DELIVERABLE D.T1.1.2

INDIVIDUAL REGIONAL BASELINE REPORT ON LOW CARBON INVESTMENTS FUNDING FOR MAGDEBURG – SAXONY-ANHALT

Version n°1/2019

1.2: Individual Regional Baseline Report on Low Carbon Investments Funding for Magdeburg – Saxony-Anhalt

Baseline assessment of public funds supporting low carbon investments

Partners in volved

PPn°9 – PP HSMD

PPn°10 – PP MULE

Interreg CENTRAL EUROPE

Priority:	2. Cooperating on low-carbon strategies in CENTRAL EUROPE
Specific objective:	2.2 To improve territorial based low-carbon energy planning strategies and policies supporting climate change mitigation
Acronym:	PROSPECT2030
Title:	PROmoting regional Sustainable Policies on Energy and Climate change mitigation Towards 2030
Index number:	CE1373
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1. Background

The work package “T1 assessment of availability and use of public funds dedicated to climate change mitigation” includes collecting data and is intended for this reporting guide (D.T1.1.1). The aim of T1 is to identify and evaluate the use of public funds supporting climate change mitigation in the period of 2014-2020 and especially focus on the implementation of renewable energy systems. The long-term goal is to be able to pronounce recommendations for macro-regional strategies like EUSDR, EUSAIR, EUSBSR, EUSALP.

The starting point of T1 is a baseline assessment of the use of available funding for low-carbon investments in the participating regions from 2014 onwards. The financing programmes to be covered shall include the following main items:

- National/federal funding schemes (grants, subsidized loans, feed in tariffs, building integrated RES schemes)
- Cooperation with private stakeholders (EPC, ESCO schemes, crowdfunding, venture capital, etc.)
- Decentralised funds made available from the ESI Funds through the Partnership Agreements (national, sectoral or regional operative programmes)
- EU low-carbon initiatives (H2020, LIFE, EFSI, ELENA, Jessica, SEFF schemes).

The analysis, provided by all project partners (PP) under the leadership of PP8, will evaluate the adequacy of the funding policy, administrative procedures, planning and implementation structures, dedicated resources and impacts in environmental and economic terms. Where relevant, the environmental impacts will address the whole lifecycle of the supported RES projects. The economic analysis should particularly focus on the cost-effectiveness of the use grants and exploring best practices concerning innovative low-carbon financing solution leveraging to maximum extent private financial resources.

HSMD, as PP9 and MULE, as PP10, are authors of this document, PP9 is responsible for delivering Individual Regional Baseline Report on Low Carbon Investment Funding for Saxony-Anhalt.

2. Presentation of the target region

2.1. General presentation of the target region

The region Saxony-Anhalt is one of 16 federal states in Germany and joined the Federal Republic of Germany in 1990 as a new state, after collapse of the German Democratic Republic.

It is located in de north-eastern part of Germany and with an area of 20,452 km² it makes up ~5.7 % of the total area of Germany. The northern part is mostly characterised by lowland while in the south-west the low mountain ranges of the Harz captivates the land. In the south-east it borders to the urban area of Halle (Saale). In the south, next to the river Saale, the wine production area Saale-Ustrut is located. The Saale is also the second largest river that crosses the region with a length of about 400 km. The longest river Elbe crosses the region having a length of 1094 km. At the waterway crossing near Magdeburg Elbe, Saale, *Mittellandkanal* and *Elbe-Havel-Kanal* cross each other. Around 75% of Saxony-Anhalt is considered as rural area and about 53% of the population lives there.

The state capital Magdeburg is in the middle part of Saxony-Anhalt in the region Magdeburger-Börde. About 10.6% live in the state capital of the total population of Saxony-Anhalt, which are 2,197,438 residents in total. This results to a population density of 108 residents per km², the third-lowest in Germany. The state has the 6th lowest population in Germany which make up only 2.7% in total. Furthermore, the population marks a negative trend. Forecasts predicts a population of 2.09 Mio. in 2025 and only 1.99 Mio in 2030, this corresponds to a population decrease of 30 % since the German Reunification in 1990. [1]

Before the German Reunion the energy supply was mostly covered by brown coal, which nowadays decreased to 14.5% of the primary energy consumption. 33.8% of total consumption is provided by natural gas and 18.7% by renewable energy. For the use of power generation renewable energies make up 53.0% of the total. [2]

Saxony-Anhalt is pervaded by five federal highways, which connect e.g. Berlin to Hannover and Berlin to Munich. In total the region has ~630 km of federal highways and about 3,800 km of country roads. Even some part of the *Transromanica* and “Streets of the family Bismarck” lead through Saxony-Anhalt.

Beside the highways the region is connected by railways of the Deutsche Bahn (DB), which owns most of the railways. Only a short sector between Magdeburg, Halle and Harz is covered by *Abellio Rail Mitteldeutschland*. In addition, the cities have their own public transportation companies for suburban railways or bus transfer.

The nearest airport is Leipzig/ Halle, which is actually on Saxonian area. Saxony-Anhalt only has one airfield that is used only by sport and private pilots. The previous airport Cochstedt filed for insolvency in 2016.

Figure 1: region Saxony-Anhalt, zoom in and out [3]

The GDP in Saxony-Anhalt is 63.5 Bill.in 2018 and occupies the 12th place in country comparison. [4]

The unemployment rate is at 7.7% in 2018 and the 4th highest in the Federal Republic of Germany and is on its lowest rate since the Reunification. [5] Compared to the total unemployment rate in Germany it is yet as twice as high, which is at 4,9% in 2019. [6]

2.2. Potentials for regional low carbon sector development

The highest impact on the energy consumption might have the big section of mechanical chemical industry that is located in Saxony-Anhalt as well as the other known sectors with a high energy consumption like the local and long-distance transportations, the real estate sector and agriculture.

In 2017 the government of Saxony-Anhalt passed a climate and energy concept (KEK) in order to combine the aims for climate protection and increasing energy efficiency, following the coalition contract between the ruling parties in 2016-2020. Its aim is to limit the CO_2-emissions to 31,3 Mio.t CO_2eq/a in the year 2020. Despite the already existing measures Saxony-Anhalt would not reach the set target. In order to do so the government agreed on efforts beyond the existing climate protection programme 2020 and energy concept 2030. Increasing the CO_2-savings builds on two pillars. On one hand the greenhouse gases will be decreased by changing the energy mix to 100% based on renewable energies, on the other hand reducing the GHGs in the five biggest sectors is necessary. These include the sectors energy, transport, buildings, industry/economy as well as agriculture/land use/forestry/nutrition. In addition to the CO_2-emission target in 2020, KEK's efforts will probably result after 2030 so that based on the year 1990 50% of the GHGs are to be saved. That means Saxony-Anhalt has to reduce the emissions of 26.8 Mio. Tonnes CO_2-equivalent compared to 1990 and further 4.5 Mio from 2020 to 2030.

In regard to evaluate new measures five technical working groups were formed following the big sectors responsible for improving their energy efficiency:

- Energy
- Transport
- Buildings
- Industry /economy
- Agriculture/ land use/ forestry/ nutrition

They were joined by different ministries, municipal cooperation and the university and scientific institutions of e.g. Otto-von-Guericke-Universität, Hochschule Magdeburg-Stendal and Fraunhofer-Institute for factory operation and automatization (IFF) and church associations.

In the coalition contract of the ruling parties agreed on the back out of brown coal until 2038, so that the government has to collect measure to ensure that renewable energies can cover the full capacity of energy consumption.

2.3. Renewable energies

2.3.1. Coal phase-out by 2038

Due to the phase-out of lignite by 2038, the full supply of renewable energies will focus in particular on the expansion of photovoltaics and wind energy. Just recently the Federal Government and the four lignite-producing federal states agreed on a decommissioning path for German coal-fired power plants. This federal-state agreement on the coal phase-out was agreed by the Minister Presidents of the States Saxony-Anhalt, Saxony, North Rhine-Westphalia and Brandenburg. Key points of the agreement are

- Possibility of an early phase-out of coal-fired power generation already in 2035
- No use of the Hambacher Forst opencast lignite mine
- Additional gas-fired power plants at the existing power plant sites
- Introduction of an adjustment allowance for employees in coal-fired power plants and in opencast lignite mining
- Structural strengthening law coal regions: Financial aid and structural strengthening of 40 billion euros until 2038
- Addition of further measures to the draft law on structural strengthening, such as an Innovation Centre for University Medicine in Cottbus, new Helmholtz Centres in the Saxon Lausitz and Central German districts, and a "Helmholtz Cluster for Sustainable and Infrastructure-Compatible Hydrogen Economy" in Jülich
- New funding guideline for electricity-intensive companies [7]

In a first draft the German Government around 12 % of the € 40 billion will be allocated to the State of Saxony-Anhalt. [8] The structural strengthening law for coal regions with its details has yet to be passed.

2.3.2. Photovoltaic power plants

The installed power of all photovoltaic systems in Saxony-Anhalt is 2,503 MW. This leads photovoltaic to be on the third among electricity producers from renewable energies (after wind and bio mass plants) with almost 2 Bill. kWh being generated, almost 8% of the consumed energy (in 2017) (see Figure 2). [9]

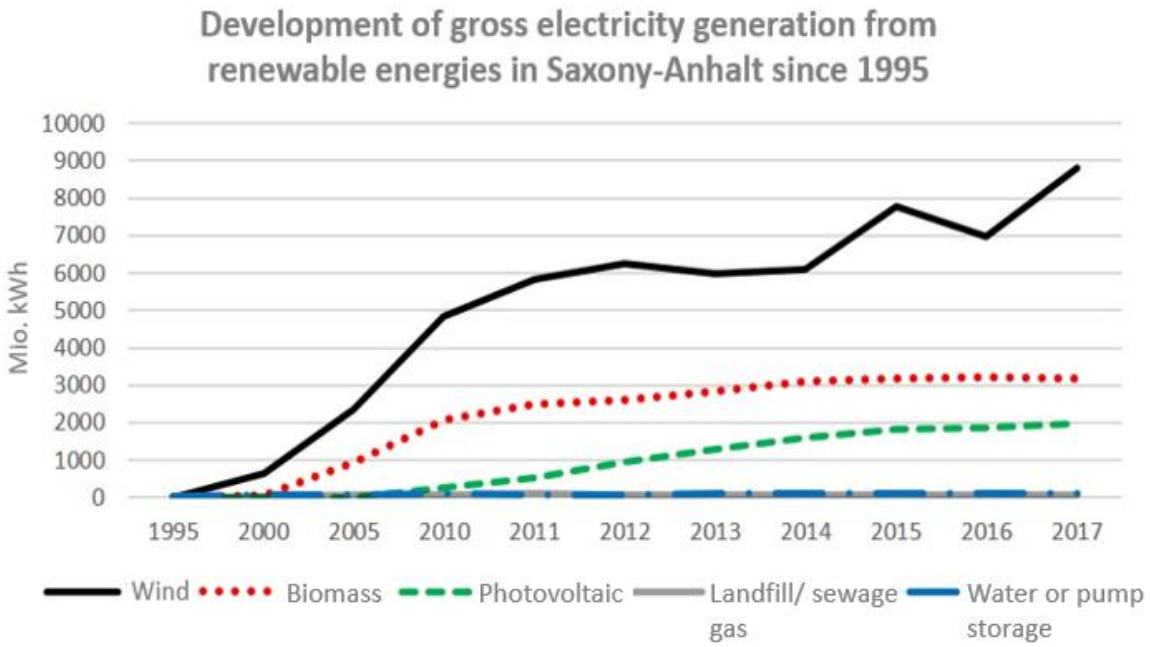


Figure 2: Development of gross electricity generation in Saxony-Anhalt [9]

2.3.3. Wind power

In the nationwide comparison for cumulative onshore wind power, Saxony-Anhalt is on the forth place. The installed power of 2,860 wind turbines amounts to 5,122 MW (see Figure 3). In 2017 the gross generated energy in Saxony-Anhalt was 53 % of renewable energies, this equals 54% of net electricity generation. Wind power provides the region with 8,800 GWh (in 2017), which makes up the major part of 62% of renewable generated electricity. [10]

Figure 3: Expansion of wind power in Saxony-Anhalt [10]

3. Saxony-Anhalt State low-carbon initiatives financed directly through State's budget

Due to the increasing importance of solar power systems, the incentive is to support the installation of photovoltaic plants by offering funding schemes that enhance electricity storage systems. With the *funding of electricity storages for photovoltaic roof systems* up to an installed power of 30kWp, the grant is up to 30% of the eligible expenses, but maximum € 5,000. By adding a charging point for electric vehicles with a charging capacity of at least 3.7 kW a one-off bonus of up to € 1,000 is possible.

Private persons and companies as well as participants of the tenant electricity model (up to 100 kWh) are allowed to apply for the funding. The photovoltaic plant itself is not funded, but it requires that a new photovoltaic system is installed or the power of an existing one has to be increased by 50%. [9] [11]

4. National funding schemes

In Germany exist 47 national funding schemes for three target groups. Differentiation are made between the private and commercial sector and local authorities/ public institutions/ non-profit organisations. Each sector is allowed to apply for their specific or one of the shared funding programmes. The most known programmes are offered by the Credit of reconstruction (KfW) and Federal Office of Economics and Export Control (BAFA). Other less common programmes are from Federal Ministry of Food and Agriculture (BMEL), Federal Ministry of Finance (BMF) and German Federal Foundation for the Environment (DBU). The support programme for renewable energies (n°9 & 10) and offshore wind power are probably one of the most popular, just to name some of them. A list of all national offered programmes including the offering agency, targeted sectors and a short description of what is supported, can be found in the Appendix 1. [12] Analysing the funded projects in Saxony-Anhalt by the KfW for the year 2019, results in € 3 Million in total grand for about 150 projects, nationwide € 39.851 Billion were granted. [13]

One reason for this wide range of funding programmes is based in the *Renewable Energy Law*, which in the year 2000 replaced the previous *Electricity Feed Act* from 1991. The Renewable Energy Law aims to achieve following points:

- to enable a sustainable development of energy supply, especially the interest of climate and environmental protection
- to reduce the economic costs of energy supply, also by taking account of long-term external effects
- to conserve fossil energy resources
- to promote the further development of technologies for the generation of electricity from renewable energy sources [14]

Another pillar of this law is the expansion of the use of renewable energies, which results in the aim to generate 40-45% of the energy by RES until 2025 (until 2035 55-60% and 2050 80%). It also obligates network operators to prioritise the connection of RE into their electricity

network. However, the feed-in tariff or market premium, is only paid for electricity from plants where the production costs of the electricity do not allow economic operation without subsidies. Usually the duration for these subsidies are 20 year. [14]

Whereas plants with less than 100 kW receive a fixed feed-in tariff, depending on the system of the renewable energies, power of the plant and other characteristics (being adjusted before new installations due to technical progress and decreasing costs for installation; correspondingly decreasing in the last years), direct marketing is obligatory for plants with more than 100 kW and the support is paid to the operator as a market premium in addition to the average monthly technology specific market value. Wind and solar power plants above 750 kW and biomass above 150 kW the levels of remuneration are not prescribed. The subsidy has to be determined in tender. [14]

5. Cooperation with private stakeholders

Beside funding schemes, that are managed by national authorities, there also exist some that are offered by cooperation with private stakeholders. The Project Management Agency Julich (PTJ) supports the adaptation of the energy revolution on municipal level together with the Federal Ministry for Environment, Nature Conservation and Nuclear Safety (BMU). [15] The German Caritas Association tenders in cooperation with the Federal Association of Energy and Climate Protection Agencies, BMU and the National Climate Protection Initiative an energy saving check for private households. [16] Below you can find a table listing the mentioned fundings.

Table 1: Overview of support programmes offered in cooperation with private stakeholders [12]

offered by	support programme	targeted group	short description
PTJ	Municipal Directive	local authorities	Consulting climate protection, energy & environment management systems, energy saving models, municipal networks, climate protection concepts & climate protection
German Caritas Association/ Federal association of Energy and Climate Protection Agencies in Germany	Energy saving check municipal	private	Energy saving check on site in the affected household
Energy supply companies/ network operators	Electricity reimbursement according to the Renewable Energy Sources Act	private local authorities commercial	Feeding of electricity from photovoltaic, biomass, water & wind power (on- & offshore)into public networks

6. Decentralised funds made available from ESI funds through the Partnership Agreement

6.1. National/federal horizontal (sectoral) operative programmes

One aim of the European Union is to even out the differences between stronger and weaker regions, another is to reduce economic and social inequalities within the community, as well as to ensure and improve the environmental compatibility of the measures. Due to these targets the European Structural and Investment Fund (ESI) was founded and orients towards the Europe-2020-Strategy of achieving a smart, sustainable and integrated growth for the European Union in order to improve conditions for research, development and innovation, reduce greenhouse gases and promote employment by supporting the necessary entrepreneurial investment. In order to reach the set targets the member states of the EU will be financially supported by the following important instruments:

- European Regional Development Fund (ERDF)
- European Social Fund (ESF)
- European Agricultural Fund for Rural Development (EAFRD)
- European Marine and Fisheries Fund (EMFF)

The fundamentals of the funding are defined in the partnership agreement of the EU and Germany. During the funding period of 2014-2020 the ERDF will take actions in following thematic objectives in order to improve the regional competitiveness and reduce the regional disparities:

- Target 1: “strengthening research, technological development and innovation”
- Target 3: “improving the competitiveness of SMEs”
- Target 4: Promotion of efforts to reduce CO_2-emissions in all sectors of the economy”

For these targets 83 % of the ERDF are allocated (without expenditure for technical support), whereas the remaining 17% just over a third each relate to target 6 “protection and promotion of the sustainable use of the resource“ and target 9 “promoting social inclusion and combating poverty and all forms of discrimination”. Regarding the recommendations of the EU these ERDF interventions will contribute to the achievement of the renewable energy targets and the climate change objective, and will contribute to reducing the costs of energy system transformation through energy efficiency measures.

Key aspects that are concentrated on with EAFRD are improving the sustainable management of natural resources and climate change policy, as well as economic and social development in rural areas. Due further targets are set:

- Target 3: “supporting the competitiveness of SMEs”
- Target 5: “promoting adjustment to climate change and risk prevention and management”
- Target 6: “preserving and protecting the environment and promoting resource efficiency”

- Target 9: “promoting social inclusion and combating poverty and all forms of discrimination”

In regard to the thematic focusses two third of the EAFRD expenditures are allocated for the targets 5,6 and 9, another 19 % are spent for target 3. In Table 2 the amount of funding for each state in ERDF and EAFRD programme is listed.

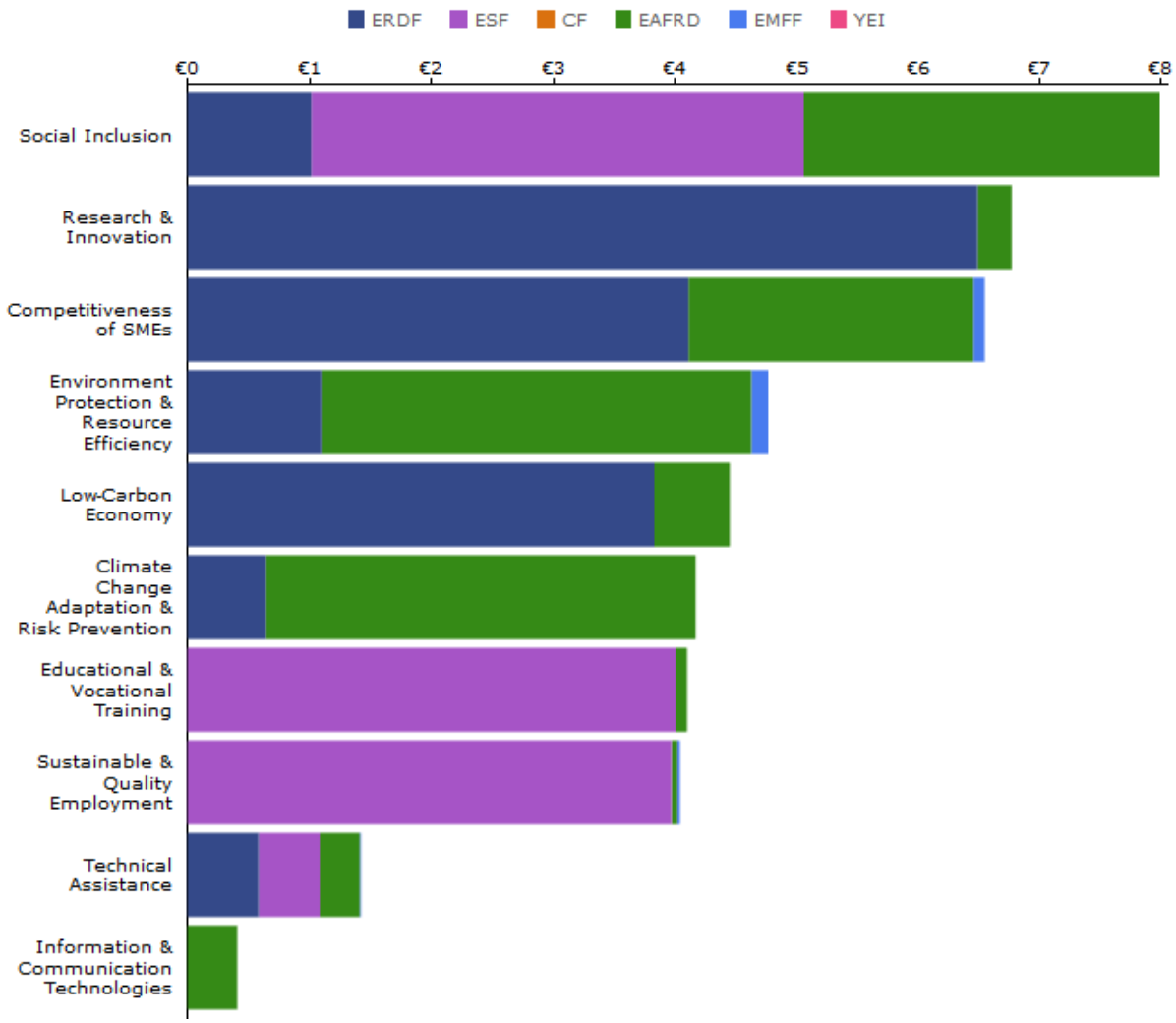


Figure 4: total budget by theme in € billion in Germany [17]

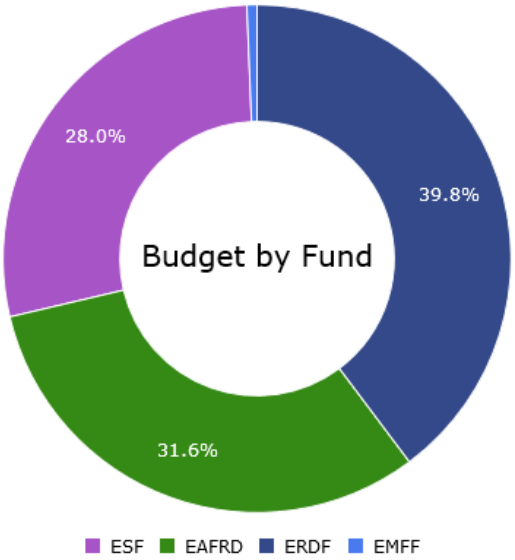


Figure 5: total budget by fund in Germany, EUR [17]

Table 2: Indicative allocation of EU fund ERDF and EAFRD by country and ESI funds in € (including performance reserve) [18]

Recipients / Programmes	ERDF	EAFRD
Baden-Württemberg	246,585,038	617,955,862
Bavaria	494,704,308	1,292,421,451
Berlin	635,213,023	965,810,161
Brandenburg	845,643,228	
Bremen	103,021,352	cf. Lower Saxony, incl.
Hamburg	55,472,740	
Hessen	240,723,366	268,275,991
Mecklenburg-Western Pomerania	967,806,184	846,982,072
Lower Saxony	690,789,930	93,592,554
North Rhine-Westphalia	1,211,731,011	512,072,729
Rhineland-Palatinate	186,025,744	258,733,232
Saarland	143,289,081	28,628,276
Saxony	2,089,020,063	816,860,146
Saxony-Anhalt	1,427,495,230	777,610,363
Schleswig-Holstein	271,244,600	348,435,164
Thuringia	1,165,077,915	625,673,049
network rural area		5,000,000
total	10,773,842,813	8,303,051,050

For completeness the targets of ESF and EMFF are listed, even though they do not apply to energy efficiency or reducing CO_2 emissions:

In terms of promoting human resources and social cohesion, ESF interventions in the 2014-2020 programming period will focus on the following thematic objectives:

- Target 8: “Promoting sustainable and quality employment and supporting labour mobility"
- Target 9: "Promoting social inclusion and combating poverty and all forms of discrimination"
- Target 10: "Investing in education, training and education for skills and lifelong learning”

The development of a sustainable and resource-saving aquaculture is accelerated by the EMFF, which results in following objectives and is allocated with a fund of € 219,5960276.

- Support of sustainable, environmental- and resource-friendly fishing
- Reducing the negative impact of fishing on the marine environment and protecting and restoring aquatic biodiversity and ecosystems
- Management of fish stocks according to maximum sustainable yield (MSY) and the avoidance of unwanted by-catches [18]

6.2. Regional operative funding

This regional operative programme is funded partly by EFRD and partly through national funds. It focusses on seven different priority axes (PA), each with multiple thematic objectives (TO) and investment priorities (IP). The priorities axes are:

- PA1: strengthening of research, technological development and innovation
- PA2: strengthening the competitiveness of SME
- PA3: promotion of efforts in order to reduce CO_2 emissions in all branches of economy
- PA4: maintenance and protection of the environment and promotion of the resource efficiency
- PA5: promotion of the adjustment to the climate change and the risk prevention and management
- PA6: territorial dimension to development endogenous potentials – CCLD
- PA7: technical support

Considering only TO4 ‘promotion of efforts in order to reduce CO_2 emissions in all branches of economy’, as part of PA4, three different investment priorities with four result indicators (IR) have been set:

- IP 4b: Promotion of energy efficiency and the use of renewable energies in enterprises
  - RI06: CO_2 emissions of the processing party industry from the final energy consumption (polluter balance) in the ten-year average
- IP 4c: Promotion of energy efficiency, of intelligent energy management and the use of renewable energies in public infrastructure, including public buildings, and in residential construction

- RI07: CO_2 emissions from the energy consumption in public sector

- IP 4e: Promotion of strategies for reducing CO_2 emissions in the all areas, especially urban areas, including promotion a sustainable multimodal urban mobility and relevant to climate protection adaptation measures
  - RI08: CO_2 emissions of traffic from the final energy consumption (polluter balance) in ten-year average
  - RI09: CO_2 emissions from the final energy consumption - households, businesses, trading, services, remaining consumers (polluter balance) in the ten-year average [19]

In Table 3 the structure of the financial plan and the distribution of funding through the European Union and national fundings is listed for each priority axis.

Table 3: structure of the financial plan [19]

Priority axis	thematic objective	union funding	national contribution	total financial resources
PA1	TO1	524,198,193	131.816.082	656.014.275
PA2	TO3	355.554.130	118.597.063	474.151.193
PA3	TO4	246.250.449	91.732.524	337.982.973
PA4	TO6	94.502.116	24.429.158	118.931.274
PA5	TO5	23.125.000	30.781.250	153.906.250
PA6	TO9	26.765.534	2.973.949	29.739.483
PA7	technical support	57.099.808	14.274.952	71.374.760

6.3. Joint funding programmes of the EU and Saxony-Anhalt

6.3.1. Saxony-Anhalt ENERGY

The funding scheme Saxony-Anhalt ENERGY supports small and medium sized companies investing a minimum volume of € 10,000 (large companies € 100,000), energy service provider that offer energy contracting and municipal owned companies. ERDF and the federal state Saxony-Anhalt together provide a grand of max. € 500,000, depending on the subject and company size, for investment measures to increase energy efficiency and to integrate renewable energies in all relevant business areas. However currently no more applications can be submitted in this programme. [20]

6.3.2. Saxony-Anhalt CLIMATE II

Irrespective of funding schemes that relates to active implementation or improvement measures, the programme Saxony-Anhalt CLIMTE II encourages research and development in the field of climate protection. Commercial enterprises and research institutions/ universities as co-proposer within the framework of joint and collaborative projects receive a grant of up to 50% of eligible expenditure for industrial research and 25 % for experimental development. This if offered by the Federal State Saxony-Anhalt and ERDF. It focusses on innovate projects for developing new products and processes with the following thematic priorities. For example:

- Integration of renewable energies
- Significant GHG reduction, in particular CO_2
- Material or energetical use of biomass
- Implementation of climate adaptation strategies [21]

7. Other EU low carbon initiatives

7.1. EU initiatives centrally managed by the European Commission

7.1.1. Horizon2020 Programme

The State Saxony-Anhalt is classified as NUTS1 (DEE0) in the European Union and, based on the data on this region, participated in 143 projects in H2020 with € 61.89 Mio. of EU contributions in total. This results in a total number of signed grants of 133. In Figure 6 shows the types of organisation and the respective net contribution of the EU, whereas in Appendix 2 the number of project participants with the corresponding Net EU contributions are listed. [22] The largest portion falls to the Otto-von-Guericke-University of Magdeburg and Marin-Luther-University Halle-Wittenberg, each participating in 20 projects. Followed by Julius Kuhn-Institute Federal Research Institute for Cultivated Plants with 12, Federal Environment Agency with 11 and Leibnitz-Institute for Plant genetics and agricultural plant research,10, participations.

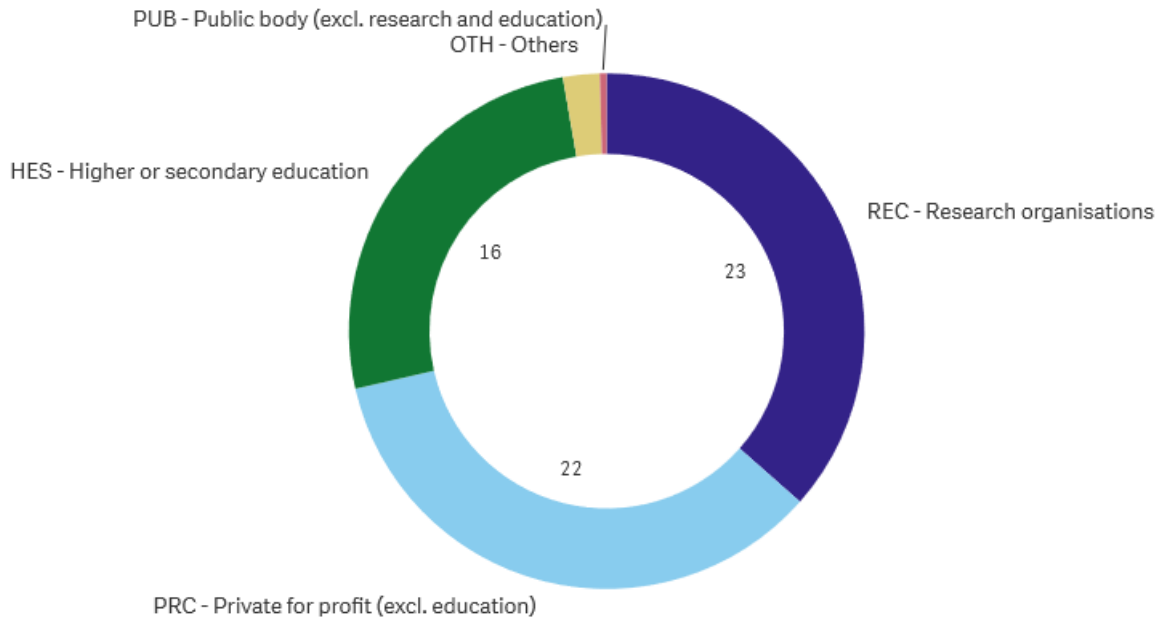


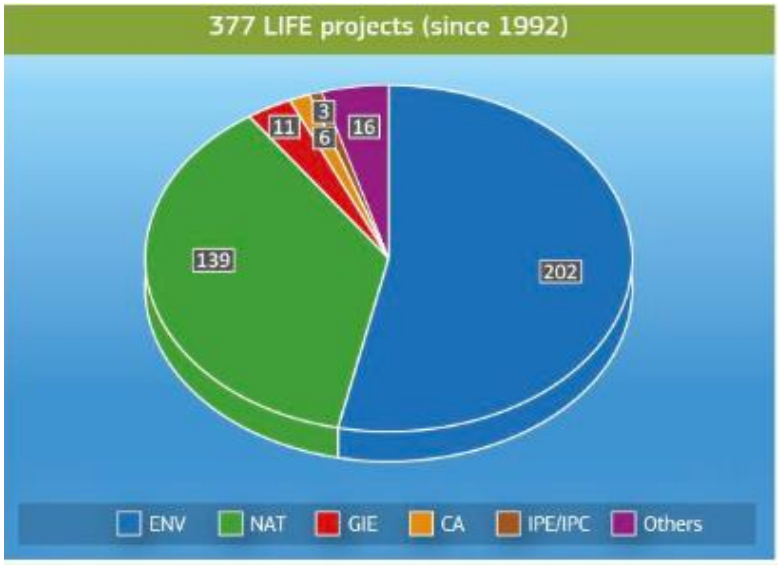
Figure 6: Net EU contribution by type of organisation (Mil EUR) [22]

7.1.2. LIFE Programme

In the LIFE programme consists of four types that take in account the environmental and climate protection:

- Traditional (environment and resource efficiency, nature and biodiversity, environmental policy and information, climate protection measures, adaptation to climate change, climate policy and information)
- Integrated (environmental, nature and climate protection)
- Preparatory actions
- Capacity building

Since the establishment of the LIFE programme in 1992, Germany was given € 10.5 million (cf. Figure 7). In the period from 2014-2020 the budget of the LIFE programme is fixed at € 3.4 billion. For the federal state Saxony-Anhalt nine projects have been granted of which two were led by SME and the others are administered by NGOs (cf. Figure 8). [23]



Investment in LIFE projects in Germany (€ million)

	Total investment	EU contribution
ALL LIFE projects	**1 031.5**	**433**
Environment and Resource Efficiency (ENV)	544	160
Nature and Biodiversity (NAT)	369	209
Environmental Governance and Information (GIE)	29.5	17
Climate Action (CA)	16	9.5
Integrated (IPE/IPC)	50	27
Others	23	10.5

Figure 7: subject distributions of all LIFE projects and the investments made in Germany [24]

[+] LIFE GreenPower- - Demonstration of an innovative energy conversion technology for waste heat recovery in the glas ...	LIFE16 CCM/DE/000085		2016	DE	SME Small and medium sized enterprise
[+] LIFE SmartWater - Demonstration of smart actuators to reduce water losses and energy consumption in water supply ...	LIFE16 ENV/DE/000550		2016	DE	SME Small and medium sized enterprise
[+] LIFE EUROLARGECARNIVORES - Improving human coexistence with large carnivores in Europe through communication and transboun ...	LIFE16 GIE/DE/000661		2016	DE	NGO-Foundation
[+] LIFE AskREACH - Enabling REACH consumer information rights on chemicals in articles by IT-tools	LIFE16 GIE/DE/000738		2016	DE	National authority
[+] LIFE VinEcoS - Optimizing Ecosystem Services in Viniculture facing Climate Change	LIFE15 CCA/DE/000103		2015	DE	NGO-Foundation
[+] LIFE - Get Real - Close the gap between official manufacturer's data and real world fuel consumption of cars	LIFE15 GIC/DE/000029		2015	DE	NGO-Foundation
[+] LIFEBioStandards - Biodiversity in Standards and Labels for the Food Industry	LIFE15 GIE/DE/000737		2015	DE	NGO-Foundation
[+] LIFE Legal Actions - Legal Actions on Clean Air	LIFE15 GIE/DE/000795		2015	DE	NGO-Foundation
[+] LIFE - CLEAN HEAT - CLEAN HEAT: Reducing particulate matter caused by wood burning	LIFE14 GIE/DE/000490		2014	DE	NGO-Foundation

Figure 8: Results for LIFE projects in Saxony-Anhalt since 2014 [23]

7.1.3. INTERREG and other EU initiatives

One part of the European Fond for regional Development (EFRD) that “aims to strengthen economic and social cohesion in the European Union by correcting imbalances between its regions” [25], is the project for European territorial cooperation (INTERREG).

INTERREG builds on three different directions:

- Cross-border cooperation (direction A)
- transnational cooperation (direction B)
- interregional cooperation (direction C)

In the State of Saxony-Anhalt, the Ministry of Regional Development and Transport works on the transnational cooperation programme INTERREG Central Europe (direction B) and the interregional programme INTERREG Europe (direction C).

The programme INTERREG Central Europe is based on the aims of Europe 2020 and focusses on the following thematical points and has a grant of € 246 million in the period from 2014 to 2020:

- research and innovation
- low carbon economy
- environment- and resource efficiency
- transport and mobility

Other participating States are Austria, Poland, the Czech Republic, Slovakia, Hungary, Slovenia and Croatia as well as parts of Northern Italy and other parts of Germany. [26]

INTERREG Europe cooperates with all 28 members of the EU as well as Switzerland and Norway and focusses on the support of interregional exchange of experience, knowledge and best practises between stakeholders at pan-European level. The aim is to improve the implementation of political initiatives and programmes for the regional development. For 2014-2020 the programme receives in total € 359 million from the EFRE fond. Main priorities are:

- research and innovation
- improving the competitiveness of small and medium sized enterprises
- low carbon economy
- environment and resource efficiency [26]

“Keep.eu” offers a link to view all INTERREG projects granted in the different time periods and sorted by region. By setting the filters to the currently period 2014-2020, choosing the State Saxony-Anhalt DEE0, NUTS1, and the Thematic objective: 4 – supporting the shift towards a low-carbon economy in all sectors, the delivered data displays 24 projects on 25 thematic, implemented by 32 partnerships, which are financed by € 46.1 million. (cf. Figure 9 and Figure 10) [27]

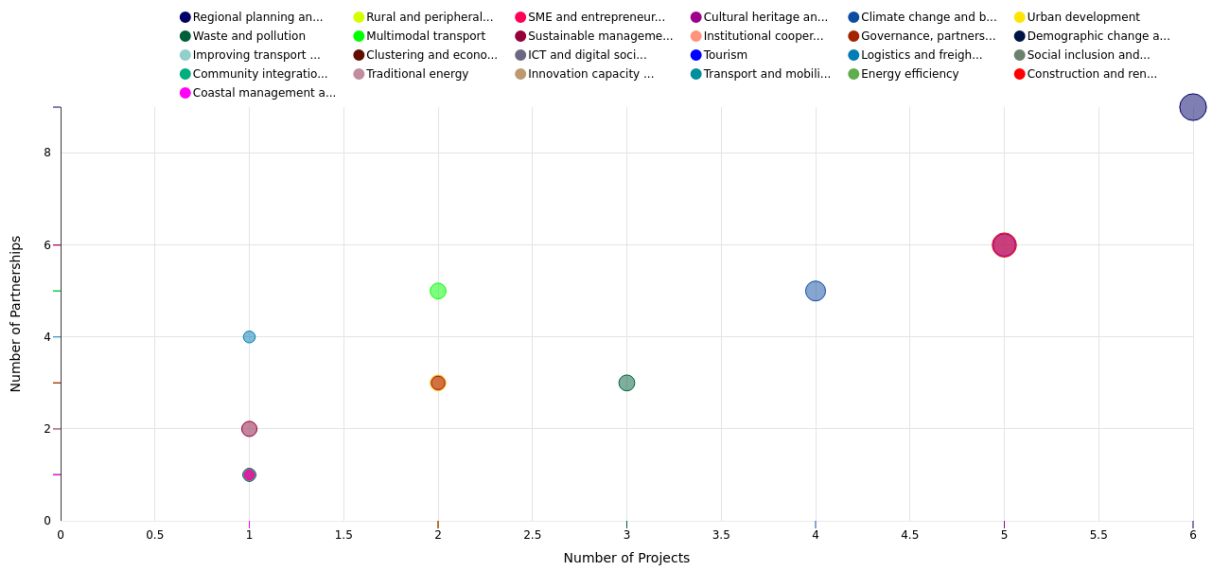


Figure 9: Projects and partnerships per thematic for DEE0 [27]

The sub-theme “regionals planning and development” has the largest amount of partnerships, number of projects and a whole budget of € 11.8 million. Followed by “SME and entrepreneurship”, € 9.86 million, and “cultural heritage and arts”, € 8.24 million. Each with 5 projects and 6 partnerships.

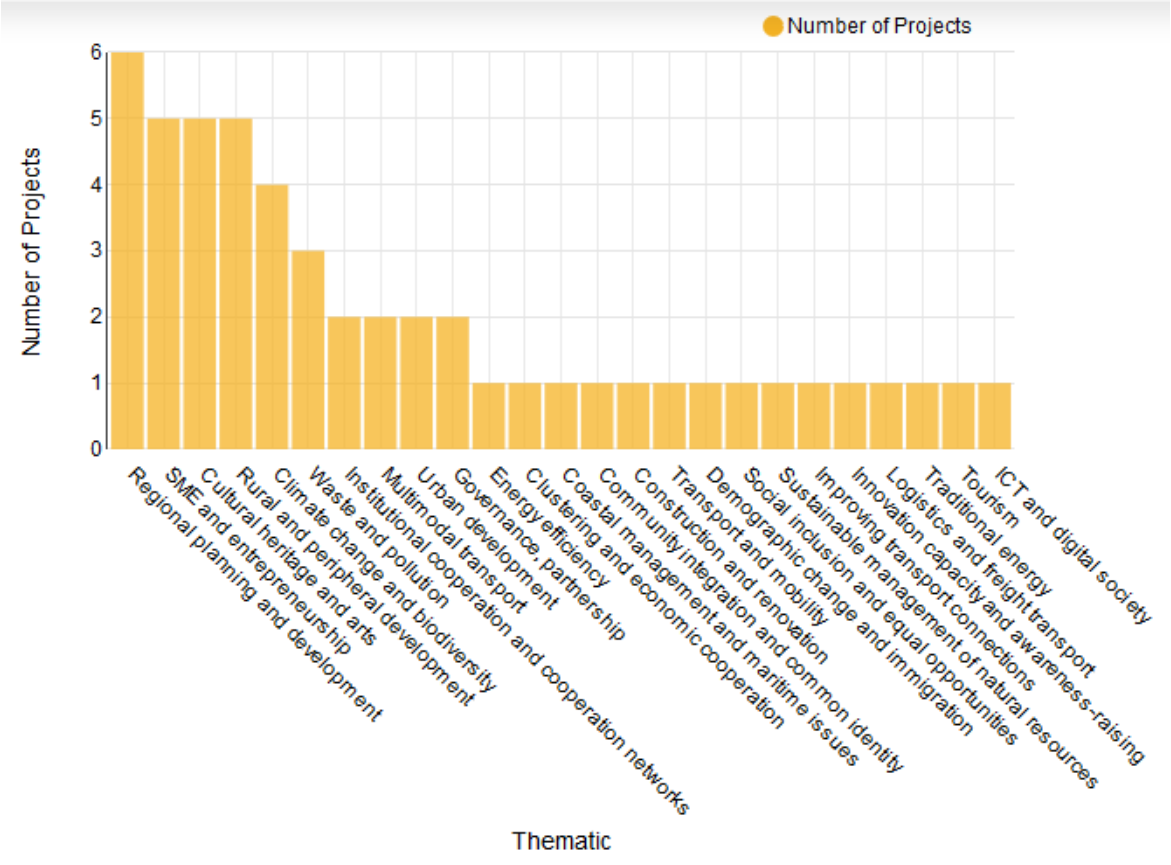


Figure 10: Projects per thematic [27]

By choosing one of the programmes INTERREG Europe, INTERREG VB Alpine Space or INTERREG VB Central Europe a detailed analysis can be made. Filtering by INTERREG Europe programme 14 projects, with 14 thematic and a total budget of € 23.9 million worked on by 16 partnerships are listed. “Cultural heritage and art” is the most granted sub-theme followed by “SME and entrepreneurship”.

With € 23.9 million of total grant the programme INTERREG Europe receives the biggest amount of INTERREG grants. By amount of aggregated budget, the thematic “SME and entrepreneurship”, € 7.76 million, is on first place. On second “cultural heritage and arts” with € 5.93 million, but taking care of one more project than the first place.

INTERREG VB Central Europe is subsidised with € 21.4 million in total. “Regional planning and development” is with € 5.72 million the highest subsidy recipient, but “multimodal transport”, € 4.09 million, has currently one more partnership.

The programme INTERREG VB Alpine Space only subsidises only one project with one partnership with a grant of € 743 Th, covering the three topics “governance, partnership”, “regional planning and development” and “climate change and biodiversity”.

A detailed table of the funded project of INTERREG in the State Saxony-Anhalt is attached in Appendix 3.

Appendix 2: Number of project participants and Net EU contributions

Legal Name	NUTS 2 Name	H2020 Net EU Contribution	H2020 Participations
Totaux		**€ 61.895.217**	**143**
UMWELTBUNDESAMT	Sachsen-Anhalt	€ 10.693.480	11
OTTO-VON-GUERICKE-UNIVERSITAET MAGDEBURG	Sachsen-Anhalt	€ 9.133.302	20
MARTIN-LUTHER-UNIVERSITAET HALLE-WITTENBERG	Sachsen-Anhalt	€ 6.856.959	20
GLOBAL BIOENERGIES GMBH	Sachsen-Anhalt	€ 5.188.587	3
EW BIOTECH GMBH	Sachsen-Anhalt	€ 4.272.188	2
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SOLIBRO HI-TECH GMBH	Sachsen-Anhalt	€ 483.750	1
LEIBNIZ-INSTITUT FUER NEUROBIOLOGIE	Sachsen-Anhalt	€ 460.571	2
PUMACY TECHNOLOGIES AG	Sachsen-Anhalt	€ 394.188	1
INSTITUT FUER AUTOMATION UND KOMMUNIKATION E.V. MAGDEBURG	Sachsen-Anhalt	€ 385.574	3
TLS TECHNIK GMBH & CO. SPEZIALPULVER KG	Sachsen-Anhalt	€ 303.775	1
BCM BIOECONOMY CLUSTER MANAGEMENT GMBH	Sachsen-Anhalt	€ 298.675	2
BG KLINIKUM BERGMANNSTROST HALLE GGMBH	Sachsen-Anhalt	€ 260.013	1
MOL KATALYSATORTECHNIK GMBH	Sachsen-Anhalt	€ 251.151	1
GLYXERA GMBH	Sachsen-Anhalt	€ 249.216	1
TRAVELPING GMBH	Sachsen-Anhalt	€ 235.931	1
TTI TECHNOLOGIETRANSFER- UND INNOVATIONSFORDERUNG MAGDEBURG GMBH	Sachsen-Anhalt	€ 226.303	4
GNS GESELLSCHAFT FUR NACHHALTIGE STOFFNUTZUNG MBH	Sachsen-Anhalt	€ 210.350	1
LANDESAMT FUR GEOLOGIE UND BERGWESEN SACHSEN-ANHALT	Sachsen-Anhalt	€ 187.895	1
FOLIENWERK WOLFEN GMBH	Sachsen-Anhalt	€ 172.813	1
ISW INSTITUT FUR STRUKTURPOLITIK UND WIRTSCHAFTSFORDERUNG GEMEINNUTZIGE GESELLSCHAFT MBH	Sachsen-Anhalt	€ 137.219	1
IHK BILDUNGSZENTRUM HALLE-DESSAU GMBH	Sachsen-Anhalt	€ 125.750	1
TRANSROMANICA - THE ROMANESQUE ROUTES OF EUROPEAN HERITAGE E.V.	Sachsen-Anhalt	€ 110.625	1
TRANSPORTWERK MAGDEBURGER HAFEN GMBH	Sachsen-Anhalt	€ 109.209	1
SMARTMEMBRANES GMBH	Sachsen-Anhalt	€ 108.000	1
MUNCHHOFF FRIEDRICH-CHRISTIAN	Sachsen-Anhalt	€ 87.500	1
KROPPENSTEDTER OLMUHLE WALTER DOPELHEUER GMBH	Sachsen-Anhalt	€ 81.250	1
MINISTERIUM DER FINANZEN DES LANDES SACHSEN-ANHALT	Sachsen-Anhalt	€ 74.000	1
EUROPEAN CHEMICAL REGIONS NETWORK ECRN EV	Sachsen-Anhalt	€ 71.250	1
BAUVEREIN HALLE & LEUNA EG	Sachsen-Anhalt	€ 67.152	1
DIESDORFER SUSSMOST-, WEINKELTEREIUND EDELDESTILLE GMBH	Sachsen-Anhalt	€ 61.688	1
DIGITTRADE GMBH	Sachsen-Anhalt	€ 50.000	1
LAB-ON-FIBER GMBH SE MA GESELLSCHAFT FUR INNOVATIONENMBH	Sachsen-Anhalt Sachsen-Anhalt	€ 50.000 € 50.000	1 1
ELEKTRO THERMIT GMBH & CO. KG	Sachsen-Anhalt	€ 34.355	1
HOCHSCHULE MAGDEBURG-STENDAL	Sachsen-Anhalt	€ 13.500	1
BAUERNVERBAND SACHSEN-ANHALT EV	Sachsen-Anhalt	€ 9.375	1
IMKERVERBAND SACHSEN-ANHALT EV	Sachsen-Anhalt	€ 9.375	1
ISW GESELLSCHAFT FUR WISSENSCHAFTLICHE BERATUNG UND DIENSTLEISTUNG MBH	Sachsen-Anhalt	€ 4.898	1
INDUSTRIE- UND HANDELSKAMMER MAGDEBURG	Sachsen-Anhalt	€ 0	3
KfU Envirotech GmbH	Sachsen-Anhalt	€ 0	1
Landesbetrieb für Hochwasserschutz und Wasserwirtschaft	Sachsen-Anhalt	€ 0	1

Appendix 3

7.2. Joint initiatives of the EU with International Financial Institutions

7.2.1. European Fund for Strategic Investments (EFSI)

The European Fund for Strategic Investments subsidises strategic investments in key sectors like Infrastructure, energy efficiency and renewable energies, research and innovation, environment, agriculture, digital technology, education, health and social affairs. The aim is to tackle the lack of confidence and investment and to make use of liquidity held by financial institutions, corporations and individuals at a time when public resources are scarce, so that small companies in the start-up phase and in growth and expansion by providing venture capital can be supported. [28] EFSI provides a link [29] where all approved EFSI projects can be seen. In Germany 104 total number of transactions are named. Resulting in an approved EFSI financing amount of € 7.1 billion and an expected investment related to EFSI of € 32.6 billion. Whereas no projects take place in the State of Saxony-Anhalt. [29]

7.2.2. European Local Energy Assistance (ELENA)

Under the HORIZON2020 programme, ELENA was founded as a joint initiative by European Commission and the European investment bank (EIB). Its aim is to provide grants for technical assistance. The main focus lies on the implementation of energy efficiency, distributed renewable energy and urban transport programmes. Four different co-financed fields in the energy sector can be defined as followed:

- Increasing energy efficiency in buildings and street/ traffic lighting
- Integration of renewable energy sources
- Investments into renovating and extending or building new district heating and cooling networks
- Local infrastructure incl. smart grid
- Infrastructure for energy efficiency, energy-efficient urban equipment and link with transport

Based on the publicly available data of EIB, no projects under ELENA are financed in the State of Saxony-Anhalt, but in the rest of Germany in total three project were granted. One located in the sector of urban mobility services, one in energy efficiency in public buildings and the third in energy efficiency and small-scale renewable energy. [30]

7.2.3. Joint European Support for Sustainable Investment in City Areas (Jessica)

JESSICA, an initiative by the European Commission, was developed in cooperation with the EIB and the Council of Europe Development Bank (CEB). The EIB is involved in JESSICA in three ways:

- advises and supports national authorities as well as regional and local authorities in implementing JESSICA
- promotes the use of urban development funds and the application of best practices throughout Europe
- acts as a holding fund if Member States or managing authorities so wish

Financing for projects is provided through urban development funds and, where appropriate, holding funds. [31]

For Saxony-Anhalt no projects under JESSICA were found.

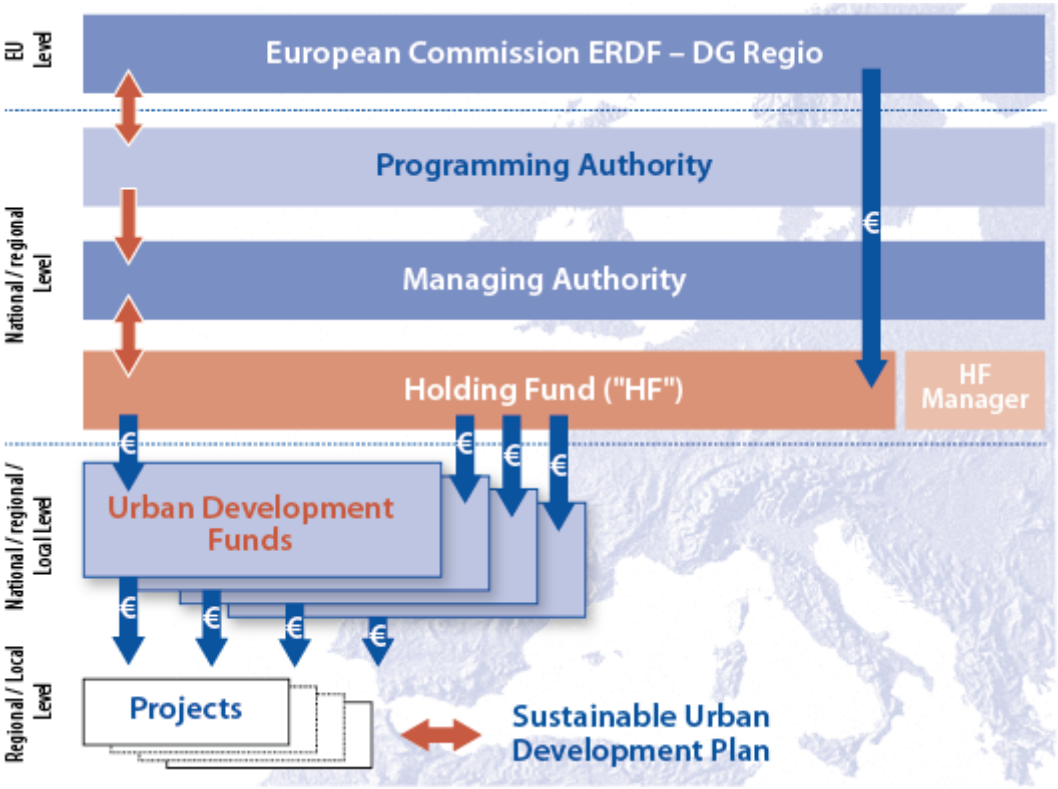

Figure 11: structure of authority level for JESSICA [31]

7.2.4. Sustainable Energy Finance Facility (SEFF) of EBRD

The European Bank for Reconstruction and development (EBRD) was founded in the early 1990s to help overcome the distances and remains of the communism after the cold war. It extends credit lines to local financial institutions in order to support the development sustainable energy financing, to the SEFF was founded. It offers finances for sustainable energy projects that focusses on energy efficiency and small-scale renewable energy, by loaning the many to local financial institutions. They on-lend to their clients like small and medium-sized enterprises, corporates and residential borrowers as well as developers of renewable energy projects. Since Germany is no part of the area the EBRD is working on, no funds are available in Saxony-Anhalt. [32]

7.2.5. Private Finance for Energy Efficiency (PF4EE)

The EIB and European Commission agreed on an instrument for private finance for energy efficiency (PF4EE-instrument) in order to counteract the limited access to affordable loans of commercial banks for projects in the field of energy-efficiency. It is supposed to support and help develop projects, that aim to achieve national energy-efficiency action plans or other energy-efficiency programmes of the EU member states. The administration is taken over by the EIB and financed by the Environment and Climate Policy Programme (LIFE). € 80 million of the LIFE-Programme have been earmarked from the LIFE programme to finance credit risk protection and the provision of expert services. € 480 million at least will be added by the EIB to provide long-term financings. Until now no projects in Germany take place, that are funded by PF4EE. The following figure shows the organisation of approval and financing for PF4EE. [33]

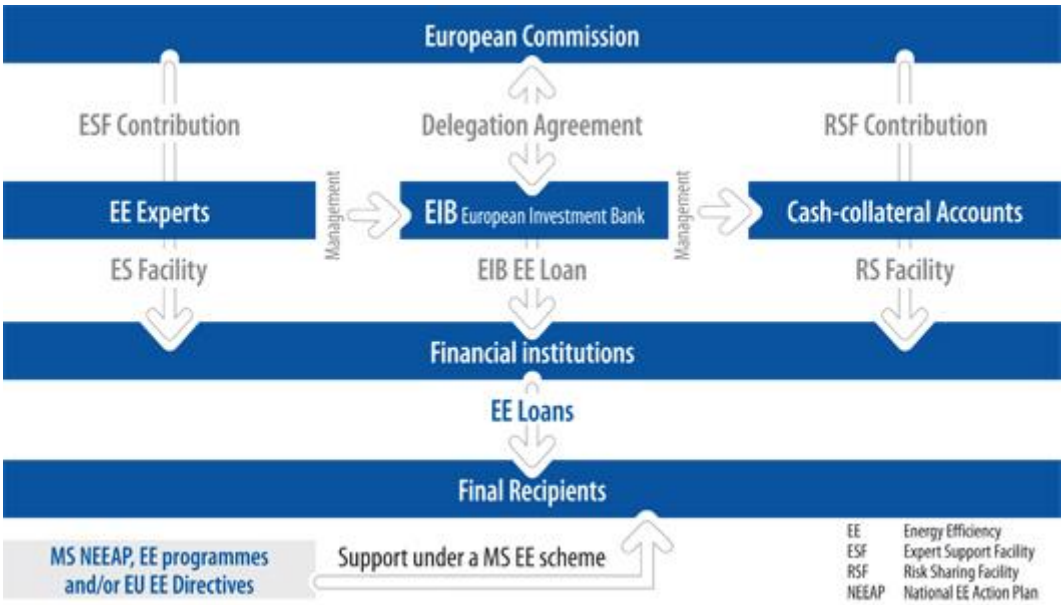

Figure 12: Organisation of approval and financing [33]

8. Evaluation

The evaluation criteria of the previously mentioned financial funding schemes has been provided by AACM (PP8) and filled by HSMD (PP8).

Setting priorities and objectives for low-carbon funding

- *To what extent do EU priorities and objectives respond to the demands of your regions? Please consider all relevant initiatives described above.*

The EU priorities and objectives are well defined to meet the objectives of a low-carbon economy through various measures. Besides EU initiatives the Federal State has initiated a programme to enhance electricity storage systems for photovoltaic roof systems, in addition to the nationals targets e.g. coal phase-out until 2038. Nonetheless Saxony-Anhalt participates in INTERREG and LIFE.

- *To what extent do national priorities and objectives respond to the demands of your specific region?*

As mentioned in the previous point, besides EU initiatives there are also Federal State initiatives tailor-made for regional research and development demands financed directly through the federal's budget or in cooperation with EFRD. National priorities are more widely defined and not covering specific regional demands, but general applications or problems.

- *If there are regional priorities and objectives, do they appropriately meet actual needs?*

Besides the Climate and energy concept (KEK), which is based on the five fields of action of the German government's climate protection plan 2050 and defines measures to save GHG emissions so they can be directly implemented at federal level, no formalised state low carbon policy is yet introduced.

- *To what extent setting priorities is based on public consultation?*

Regional concepts and setting priorities are generally been consulted with the public and other stakeholders. The final settings are a result of their and political interests. It is hardly possible to distinguish and highlight the single impact of public consultation on setting priorities.

- *In what low-carbon areas innovative financial schemes can be instrumental?*

Financial schemes can be instrumental in the usage of renewable energies, improving the energy efficiency etc.

Institutional framework

- *Is/are the regional programming and implementation structure(s) appropriate? Any space for improvement?*

The programming and implementation process allows improvement due to changing conditions and stakeholders. But generally, the structure can be considered as appropriate to address low-carbon funding.

- *Is the programming and related decision-making based on appropriate public consultation?*

The regions aim to consider all relevant interests during programming and implementation.

- *Are stakeholders comprehensively identified?*

For the purpose of Prospect2030, the main stakeholders were identified from the Federal State of Saxony-Anhalt. However, this stakeholders' group might change in further project development.

Eligibility and application conditions

- *Are beneficiaries appropriately identified?*

The beneficiaries can be appropriately identified for each funding scheme. Different target groups are addressed through various funding programmes.

- *Is the financing (grants or loans) adequately sized?*

The financing bases on the available funds. Not the size but the restrictive funding conditions (documentary, evaluation) may reduce the impact of low-carbon funding.

- *Are there application conditions that substantially limit the target beneficiaries or the project scope?*

See the answer to previous question.

Administrative procedures

- *Are the application procedures transparent? Is sufficient information available?*

For the application procedures sufficient information is available and it might seem to be transparent. But the lack of specialised experts for the application for targeted tenders might necessitate an external consultant. Especially for beneficiaries such as private households, SMEs, local or regional public authorities.

- *Is the application process easy? Do the beneficiaries need external assistance to complete the application process?*

As mentioned above, for certain beneficiaries such as SMEs, local or regional public authorities, private households the lack of specialised expertise for application to a targeted tender could be an obstacle and an external assistance might be needed.

- *Is the required financial administration transparent and smooth?*

Yes.

- *Are there significant delays in payments?*

As far it is known, there no significant delays in payments from the funds mentioned in this document. Beside the fact that payments might only be received some time after finishing the project or implementation, what is considered common practice.

Financial burdens

- *Are there financial burdens to apply for funding (e.g. lack of preparatory resources, own contribution, cash-flow issues concern pre-financing)? Can you pls. differentiate according to types of beneficiaries (e.g. local authorities, private individuals, SMEs)*

Potential burden could be lack of knowledge about the suitable programme and possibilities of receiving funding. As well as the lack of preparatory resources to hire specific administrative and technical consultants or so-called Energy Saving Consultants with the needed expertise. These consultants have to take care of the required application documents whether or not hired by private individuals or SMEs.

Efficiency of use of funding dedicated to sustainable energies

- *Are the dedicated EU grants funding efficiently used?*

Taking in account the overall efficiency of public funding programme the usage is described in Chapter N°6.

- *Are there areas where grant funding can (partially) be replaced by more market-oriented instruments?*

Yes, probably. For example one way might be a short-term reduction of the prices for producing renewable energy power plants by decreasing taxes in order to easier the coal phase-out for other industries that, until now, depend on heat or energy generated by coal power plants.

- *Is the blending of grants and commercial financing a usual praxis in the public sector?*

No proved information can be offered here.

- *Are there aggregated projects with a critical size that attract the interest of the financial market actors?*

No proved information can be offered here.

- *Are there mechanisms to leverage private financial resources?*

Some programmes offer support for finding alternative energy solutions or the suitable financial funding programmes for each case, but do not leverage private financial resources itself.

9. Conclusion

Conclusions at the level of the target region

By looking at the projects that have been implemented or participated in in Saxony-Anhalt, you will see that many different funding programmes are used. Most project have been funded by INTERREG or Horizon2020. A smaller amount used the funding programme offered by the national scheme KfW and only 9 by LIFE. Focusing on the areas in which the programmes of INTERREG have been implemented, the area around Magdeburg and Dessau-Roßlau stand out followed directly by Halle (Saale). Generally, the region Harz, that also covers areas in other neighbouring Federal States like Thuringia, is where most of the programmes are realised, followed by the area around the state capital Magdeburg. The more rural the area the lesser funding programmes are participated in. Numbers of the realised applied projects, that are funded by the Federal State, were not published.

Conclusions at national level

Decentralised funds made available through the Partnership Agreement, ESI sum up to around € 19 Billion grants paid. Considering renewable energies, energy efficiency and climate change result in only a few main centres of implementation. Hot spots can be found near the East Sea, Hannover, Hamburg and Berlin. Areas with a lower density of funding usage are located around Munich, Cologne and Essen.

A total funding amount of € 39.851 Billion was granted by the KfW nationwide addressing projects under the topic of energy revolution. The amounts of paid subsidy suggest that the funding schemes of KfW are the most popular and most used once for private households and SMEs in total Germany.

Conclusions at EU level

Focussing on the transnational or cross-border programmes of INTERREG only eight projects located around Berlin, Magdeburg, Halle (Saale) and Neubrandenburg can be found. Compared to other funding programmes this small number strikes.

Conclusions at macro-regional (EUSDR, EUSAIR, EUSBSR, EUSALP)

At macro-regional level six projects were financed by EUSBSR, three by EUSDR, none by EUSAIR and three by EUSALP. But none of these included the Federal State Saxony-Anhalt.

10. Appendixes

Appendix 1: national support programmes, p: private, l: local authorities, c: commercial [12]

offered by	support programme	n°	targeted group	short description
KfW	Energy consulting of the consumer centres	01	p	consulting of building services, Structural thermal insulation, energy consumption, renewable energy
KfW	Energy-efficient renovation – subsidy/ credit	02/ 03	p l c	Energy measures leading to the KfW efficiency house standard, incl. installation of RES
KfW	Energy-efficient construction and renovation – subsidy for construction supervision	04	p l c	Planning and professional construction supervision
KfW	Energy-efficient construction and refurbishment	05	c	New construction and renovation of commercially used buildings
KfW	Energy-efficient renovation - supplementary loan	06	p l c	Loans for the installation of a heating system based on renewable energies
KfW	Energy efficient building	07	p l c	construction or initial acquisition of a KfW efficiency house
KfW	Energy-efficient construction and renovation - Fuel cell subsidy	08	p l c	Installation of stationary fuel cell systems up to 5.0 kW
KfW	Renewable Energy	09	p l c	plants that fulfil the requirements of the renewable Energy Sources Act (EEG) (photovoltaic plants, hydroelectric/ wind power plants, plants for production and use of biogas and geothermal energy, CHP plants)
KfW	Renewable Energy Premium	10	p l c	Large solar thermal/ bio mass/ CHP plants etc. of at least 100kW-2MW max.
KfW	Energetic urban redevelopment - subsidy	11	p	Integrated neighbourhood concept, Reorganisation managers
KfW	Energetic urban redevelopment - energy efficient building and redevelopment	12	p	New construction/ initial acquisition of or renovation into a KfW Efficiency Building
KfW	Energetic urban redevelopment - neighbourhood supply	13	p c	Neighbourhood-related heat and cold supply; energy-efficient water supply and wastewater disposal in the neighbourhood

KfW	Investment loan Municipalities	14	p	Investments in municipal and social infrastructure and residential projects
KfW	BMU Environmental Innovation Programme	15	p c	innovative large-scale pilot projects that lead to the avoidance or reduction of environmental pollution
KfW	Energy efficiency and process heat from renewable energies in the economy	16	p c	Measures that significantly increase electricity or heat efficiency and thus contribute to reducing energy consumption
KfW	Energy efficiency program - production facilities/processes	17	c	Investment and modernisation measures that lead to energy savings of at least 10 % (entry-level standard) or at least 30 % (premium standard)
KfW	Offshore wind power	18	c	Construction of up to 10 offshore wind farms off the coast of Germany
BAFA	Energy consulting for residential buildings	19	p l c	Written restructuring concept
BAFA	heating optimisation	20	p l c	Installation of highly efficient heating and hot water circulation pumps
BAFA	Heating with renewable energies - Solar thermal energy	21	p l c	Systems for the exclusive production of hot water, heating support, combined hot water preparation and heating support, solar refrigeration, Generation of process heat etc.
BAFA	Heating with renewable energies – biomass	22	p l c	Plants with a performance from 5 to 100 kW
BAFA	Heating with renewable energies – heat pumps	23	p l c	heat pumps with an output of up to 100 kW for the combined production of hot water and room heating or as room heating only if the hot water supply of the building is provided to a significant extent by other renewable energy sources
BAFA	Visualization of the revenue from renewable energies	24	l	Visualization measures on plants for the use of renewable energies
BAFA	Grant for mini-CHP plants	25	p l c	Construction of CHP plants up to 20 kW_{el} in existing buildings
BAFA	Electricity compensation according to the combined heat and power law (KWKG)	26	p l c	For CHP plants that feed electricity into the grid, the so-called CHP surcharge is paid over a certain period of time

BAFA	Promotion of heating and cooling networks under the KWKG	27	p l c	New construction and expansion of heating and cooling networks into which at least 75% of CHP is fed
BAFA	Support of heat and cold storage facilities according to the KWKG	28	p l c	New construction or extension of a storage facility for heat or cold at least 50 % of which comes from CHP plants
BAFA	Air conditioning and refrigeration systems	29	l c	Promotion of stationary refrigeration and air conditioning systems, Vehicle air conditioning systems in buses and trains
BAFA	Small series of climate protection products	30	p l c	Micro hydropower plants, plants for oxygen production with a power consumption of less than 0.5 kWh/m³, heat recovery from grey water shower channels and shower trays and shower pipes with heat exchangers
BAFA	Support for energy management systems	31	c	Initial certification of an energy management system, acquisition of measurement technology and software for energy management systems
BAFA	Support for entrepreneurial know-how	32	c	Consultations on technology and innovation, environmental protection
BAFA	Energy consulting in medium-sized businesses	33	c	Energy audits in terms of the EU Energy Efficiency Directive
BAFA	Energy consulting for non-residential buildings of municipalities	34	l	Renovation timetable, new construction consulting for non-residential buildings
BMEL	Integrated rural development concepts (GAK)	36	l c	the preparation of integrated rural development concepts as preliminary planning
BMEL	Agricultural Investment Promotion Programme (GAK)	37	c	construction, acquisition or improvement of immovable property, purchase of new machinery and equipment, general expenses, such as for architectural and engineering services
BMEL	Consultations (GAK)	38	c	Consulting services to support the resource efficiency of the agricultural sector in the transition to a low-carbon and climate-resistant economy
BMEL	Market- and location-adapted land management - "concepts" (GAK)	39	c	Development of integrated concepts for market- and location-adapted land management as preliminary planning of cooperation
BMEL	Land management adapted to the market and location - "Management" (GAK)	40	c	Initiation, organisation and implementation of development processes for land management adapted to the market and location

BMF	Tax deductibility of craftsman services	41	p	Craftsmen's services in the context of modernisation or maintenance in their own household
Agricultural Pension bank	Sustainability	43	c	Investments to increase energy efficiency in agriculture
Agricultural Pension bank	environment and consumer protection	44	c	Investments to reduce energy consumption in the food industry
Agricultural Pension bank	Energy from the land	45	c	Investments for energy recovery from renewable raw materials and other organic compounds, plants for the production of biogenic fuels and photovoltaic or wind/water power plants
DBU	Funding guidelines of the DBU	47	l c	Renewable energies: decentralised heat turnaround, optimisation of existing plants, Reduction of CO2 emissions in energy-intensive industries, Climate and resource-saving construction and Neighbourhood development and renewal

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LEIBNIZ-INSTITUT FUER NEUROBIOLOGIE	Sachsen-Anhalt	€ 460.571	2
PUMACY TECHNOLOGIES AG	Sachsen-Anhalt	€ 394.188	1
INSTITUT FUER AUTOMATION UND KOMMUNIKATION E.V. MAGDEBURG	Sachsen-Anhalt	€ 385.574	3
TLS TECHNIK GMBH & CO. SPEZIALPULVER KG	Sachsen-Anhalt	€ 303.775	1
BCM BIOECONOMY CLUSTER MANAGEMENT GMBH	Sachsen-Anhalt	€ 298.675	2
BG KLINIKUM BERGMANNSTROST HALLE GGMBH	Sachsen-Anhalt	€ 260.013	1
MOL KATALYSATORTECHNIK GMBH	Sachsen-Anhalt	€ 251.151	1
GLYXERA GMBH	Sachsen-Anhalt	€ 249.216	1
TRAVELPING GMBH	Sachsen-Anhalt	€ 235.931	1
TTI TECHNOLOGIETRANSFER- UND INNOVATIONSFORDERUNG MAGDEBURG GMBH	Sachsen-Anhalt	€ 226.303	4
GNS GESELLSCHAFT FUR NACHHALTIGE STOFFNUTZUNG MBH	Sachsen-Anhalt	€ 210.350	1
LANDESAMT FUR GEOLOGIE UND BERGWESEN SACHSEN-ANHALT	Sachsen-Anhalt	€ 187.895	1
FOLIENWERK WOLFEN GMBH	Sachsen-Anhalt	€ 172.813	1
ISW INSTITUT FUR STRUKTURPOLITIK UND WIRTSCHAFTSFORDERUNG GEMEINNUTZIGE GESELLSCHAFT MBH	Sachsen-Anhalt	€ 137.219	1
IHK BILDUNGSZENTRUM HALLE-DESSAU GMBH	Sachsen-Anhalt	€ 125.750	1
TRANSROMANICA - THE ROMANESQUE ROUTES OF EUROPEAN HERITAGE E.V.	Sachsen-Anhalt	€ 110.625	1
TRANSPORTWERK MAGDEBURGER HAFEN GMBH	Sachsen-Anhalt	€ 109.209	1
SMARTMEMBRANES GMBH	Sachsen-Anhalt	€ 108.000	1
MUNCHHOFF FRIEDRICH-CHRISTIAN	Sachsen-Anhalt	€ 87.500	1
KROPPENSTEDTER OLMUHLE WALTER DOPELHEUER GMBH	Sachsen-Anhalt	€ 81.250	1
MINISTERIUM DER FINANZEN DES LANDES SACHSEN-ANHALT	Sachsen-Anhalt	€ 74.000	1
EUROPEAN CHEMICAL REGIONS NETWORK ECRN EV	Sachsen-Anhalt	€ 71.250	1
BAUVEREIN HALLE & LEUNA EG	Sachsen-Anhalt	€ 67.152	1
DIESDORFER SUSSMOST-, WEINKELTEREIUND EDELDESTILLE GMBH	Sachsen-Anhalt	€ 61.688	1
DIGITTRADE GMBH	Sachsen-Anhalt	€ 50.000	1
LAB-ON-FIBER GMBH SE MA GESELLSCHAFT FUR INNOVATIONENMBH	Sachsen-Anhalt Sachsen-Anhalt	€ 50.000 € 50.000	1 1
ELEKTRO THERMIT GMBH & CO. KG	Sachsen-Anhalt	€ 34.355	1
HOCHSCHULE MAGDEBURG-STENDAL	Sachsen-Anhalt	€ 13.500	1
BAUERNVERBAND SACHSEN-ANHALT EV	Sachsen-Anhalt	€ 9.375	1
IMKERVERBAND SACHSEN-ANHALT EV	Sachsen-Anhalt	€ 9.375	1
ISW GESELLSCHAFT FUR WISSENSCHAFTLICHE BERATUNG UND DIENSTLEISTUNG MBH	Sachsen-Anhalt	€ 4.898	1
INDUSTRIE- UND HANDELSKAMMER MAGDEBURG	Sachsen-Anhalt	€ 0	3
KfU Envirotech GmbH	Sachsen-Anhalt	€ 0	1
Landesbetrieb für Hochwasserschutz und Wasserwirtschaft	Sachsen-Anhalt	€ 0	1

Appendix 3: Interreg 2014-2020 Programmes implemented in Saxony-Anhalt [27]

Programme	Acronym	Lead partner	Town	Website	Department	Legal Status
2014 - 2020 INTERACT III						
2014 - 2020 Interreg Europe – Improve the RIS3 effectiveness through the management of the entrepreneurial discovery process (EDP)	Beyond EDP	Centre-Val de Loire Regional Innovation Agency	Orléans, France	http://www.interregeurope.eu/BeyondEDP		public
2014 - 2020 Interreg Europe – Capitalising good coastal practices and improving policies to prevent marine litter	CAPonLITTER	NOVA University Lisbon - NOVA School of Science and Technology	Caparica, Portugal	http://www.fct.unl.pt/en	Department of Environmental Sciences and Engineering (DCEA)	public
2014 - 2020 Interreg Europe – Construction & demolition waste management policies for improved resource efficiency	CONDEREFF	Polytechnic University of Valencia	Valencia, Spain	http://www.interregeurope.eu/CONDEREFF		public
2014 - 2020 Interreg Europe – More carbon reduction by dynamically monitoring energy efficiency	EMPOWER	Energy Agency of Podravje – Institution for sustainable energy use	Maribor, Slovenia	http://www.interregeurope.eu/EMPOWER		public
2014 - 2020 Interreg Europe – Financing impact on regional development of cultural heritage valorisation	FINCH	Piemonte Region	Torino, Italy	http://www.interregeurope.eu/FINCH	Financial Resources and Asset Directorate	public
2014 - 2020 Interreg Europe – More Carbon Reduction through Intense	INTENSIFY	Local Energy Management Agency of Almada, AGENEAL,	Almada, Portugal	http://www.interregeurope.eu/INTENSIFY		public

Community Engagement						
2014 - 2020 Interreg Europe – European Network of Lindane waste affected regions working together towards a greener environment	LINDANET	Government of Aragon	Zaragoza, Spain	http://www.interregeurope.eu/	Department of Rural Development and Sustainability	public
2014 - 2020 Interreg Europe – Models of Management for Singular Rural Heritage	MOMAr	DPZ Provincial Government of Zaragoza	Zaragoza, Spain	http://www.interregeurope.eu/	Area of Citizenship. Service of Culture, Youth and Sports.	public
2014 - 2020 Interreg Europe – PUblic authorities Role Enhancing COmpetitiveness of SMeS	PURECOSMOS	Municipality of Genoa	Genoa, Italy	http://www.interregeurope.eu/PURECOSMOS	Financial department	public
2014 - 2020 Interreg Europe – Improving regional policies to better protect natural heritage of peri-urban open spaces	RENATUR	Martin Luther University Halle-Wittenberg	Haale (Saale), Germany	http://www.interregeurope.eu/	Department of Sustainable Landscape Development	public
2014 - 2020 INTERREG VB Central Europe – Exploring social innovation approaches for the social and economic integration of non-EU nationals	Arrival Regions	Leibniz Institute for Regional Geography	Leipzig, Germany	https://www.interreg-central.eu	Department: Regional Geography of Europe	public
2014 - 2020 INTERREG VB Central Europe – Promotion of Multimodal Transport in Chemical Logistics	ChemMultimodal	Ministry of Economy, Science and Digitalisation Saxony-Anhalt	Magdeburg, Germany	http://www.interreg-central.eu	Unit for Foreign Economic Affairs, European Affairs, Development co-operation	public
2014 - 2020 INTERREG VB Central Europe – Development of Financial Ecosystems for the Promotion of	DelFin	Development Bank of Saxony-Anhalt	Magdeburg, Germany	https://www.interreg-central.eu		public

Social Entrepreneurship in Rural Regions						
2014 - 2020 INTERREG VB Central Europe – European Cultural Route of Reformation	ECRR	Association for Rural Development Thuringia, Erfurt	Erfurt, Germany	http://www.interreg-central.eu	Central Division Planning	public
2014 - 2020 INTERREG VB Central Europe – Environmental Rehabilitation of brownfield Sites in central Europe	Greener Sites	City of Venice	Venice, Italy	http://www.interreg-central.eu	European Policies Department and Environment Department	public
2014 - 2020 INTERREG VB Central Europe – PROmoting regional Sustainable Policies on Energy and Climate change mitigation Towards 2030	PROSPECT2030	Piemonte Region	Torino, Italy	https://www.interreg-central.eu	Sustainable Energy Development Sector	public
2014 - 2020 INTERREG VB Central Europe – Stimulating CCI in mid-sized urban centres to boost competitiveness	STIMULART	Municipality of Jászberény	Jászberény, Hungary	https://www.interreg-central.eu		public
2014 - 2020 URBACT III – Welcoming international Talent	Welcoming International Talent	City Council of Groningen	Groningen, Netherlands	http://urbact.eu		public

11. List of figures

12. List of tables

13. References

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