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INPUT PAPER

For the interregional workshop on how to facilitate the market placement of alternatives for single-use plastics

PLASTECO activity 3.2b

PLASTECO
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Contents

1 Introduction

This document provides the thematic background and organisational guidelines for conducting an interregional workshop on the market placement of alternatives for single-use plastics, as dictated by PLASTECO activity 3.2b. The input paper will serve as the primary source of knowledge, facilitating the workshop's interregional learning process. To that end, it will:

- Outline the objectives and themes of the workshop
- Introduce the most relevant issues to be discussed and addressed by regional authorities
- Develop recommendations for workshop topics and focal points
- Deliver guidelines on how to plan and organize the workshop's activities

The input paper provides guidelines for two possible options regarding the workshop organisation: a) in case the workshop will be held on-site, in Stara Zagora, Bulgaria or b) in case the workshop will be held virtually, due to coronavirus restrictions.

All partners are expected to participate with their stakeholder groups and external experts, to discuss regional strategies for the placement of alternatives to single-use plastics and to build capacities on this issue. During the workshop, participants are expected to exchange views with their peers, familiarise themselves with existing policy measures and strategies, and co-shape a common approach to boost economic activity in secondary raw plastics markets, setting the ground for the emergence of a unified market approach in the EU.

The report is structured as follows: Section 2 demonstrates the added value and strategic orientation of PLASTECO interregional workshops; section 3 presents the background research conducted to define the topics related to the market placement of alternatives for single-use plastics. Section 4 provides recommendations in the form of topics to be presented and discussed in the workshop. Finally, section 5 elaborates on the workshop's organisational issues, including the provision of a draft agenda.

2 Added value & strategic orientation of PLASTECO workshops

PLASTECO interregional workshops have been designed to provide partners and participating stakeholders with valuable practical experience, enhancing the learning process on finding alternatives to single-use plastics. The Interreg Europe programme encourages this type of exchange of experience and suggests that sharing knowledge and expertise should be an indispensable component of regional authorities' efforts to drive sustainable policy development.

Interregional workshops pose an excellent opportunity for regional stakeholders, policy makers, and experts, to communicate, exchange ideas, discuss the regional issues and examine potential solutions for various social, economic, environmental, or other challenges concerning policy development. This type of activity can, therefore, play a crucial role in policy making and the implementation of potential advancements and/or change. The relevant discussions and hands-on experience can facilitate the involvement and possible contribution of key stakeholders in shaping action plans and, in the long-run, after the project's completion.

During this interregional workshop, project partners will gain insights and understanding of the political priorities and initiatives in the field of secondary plastics, identify challenges and needs to be addressed at the action plans implementation phase, and ensure the involvement of critical stakeholders in the facilitation of action plans. The interactions and discussion to take place during the interregional workshop will enable all participants to discuss issues such as the market placement of alternatives for single-use plastics, green public procurement, eco-labeling schemes, measures for the development of secondary raw plastic markets as well as market barriers hindering the adoption of alternative products and services to single-use plastics, including ways to overcome them.

3 Thematic background

This section provides the thematic background for the exchange of experience expected to take place during the PLASTECO A3.2b workshop. It presents operational and technical knowledge on how to steer policy implementation away from single-use plastics by promoting the use of alternative recyclables and the development of secondary raw plastic markets. In the context of the workshop, the thematic focus is placed on four thematic axes, as dictated in the PLASTECO Application Form:

1. Green public procurement, as a means to generate demand for alternatives to single-use plastics.
2. Eco-labelling schemes, drawing from relevant EU initiatives and good practices, which partners and relevant stakeholders could use to boost the use of alternatives to single-use plastics.
3. Policy tools and instruments that partners and their stakeholders could utilise to support the uptake of alternatives to single-use plastics and develop secondary raw plastics markets.
4. Barriers that hinder the adoption of alternatives to single-use plastics and ways for mitigating their impact in partners' territories.

3.1 Green Public Procurement (GPP) for promoting alternatives to single-use plastics

3.1.1 Policy framework

The way plastic is being produced, used, and consumed constitutes a real threat for the European countries and the rest of the world. The alarming growth of plastics at a global scale, together with the associated health and sociocultural risks arising from single-use plastics signal the need for intervention at different policy levels.

Entering into force on July 2nd 2019, the European Commission Directive on the reduction of the impact of certain plastic products on the environment (commonly named "the Single-Use Plastics Directive", or SUP) aims to tackle pollution from single-use plastics and promote the market placement of eco-friendly materials. This section will shed light on some key Green Public Procurement criteria, as set in the SUP Directive. It will then elaborate on particular instruments that facilitate a framework for green public procurement while presenting examples from companies, regional communities, and stakeholders across Europe that have adopted public procurement criteria in their policy mix.

According to the definition provided by the European Commission, Green Public Procurement is "a process whereby public authorities seek to procure goods, services and works with reduced environmental impact through their life cycle when compared to goods, services and works with the same primary function that would otherwise be procured".[1] In other words, GPP constitutes a vital tool to promote the use of greener products and services by the public authorities and, therefore, to meet environmental policy goals concerning climate change, resource efficiency, and sustainable production and consumption. Indicatively, GPP can be instrumental in addressing ecological problems such as plastic waste, for example, by

[1] **https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2008:0400:FIN:EN:PDF**

specifying processes or packaging which generate less waste or encouraging reuse and recycling of materials.[2]

The emergence of the concept of Green Public Procurement is directly linked to the continually increasing role of environmental protection in the EU policy priorities and targets since 1986 with the entry into force of the Single European Act (SEA). The Single-Use Plastics Directive sets green public procurement very high in the European planning, setting several measures to reduce pollution from single-use plastics most commonly found in the environment, with some of them being binding.[3] Chief among these measures are:[4]

- Enforcement of EU-wide bans on 15 single-use plastic items (such as straws, cutlery, plates, food containers, cup, and beverage containers).
- Prevention of regrettable substitution by ensuring that banned items are replaced with reusable alternatives rather than single-use products from another material.
- Definition of quantitative targets to achieve reduction and promote reuse.
- Definition of minimum targets for recycled content to be included in the production of new plastics.
- Implementation of strict marking requirements, ensuring clear and visible labelling.
- Awareness-raising measures focused on consumption reduction and on the promotion of available reusable alternatives.
- Establishment of thorough data collection and monitoring mechanisms, together with vigorous enforcement, to assess and adjust measures to improve effectiveness.

Assisting in the SUP Directive efforts to phase out single-use plastics, the European Commission Circular Economy Action Plan (CEAP) concentrates on creating a sustainable product policy framework to ensure that plastic products which are either short-lived, toxic, unrepairable, unrecyclable, or untraceable are phased out from the EU market. Hence, the emphasis is placed on the sectors that use the most resources and where the potential for circularity is high: electronics and ICT, batteries and vehicles, packaging, plastics, textiles, construction and buildings, food, water, and nutrients.

Additionally, the CEAP includes proposals for further developing waste prevention targets, expanding the use of Extended Producer Responsibility tools and restricting waste exports outside the EU. In this context, the elaboration of additional GPP measures that promote plastic waste as a resource and demand a higher level of quality from secondary plastics could be another step towards the realisation of a more sustainable European plastic economy. Based on the above, it appears that the GPP criteria can address different aspects of the plactics value chain.[5] For example, reducing the consumption of wasteful and/or polluting plastic products (e.g., single use straws) or advancing good practice in waste management, as well as opting for products which can be reused and recycled.

[2] **https://ec.europa.eu/environment/gpp/benefits_en.htm**
[3] **https://link.springer.com/article/10.1007/s12027-020-00635-5#Fn7**
[4] **https://rethinkplasticalliance.eu/wp-content/uploads/2019/10/2019_10_10_rpa_bffp_sup_guide.pdf**
[5] **https://www.oecd.org/environment/waste/background-paper-policy-approaches-to-incentivise-sustainable-plastic-design.pdf**

The CEAP has produced these policy frameworks to help national govenrments define policies and actions that will contribute towards tackling single-use plastic through green public procurement.

Taking account experiences across the EU countries and beyond, sound solutions ought to be designed. A progressive step by-step approach should be adopted to ensure that:

a) Governmental resources, guidelines and monitoring mechanisms are in place to successfully use public procurement to reduce the acquisition and use of single-use plastics and to review approaches if the objectives are not achieved.

b) Relevant industry is equipped with financial resources and technological means to produce economically and environmentally-friendly alternatives, without jobs/revenue loss.

c) Relevant standards and norms are in place to guarantee the production of alternatives to single-use plastics and contribute to the definition and verification of tender specifications.

d) Companies acknowledge the value of different alternatives and are encouraged to modify their production and service patterns; and users are also cognizant of the impact of their own behaviour and are incentivized to change consumption habits.

e) The waste management system across countries is adapted to implement additional measures to reduce the impacts of single-use plastics. Selective collection and recycling rates must improve, unsound waste disposal practices ought to be avoided. Furthermore, the waste management system may need to adapt to the new alternatives introduced in the market, such as compostable items.

The process to tackle single-use plastics through green public procurement entails a series of steps. Governments across Europe, however, are already implementing environmental criteria in their procurement processes. The most effective way to do is by adopting a specific policy/regulatory instrument to reduce the procurement and use of disposable plastics, which might be approved under the umbrella of an existing overarching green/sustainable public procurement (GPP/SPP). If such overarching GPP/ SPP policy is being developed, single-use plastics could be included in it as a priority area to ensure that this aspect is properly addressed during policy implementation. This approach can be also used if an overarching policy to tackle single-use plastics or to promote a circular economy is being defined.[6] The part that follows shows two examples of such kind to illuminate the different approaches that the Government of Slovakia and the Government of Belgium have employed in their attempts towards eradicating single-use plastics.

3.1.2 Case study 1: Different governmental approaches from Slovakia and Belgium

The Government of Slovakia has a third National Action Plan for GPP for 2016- 2020 and in this framework, the Slovak Ministry of Environment adopted in 2018 a ministerial order to tackle single-use plastics. The order prohibits the purchase of bottled water for representation and other purposes by the Ministry and

[6] **http://www.cprac.org/ca/arxiu-de-noticies/generiques/addressing-plastic-pollution-through-public-procurement-new-guidelines-**

its public companies or agencies. Instead, tap water must be served in jugs, except in those circumstances where no tap water is available in the premises.

The region of Flanders (Belgium) has a Strategic Policy Plan on Public Procurement (2016-2020) with an objective to reach 100% SPP in the region. The Government uses this overarching policy for its SPP actions but it also includes GPP requirements in other relevant policies. For single-use plastics, the Flemish Government approved in 2019 a comprehensive policy to promote the circular economy in the region focusing on the sustainable management of material loops and waste, within which the government set strict objectives to reduce single-use plastics in catering-related services.

Having both GPP/SPP Policies, in Slovakia the Ministry adopted a ministerial order specific to tackle single-use plastics through procurement, while in Flanders the specific objectives were included in an overarching "circular economy" policy.

3.1.3 Case study 2: GPP criteria for eliminating single-use plastic cups and bottles in medical centres

Mutualia is a provider of social services and medical care, which is subject to EU public procurement laws. It collaborates with the Spanish social security system and operates 17 social and medical service centres in the Basque country, Spain.

Mutualia is a participant of the Basque GPP Programme[7] and is committed to green their procurement practices. So far, 70% of Mutualia's tenders include environmental criteria and the organisation aims to increase this number and introduce environmental criteria in future tenders. Until recently, drinking water was provided in all facilities by water fountains which dispensed water from large plastic bottles (11 litres) into single-use plastic cups. In addition, patients also received bottled water with their meals and Mutualia provided bottled water during meetings. This led to high expenditures on mineral water on the one hand, and a high amount of plastic waste on the other: approximately 147,000 glasses, 4,000 large cooler bottles for the fountains, and 7,000 small water bottles were used and thrown out each year.

To address issues of plastic waste and reduce spending on bottled water, Mutualia decided to install water fountains connected to the public water network, offering tap water instead of buying bottled water. The goal was to offer high quality drinking water at varying temperatures. To reduce the use of plastic cups and bottles Mutualia also aimed to:

- Replace plastic cups at the water fountains with recyclable cardboard cups.
- Use glass jars and washable and reusable cups to serve the water to patients and during meetings.
- Distribute 0.5l glass bottles to Mutualia staff to refill with water from the new water fountains.
- Remove plastic water bottles from existing vending machines.

Criteria used

[7] **https://www.ihobe.eus/compra-publica-verde#programa-compra**

The contract was divided into two lots. The first concerned the supply of purified water sources connected to the public water network for 17 Mutualia centres. This included the installation and commissioning of the water fountains maintenance and repair, or replacement in case of breakdown, as well as the supply of spare parts and consumables. The contract was awarded for 48 months with the option of extension. The second lot covers the delivery of refillable glass jars and bottles.

For lot 2 technical specifications included the delivery of a minimum 600 bottles, preferably with a printed environmental commitment on them or on their packaging. The bottles have to be made of glass, for its low environmental impact, machine and hand-washable, and include a screw cap for easy refill. In addition, a minimum of 100 glass jars had to be delivered, also washable by hand or machine. During the procurement process, bidders were required to submit a demonstration of the product that they planned to supply.

Award criteria

The contract was awarded to the most economically advantageous offer, weighted according to price (50%) and quality (50%).

- For the assessment of submissions for lot 2, bidders were asked to submit a report detailing:
- The design of the jars and bottles (15 points)
- The packaging and presentation of the jars and bottles (10 points)
- Delivery and replacement time (15 points)
- The printing and design quality of Mutualia' name and logo (10 points)

Results

The call for tender was published in November 2018 and five bids were received in the process, three out of which were accepted, and two made it to the evaluation phase. In January 2019 Mutualia introduced 40 new water fountains in its 17 service centres, provided its staff and rooms with the new glass bottles and jars, and purchased recyclable paper cups.

As a result of the procurement, Mutualia is saving an estimated €17,000 annually on water for its patients, employees, and visitors. Mutualia observed that the market consultation helped to raise awareness among suppliers that demand for plastic free water solution exists. Due to the market's lack of combined solutions for both water fountains and recyclable paper cups, Mutualia opted to manage the purchase of single-use paper cups for visitors separately. Mutualia's choice to procure paper cups separately was a signal to the market that combined, plastic-free solutions are in demand.

Environmental impacts

Single-use plastic and associated resource consumption and waste are a major concern in the EU due to adverse environmental and health impacts. The EU's plastics strategy therefore includes the goal to reduce plastic waste overall and recycle all remaining plastic by 2030. In line with these ambitions, the procurement has reduced both Mutualia's spending on water and its plastic waste. Per year, Mutualia admits about 5,000 patients and has about 600 employees. Based on these numbers, an estimated 147,000 plastic cups, 4,000 big plastic water cooler bottles, and 7,000 small plastic bottles will be saved annually

through the use of reusable bottles, jars and cups. Mutualia also has plans to remove plastic water bottles from the beverage vending machines installed in the different centres.

3.1.4 Case study 3: Public procurement as a circular economy enabler

The "Partnership for GPP" is a collaborative initiative in Denmark between Danish regions, municipalities and the Ministry of Environment and Food on common objectives for green procurement.[8] The current 14 partners have committed themselves to integrate green goals in their procurement policies as well as greening their procurement on 11 specific product groups. Criteria include recyclability, number of chemicals, product lifespan and total cost of ownership – all elements essential for the transition to a circular economy. The partnership's total volume of procurement is significant at EUR 5 billion.

The Partnership for GPP was established in 2006 by the then Minister of Environment, Connie Hedegaard, and Denmark's three largest municipalities. The objective is to create a coalition of governmental bodies to increase procurement volumes and therefore have a larger impact on the market. The partnership is in close collaboration with the Forum for Sustainable Procurement, which is a broader national initiative targeting all stakeholders with an interest in procurement, and has been running since 2011.

The key activities of the Partnership for GPP revolve around collaboration, capacity building and sharing of knowledge and experiences. Through the partnership, the members get access to knowledge on how to integrate environmental and economic requirements into tenders, and a common set of criteria they can use to strategically drive the market in the same direction. Membership is free, but active participation and the development of specific actions are requirements.

For example, Odense Municipality was to construct 40 new residences for youths with disabilities. By rethinking the tender and implementing green procurement requirements the new buildings were constructed using fewer unwanted chemicals, recycled plastics, alternative materials such as paper wool for insulation, recycled bricks, and energy-efficient solutions including LED lighting and solar water heating. The construction cost of the residences was 5% higher than business-as-usual, but it is expected that the extra investment will be repaid quickly due to lower operating costs.

3.2 Plastics and eco-labelling schemes

Eco-labelling is a voluntary method of environmental performance certification and labelling that is practiced around the world. A European-wide eco-labelling scheme was introduced by the European Commission in 1992 as part of its 5th Environmental Action Plan. The EU eco-labelling scheme aims to promote products with reduced environmental harm during their entire life-cycle and provide customers with information about the environmental impact and substances contained in products. More specifically, environmental labels offer a plethora of benefits to consumers, producers, and public authorities:

- Consumers acquire knowledge on whether purchasing products adhere to environmental criteria and sustainability principles.

[8] **Source: https://www.ellenmacarthurfoundation.org/case-studies/denmark-public-procurement-as-a-circular-economy-enabler**

- Marketing opportunity for producers and companies since they can advertise their products' green, eco-friendly character and even secure funding for further improvement of their products and services.
- Public authorities may integrate eco-friendly and sustainable criteria in public tenders by requiring labels as the main prerequisite for awarding contracts.

Different environmental performance labels and criteria are being used across the EU. The three types of environmental claims, developed by the International Standards Organisation (ISO) are the following:[9]

1. **Third-party certified environmental labelling (Eco-labels):** Claims are based on criteria set by a third party and are multi-issue, being based on the product's life cycle impacts. The awarding body may be either a governmental organization or a private non-commercial entity. An example of this kind is the EC Eco-label mentioned above.

2. **Self-declaration claims:** This is a self-declared certification that focuses on a particular quality of a product. Therefore, claims are based on self-declarations by manufacturers, retailers, and/or distributors about a product's environmental characteristics.

3. **Quantified product information label:** Claims consist of quantified product information based on life-cycle impacts. These impacts are presented in a form that facilitates comparison between products against a set of given parameters.

4. **Single issue eco-labels:** These labels do not fall within any of the above categories; while similar to the first type (eco-labels), single issue eco-labels concentrate on a specific issue (such as energy consumption, raw materials sourcing).

The most reliable labels are the ones that use objective and transparent criteria and are product screened by an independent third-party/body. European Eco-labels are based on Life Cycle Assessment (LCA); thus, before receiving the European Eco-label, rigorous studies assess the item's environmental impact over its entire life cycle. At the moment, the scheme covers more than 23 types of products and services which have been awarded the Eco-label with other groups being continuously added.[10] Indicative examples include the *Nordic Swan* and the *Blue Angel*.

The EU Ecolabel, supporting the EU Plastics Strategy and global plastic initiatives, aims to promote alternative solutions to single-use plastics. To this end, it has introduced specific criteria for tourist accommodations that prohibit the use of single-use plastic items like disposable toiletries, cutlery and single-dose packages for food. Instead, it encourages eco-designed plastic packaging, toiletries, and other single-use plastic items; this will allow venues to reduce single-use plastics waste[11].

In addition, the EU Ecolabel includes criteria for a number of plastic product groups that can drive the demand for recycled plastic content. On textile products and on furniture, quantitative information on

[9] **https://ec.europa.eu/environment/ecolabel/about_ecolabel/reports/erm.pdf**
[10] **https://ec.europa.eu/environment/ecolabel/documents/general.pdf**
[11] **https://ec.europa.eu/environment/ecolabel/news.html**

minimum recycled content is required. For textile products, staple fibres shall at least contain 50% recycled PET, and this requirement is coupled with the assessment and verification of the recycled content through thirdparty certification. Criteria for rinse-off cosmetics require a signed declaration of the recycled or renewable content of the packaging[12].

Similarly, the German Ecolabel 'Blue Angel' promotes products with a high percentage of post-consumer recyclates and more precisely, with a high percentage of recycled plastics[13]. The criteria apply to finished products that have a plastic content of over 90% (weight) and a minimum recycled post-consumer plastic of 80%[14]. To certify the recycled content and its proper treatment, Blue Angel is using the EUCertPlast certification[15]. Some of the products that have been certified with the label belong to the following categories: office equipment (e.g. letter trays/drawer boxes), waste and recycling bins, plastic buckets, pots and containers, watering cans, garden tables and chairs, palisades, fences, lawn grids, compost silos and composters as well as film or sheet products, such as garbage and carrier bags, cover sheets and tarapaulins.

Along the same lines, the Ecolabel 'Nordic Swan'[16] promotes also plastic packaging products that follow eco-design principles. If the primary packaging consists mainly of plastics, at least 80% of the product's weight must be made from bio-based material or recycled material or a combination of both. The recycled plastic must fulfill Regulation (EC) No 282/2008 on recycled plastic materials and articles intended to come into contact with foods. The recycling process must be assessed for safety by EFSA.

There are several complementary initiatives that could help both consumers and companies move towards the use of Ecolabels:

- **Knowledge dissemination about eco-labels:** Various existing and emerging digital solutions, such as smartphone apps, can help facilitate information flows throughout the plastics supply chain. Such tools intend to enable end consumers to make better-informed purchasing decisions, thereby potentially favouring alternatives with less health and environmental impacts on the market and send a market signal to producers and designers about consumer preferences. One example is the Beat the Microbead app, through which consumers can verify whether a product contains plastic microbeads by scanning the barcode with their smartphone camera. The app was launched in 2012 by the Amsterdam-based NGO Plastic Soup Foundation.

- **Industry-wide and collective initiatives:** While the plastics supply chain can generate effective changes to production processes and material choice, regulators have an important role in incentivising voluntary commitment and sufficient industry ambition. For instance, to encourage this type of commitment and boost the uptake of recycled plastics, the European Commission recently called on companies and industry associations to put forward voluntary pledges (the

[12] https://ecostandard.org/wp-content/uploads/2019/06/APPLYING-ECODESIGN-PRINCIPLES-TO-PLASTICS.pdf
[13] https://www.qhse-cert.com/DE-UZ30a-blue-angel
[14] https://produktinfo.blauer-engel.de/uploads/criteriafile/en/DE-UZ%2030a-201901-en%20Criteria-2020-09-28.pdf
[15] https://www.eucertplast.eu/blue-angel
[16] http://www.nordic-ecolabel.org/product-groups/group/DownloadDocument/?documentId=5180

"Pledging Campaign"). The overall objective is to ensure that 10 million tonnes of recycled plastics are used in new products on the EU market by 2025.

- **Commitments by individual firms:** Some companies are taking pre-emptive action concerning substances or groups of chemicals "of concern", i.e., that are not yet categorised as hazardous but might have been identified as potentially harmful and likely to be subject to future restrictions. One example is retailer COOP Denmark who has banned the use of twelve substances of concern ("the dirty dozen") from its own-brand products and product packaging. One example of these substances is Bisphenol. COOP has since launched a public campaign urging Danish politicians to vote for a ban on these chemicals from all consumer goods.

- **Public-private collaborations and partnerships:** Collaboration and voluntary agreements between industry and the regulator are common in relation to chemicals and plastics, particularly plastic packaging. The Bio-based Industries Joint Undertaking (BBI JU) is a new €3.7 billion Public-Private Partnership between the EU and the Bio-based Industries Consortium aiming to increase investment in the development of a sustainable bio-based industry sector in Europe. Operating under Horizon 2020, the BBI JU's role is to maximise the potential of the bio-based economy in Europe – using innovative technologies to turn biological waste into greener products.[17]

- **Information exchange and know-how**: Public or private bodies may produce guidelines, training, online databases, or other services to assist companies in interpreting and evaluating different substances regarding their environmental and health compatibility. One example is the Substitute It Now (SIN) list established by ChemSec, a globally used database of chemicals identified by ChemSec as fulfilling the EU REACH criteria for Substances of Very High Concern (SVHC).

Awareness campaign – The European Ecolabel "pop-up shop"

Co-organised by the European Commission, the Federal Ministry for the Environment, the Federal Environmental Agency, and RAL, the Showroom made its mark on Berlin from the 28th of September to the 4th of October 2020. Taking up residence in the area of Dorothea-Schlegel-Platz, the Showroom displayed a selection of the best EU Ecolabel products and services, with a particular focus on goods and services available in Germany.

Figure 1: Official Showroom poster

Over seven days, the Showroom hosted an action-packed programme of student workshops, infotainment activities, certification events, and presentations by experts, consumer associations, producers, and public figures. Through the above awareness-raising initiatives, the local community had the opportunity to learn about national companies that incorporate environmentally-friendly plastics and other secondary raw materials in their packaging as well as ways to make informed sustainable choices on product purchase, usage, and disposal.

[17] https://europa.eu/european-union/about-eu/agencies/bbi_en

3.3 Developing secondary raw plastic markets

Scholarly work conducted in the field of secondary plastic markets reveals that despite several policy initiatives in many Member States over the last decades, there is still a general sense that too much municipal solid waste is generated and that only a small share of it is not landfilled. To reverse the cradle-to-grave model of waste, further development of landfill diversion strategies and secondary raw material markets is considered necessary. This section will concentrate on the second category, thus offering a working definition of the term and describing several challenges and policy interventions to support the emergence of secondary raw plastic materials in the European market.

Secondary raw materials (SRMs) are materials and articles that may be used repeatedly in production as starting material after complete initial use. Some of the most important forms of secondary raw materials are a) scrap (usable waste of ferrous, nonferrous, and precious metals), b) waste paper and glass, c) machines, equipment, and their components that have fallen out of service, d) metal parts obtained in the demolition of buildings and/or old ships, e) secondary metals formed in the shape of depreciated scrap and industrial waste, and f) end waste products of production.

The overriding majority of the aforementioned secondary raw materials are being incinerated, landfilled and/or shipped between the EU and outside the EU. As a result, the European economy loses a significant amount of metals, wood, glass, paper, and plastics that could have been reused or recycled. The EU makes explicit mention of the importance of turning waste into resources and keeping them in use in a perpetual flow. To this end, the EU has adopted several policies and measures to provide sustainable waste management solutions.

The European Green Deal constitutes the new strategy for economic growth, adopted by the European Commission in late 2019. One of the most important tasks in realising this strategy is the mobilization of the industry towards a clean(er) and circular economy (CE). The EC underlines that both changes in the management of mineral resources in individual member states and their effects should be monitored. Therefore, in 2018, the EC pointed out secondary raw materials management issues as important elements of the monitoring framework in the transformation process towards CE. These include a) reducing the amount of waste generated per country, b) maximising re-cycling and re-use, c) limiting incineration to materials that are not recyclable, d) phasing out landfilling to non-recyclable and non-recoverable waste, and e) ensuring full implementation of the waste policy targets in all member states.

3.3.1 The need to align supply and demand

Developing well-functioning markets for secondary raw materials will speed up the transition towards a New Plastics Economy. Such a transition can be achieved by assessing the consumption-production-resources nexus and introducing a series of initiatives in this area. While single-use plastic constitutes a ubiquitous material in the market, the same does not necessarily apply for secondary plastics. Manufacturers across Europe often encounter difficulties in locating suppliers who can supply them with secondary raw materials with the right specifications. Also, recyclers often experience similar problems in identifying potential buyers for their products. Thus, to enable better matching between supply and

demand, it is critical for local communities to establish a well-functioning market for these materials, with sufficient transparency on material specifications and mechanisms to align supply and demand.

Policy measures taken by different governments across Europe have worked towards increasing the demand for recycled materials. These include, among others:

- Public procurement rules.
- Criteria in public tenders to boost market conditions for secondary raw materials.
- Abolishment of regulations that hinder recycling.
- Financial incentives (capital allowances and/or tax privileges).

Generating demand for recycled plastics can trigger a pull effect to speed up the transition towards a significant after-use plastics economy. This can be realized through policy frameworks or private initiatives within the industrial sector. More specifically, voluntary initiatives by the side of large manufacturers and companies wishing to engage in recycled content are likely to create a significant pull effect and motivate other stakeholders within the industry. For example, among the manufacturers that have committed to implement eco-friendly initiatives is Colgate-Palmolive. The personal care products manufacturer Colgate-Palmolive has agreed to make 100 percent of its packaging for three of four product categories completely recyclable and even develop a recyclable toothpaste tube or package, which would bring its fourth product category close to the same sustainability standard.[18]

Around the world: Closing the loop on single-use food packaging in New Zealand

The rapidly growing takeaway food sector results in many single-use plastic containers being discarded every year. Recycling is generally impractical due to contamination caused by food residues, so takeaway packaging most often ends up in a landfill. Reusable containers should be implemented wherever possible, but this is sometimes not practical, leaving a proportion that remains single use.

While recycling is an important part of the solution, it is not always the best option and can be very expensive. Reuse models are a good alternative, but not always appropriate. In cases where single-use is needed, when recycling or reuse are not practical or economic, and there is the opportunity to divert food waste from landfill, compostable packaging can have a role to play.

As demand for packaging increases, the development of better options for plastic packaging, which are decoupled from the use of finite resources, becomes more important. Based on circular economy principles, these alternatives should be reusable, recyclable, or compostable by design and fit within a system that carries this out in practice and at scale.

Designed to be part of a circular economy, BioPak compostable packaging is made from responsibly-sourced materials, backed up by a collection service that ensures its products are composted in practice. BioPak's compostable foodservice packaging, and crucially, its after-use collection service guarantees the diversion of a proportion of these resources away from landfill.

BioPak packaging is produced in facilities certified to ISO14000, a family of standards that help

[18] **https://sustainablebrands.com/read/chemistry-materials-packaging/colgate-commits-to00-recyclable-packaging-for-three-of-four-product-categories-by-2020**

organisations minimise how their operations negatively affect the environment. The process starts with the responsible sourcing of materials and ends with the diversion of food and plastics from landfill. These materials are instead used to produce compost that can then be used to regenerate soil and grow new plants, at the same time reducing plastic pollution and cutting carbon emissions.[19]

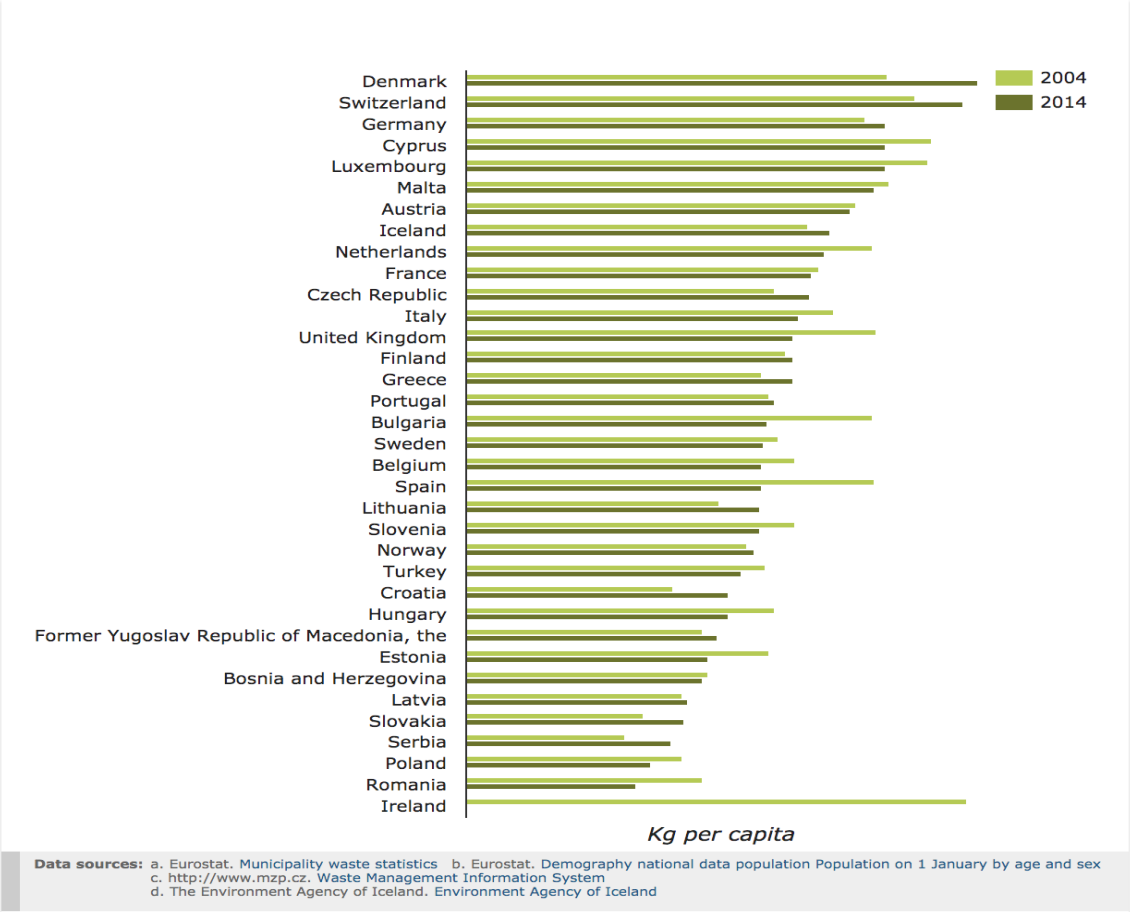
3.3.2 The role of waste management

Regions play an essential role in promoting resource efficiency and recycling towards sustainable development at the sub-national level. Public authorities have direct responsibilities to advance the transition towards a circular economy model, employing: a) waste management (sorting of recyclables), b) local taxation, c) public procurement, d) regional innovation programmes, and e) regional advisory business centres.

According to the European Environment Agency, the total municipal waste generated within the EU has been decreased by 3% in absolute terms and average generation per person by 7% during 2004-2014. Nevertheless, member states present noticeable variations in terms of municipal waste generated. Indicatively, countries like Poland produce 286 kg of waste per capita while Denmark reaches 789 kg. Such differences showcase that wealthier countries are likely to have more municipal waste per person. Countries like Greece, Cyprus, and Malta, whose economy relies on tourists, also produce high amounts of waste.

[19] **Some EU initiatives are 'Recup' (https://recup.de/) and 'Vytal' (https://www.vytal.org/).**

Figure 2: Municipal waste genera ted per person in 35 European countries (2004-2014)



These variations, not only uncover differences in consumption patterns and economic structures, but also diverse ways through which municipal waste is being collected and managed.

To improve waste management and stimulate the use of secondary raw materials, and plastics, in particular, a series of policies and frameworks could be implemented at a sub-national level:

- **Establish comprehensive waste management plans.** Waste management planning constitutes the cornerstone of any national, regional and local policy on waste management. The drawing up of a waste management plan allows a) assessing and identifying the existing situation at a regional level, b) defining qualitative and quantitative waste management objectives for secondary raw materials, c) formulating strategies, and d) tracing the necessary means to implement them. For example, partners could formulate a waste management plan in their regions for secondary raw materials, including recycled plastics.
- **Separate collection and sorting system for secondary raw materials.** The waste collection system may be divided by a) the type of waste segregation model (multiple fractions, mixed waste), and b) the location of collection points (e.g., door-to-door, buried containers, surface containers, battery-recycling drop off). Waste collection bins in different colours may be placed throughout a region's territory to sort different types of secondary raw materials.

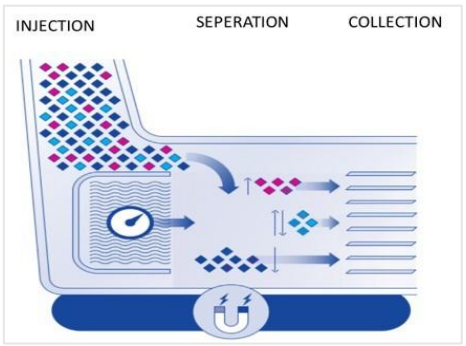
- **Pay-as-you-throw scheme.** Pay-as-you-throw (PAYT), also known as unit pricing or variable-rate pricing, is a usage-pricing model for disposing of municipal solid wastes. Therefore, residents of a region are charged for the collection of municipal solid waste—ordinary household trash—based on the amount they throw away. This model has been implemented across many European countries with success as it provides a direct economic incentive and the impetus recycle more and generate less waste. For example, partners could develop action plans to introduce a pay-as-you-throw scheme in own regions.
- **Public awareness on environmental protection and recycling of secondary raw materials.** Regional/local authorities are encouraged to organise environmental campaigns to familiarise the local community with sustainable environmental management, recycling, resource efficiency, and provide them with knowledge and incentives (e.g. pay-as-you-throw scheme) to adopt eco-friendlier lifestyles. In this context, partners could organise an information day and issue press releases (online) to communicate the value of recycling and value of secondary raw materials.
- **Patents related to recycling and secondary raw materials.** An essential economic growth element is developing and implementing innovative solutions on the market through patents about recycling and secondary raw materials (see Case study). The example of China showcases that in 2015 more than 3811 patents concerning recycling secondary raw materials were developed across the country. The EU countries (28) are far behind and in 2014 published 356 patents. Although higher compared to previous years, the numbers demonstrate the need for investment in research and development at a national and regional level. In this context, partners could act as facilitators in developing community-university partnerships, committing financial resources for research in the area of secondary plastic materials.

3.3.3 Case study: Developing new methods for higher-quality secondary plastics

The Urban Mining Corp (Umincor), based in the Netherlands, has established a proper waste management system geared towards supporting the use of secondary raw materials.

Plastic is everywhere, fulfilling many tasks in our daily lives. While it is a product with outstanding opportunities, it also comes with its weaknesses. Yearly around 300 M tons of plastics are produced on earth, representing a raw material value of more than 100 B $.

Figure 2: Urban Mining Corp's method for better waste management



Most of it is used for less than 15 minutes. After usage, around 30% of the plastic flow ends up in rivers and oceans (this means one garbage truck each minute). Approximately 10% is being incinerated and 40% is being landfilled. 20% is collected for recycling, but this is more down-cycling, as only 5% flows back into the economy as new raw material.

Acknowledging inefficiencies in commonly used recycling techniques (based on object sorting), Umincorp developed a recycling process with a 40% higher recovery of plastics and a 10% higher output quality than currently used methods. The Magnetic Density Separation (MDS) application, with a capacity of 10.000t/year, makes

use of specially designed magnets in combination with a unique water-based process fluid to separate heterogeneous input flows on density levels of each individual particle in one step. The magneto-responsive fluid, also produced in-house, together with the permanent magnet, creates the required density gradient so that there are different densities at different heights in the machine.

Particles flow through the density field, with light particles floating on the surface while more massive particles are suspended in the liquid below at different depths according to their density. The separation for the production of pure material fractions of equal densities is combined into one process by setting splitters in the right positions. The use of MDS in the plastics industry results in high purity PP, HDPE, PS, PET, ABS, PVC or other plastics fractions that can be used directly in new high-quality end products. We have the unique expertise to improve material recovery at higher product purity while reducing the cost compared to current alternatives.

3.4 Barriers to the adoption of alternatives to single-use plastics

This section presents the main barriers hindering the market adoption of alternatives to single-use plastics. It also suggests ways that EU regions could employ to overcome them, prioritising the main challenges that need to be addressed, and providing potential solutions.

Relevant literature showcases the existence of a broad range of barriers hampering the transition to a new plastics economy. These may originate from: a) the enabling institutional environment, such as the regulatory and policy-making framework, b) the structure and function of the relevant market, and c) social and cultural issues include limited environmental consciousness and knowledge from suppliers and buyers.

The greatest challenge is to lift regulatory barriers to a circular economy. The obstacles in question are multiple and concern an entire spectrum of directives, legislation, and regulations on the circular economy. These obstacles can be summarized as follows: a) low and at times, uneven implementation of EU directives across member states, b) lack of harmonization and non-aligned rules at a national and regional level translate into a diverse yet flawed policy mix concerning recycling, reuse, and introduction of eco-friendly alternatives to single-use plastics, c) lack of stringent government regulations concerning waste management, d) division between government departments responsible for procurement and environmental matters and e) limited government initiatives to promote alternatives to single-use plastics.

The market's structure and the way it operates is another barrier to choosing alternatives to single-use plastics. While single-use plastics may be of low quality and dangerous for the environment, at the same time, they offer adequate performance at a low cost. As a result, companies and industries may be reluctant to opt for alternatives often requiring a higher price or significant initial investment. Public authorities should make concerted efforts to promote sustainable plastics design and use, including modulated EPR fees to encourage more sustainable and eco-friendly design, imposing taxes and penalties on the use of hazardous additives, and improving waste management infrastructure.

The limited environmental awareness among suppliers and customers is widely recognized as a significant barrier to a circular economy. Knowledge gaps constitute an important issue in several innovative and emerging areas (secondary raw materials and bio-based plastics), holding back investments. Furthermore,

given the lack of financial incentives, the majority of suppliers are not interested in adopting environmentally-friendly criteria into production processes. Although companies do not always have the power to influence their suppliers' agenda, many companies have branded themselves as environmentally friendly and offer products that have a smaller adverse effect on the environment while also offering benefits to the end-user. Despite the availability of and preference for alternatives to single-use plastics, however, the understanding of consumers 'choice for eco-products is still insufficient. To understand this behavior attitude gap, research on the primary factors that influence consumers' preferences and awareness campaigns on the availability of eco-products is of crucial importance.

The following table summarises the main barriers identified in the literature. It proposes potential measures to be taken by (regional) public authorities to create an enabling environment for the market placement of alternatives to single-use plastics.

Table 1: Barriers to the development of secondary plastic markets

Barrier	Type of barrier	Potential solutions
Uneven implementation of the EU Single-use plastics Directive	Regulatory	• Transpose the EU regulation on design, production, and management of plastics into national and regional policies
Lack of clear guidelines about the application of national regulations on recycling, recovery, and reuse	Regulatory	• Clarify the application of national regulations • Streamline the administrative process • Funding investment to support eco-friendly products
Regulations and loopholes undermining the scope of alternatives to single-use plastics (health versus food waste)	Regulatory	• Resolve conflicts and stimulate the market for secondary raw and eco-friendly materials
Lack of harmonized definitions for the new plastics economy concerning the collection and sorting of plastics	Regulatory	• Formulate clearer and harmonized definitions • Define clear labelling and material marking standards, aligned with national and sorting separation systems • Include end-of-life options for particular products
Absence of end-of-waste criteria for particular product categories (e.g. manure, palladium)		
Lack of waste separation at source	Operational	• Improve regional waste management infrastructure • Design and organize collection systems for secondary raw materials

Reconsideration of existing recycling targets	Operational	• Reduce national consumption targets through economic restrictions • Ensure reusable alternatives to single-use plastics • Set qualitative targets concerning the reusable materials to be used
Research and development	Operational	• Support stakeholders targeting inefficiencies in the plastics sector upstream • Subsidies and incentives to ensure the sustainability of plastic • Address gaps in waste management infrastructure and risks of plastic waste leaking into the environment
Quality of recycling (presence of additives or contaminants in recycled materials)	Operational	• Enhance collection and sorting of different materials
Lack of concrete product requirements to promote waste treatment and recyclability	Operational	• Set a common environmental certification scheme to monitor the process of manufacturing commercial products • Provide incentives to suppliers and firms complying with these criteria
Lack of transparency concerning the material components of products	Operational	• Develop criteria (Environmental Product Declaration) production information about product composition and content
Low market prices for single-use plastic	Economic	• Application of taxes to single-use plastic items • Provide opportunities for affordable and eco-friendly alternatives • Public-private collaborations and partnerships
Price fluctuations of secondary raw materials	Economic	• A centrally-managed investment fund which would act as a buffer against price volatility • Tax the consumption of raw materials
Lack of environmental awareness among suppliers and customers	Economic	• Financial incentives to companies and suppliers • Communication campaigns & volunteering initiatives • Environmental seminars and workshops within the educational system

		• Research on customers' consumption choices and trends

4 Topics for discussion

This section provides a series of themes and areas that could be discussed during the interregional workshop. This list is not final and subject to modifications and/or updates (if necessary), following the review and feedback from the hosting organization.

The term 'thematic areas', as indicated below, refers to a broad theme and the term 'topic(s)' refers to sub-themes in which the core theme is divided. Four distinct thematic areas have been identified for the interregional workshop on alternatives to single-use plastics. Each thematic area comprises some indicative topics, around which the workshop's presentations and discussions shall revolve. Guest speakers are encouraged to draw on the research findings and new provide new ideas and perspectives for the topics under examination.

Thematic area 1: Policies and instruments facilitating a framework for green public procurement

This session will provide a number of potential policy interventions encouraging the market placement of alternatives for single-use plastics. It will present best practices from waste management and use of recyclable materials and by-products towards a new plastics economy and prescribe policies and instruments supporting the sustainability of plastics and the use of eco-friendly alternatives. An open discussion will follow where participants will have the opportunity to share general thoughts and experiences from their own countries. The exchange of views among regional authorities' representatives and stakeholders will provide fertile ground for creating a common understanding of how to facilitate a green plastics economy.

Indicative topics to be discussed:

- Best practices from own country
- Green public procurement guidelines and main national/regional challenges
- Environmental criteria to reduce the harmful impact of services or products throughout their lifecycle
- Procurement criteria, producer responsibility schemes, and product labels

Thematic area 2: Eco-labelling schemes at a European and national level

This session will attempt to decode the functioning and management of the EU Eco-label, as carried out by the European Commission together with the bodies from the Member states and other stakeholders. It will provide details on the voluntary scheme and the ways it has been applied by producers, importers, and retailers across Europe for the label of their products. The participants will be encouraged to discuss the role of eco-labeling schemes and how they can be employed to further boost the use of alternatives to single-use plastics.

Indicative topics for discussion:

- Incentives to further promote the application of eco-labeling schemes
- Lessons learnt from own countries
- Eco-labeling schemes, companies, and customers

Thematic area 3: Support for secondary raw materials markets

This session will analyse the state of secondary raw materials markets as well as the benefits and challenges arising from their use. The participants may discuss potential measures to stabilise the fluctuating cost of secondary raw materials and tools (both economic and policy-making) to promote their adoption from suppliers and customers.

Indicative topics for discussion:

- Ways to motivate stakeholders to trade in the secondary raw materials market
- Perspectives from own country
- Means to distribute the benefits of secondary raw materials to the civil society

Thematic area 4: Barriers hindering the adoption of alternatives to single-use plastics

The last thematic session will provide a general overview of the main barriers hindering the adoption of alternatives to single-use plastics. This session will explore regulatory, operational, economic as well as socio-cultural obstacles which affect the smooth integration of eco-friendly materials and reusable plastics in the market. Furthermore, it will provide potential solutions and strategies to lift the above barriers.

Indicative topics for discussion:

- Regulatory, administrative, and economic barriers disallowing the adoption of alternatives to single-use plastics.
- Potential means to lift the main barriers
- Experiences from own countries

5 Guidelines for the organisation of the workshop

5.1 Date & attendees

The Stara Zagora Regional Economic Development Agency (SZREDA) will host the interregional thematic workshop on the market placement of alternatives for single-use plastics. The workshop will last one day (DD-MM-YYYY). The working language will be English, which means that participants must have sufficient knowledge of the language to be able to fully participate in workshop discussions.

The PLASTECO Application Form foresees that two representatives from partners' organisations, accompanied by one regional stakeholder or external expert, can attend the study visit. The target audience includes all those individuals that can be impacted by the project outcomes and are interested in using project outputs and results to support policy measures for the transition to a new plastics economy.

The Application Form provides a list of key regional stakeholders per project partners. Nevertheless, this is only an indicative pool of regional stakeholders identified at an initial stage; the project development phase. As the project progresses, project partners are expected to expand their network of contacts, through targeted communication actions and networking, reaching and liaising with new stakeholders and interested institutions from across Europe such as environmental agencies, regional development agencies, higher education institutes, and research centres, chambers of commerce, professional associations and public authorities. In any case, PLASTECO partners are advised to invite any other organisation or body involved in the decision making process and/or interested in triggering policy development and behavioural changes towards a new plastics economy.

5.2 On-site workshop

If conducted on-site, the workshop will last one day. All PLASTECO partners will take part, with members of their stakeholder groups and external experts. The venue selected by SZREDA for the oral presentation and roundtable discussions should be ably equipped with suitable projection devices and equipment to deliver presentations, including a flip chart and a whiteboard. Good acoustics are required, roving microphones available and the room must be properly ventilated and air-conditioned. The facility has to be designed to allow "access for all". Finally, special attention should be paid to health and safety rules, in full compliance with national restrictions and guidelines to prevent the spread of COVID-19. Relevant precautions may include:

- Social distancing
- Availability of sanitizers and protective equipment (e.g. masks)
- Frequent ventilation
- Attention in the distribution of food and beverages (safer options include seated service or pre-packed snacks and beverages)

5.3 Virtual workshop

Virtual events, including meetings, webinars, workshops, and conferences, are gaining ground as a variety of software and tools are increasingly user friendly and widely available and holding an event online offers numerous benefits. At the same time, online events may offer a viable alternative in cases where physical attendance is not an option, such as the current Covid-19 outbreak. This subsection provides guidelines for the organisation of a virtual study visit, as a viable alternative, seeking to guarantee the project's seamless implementation and continuity.

Taking into consideration the limitations associated with virtual communication in comparison to physical communication and live events, the virtual events are expected to have a decreased duration, not exceeding 5 hours, to remain productive and efficient.

Maintaining the schedule is essential for virtual events, as delays can be much more irritating than in face-to-face events. Thus, the organisers should make sure that the study visit will start and end on time. Also, breaks should be scheduled every 45-60 minutes, to maintain the attendees' attention; virtual events require rigid scheduling.

There is a wide selection of virtual conferencing tools available, both free and paid, offering the technical possibilities to support the purposes of the study visit. The following table presents a comparison between three very popular options: Google Meet, Zoom and Microsoft Teams.

Table 2: Overview of Google Meet, Zoom and Microsoft Teams features[20]

	Google Meet	**Zoom**	**Microsoft teams**
Free plan available	Yes	Yes	Yes
Maximum number of participants	100 (free plan)	100 (free plan)	n/a (free plan)
Maximum duration	24 hours (free plan through 30/09/20)	40 mins limit on group meetings (free plan)	n/a (free plan)
Join from a browser	Yes	Yes (with limited features)	Yes
Share screen/presentation	Yes	Yes	Yes
Adjustable layouts	Yes	Yes	Yes

[20] **Sources:**
https://apps.google.com/meet/pricing;
https://zoom.us/pricing;
https://www.microsoft.com/en-ww/microsoft-365/microsoft-teams/compare-microsoft-teams-options

Based on the free plan features of Google Meet, combined with its ease of access and use, the platform is considered the best option for hosting study visit. As an example, Annex B presents its functionalities in detail and provides guidelines for the host organisation for conducting a virtual study visit using Google Meet. It presents, additionally, guidelines for participants. The hosting organisation (SZREDA) is, however, free to choose any platform they find most suitable.

5.4 Session format

In either its on-site or virtual form, the interregional workshop may include two different types of activities to facilitate the transfer/exchange of knowledge and capacity building among regional authorities' representatives: a) presentations, b) interactive session with roundtable discussions.

Presentations will provide an opportunity for participants to acquire a better understanding of a) how the markets for alternatives for single-use plastics are functioning, b) potential policy measures to promote the use of secondary raw materials, c) eco-labeling schemes and eco-friendly examples from European countries, and d) barriers hindering the adoption of new products and services, as well as ways to lift them.

The presentations should be delivered by experts from various professional backgrounds (e.g., academics, policy-makers, business executives, researchers) and empirical knowledge on the topics under examination. Round table discussions will follow the completion of each presentation. Partners and stakeholders are highly encouraged to discuss the issues under examination with slides and/or spontaneous interventions. The interactive phase will enable regional authorities' participants to come up with new ideas for policy measures to promote the market placement of alternatives for single-use plastics, deciding on priorities, strategy, and vision, and working towards common solutions.

5.5 Agenda

The following is an indicative agenda for the PLASTECO A3.2b interregional workshop. It is applicable for both on-site and virtual options; in the virtual option, however, it is strongly advised to limit the minutes of the interactive discussion by half (e.g. 15min) or skip one the last session altogether.

Time/Duration	Description
09:00 - 09:30	Arrivals and registration (logging-in if held virtually)
09:30 - 09:45	Opening speech
09:45 - 10:00	Objectives of the workshop/Overview of the agenda
10:00 – 11:15	Towards a framework for Green Public Procurement <u>Indicative topics of discussion</u> • Green public procurement guidelines & main regional challenges • Environmental criteria to reduce the harmful impact of services or products • Best practices from own country <u>Format</u>

	• Oral presentation (10 minutes for each presentation) • Interactive session-roundtable discussion (30 minutes) Wrap-up: Main conclusions & findings from the interactive session
11:15 – 12:30	Eco-labeling schemes: EU initiatives & good practices <u>Indicative topics of discussion</u> • National/regional Incentives to promote the application of eco-labeling schemes • Eco-labeling schemes: Between companies/manufacturers and consumers • Lessons learnt from own countries <u>Format</u> • Oral presentation (10 minutes for each presentation) • Interactive session-roundtable discussion (30 minutes) Wrap-up: Main conclusions & findings from the interactive session
12:30 – 13:00	Break
13:00 – 14:15	Support for secondary raw materials markets <u>Indicative topics of discussion</u> • Ways to motivate stakeholders to trade in the secondary raw materials market • Means to distribute the benefits of secondary raw materials to the civil society • Perspectives from own country <u>Format</u> • Oral presentation (10 minutes for each presentation) • Interactive session-roundtable discussion (30 minutes) Wrap-up: Main conclusions & findings from the interactive session
14:15 – 15:30	Barriers hindering the adoption of alternatives to single-use plastics <u>Indicative topics of discussion</u> • Regulatory, administrative, and economic barriers • Potential means to lift such barriers • Experiences from own countries <u>Format</u> • Oral presentation (10 minutes for each presentation) • Interactive session-roundtable discussion (30 minutes)

	Wrap-up: Main conclusions & findings from the interactive session
15:30 – 16:15	Final remarks

5.6 How to draft the summary report

To conclude the PLASTECO activity 3.2b, SZREDA will deliver a summary report. The report will present the outcomes of the visit and will be used by project partners as the main input for diffusing the lessons learned within their organisations and to promote storytelling. Summary reports are short written communication documents, which aim to convey information related to the discussions and activities carried out during study visit proceedings. The summary report should include the following aspects:

- Document the interventions of participants and the overall discussion within each session.
- Draw conclusions from the roundtable discussions and the debates in each session of the workshop.
- Briefly present policy recommendations for the development of action plans based on the interventions of the participants and the conclusions drawn from the discussion.
- Present an evaluation of the workshop based on the comments and feedback from participants.
- Present the metrics of the workshop (number of registered participants, type of participants, duration).

The following guidelines have been developed to provide assistance and guidance to SZREDA on how to summarise and present the main conclusions drawn from the visit; the summary report should be drafted as follows:

- Develop short summaries for each session of the workshop. The summaries should include a) the context and objectives of the session, b) key argumentation from the interventions of participants, and c) conclusions and findings extracted from the overall discussion.
- Review the evaluation forms and present the main conclusions. The author should summarise the key pitches and ideas as drawn from the forms completed by study visit participants. It is highly recommended that any idea (i.e. policy advice) that could contribute to the improvement of regional policies in the field should be integrated
- Juxtapose the key arguments/conclusions drawn with any relevant results and findings from PLASTECO thematic studies and guides on similar policy aspects. Identify convergences and divergences between findings.
- Provide guidelines (in the form of policy recommendations) on how to utilise the key conclusions drawn to design policy measures and action plans to promote the adoption of policy measures that lead to EU region's transition to a new plastics economy. The guidelines on how to integrate the lessons learnt in the PLASTECO action plans, as well as any policy advice that may be derived from the analysis of evaluation forms, should be described in a way that is simple, brief, and easy to follow.

- Draft the summary report. The workshop summary report should be drafted clearly and concisely, focusing on the conclusions drawn from knowledge sharing and consultation processes that took place during the workshop sessions. To meet its purpose, the summary report should include the following:
    - Overview and statistics, i.e. the number of participants and the type of organisations represented.
    - Short description of the sites visited and the reasons for their selection.
    - Summary of the main observations and lessons learnt from field visits and the key discussion points and conclusions from topics discussed.
    - Brief presentation of policy recommendations for the development of action plans, based on the interventions of the participants and the conclusions drawn.
    - The evaluation of the visit, based on participants' feedback.

Annex A: Feedback form

Evaluation Form				
PLASTECO A3.2b Interregional Workshop				
Organised by SZREDA				
Name:				
Organisation:				
Please answer the following questions, relevant to different aspects of the public consultation meeting, by rating on a 1 to 5 scale.				
How would you rate the workshop's overall organisation?				
1	2	3	4	5
☐	☐	☐	☐	☐
Do you think that the time allocated to each topic was sufficient?				
1	2	3	4	5
☐	☐	☐	☐	☐
How would you rate the quality of the presented topics?				
1	2	3	4	5
☐	☐	☐	☐	☐
How would you rate the quality of the discussion during the study visit?				
1	2	3	4	5
☐	☐	☐	☐	☐
How relevant to your organisation's operations were the topics addressed?				
1	2	3	4	5
☐	☐	☐	☐	☐
The study visit will lead to improvements in the proposed policies				
1	2	3	4	5

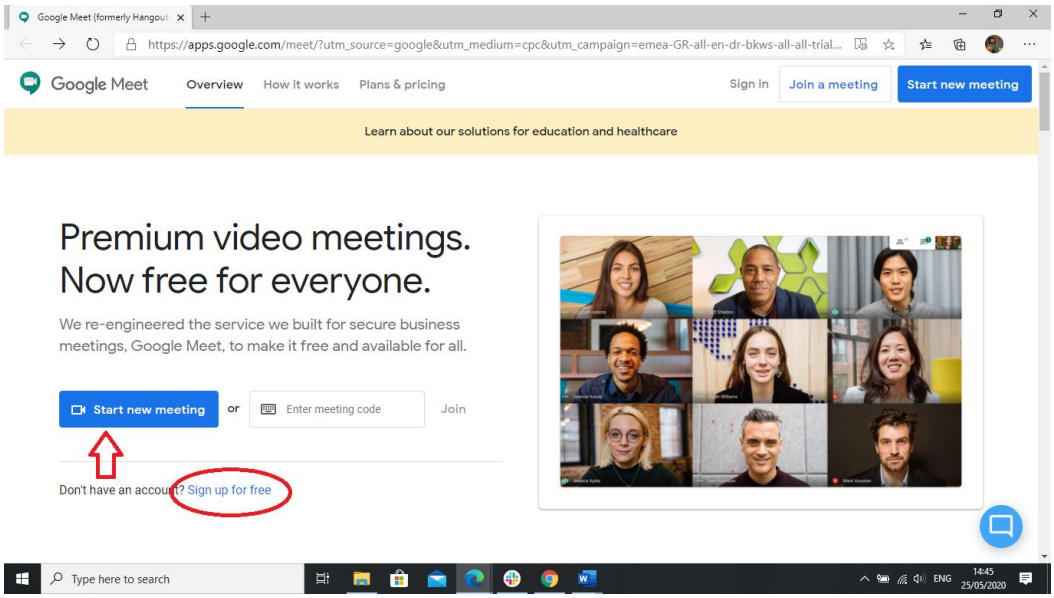
☐	☐	☐	☐	☐
The study visit, as a whole, has been appropriate and productive.				
1	2	3	4	5
☐	☐	☐	☐	☐
Are there any issues related to the topics of the workshop that have not been addressed? Please briefly describe them.				
Click here to enter text.				
Do you have any suggestions for the organisation of future PLASTECO interregional workshops?				
Click here to enter text.				

Annex B: Guide for virtual workshop organisers and participants

Creating an event on Google Meet is rather straightforward:

Visit https://apps.google.com/meet/, while logged-in with your Google account and press 'Start new meeting' (see red arrow in Screen 1). If you do not have a Google account or you do not wish to use a personal account for the purposes of the event you can easily create a new account by clicking 'Sign up for free' (cycled in Screen 1)

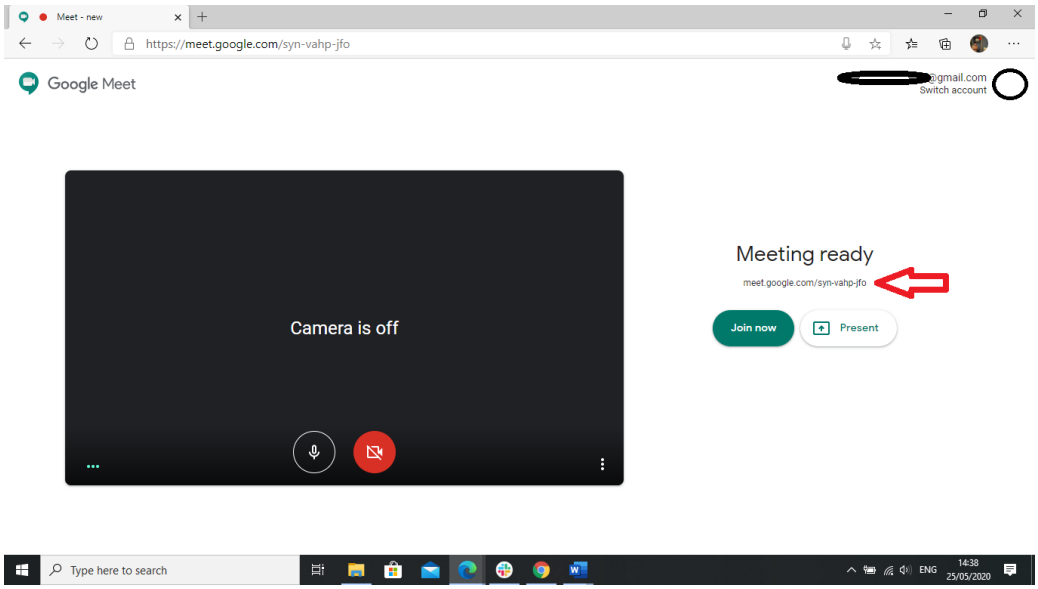
Screen 1



Once a new meeting has started, Screen 2 will appear. Note that at this point you have created the 'meeting room' (signified by a distinctive 'meeting code') but you have not entered it yet. This means that you are able to check the functionality of your microphone and camera but you are not yet visible to other participants. The 'meeting code', which should be shared with the workshop participants, allowing them access at the meeting, is signified by the red arrow in Screen 2.

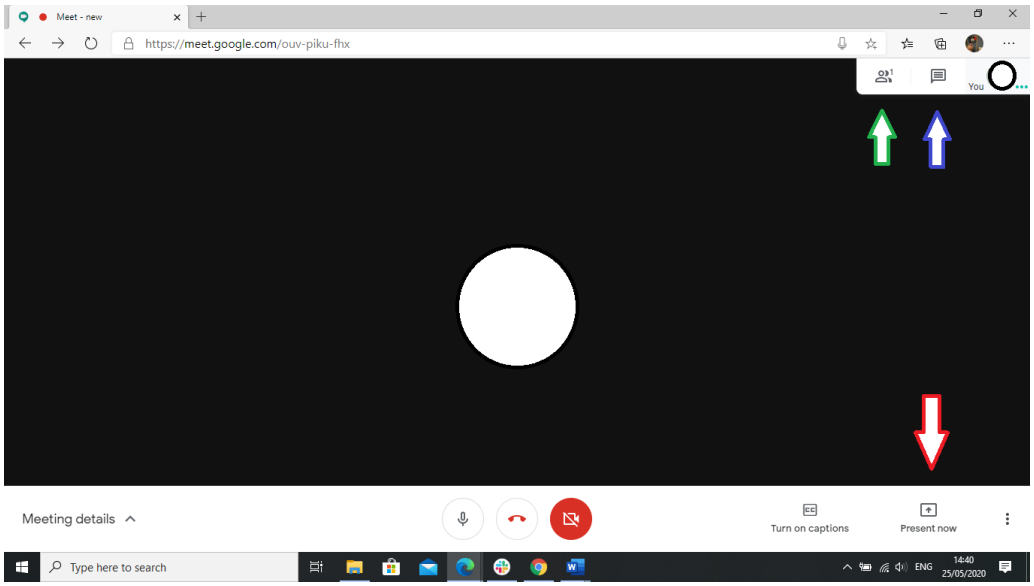
If the study visit foresees 'break-out' sessions, the organisers should see to the creation of additional 'meeting rooms' and sharing relevant information with the participants accordingly.

Screen 2



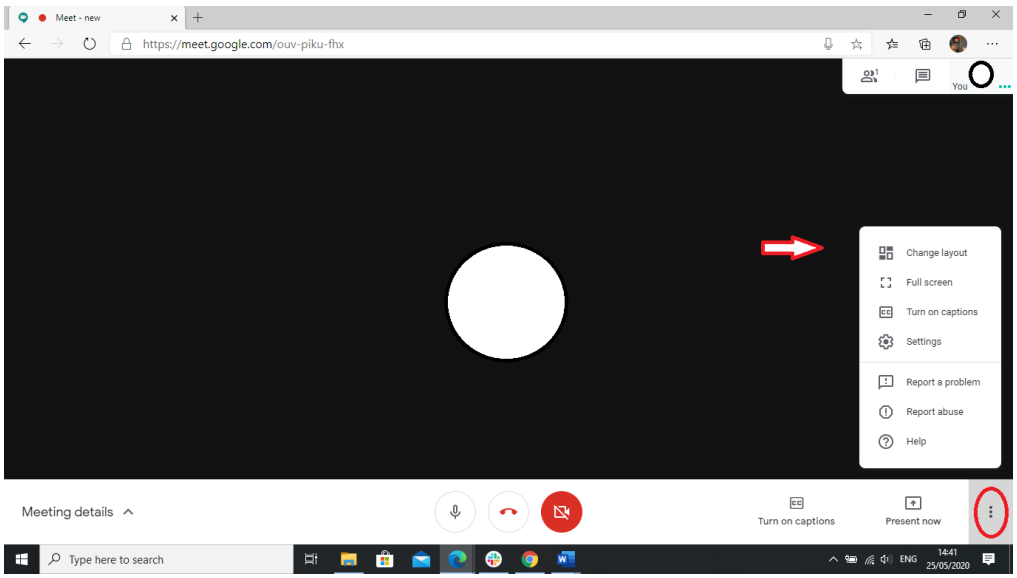
Once you have entered the meeting room the layout is quite forthright. The green arrow in Screen 3 indicates the participants 'button', it shows the number of persons participating and if pressed produces the relevant list. The blue arrow indicates the chat button and can be used in a similar manner. Finally, the red arrow indicates the 'present now' button which can be used by the hosts and speakers for sharing content from their own screens allowing them to share their entire screen or specific applications (e.g. power point).

Screen 3

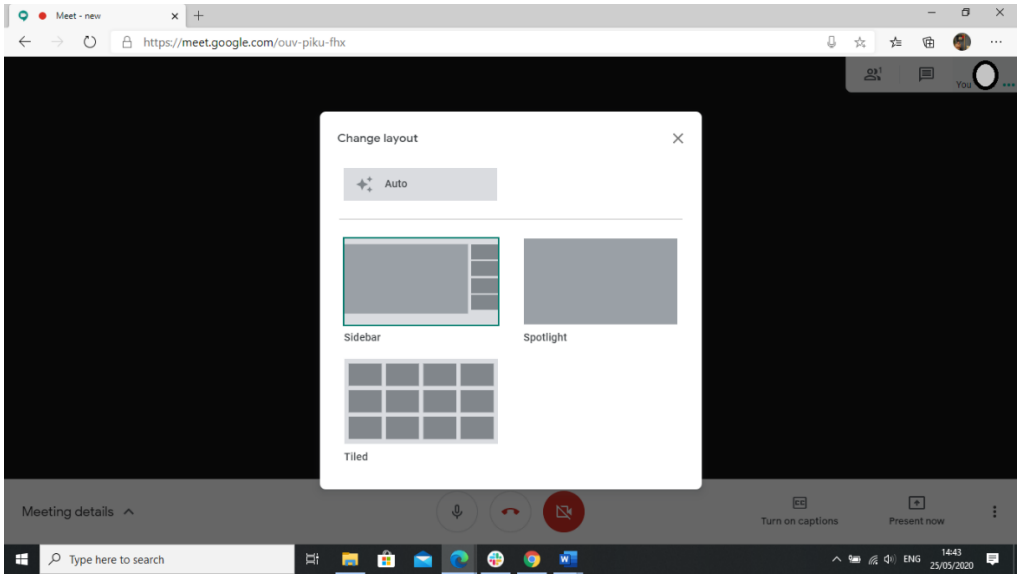


The three dots sign in the right-hand bottom of the screen (cycled in Screen 4) opens a variety of adjustments and settings including the ability to change the layout (indicated by the red arrow in Screen 4).

Screen 4



Screen 5



Each participant can choose between a sidebar, a spotlight or a tiled layout (see Screen 5), it is however recommended to use spotlight during presentations and sidebar during discussions. The tiled layout can be best used by smaller groups, and it could be considered during round table discussions.

In case the hosting partner decides to use a platform other than Google Meet for the organisation of the workshop, a similar short document regarding the platform of their choice should be created and circulated.

The virtual study visit organisers, with the participation of the event's speakers and moderators, should conduct a short 'rehearsal session' a few days before the actual study visit, making sure that all software and hardware (desktops, laptops, cameras, microphones) function properly. In addition, they need to make sure that the event speakers and moderators will participate from a suitable location (a quiet room with good lighting).

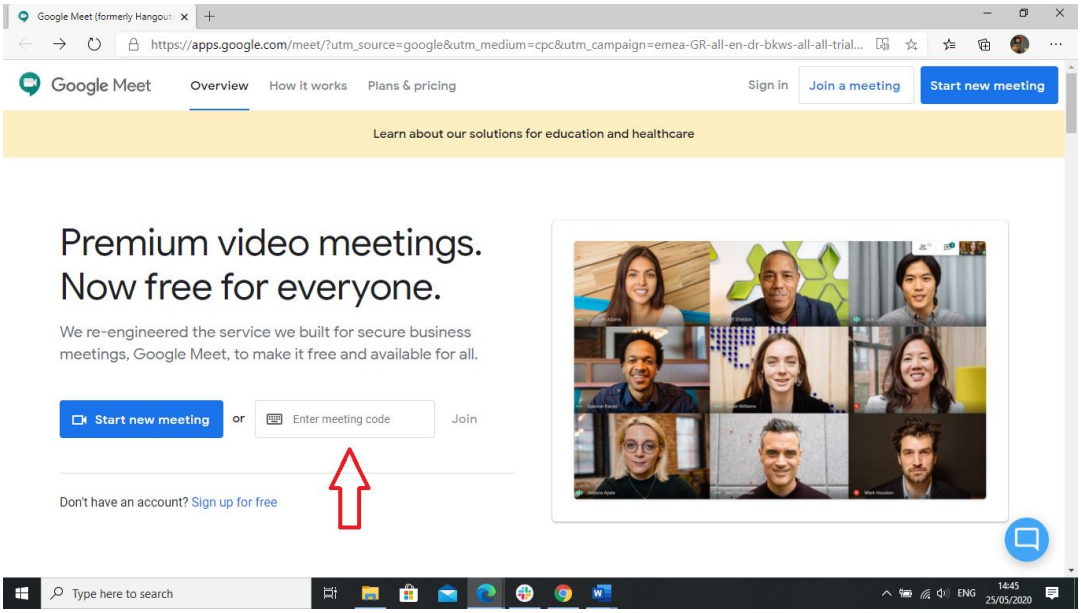
At least one staff member of the hosting organisation should be responsible for the technical aspects of the study visit and deal with any issue that may arise. This person should also receive all the presentations to be projected during the event in order to respond to any mishaps on behalf of the speakers.

The organisers should make sure that the study visit proceeds according to schedule and are thus encouraged to open the 'meeting room' a few minutes ahead of schedule. They do not need to appear on camera; they can use the 'present now' function and project a slide-show relevant to the event.

The speakers should be well prepared and rehearse their presentations, mainly with regards to timing as time-slots will be tight and very specific. In addition, they need to make sure that their hardware and software run properly. Finally, they need to make sure that they participate from a suitable location and that there is no risk of any interruption during their presentations.

The role of moderators is quite critical in virtual events as they are responsible for maintaining the schedule as well as adjusting the discussion flow. Therefore, moderators should be encouraged to politely interrupt the speakers when they exceed their time limit. In addition, moderators should encourage participants to use the 'chat' functionalities of the platform for submitting any questions or interventions 'real time' and make sure all questions and issues are addressed during the session.

Participants can join the virtual meeting by visiting https://apps.google.com/meet/ and entering the code they will be provided by the organisers in the field indicated by the red arrow in the picture bellow.



Participants are advised to keep the microphone muted during the event, unless you wish to make a statement or pose a question. Also, participants are encouraged to use the chat function to pose any questions or statements during presentations. Questions or statements will be addressed by the moderator during the course of the session.