projekta z državnim strateškim razvojnim dokumentom in drugimi razvojnimi dokumenti, usmeritvami Skupnosti ter strategijami in izvedbenimi dokumenti strategij posameznih področij in dejavnosti;

5. analizo tržnih možnosti skupaj z analizo za tiste dele dejavnosti, ki se tržijo ali izvajajo v okviru javne službe oziroma s katerimi se pridobivajo prihodki s prodajo proizvodov in/ali storitev;
6. tehnično-tehnološki del (opredelitev investicijskega projekta na podlagi normativov in materialnih bilanc);
7. analizo zaposlenih za scenarij »z« investicijo glede na scenarij »brez« investicije in/ali minimalno alternativo;
8. oceno vrednosti projekta po stalnih in tekočih cenah, ločeno za upravičene in preostale stroške, z navedbo osnov in izhodišč za oceno;
9. analizo lokacije, ki vsebuje tudi imenovanje prostorskih aktov in glasil, v katerih so objavljeni;
10. analizo vplivov investicijskega projekta na okolje ter oceno stroškov za odpravo negativnih vplivov z upoštevanjem načela, da onesnaževalec plača nastalo škodo, kadar je primerno;
11. časovni načrt izvedbe investicije s popisom vseh aktivnosti skupno z organizacijo vodenja projekta in izdelano analizo izvedljivosti;
12. načrt financiranja v tekočih cenah po dinamiki in virih financiranja (pri financiranju s krediti tudi izračun stroškov financiranja in odplačil kreditov);
13. projekcije prihodkov in stroškov poslovanja po vzpostavitvi delovanja investicije za obdobje ekonomske dobe investicijskega projekta;
14. vrednotenje drugih stroškov in koristi ter presojo upravičenosti (ex-ante) v ekonomski dobi z izdelavo finančne in ekonomske ocene ter izračunom finančnih in ekonomskih kazalnikov po statični in dinamični metodi (doba vračanja investicijskih sredstev, neto sedanja vrednost, interna stopnja donosnosti, relativna neto sedanja vrednost in/ali količnik relativne koristnosti) skupaj s predstavitvijo učinkov, ki se ne dajo ovrednotiti z denarjem;
15. analizo tveganj in analizo občutljivosti;
16. predstavitev in razlago rezultatov.

2.2 Analiza stroškov in koristi investicije (CBA)

2.2.1 Finančna analiza projekta

Z namenom finančno ekonomske analize so izdelani izračuni finančne notranje stopnje donosa, finančne neto sedanje vrednosti in izračun finančne relativne neto sedanje vrednosti. Pri izračunu omenjenih kazalnikov smo upoštevali metodo diskontiranja (DCF).

Osnovna izhodišča in glavne predpostavke, upoštevane pri izračunu upravičenosti investicijskega projekta, so podane v nadaljevanju:

- Analiza stroškov in koristi je izdelana na podlagi Uredbe o enotni metodologiji za pripravo in obravnavo investicijske dokumentacije na področju javnih financ (Ur. l. RS, št. 60/06 in vse spremembe) in dokumenta Guide to Cost-Benefit Analysis of Investment Projects for Cohesion Policy 2014-2020 (European Commission, december 2014), razen v delih izračunov, ki se nanašajo na izračune diskontiranih vrednosti, saj se diskontiranje prične z letom 2019.
- Kot kriteriji donosnosti naložbe so v finančno ekonomski analizi uporabljeni kazalci finančne interne stopnje donosa investicije - FRR(C), finančne neto sedanje vrednosti projekta – FNPV(C), finančne interne stopnje donosnosti s kohezijskim sofinanciranjem - FRR(K), finančne neto sedanje vrednosti s kohezijskim sofinanciranjem – FNPV(K), upoštevaje 4 % diskontno stopnjo, kakor določa Uredba o enotni metodologiji za pripravo in obravnavo investicijske dokumentacije na področju javnih financ (Ur. l. RS, št. 60/06, 54/10, 27/16).

Ugotavljala se finančna donosnost projekta, katero se presodi, na podlagi ocenjene finančne neto sedanje vrednosti FNPV(C) in finančne interne stopnje donosnosti projekta FRR(C). Ti kazalniki pokažejo zmožnost neto prihodkov, da povrnejo stroške investicije, ne glede na to, kako so ti financirani. Da se za projekt lahko zaprosi za prispevek iz skladov, mora biti FNPV(C) negativna, FRR(C) pa nižja od diskontne stopnje, ki je bila uporabljena v analizi.

Finančna trajnost (vzdržnost - pokritost) projekta, je ocenjena s preverjanjem, ali so skupni (nediskontirani) neto denarni tokovi v referenčnem obdobju pozitivni. Ti neto denarni tokovi vključujejo investicijske stroške, vse vire financiranja (nacionalne in sredstva EU) in neto prihodke.

Pri pripravi analize je potrebno natančno upoštevati predpostavke modela kot so:

- diskontna stopnja
- analizo je navadno izdelana v stalnih cenah (stalne cene so enake tekočim)
- izhodišča za investicijsko vrednost
- viri financiranja
- nedenarne računovodske postavke (amortizacije, rezerve za prihodek…)
- amortizacijske stopnje
- referenčno obdobje
- izračun finančnega preostanka vrednosti
- predpostavke za izračun stroškov in prihodkov

Izračun ponderirane življenjske dobe projekta

Z amortizacijskimi stopnjami in pričakovano življenjsko dobo osnovnih sredstev je potrebno določili ponderirano življenjsko dobo projekta. Pri izračunu so upoštevana smo osnovna sredstva brez DDV. Metodologija za določitev ponderirane življenjske dobe je povzeta po EIB, The Ecoomic Appraisal of Investment Project at the EIB, stran 42.

Ocena stroškov in prihodkov v ekonomski dobi projekta

Pri finančni analizi je potrebno določiti stroške za scenarij brez projekta in stroške za scenarij s projektov. Nato se projekt prouči z vidika diskontiranih denarnih tokov, z uporabo inkrementalne metode (brez projekta in s projektom). Opazovati je potrebno diskontirani neto denarni tok oz. kumulativni neto denarni tok projekta, ki izkazuje ali je projekt finančno vzdržen oz. ali se s projektom ustvarja ustrezne in dovolj visoke prihodke, za kritje stroškov.

Izračun finančnega denarnega toka investicije

V nadaljevanju je predstavljena tabela finančnega denarnega toka projekta v EUR

Leto	Stroški naložbe	Operativni stroški	Prihranki	Ostanek vrednosti	Neto denarni tok	Diskontiran NDT
1 leto						
2 leto						
3 leto						
4 leto						
5 leto						
6 leto						
7 leto						
8 leto						
9 leto						
10 leto						
11 leto						
12 leto						
13 leto						
14 leto						
15 leto						
Skupaj						

Diskont.

Iz podatkov zgornje table se določijo naslednji kazalniki statične in dinamične ocene za presojo ekonomske dobe upravičenosti naložbe za celoten projekt.

Naziv	**Kratica**	**Vrednost**
Prihranki (leto .....)		EUR
Odhodki (leto .....)		EUR
Dobiček/izguba		EUR
Ekonomičnost poslovanja		
Donosnost poslovanja		
Doba vračanja vloženih sredstev	(v letih)	
Finančna interna stopnja donosnosti investicije	FRR/C	%
Finančna neto sedanja vrednost investicije	FNPV/C	EUR
Relativna neto sedanja vrednost	relativna FNPV/C	

Ob koncu finančne analize se na kratko predstavijo opisno rezultati finančne analize.

2.2.2 Ekonomska analiza projekta

Bistvo ekonomske analize je, da je potrebno vložke projekta oceniti na podlagi njihovih oportunitetnih stroškov, donos pa glede na plačilno pripravljenost potrošnikov. Oportunitetni stroški ne ustrezajo nujno opazovanim finančnim stroškom, prav tako plačilna pripravljenost ni vedno pravilno prikazana z opazovanimi tržnimi cenami, ki so lahko izkrivljene ali jih celo ni. Ekonomska analiza je izdelana z vidika celotne družbe in ne tako kot finančna, ki predstavlja samo koristi lastnika kapitala. Denarni tokovi iz finančne analize se štejejo kot izhodišče ekonomske analize.

Pri ekonomski analizi izhajamo iz podatkov finančne analize in prav tako na začetku predstavimo predpostavke modela.

<u>Predpostavke ekonomske analize</u>

- diskontna stopnja
- investicijska vrednost
- referenčno obdobje
- izločen vpliv davkov (uporaba konveerzijskih faktorjev)
- nedenarne računovodske postavke
- ekonomski preostanek vrednosti
- ekonomske koristi

Bistvo ekonomske analize je zagotoviti, da ima projekt pozitivne neto koristi za družbo in je posledično upravičen do sofinanciranja s strani Sklada za podnebne spremembe.

Zato je potrebno, da:

- koristi presegajo stroške projekta,
- sedanja vrednost ekonomskih koristi presega neto sedanjo vrednost stroškov.

Da sta ta pogoja izpolnjena se vidi s tem, da je:

- ekonomska neto sedanja vrednost je pozitivna,
- ekonomska interna stopnja donosnosti višja od diskontne stopnje za izračun ekonomske neto sedanje vrednosti (5,0 %),
- razmerje med stroški in koristmi večje od 1.

Cilj analize stroškov in koristi je določiti ekonomsko vrednost projekta z določanjem dodatnih koristi, ki jih bo povzročila implementacija projekta. Projekt ima več indirektnih ekonomskih, družbenih in socialnih vplivov. Projekt je mogoče pravilno oceniti le z upoštevanjem teh vplivov, ti vplivi pa so največkrat povezani z razvojem.

Socialno ekonomska analiza stroškov in koristi je ena izmed metod ekonomskih analiz. Analiza omogoča pregled socialnih in družbenih vplivov implementacije projekta na ekonomijo občin oziroma regije ali celo države. Metodologija je osnovana na izračunu dodatnih prihodkov, proizvodov, ki bodo posredno ustvarjeni zaradi novega projekta. Pri ekonomski analizi smo izhajali iz finančne analize na ravni celotnega projekta.

<u>Izračun ekonomskega denarnega toka investicije</u>

V nadaljevanju prikazujemo primer tabele ekonomskega denarnega toka projekta v EUR

	Stroški		**Koristi**				
Leto	**Stroški naložbe brez DDV**	**Operativni stroški**	**Manj okvar**	**Izpad prihodka**	**Ostanek vrednosti**	**Neto denarni tok**	**Diskontiran NDT**
1 leto							
2 leto							
3 leto							
4 leto							
5 leto							
6 leto							
7 leto							
8 leto							
9 leto							
10 leto							
11 leto							
12 leto							
13 leto							
14 leto							
15 leto							
Skupaj							
Diskont.							

Na podlagi zgornje tabele, se izračunajo naslednji kazalniki ekonomske analize projekta.

Naziv	**Kratica**	**Vrednost**
Ekonomska interna stopnja donosnosti investicije	ERR/C	%
Ekonomska neto sedanja vrednost investicije	ENPV/C	EUR
Stopnja družbene koristnosti	B/C	

2.2.3 Analiza občutljivosti in tveganj

V okviru projekta je potrebno narediti oceno tveganja in analize občutljivosti. Pri določitvi kritičnih spremenljiv je potrebno uporabljena naslednja merila:

- kritične spremenljivke so tiste, katerih 1 % sprememba povzroči več kot 1% spremembo FNPV oz. ENPV.
- kritične spremenljivke so tiste, katerih 1 % sprememba povzroči več kot 1% spremembo FRR oz. ERR.

V okviru analize občutljivosti se navadno spreminjajo / preizkušajo naslednje postavke:

- predračunske vrednosti investicije,
- vrednosti operativnih stroškov,
- vrednost prihodkov,
- sprememba koristi.

2.3 Orodje za pripravo investicijske dokumentacije za javne institucije

Priloga k metodologija je predloga za pripravo dokumenta identifikacije investicijskega dokumenta. V dokumentu so pri vsakem poglavju kratka navodila, ki vodijo pripravljala skozi proces priprave vsebine in finančnih tabel. Finančne tabele so povezane z Excelovim dodatkom in vsebujejo vse finančne izračune.

Obrazložite oz. informacije, ki so v predlogi Wordovega dokumenta vpisane z zeleno barvo je potrebno izbrisati. Zardi napak pri sklicih je potrebno finančne tabele ročno vnesti v Wordov dokument.

Ob zaključku vnašanja podatkov pritisnite na tipkovnici tipko F9 in posodobit vse sklice in kazala v dokumentu.

Količinski plan prodaje

Oz.	Vrsta izdelkov / storitev	EM	1. leto	2. leto	3. leto	4. leto	5. leto
1							
2							
3							
4							
5							
6							
7							

Vrednostni plan prodaje

Oz.	Vrsta izdelkov / storitev	EM	1. leto	2. leto	3. leto	4. leto	5. leto
1							
2							
3							
4	0						
5	0						
6	0						
7	0						
	Skupaj		-	-	-	-	-

Količinski načrt nabave materiala oz. blaga

Oz.	Vrsta materiala/polizdelka/izdelka	EM	1. leto	2. leto	3. leto	4. leto	5. leto
1							
2							
3							
4							
5							
6							
7							

Vrednostni načrt nabave materiala oz. blaga

Oz.	Vrsta materiala/polizdelka/izdelka	EM	1. leto	2. leto	3. leto	4. leto	5. leto
1							
2							
3							
4							
5							
6							
7							
	Skupaj		-	-	-	-	-

Stroški poslovanja

Oz.	Vrsta stroškov	mesečni	1. leto	2. leto	3. leto	4. leto	5. leto
I	**Stalni stroški**	**0**	**0**	**0**	**0**	**0**	**0**
1	Amortizacija	0	0	0	0	0	0
2	Plače	0	0	0	0	0	0
3	Prispevki 16,1 %	0	0	0	0	0	0
5	Vzdrževanje opreme	0	0	0	0	0	0
6	Malica	0	0	0	0	0	0
7	Prevoz	0	0	0	0	0	0
8	Računovodstvo	0	0	0	0	0	0
9	Telefon	0	0	0	0	0	0
10	Najemnina, ogrevanje, elektrika	0	0	0	0	0	0
II	**Spremenljivi stroški**	**0**	**0**	**0**	**0**	**0**	**0**
1	Nabava materiala	0	0	0	0	0	0
2	Kilometrina	0	0	0	0	0	0
3	Reklama	0	0	0	0	0	0
4	Pisarniški material	0	0	0	0	0	0
5	Nepredvideni stroški	0	0	0	0	0	0
6	Drobni inventar	0	0	0	0	0	0
7	Zavarovanje	0	0	0	0	0	0
8	Ostali stroški	0	0	0	0	0	0
III	**Skupaj**	-	-	-	-	-	-

Nabava osnovnih sredstev

Oz.	Osnovno sredstvo	1. leto	2. leto	3. leto	4. leto
1					
2					
3					
4					
5					
6					
7					
	Skupaj	-	-	-	-

Amortizacija

Oz.	Osnovno sredstvo	Vrednost	Am.st.	1. leto	2. leto	3. leto	4. leto	5. leto
1		-	0.00%	0	0	0	0	0
2		-	0.00%	0	0	0	0	0
3		-	0.00%	0	0	0	0	0
4		-	0.00%	0	0	0	0	0
5		-	0.00%	0	0	0	0	0
6		-	0.00%	0	0	0	0	0
7		-	0.00%	0	0	0	0	0
	Skupaj	-		-	-	-	-	-

Projekcija Bilance stanja

	Postavke	1. leto	2. leto	3. leto	4. leto	5. leto
A.	Dolgoročna sredstva	0	0	0	0	0
I.	Neopred.sredstva in DPČR	0	0	0	0	0
II.	Opredmetena OS	0	0	0	0	0
1.	Zemljišča	0	0	0	0	0
2.	Poslovni prostor/zgradba	0	0	0	0	0
3.	Oprema, vozila, mehaniz.	0	0	0	0	0
4.	Računalniki in račun.oprema	0	0	0	0	0
5.	Druga oprema	0	0	0	0	0
III.	Naložbene nepremičnine	0	0	0	0	0
IV.	Dolgoročne finančne naložbe	0	0	0	0	0
V.	Dolgoročne poslovne terjatve	0	0	0	0	0
VI.	Odložene terjatve za davek	0	0	0	0	0
B.	Kratkoročna sredstva	0	0	0	0	0
I.	Sredstva za prodajo	0	0	0	0	0
II.	Zaloge	0	0	0	0	0
III.	Kratkoročne finančne naložbe	0	0	0	0	0
IV.	Kratkoročne poslovne terjatve	0	0	0	0	0
V.	Denarna sredstva	0	0	0	0	0
C.	Kratkoročne AČR	0	0	0	0	0
	SREDSTVA	**0**	**0**	**0**	**0**	**0**
A.	Kapital	0	0	0	0	0
I.	Vpoklican kapital	0	0	0	0	0
II.	Kapitalske rezerve	0	0	0	0	0
III.	Rezerve iz dobička	0	0	0	0	0
IV.	Presežek iz prevrednotenja	0	0	0	0	0
V.	Prenesen čisti dobiček/izgu.	0	0	0	0	0
VI.	Čisti dobiček / izguba	0	0	0	0	0
B.	Rezervacije in DAČR	0	0	0	0	0
1	Rezervacije	0	0	0	0	0
2	Dolgoročne AČR	0	0	0	0	0
C.	Dolgoročne obveznosti	0	0	0	0	0
I.	Dolgoročne finančne obvez.	0	0	0	0	0
II.	Dolgoročne poslovne obvez.	0	0	0	0	0
III.	Odložene obvezno. za davek	0	0	0	0	0
Č.	Kratkoročne obveznosti	0	0	0	0	0
I.	Obveznosti za odtujitev	0	0	0	0	0
II.	Kratkoročne finančne obvez.	0	0	0	0	0
III.	Kratkoročne poslovne obvez.	0	0	0	0	0
D.	Kratkoročne PČR	0	0	0	0	0
	OBVEZNOSTI DO VIROV	**0**	**0**	**0**	**0**	**0**
		0	0	0	0	0

Projekcija Izkaza poslovnega izida

	Postavke	1. leto	2. leto	3. leto	4. leto	5. leto
A.	Čisti prihodki od prodaje	0	0	0	0	0
1	Čisti prih. na domačem trgu	0	0	0	0	0
2	Čisti prihodki na trgu EU	0	0	0	0	0
3	Čisti prih. na trgu izven EU	0	0	0	0	0
B.	Drugi poslovni prihodki	0	0	0	0	0
C.	Kosmati prihodki od poslov.	0	0	0	0	0
I.	Stroški blaga, mat. in storit.	0	0	0	0	0
1	Nabavna vrednost prodanega blaga	0	0	0	0	0
2	stroški porabljenega mater.	0	0	0	0	0
2.1.	Stroški surovin in osnovnega materiala	0	0	0	0	0
2.2.	Stroški pom. mater.- energija	0	0	0	0	0
2.3.	Stroški nadom. delov za OS	0	0	0	0	0
2.4.	Drugi stroški materiala	0	0	0	0	0
3	Stroški storitev	0	0	0	0	0
3.1.	Stroški promocijskih aktivnosti	0	0	0	0	0
3.2.	Stroški storitev	0	0	0	0	0
3.3.	Stroški prevoznih storitev	0	0	0	0	0
3.4.	Stroški storitev vzdrževanja	0	0	0	0	0
3.5.	Stroški najemnin	0	0	0	0	0
3.6.	Stroški drugih storitev	0	0	0	0	0
II.	Stroški dela	0	0	0	0	0
1	Stroški plač (BTO, BTO)	0	0	0	0	0
2	Stroški pokojninskega zav.	0	0	0	0	0
3	Stroški drugih zavarovanj	0	0	0	0	0
4	Drugi stroški dela	0	0	0	0	0
III	Odpis vrednosti, amortizac.	0	0	0	0	0
A.	Neopredmetena sredstva	0	0	0	0	0
B.	Opredmetena OS	0	0	0	0	0
1	Poslovni prostor / zgradba	0	0	0	0	0
2	Oprema, vozila, mehanizac.	0	0	0	0	0
3	Računalniki in račun.oprema	0	0	0	0	0
4	Drugo	0	0	0	0	0
IV.	Drugi poslovni odhodki	0	0	0	0	0
E.	Dobiček / izguba iz poslov.	0	0	0	0	0
F.	Finančni prihodki	0	0	0	0	0
G.	Finančni odhodki	0	0	0	0	0
H.	Dobiček / izguba iz red.delo.	0	0	0	0	0
I	Drugi prihodki	0	0	0	0	0
J	Drugi odhodki	0	0	0	0	0
K	Celotni dobiček / izguba	0	0	0	0	0
L.	Davek iz dobička	0	0	0	0	0
M.	**Čisti dobiček / izguba**	**0**	**0**	**0**	**0**	**0**
N.	Število zaposl. na 31.12.	0	0	0	0	0

Denarni tok

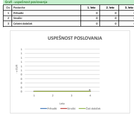
Oz.	Postavke	1. leto	2. leto	3. leto	4. leto	5. leto
I.	**Začetni saldo**	**0**	**0**	**0**	**0**	**0**
II.	**Prilivi**					
1	Prilivi od prodaje	0	0	0	0	0
2	Lastna sredstva	0	0	0	0	0
3		0	0	0	0	0
	Skupaj prilivi	0	0	0	0	0
III.	**Odlivi**					
4	Stroški brez amortizacije	0	0	0	0	0
5	Plače	0	0	0	0	0
6	Ostali stroški	0	0	0	0	0
7	Odplačilo anuitet	0	0	0	0	0
8	Davek iz dobička	0	0	0	0	0
9	Nabava opreme	0	0	0	0	0
	Skupaj odlivi	0	0	0	0	0
IV.	**Končni saldo**	**0**	**0**	**0**	**0**	**0**

Kazalniki uspešnosti

prag rentabilnosti	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
ekonomocnost	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
donosnost	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
prag.rent.%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Stalni stroški	0	0	0	0	0	
Spremenljivi stroški	0	0	0	0	0	
Stroški skupaj	0	0	0	0	0	

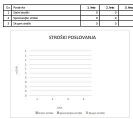
Grafi - uspešnost poslovanja

Oz.	Postavke	1. leto	2. leto	3. leto	4. leto	5. leto
1	Prihodki	0	0	0	0	0
2	Stroški	0	0	0	0	0
3	Celotni dobiček	0	0	0	0	0



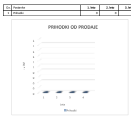
Graf - stroški poslovanja

Oz.	Postavke	1. leto	2. leto	3. leto	4. leto	5. leto
1	Stalni stroški	0	0	0	0	0
2	Spremenljivi stroški	0	0	0	0	0
3	Skupni stroški	0	0	0	0	0



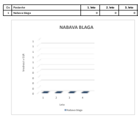
Graf - prihodki od prodaje

Oz.	Postavke	1. leto	2. leto	3. leto	4. leto	5. leto
1	Prihodki	0	0	0	0	0



Graf - nabava blaga

Oz.	Postavke	1. leto	2. leto	3. leto	4. leto	5. leto
1	Nabava blaga	0	0	0	0	0



Navodilo

Podatki se vnašajo v celice, ki so obarvane z rumeno

V nadaljevanju prikazujemo kazalo celotnega delovnega zvezka s kratkimi navodili. Ob celicah so tudi navodila, kar je označeno (kot je v celici C8, kjer se vstavi naslov).

Naziv projekta	

Vnos glavnih parametrov modela	Enota	Vrednost
Prvo leto projekcije	Leto	2017
Doba izvajanja projekta	Št. let	4
Valuta za izračun modela	#	EUR
Cene	#	stalne
Finančna diskontna stopnja - realna	%	4%
Socialno-ekonomska diskontna stopnja	%	5%

Referenčno obdobje (ekonomska doba proj.)	Št. let	15	
Referenčno obdobje (od / do leta)	leto	2017	2031

Max. sofinanciranje prioritete	%	

Inflacija	1.00000	1.01800	1.03938	1.06328
Postavka	**2017**	**2018**	**2019**	**2020**
Stopna inflacije (v %)	1.4	1.8	2.1	2.3
Koeficient inflacije	1.0000	1.0180	1.0210	1.0230

Vir podatkov: UMAR, marec 2019

1.1 Vrednost stroškov projekta v stalnih cenah

1.1.1 Skupna vrednost projekta po kategorijah stroškov, dinamika po letih brez DDV, stalen cene

Oz.	Vrste stroškov	2017	2018	2019	2020	Skupaj brez DDV	DDV	Skupaj z DDV	Delež v %	Stopnja DDV
I.	**Stroški storitev zunanjih izvajalcev**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**#DIV/0!**	
1.	Stroški investicijske dokumentacije					0.00	0.00	0.00	#DIV/0!	
2.	Stroški priprave razpisne dokumentacije					0.00	0.00	0.00	#DIV/0!	
3.	Stroški vodenja projekta in strokovni nadzor					0.00	0.00	0.00	#DIV/0!	
4.	Drugi stroški zunanjih izvajalcev					0.00	0.00	0.00	#DIV/0!	
II.	**Nakup ali gradnja nepremičnin**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**#DIV/0!**	
1.	Nakup nepremičnine					0.00	0.00	0.00	#DIV/0!	
2.	Nakup premičnin					0.00	0.00	0.00	#DIV/0!	
3.	Gradbena dela					0.00	0.00	0.00	#DIV/0!	
4.						0.00	0.00	0.00	#DIV/0!	
5.						0.00	0.00	0.00	#DIV/0!	
6.	Nepredvidena dela					0.00	0.00	0.00	#DIV/0!	
III.	**Informiranje in obveščanje javnosti**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**#DIV/0!**	
1.	Stroški informiranja in obveščanja					0.00	0.00	0.00	#DIV/0!	22.00%
IV.	**VMESNA VSOTA (I.+II.+III.)**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**#DIV/0!**	
1.	Vrednost DDV	0.00	0.00	0.00	0.00	0.00				
V.	**SKUPAJ INVESTICIJSKI STROŠKI (I.+II.+III.)**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**				

1.1.2 Skupna vrednost projekta po letih, stalne cene

Oz.	Vrste stroškov	Vrednost	DDV	Skupaj z DDV
I.	**Stroški storitev zunanjih izvajalcev**	**0.00**	**0.00**	**0.00**
1.	Stroški investicijske dokumentacije	0.00	0.00	0.00
2.	Stroški priprave razpisne dokumentacije	0.00	0.00	0.00
3.	Stroški vodenja projekta in strokovni nadzor	0.00	0.00	0.00
4.	Drugi stroški zunanjih izvajalcev	0.00	0.00	0.00
II.	**Nakup ali gradnja nepremičnin**	**0.00**	**0.00**	**0.00**
1.	Nakup nepremičnine	0.00	0.00	0.00
2.	Nakup premičnin	0.00	0.00	0.00
3.	Gradbena dela	0.00	0.00	0.00
4.	0	0.00	0.00	0.00
5.	0	0.00	0.00	0.00
6.	Nepredvidena dela	0.00	0.00	0.00
III.	**Informiranje in obveščanje javnosti**	**0.00**	**0.00**	**0.00**
1.	Stroški informiranja in obveščanja	0.00	0.00	0.00
IV.	**SKUPAJ INVESTICIJSKI STROŠKI (I.+II.+III.)**	**0.00**	**0.00**	**0.00**
V.	***Delež po letih***	***1.18%***	***9.23%***	***100%***

1.2 Vrednsot stroškov projekta v tekočih cenah

1.2.1 Skupna vrednost projekta po kategorijah stroškov, dinamika po letih brez DDV, v tekočih cenah

Oz.	Vrste stroškov	2017	2018	2019	2020	Skupaj brez DDV	DDV	Skupaj z DDV	Delež v %	Stopnja DDV
I.	**Stroški storitev zunanjih izvajalcev**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**#DIV/0!**	
1.	Stroški investicijske dokumentacije	0.00	0.00	0.00	0.00	0.00	0.00	0.00	#DIV/0!	0.00%
2.	Stroški priprave razpisne dokumentacije	0.00	0.00	0.00	0.00	0.00	0.00	0.00	#DIV/0!	0.00%
3.	Stroški vodenja projekta in strokovni nadzor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	#DIV/0!	0.00%
4.	Drugi stroški zunanjih izvajalcev	0.00	0.00	0.00	0.00	0.00	0.00	0.00	#DIV/0!	0.00%
II.	**Nakup ali gradnja nepremičnin**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**#DIV/0!**	
1.	Nakup nepremičnine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	#DIV/0!	0.00%
2.	Nakup premičnin	0.00	0.00	0.00	0.00	0.00	0.00	0.00	#DIV/0!	0.00%
3.	Gradbena dela	0.00	0.00	0.00	0.00	0.00	0.00	0.00	#DIV/0!	0.00%
4.	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	#DIV/0!	0.00%
5.	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	#DIV/0!	0.00%
6.	Nepredvidena dela	0.00	0.00	0.00	0.00	0.00	0.00	0.00	#DIV/0!	0.00%
III.	**Informiranje in obveščanje javnosti**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**#DIV/0!**	
1.	Stroški informiranja in obveščanja	0.00	0.00	0.00	0.00	0.00	0.00	0.00	#DIV/0!	22.00%
IV.	**VMESNA VSOTA (I.+II.+III.)**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**#DIV/0!**	
1.	Vrednost DDV	0.00	0.00	0.00	0.00	0.00				
V.	**SKUPAJ INVESTICIJSKI STROŠKI (I.+II.+III.)**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**				

1.2.2 Skupna vrednost projekta po letih, tekoče cene

Oz.	Vrste stroškov	Vrednost	DDV	Skupaj z DDV
I.	**Stroški storitev zunanjih izvajalcev**	**0.00**	**0.00**	**0.00**
1.	Stroški investicijske dokumentacije	0.00	0.00	0.00
2.	Stroški priprave razpisne dokumentacije	0.00	0.00	0.00
3.	Stroški vodenja projekta in strokovni nadzor	0.00	0.00	0.00
4.	Drugi stroški zunanjih izvajalcev	0.00	0.00	0.00
II.	**Nakup ali gradnja nepremičnin**	**0.00**	**0.00**	**0.00**
1.	Nakup nepremičnine	0.00	0.00	0.00
2.	Nakup premičnin	0.00	0.00	0.00
3.	Gradbena dela	0.00	0.00	0.00
4.	0	0.00	0.00	0.00
5.	0	0.00	0.00	0.00
6.	Nepredvidena dela	0.00	0.00	0.00
III.	**Informiranje in obveščanje javnosti**	**0.00**	**0.00**	**0.00**
1.	Stroški informiranja in obveščanja	0.00	0.00	0.00
IV.	**SKUPAJ INVESTICIJSKI STROŠKI (I.+II.+III.)**	**0.00**	**0.00**	**0.00**
V.	***Delež po letih***	***1.18%***	***9.23%***	***100%***

1.3 Skupini projektni stroški, upravičeni in neupravičeni stroški

1.3.1 Skupna vrednost projekta po letih, stalne cene

Oz.	Vrste stroškov	2017	2018
I.	**Stroški storitev zunanjih izvajalcev**	**0.00**	**0.00**
1.	Stroški investicijske dokumentacije	0.00	0.00
2.	Stroški priprave razpisne dokumentacije	0.00	0.00
3.	Stroški vodenja projekta in strokovni nadzor	0.00	0.00
4.	Drugi stroški zunanjih izvajalcev	0.00	0.00
II.	**Nakup ali gradnja nepremičnin**	**0.00**	**0.00**
1.	Nakup nepremičnine	0.00	0.00
2.	Nakup premičnin	0.00	0.00
3.	Gradbena dela	0.00	0.00
4.	0	0.00	0.00
5.	0	0.00	0.00
6.	Nepredvidena dela	0.00	0.00
III.	**Informiranje in obveščanje javnosti**	**0.00**	**0.00**
1.	Stroški informiranja in obveščanja	0.00	0.00
IV.	**SKUPAJ INVESTICIJSKI STROŠKI (I.+II.+III.)**	**0.00**	**0.00**
V.	***Delež po letih***	***1.18%***	***9.23%***

1.3.2 Skupna vrednost projekta po letih v tekočih cenah

Oz.	Vrste stroškov	2017	2018
I.	**Stroški storitev zunanjih izvajalcev**	**0.00**	**0.00**
1.	Stroški investicijske dokumentacije	0.00	0.00
2.	Stroški priprave razpisne dokumentacije	0.00	0.00
3.	Stroški vodenja projekta in strokovni nadzor	0.00	0.00
4.	Drugi stroški zunanjih izvajalcev	0.00	0.00
II.	**Nakup ali gradnja nepremičnin**	**0.00**	**0.00**
1.	Nakup nepremičnine	0.00	0.00
2.	Nakup premičnin	0.00	0.00
3.	Gradbena dela	0.00	0.00
4.	0	0.00	0.00
5.	0	0.00	0.00
6.	Nepredvidena dela	0.00	0.00
III.	**Informiranje in obveščanje javnosti**	**0.00**	**0.00**
1.	Stroški informiranja in obveščanja	0.00	0.00
IV.	**SKUPAJ INVESTICIJSKI STROŠKI (I.+II.+III.)**	**0.00**	**0.00**
V.	***Delež po letih***	***1.18%***	***9.23%***

1.3.3 Skupna vrednost projekta po letih v tekočih cenah

Oz.	Vrste stroškov	2017	2018
UPRAVIČENI STROŠKI			
I.	**Stroški storitev zunanjih izvajalcev**	**0.00**	**0.00**
1.	Stroški investicijske dokumentacije		
2.	Stroški priprave razpisne dokumentacije		
3.	Stroški vodenja projekta in strokovni nadzor		
4.	Drugi stroški zunanjih izvajalcev		
II.	**Nakup ali gradnja nepremičnin**	**0.00**	**0.00**
1.	Nakup nepremičnine		
2.	Nakup premičnin		
3.	Gradbena dela		
4.	0		
5.	0		
6.	Nepredvidena dela		
III.	**Informiranje in obveščanje javnosti**	**0.00**	**0.00**
1.	Stroški informiranja in obveščanja		
IV.	**SKUPAJ UPRAVIČENI STROŠKI (I.+II.+III.)**	**0.00**	**0.00**
NEUPRAVIČENI STROŠKI			
V.	**Stroški storitev zunanjih izvajalcev**	**0.00**	**0.00**
1.	Stroški investicijske dokumentacije	0.00	0.00
2.	Stroški priprave razpisne dokumentacije	0.00	0.00
3.	Stroški vodenja projekta in strokovni nadzor	0.00	0.00
4.	Drugi stroški zunanjih izvajalcev	0.00	0.00
VI.	**Nakup ali gradnja nepremičnin**	**0.00**	**0.00**
1.	Nakup nepremičnine	0.00	0.00
2.	Nakup premičnin	0.00	0.00
3.	Gradbena dela	0.00	0.00
4.	0	0.00	0.00
5.	0	0.00	0.00
6.	Nepredvidena dela	0.00	0.00
VII.	**Informiranje in obveščanje javnosti**	**0.00**	**0.00**
1.	Stroški informiranja in obveščanja	0.00	0.00
VIII.	**SKUPAJ NEUPRAVIČENI STROŠKI (V.+VI.+VII.)**	**0.00**	**0.00**
IX.	**SKUPAJ VSO STROŠKI (IV.+VIII.)**	**0.00**	**0.00**

2019	2020	Skupaj z DDV
0.00	**0.00**	**0.00**
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	**0.00**	**0.00**
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	**0.00**	**0.00**
0.00	0.00	0.00
0.00	**0.00**	**0.00**
62.33%	***27.26%***	***100%***

2019	2020	Skupaj z DDV
0.00	**0.00**	**0.00**
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	**0.00**	**0.00**
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	**0.00**	**0.00**
0.00	0.00	0.00
0.00	**0.00**	**0.00**
62.33%	***27.26%***	***100%***

2019	2020	Skupaj z DDV
0.00	**0.00**	**0.00**
		0.00
		0.00
		0.00
		0.00
0.00	**0.00**	**0.00**
		0.00
		0.00
		0.00
		0.00
		0.00
		0.00
0.00	**0.00**	**0.00**
		0.00
0.00	**0.00**	**0.00**
0.00	**0.00**	**0.00**
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	**0.00**	**0.00**
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	**0.00**	**0.00**
0.00	0.00	0.00
0.00	**0.00**	**0.00**
0.00	**0.00**	**0.00**

2.1 Viri financiranja s finančnim načrtom

Oz.	Postavka	Vrednosti po letih		
		2017	2018	2019
I.	**Upravičeni stroški**	**0.00**	**0.00**	**0.00**
1.1.	ESRR			
1.2.	Slovenska udeležba proračuna RS			
1.3.	Investitor	0.00	0.00	0.00
II.	**Neupravičeni stroški**	**0.00**	**0.00**	**0.00**
2.2.	Neupravičeni stroški	0.00	0.00	0.00
A.	**SKUPAJ STROŠKI**	**0.00**	**0.00**	**0.00**
B.	**Deleži po letih (%)**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**

Oz.	Opis aktivnosti	2017	2018	2019
FIN	Upravičeni stroški po letih	0.00	0.00	0.00
FIN	Neupravičeni stroški	0.00	0.00	0.00

2.2 Skupna vrednost projekta, upravičeni in neupravičeni stroški, tekoče cene

Oz.	Opis aktivnosti	Investicijski stroški skupaj (A+B+C+D)	Upravičeni str. do sofinan. (A)	Upravičeni str. drugi (B)
I.	**Stroški storitev zunanjih izvajalcev**	**0.00**	**0.00**	**0.00**
1.	Stroški investicijske dokumentacije	0.00		
2.	Stroški priprave razpisne dokumentacije	0.00		
3.	Stroški vodenja projekta in strokovni nadzor	0.00		
4.	Drugi stroški zunanjih izvajalcev	0.00		
II.	**Gradnja nepremičnin**	**0.00**	**0.00**	**0.00**
1.	Nakup nepremičnine	0.00		
2.	Nakup premičnin	0.00		
3.	Gradbena dela	0.00		
4.	0	0.00		
5.	0	0.00		
6.	Nepredvidena dela	0.00		
III.	**Informiranje in obveščanje javnosti**	**0.00**	**0.00**	**0.00**
1.	Stroški informiranja in obveščanja	0.00		
IV.	**SKUPAJ INVESTICIJSKI STROŠKI (I.+II.+III.)**	**0.00**	**0.00**	**0.00**

V.	***Delež po letih***	***#DIV/0!***	***#DIV/0!***	***#DIV/0!***

	SKUPAJ	Delež po viru
2020		
0.00	**0.00**	**#DIV/0!**
	0.00	#DIV/0!
	0.00	#DIV/0!
0.00	0.00	#DIV/0!
0.00	**0.00**	**#DIV/0!**
0.00	0.00	#DIV/0!
0.00	**0.00**	**#DIV/0!**
#DIV/0!	**#DIV/0!**	

0.00

FINANČN

Viri financiranja investicije *(vrednosti v evrih)*

Skupni investicijskih stroški	Sredstva EU skupnosti	Slovenska udeležba za financiranje KP
100%	*#DIV/0!*	*#DIV/0!*
0.00	*0.00*	*0.00*

Sredstva sofinanciranja EU skupnosti po letih *(vrednosti v e*

Skupaj	2017	2018
0.00	*0.00*	*0.00*
100%	*#DIV/0!*	*#DIV/0!*

2020	Skupaj z DDV
0.00	0.00
0.00	0.00

Neupravičeni stroški - drugi (C)	Neupravičeni stroški - DDV (D)
0.00	**0.00**
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	**0.00**
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	**0.00**
0.00	0.00
0.00	**0.00**

#DIV/0!	#DIV/0!

II NAČRT

Nacionalna javna sredstva	Nacionalna zasebna sredstva	Drugi viri
	-	-
#DIV/0!	*#DIV/0!*	*#DIV/0!*
0.00		

vrih)

2019	2020
0.00	*0.00*
#DIV/0!	*#DIV/0!*

3.1 Izračun ponderirane življenjske dobe projekta

Investicija	Vrednost	Amortizacijska stopnja	Število let
	0.00 €	3.00%	33.333
	0.00 €	3.00%	33.333
	0.00 €	8.00%	12.500
SKUPAJ	**0.00 €**		
			Ponderirana aritmetična sredina dobe trajanja
			Št. let amortizacije v ekonomski dobi
			Dodatno število let po ekonomski dobi

3.2 Osnove za izračun amortizacije in amortizacijske stopnje

Investicija	Vrednost	Amortizacijska stopnja	Število let
0	0.00 €	3.00%	33.3
0	0.00 €	3.00%	33.3
0	0.00 €	8.00%	12.5
SKUPAJ	**0.00 €**		

3.3 Izračun investicijskega vzdrževanja za projekt

Parametri	2017	2018	2019
Skupaj	-	-	-

Ponder	Število let
#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!
#DIV/0!	#DIV/0!
#DIV/0!	
11	
#DIV/0!	#DIV/0!

Letni znesek amortizacije	Prvo leto amortizacije
-	2020
-	2021
-	2021

2020	2021	2022	2023	2024	2025
-	-	-	-	-	-

2026	2027	2028	2029	2030	2031
-	-	-	-	-	-

2032	2033	2034	2035	2036	2037
-	-	-	-	-	-

2038	2039	2040	2041	2042	2043
-	-	-	-	-	-

4.1 Izračuna stroškov za projekt

4.1.1 Izhodiščni scenarij

Vrste stroška	od 2017 naprej	
Obratovalni stroški		EUR/leto
Stroški tekočega vzdrževanja		EUR/leto
		EUR/leto
		EUR/leto
		EUR/leto
Skupaj stroški	0.00	EUR/leto

Stroški investicijskega vzdrževanja	Vrednost	
Strošek investicijskega vzdrževanja		EUR
Strošek investicijskega vzdrževanja	0.00	EUR

Vstavite pred
vzdrževanju o

4.1.2 Scenarij s projektom

Vrste stroška		
Obratovalni stroški		EUR/leto
Stroški tekočega vzdrževanja		EUR/leto
		EUR/leto
		EUR/leto
		EUR/leto
Skupaj stroški	0.00	EUR/leto

Stroški investicijskega vzdrževanja	Vrednost	
Strošek investicijskega vzdrževanja		EUR
Strošek investicijskega vzdrževanja	0.00	EUR

Opedelitev st

4.1.3 Izvedbe investicije z lastnimi sredstvi

Vrste stroška		
Obratovalni stroški		EUR/leto
Stroški tekočega vzdrževanja		EUR/leto
		EUR/leto
		EUR/leto
		EUR/leto
Skupaj stroški	0.00	EUR/leto

Stroški investicijskega vzdrževanja	Vrednost	
Strošek investicijskega vzdrževanja		EUR

Vrste stroška
Obratovalni s
Stroški tekoč
Skupaj strošk
Stroški invest
Strošek inves

Strošek investicijskega vzdrževanja	0.00	EUR	Strošek inves

4.3 Stroški obratovanja in vzdrževanja za skupen projekt Bivalne skupnosti za ranljive skupine, po

4.3.1 Scenarij brez projekta

	1	2	3	4
Postavke	**2017**	**2018**	**2019**	**2020**
Operativni stroški	0.00	0.00	0.00	0.00
Stroški tekočega vzdrževanja	0.00	0.00	0.00	0.00
Stroški investicijskega vzdrževanja	0.00	0.00	0.00	0.00
SKUPAJ	**0.00**	**0.00**	**0.00**	**0.00**

4.3.2 Scenarij s projektom

Postavke	**2017**	**2018**	**2019**	**2020**
Operativni stroški	0.00	0.00	0.00	0.00
Stroški tekočega vzdrževanja	0.00	0.00	0.00	0.00
Stroški investicijskega vzdrževanja	0.00	0.00	0.00	0.00
SKUPAJ	**0.00**	**0.00**	**0.00**	**0.00**

4.3.3 Inkrementalna metoda (razlika scenarija: s projektom - brez projekta)

Postavke	**2017**	**2018**	**2019**	**2020**
Stroški inkrementalno	0.00	0.00	0.00	0.00

4.3.4 Izvedbe investicije z lastnimi sredstvi

Postavke	**2017**	**2018**	**2019**	**2020**
Operativni stroški				
Stroški tekočega vzdrževanja				
Stroški investicijskega vzdrževanja				
SKUPAJ	**0.00**	**0.00**	**0.00**	**0.00**

6.3.5 Inkrementalna metoda (razlika scenarija: s projektom čez x let - brez projekta)

Postavke	**2017**	**2018**	**2019**	**2020**
Skupaj stroški	0.00	0.00	0.00	0.00

postavke za določitev stroškov za izhodiščni scenarij oz. pri obstoječega stanja.

roške po predaji v uporabo.

troški		EUR/leto
ega vzdrževanja		EUR/leto
		EUR/leto
		EUR/leto
		EUR/leto
i	0.00	EUR/leto

icijskega vzdrževanja	Vrednost	
ticijskega vzdrževanja		EUR

ticijskega vzdrževanja	0.00	EUR

scenariju in inkrementalno

5	6	7	8	9	10	11	12
2021	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2021	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2021	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2021	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2021	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

d

13	14	15	16	17	18	19	20
2029	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**	**2036**
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2029	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**	**2036**
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2029	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**	**2036**
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2029	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**	**2036**
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2029	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**	**2036**
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

21	22	23	24	25	26	27
2037	**2038**	**2039**	**2040**	**2041**	**2042**	**2043**
0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2037	**2038**	**2039**	**2040**	**2041**	**2042**	**2043**
0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2037	**2038**	**2039**	**2040**	**2041**	**2042**	**2043**
0.00	0.00	0.00	0.00	0.00	0.00	0.00

2037	**2038**	**2039**	**2040**	**2041**	**2042**	**2043**
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2037	**2038**	**2039**	**2040**	**2041**	**2042**	**2043**
0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.1 Izračuna prihodkov za projekt

5.1.1 Izhodiščni scenarij

Postavka	Količina	Cena	Skupaj
Prihodki			0.00
SKUPAJ prihodki			0.00

Opobme in d

5.1.2 Scenarij s projektom

Postavka	Količina	Cena	Skupaj
Prihodki			0.00
SKUPAJ prihodki			0.00

Opobme in d

5.1.3 Izvedbe investicije z lastnimi sredstvi

Postavka	Količina	Cena	Skupaj
Prihodki			0.00
SKUPAJ prihodki			0.00

Opobme in d

5.2 Prihodki za projekt, po posameznem scenariju in inkrementalno

5.2.1 Izhodični scenarij

	1	2	3	4	5
Postavke	**2017**	**2018**	**2019**	**2020**	**2021**
Prihodki	0.00	0.00	0.00	0.00	0.00
SKUPAJ	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

5.2.2 Scenarij s projektom

Postavke	2017	2018	2019	2020	2021
Prihodki	0.00	0.00	0.00	0.00	0.00
SKUPAJ	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

5.2.3 Inkrementalna metoda (razlika scenarija: s projektom - brez projekta)

Postavke	2017	2018	2019	2020	2021
Skupaj prihodki	0.00	0.00	0.00	0.00	0.00

5.2.4 Scenarij s projektom financiran z lastnimi sredstvi

Postavke	2017	2018	2019	2020	2021
Prihodki	0.00	0.00	0.00	0.00	0.00
SKUPAJ	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

5.2.5 Inkrementalna metoda (razlika scenarija: s projektom čez x let - brez projekta)

Postavke	2017	2018	2019	2020	2021
Skupaj prihodki	0.00	0.00	0.00	0.00	0.00

lodatne obrazložitve

lodatne obrazložitve

lodatne obrazložitve

6	7	8	9	10	11	12	13	14
2022	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2022	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2022	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2022	2023	2024	2025	2026	2027	2028	2029	2030
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2022	2023	2024	2025	2026	2027	2028	2029	2030
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

15	16	17	18	19	20	21	22	23
2031	**2032**	**2033**	**2034**	**2035**	**2036**	**2037**	**2038**	**2039**
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2031	**2032**	**2033**	**2034**	**2035**	**2036**	**2037**	**2038**	**2039**
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2031	**2032**	**2033**	**2034**	**2035**	**2036**	**2037**	**2038**	**2039**
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2031	2032	2033	2034	2035	2036	2037	2038	2039
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2031	2032	2033	2034	2035	2036	2037	2038	2039
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

24	25	26	27
2040	**2041**	**2042**	**2043**
0.00	0.00	0.00	0.00
0.00	**0.00**	**0.00**	**0.00**

2040	**2041**	**2042**	**2043**
0.00	0.00	0.00	0.00
0.00	**0.00**	**0.00**	**0.00**

2040	**2041**	**2042**	**2043**
0.00	0.00	0.00	0.00

2040	2041	2042	2043
0.00	0.00	#REF!	#REF!
0.00	**0.00**	**#REF!**	**#REF!**

2040	2041	2042	2043
0.00	0.00	#REF!	#REF!

6.1. Finančni denarni tok

Diskontna stop. /faktorji	1.04	1.000	0.962	0.925	0.889	0.855	0.822	0.790	0.760	0.731	0.703	0.676	0.650	0.625	0.601	0.577	0.555	0.534	0.513	0.494	0.475	0.456	0.439	0.422	0.406	0.390	0.375	0.361

6.2. Inkrementalna metoda (s - brez projekta)

6.2.1 Denarni tok brez sofinaciranja

Oz.	Postavke	SKUPAJ	DISK. VRED	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
I.	***Skupaj prilivi***	***0.00***	***0.00***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
1.	Prihodki inkrementalno	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.	Ostanek vrednosti	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
II.	***Skupaj odlivi***	***0.00***	***0.00***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
1.	Stroški inkrementalno	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4.	Skupaj investicijski stroški	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
III.	**Neto denarni tok**	**0.00**	**0.00**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
IV.	**Diskontirani neto denarni tok**		**0.00**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

6.2.2 Denarni tok s sofinanciranjem

Oz.	Postavke	SKUPAJ	DISK. VRED	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
I.	***Skupaj prilivi***	***0.00***	***0.00***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
1.	Prihodki	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4.	Viri financiranja	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5.	Ostanek vrednosti	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0											
II.	***Skupaj odlivi***	***0.00***	***0.00***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	0	0	0	0	0	0	0	0	0	0	0	0
1.	Stroški inkrementalno	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.	Skupaj investicijski stroški	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
III.	**Neto denarni tok**	**0.00**	**0.00**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
IV.	**Diskontirani neto denarni tok**		**0.00**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

6.3 Izračun prispevka skupnosti za projekt

Oz.	Postavka		Nediskontirane vred.	Diskontirane vred.
1	*Referenčno obdobje (leta)*	*15*		
2	*Finančna diskontna stopnja*	*4%*		
	Glavni elementi in parametri			
3	*Skupni investicijski stroški (brez nepred.del)*		*0.00 €*	*0.00 €*
4	*Ostanek vrednosti*		*0.00 €*	*0.00 €*
5	*Prihodki*			*0.00 €*
6	*Operativni stroški*			*0.00 €*
	Izračun primanjkljaja v financiranju			
7	*Čisti prihodek = prihodki – operativni stroški + ostanek vrednosti (v EUR, diskontirano) = (5) – (6) + (4)*			*0.00 €*
8	*Naložbeni stroški – čisti prihodek = (3) – (7)*			*0.00 €*
9	*Stopnja primanjkljaja v financiranju (%) = (8) / (3)*		*#DIV/0!*	

Postavka	Brez sofinanciranja skupnosti		Z sofinanciranjem skupnosti	
Finančna interna stopnja donosnosti (%)	*FRR/C*	*#NUM!*	*FRR/K*	*#NUM!*
Neto sedanja vrednosti (€)	*FNPV/C*	*0.00 €*	*FNPV/K*	*0.00 €*

7.1 Ekonomski denarni tok za projekt

Diskontna stop. /faktorji	1.05	1.000

7.1.1 Izračun koristi za projekt

Prikaz koristi projekt

	Postavke		2017
Korist 1			
Korist 2			
Korist 3			
	SKUPAJ		**0**

7.1.2 Ekonomski denarni tok projekt

1

KF	Postavke	SKUPAJ	DISK. VRED	2017
	Skupaj prilivi	***0***	***0***	***0***
	Prihodki	0	0	0
1	Koristi	0	0	0
	Ostanek vrednosti	0	0	0
	Skupaj odlivi	***0***	***0***	***0***
0.84	Stroški	0	0	0
1	Skupaj investicijski stroški	0	0	0
	Neto denarni tok	**0**	**0**	**0**
	Diskontirani neto denarni tok		**0**	**0**

7.1.3 Izračun ekonomskih za projekt

Naziv kazalnika	Kratica	Vrednost
Diskontna stopnja		5.000%
Ekonomska IRR	ERR/C	#NUM!
Ekonomska NPV	ENPV/C	0.00 €
Količnik ekonomske relativne koristnosti	B/C ratio	#DIV/0!
Stopnja družbene koristnosti		#DIV/0!

Koristi	Vrednost na enoto (kjer je primerno)
0	*n.p.*
0	*n.p.*
0	*n.p.*
Ekonomski preostanek vrednosti	*n.p.*
SKUPAJ	*n.p.*

Stroški	Vrednost na enoto (kjer je primerno)
Skupaj investicijski stroški	*n.p.*
Stroški investicijskega vzdrževanja	*n.p.*
SKUPAJ	*n.p.*

	PODATKI O PROJEKTU			
Zap. št.	**Leto**	**Investicijski stroški**	**Stroški**	**Prihodki**
1	2018	0	0	0
2	2019	0	0	0
3	2020	0	0	0
4	2021	0	0	0
5	2022	0	0	0
6	2023	0	0	0
7	2024	0	0	0
8	2025	0	0	0
9	2026	0	0	0
10	2027	0	0	0
11	2028	0	0	0
12	2029	0	0	0
13	2030	0	0	0
14	2031	0	0	0
15	2032	0	0	0
	SKUPAJ	**0.00**	**0.00**	**0.00**

0.952	0.907	0.864	0.823	0.784	0.746	0.711	0.677

2018	2019	2020	2021	2022	2023	2024	2025
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**

2	3	4	5	6	7	8	9
2018	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
0	***0***	***0***	***0***	***0***	***0***	***0***	***0***
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	***0***	***0***	***0***	***0***	***0***	***0***	***0***
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Celotna vrednost (v evrih, diskontirana)	% vseh koristi
0.00	*#DIV/0!*
0.00	*#DIV/0!*
0.00	*#DIV/0!*
0.00	*#DIV/0!*
0.00	*#DIV/0!*

Celotna vrednost (v evrih, diskontirana)	% vseh stroškov
0.00	*#DIV/0!*
0.00	*#DIV/0!*
0.00	*#DIV/0!*

		PODATKI O PROJEKTU - DISKONTIRANE VREDNOSTI				
Ostanek vrednosti	**NDT**	**Investicijski stroški**	**Prihodki**	**Stroški**	**NDT**	**Diskontna stopnja**
0	0	0	0	0	0	1.0000
0	0	0	0	0	0	0.9524
0	0	0	0	0	0	0.9070
0	0	0	0	0	0	0.8638
0	0	0	0	0	0	0.8227
0	0	0	0	0	0	0.7835
0	0	0	0	0	0	0.7462
0	0	0	0	0	0	0.7107
0	0	0	0	0	0	0.6768
0	0	0	0	0	0	0.6446
0	0	0	0	0	0	0.6139
0	0	0	0	0	0	0.5847
0	0	0	0	0	0	0.5568
0	0	0	0	0	0	0.5303
0	0	0	0	0	0	0.5051
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	

0.645	0.614	0.585	0.557	0.530	0.505	0.481	0.458

2026	2027	2028	2029	2030	2031	2032	2033
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**

10	11	12	13	14	15	16	17
2026	**2027**	**2028**	**2029**	**2030**	**2031**	2032	2033
0	***0***	***0***	***0***	***0***	***0***	***0***	***0***
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	***0***	***0***	***0***	***0***	***0***	***0***	***0***
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**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editerranean
green mind

0.436	0.416	0.396	0.377	0.359	0.342	0.326	0.310

2034	2035	2036	2037	2038	2039	2040	2041
					0	0	0
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**

18	19	20	21	22	23	24	25
2034	2035	2036	2037	2038	2039	2040	2041
0	***0***	***0***	***0***	***0***	***0***	***0***	***0***
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	***0***	***0***	***0***	***0***	***0***	***0***	***0***
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**

0.295

2042
0
0

26

2042
0
0
0
0
0
0
0
0
0

8.1 Spremembe finančnega denarnega toka, brez sofinanciranja

FNDT	Postavka spremembe	FNPV	FRR	Sprememba v FNPV	Sprememba v FRR
%	NDT			-	#NUM!
1%	Sprememba prihodkov za +1%	0.00 €	#NUM!	#DIV/0!	#NUM!
-1%	Sprememba prihodkov za -1%	0.00 €	#NUM!	#DIV/0!	#NUM!
1%	Sprememba O&M stroškov za +1%	0.00 €	#NUM!	#DIV/0!	#NUM!
-1%	Sprememba O&M stroškov za -1%	0.00 €	#NUM!	#DIV/0!	#NUM!
1%	Sprememba investicijskih stroškov +1%	0.00 €	#NUM!	#DIV/0!	#NUM!
-1%	Sprememba investicijskih stroškov -1%	0.00 €	#NUM!	#DIV/0!	#NUM!

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Postavka spremembe	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
NDT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sprememba prihodkov za +1%	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sprememba prihodkov za -1%	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sprememba O&M stroškov za +1%	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sprememba O&M stroškov za -1%	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sprememba investicijskih stroškov +1%	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sprememba investicijskih stroškov -1%	0	0	0	0	0	0	0	0	0	0	0	0	0	0

8.2 Spremembe ekonomskega denarnega toka, brez sofinanciranja

ENDT	Postavka spremembe	ENPV	ERR	Sprememba v ENPV	Sprememba v ERR
%	ekonomski NDT			-	#NUM!
1%	Sprememba prihodkov za +1%	0.00 €	#NUM!	#DIV/0!	#NUM!
-1%	Sprememba prihodkov za -1%	0.00 €	#NUM!	#DIV/0!	#NUM!
1%	Sprememba O&M stroškov za +1%	0.00 €	#NUM!	#DIV/0!	#NUM!
-1%	Sprememba O&M stroškov za -1%	0.00 €	#NUM!	#DIV/0!	#NUM!
1%	Sprememba koristi za +1%	0.00 €	#NUM!	#DIV/0!	#NUM!
-1%	Sprememba koristi za - 1%	0.00 €	#NUM!	#DIV/0!	#NUM!

Postavka spremembe	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
ekonomski NDT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sprememba prihodkov za +1%	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sprememba prihodkov za -1%	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sprememba O&M stroškov za +1%	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sprememba O&M stroškov za -1%	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sprememba koristi za +1%	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sprememba koristi za - 1%	0	0	0	0	0	0	0	0	0	0	0	0	0	0

8.3 Analiza občutljivosti

Analiza občutljivosti - testirane variante

Postavke	**% spremembe finančne neto sedanje vrednosti (FNPV/C)**	**Spremembe finančne interne stopnje donosnosti (FRR/C)**	**% spremembe ekonomske neto sedanje vrednosti (ENPV)**	**Spremembe ekonomske interne stopnje donosnosti (ERR)**
Sprememba prihodkov za +1%	*#DIV/0!*	*#NUM!*		
Sprememba prihodkov za -1%	*#DIV/0!*	*#NUM!*		
Sprememba O&M stroškov za +1%	*#DIV/0!*	*#NUM!*		
Sprememba O&M stroškov za -1%	*#DIV/0!*	*#NUM!*		
Sprememba investicijskih stroškov +1%	*#DIV/0!*	*#NUM!*		
Sprememba investicijskih stroškov -1%	*#DIV/0!*	*#NUM!*		
Sprememba prihodkov za +1%			*#DIV/0!*	*#NUM!*
Sprememba prihodkov za -1%			*#DIV/0!*	*#NUM!*
Sprememba O&M stroškov za +1%			*#DIV/0!*	*#NUM!*
Sprememba O&M stroškov za -1%			*#DIV/0!*	*#NUM!*
Sprememba koristi za +1%			*#DIV/0!*	*#NUM!*
Sprememba koristi za - 1%			*#DIV/0!*	*#NUM!*

15

2031
0
0
0
0
0
0
0

2031
0
0
0
0
0
0
0