







SUMMARY

of the Seminar "How to combat plastic waste pollution in Europe?"

Bucharest, 22 May 2019

<u>Summary</u>

The Romanian Presidency of the EU Council —through the Ministry of Environment— and the Norwegian Ministry of Climate and Environment, with assistance of Innovation Norway, the Norwegian Environment Agency and the International Union for Conservation of Nature (IUCN), organized the seminar "How to combat plastic waste pollution in Europe?" The aim was to identify opportunities for co-operation for the development of technologies/systems and solutions, in order to combat plastic waste pollution.

The seminar was organised in response to a growing concern about plastics and microplastics, on the part of politicians, civil society, and science at the national, regional, and global levels.

Significant progress has been made through developments of EU's waste management systems and in recent years on plastic waste, with the EU drawing up its strategy and working on a proposal for a directive that mainly targets single-use plastics. Furthermore, at a global level there are positive developments, such as the decisions made by UN Environment Assembly (UNEA). However, the authorities with responsibilities in the field believe that much remains to be done to reduce plastic and microplastic pollution, at least in practical terms.

The seminar presented, discussed, and explored potential solutions to plastic waste pollution in Europe among attendees, including representatives from public authorities, the private sector, civil society, and the European Commission. Specific opportunities to fund related activities in Romania through the <u>EEA and Norway Grants</u> were introduced during the seminar. Participants - especially businesses, but also other organisations- were encouraged to explore and use such <u>opportunities</u>, which are now available.

The event, which followed the Informal Meeting of EU Environment Ministers in Bucharest the previous days, took place on May 22, 2019. The seminar was financed through EEA and Norway Grants 2014-2021.

Key points for policy makers

- There is a need to increase the facilitation and exchange of best practices among actors in the plastics industry and waste management, which could be done by boosting existing or creating dedicated stakeholder knowledge-exchange platforms.
- The management and reduction of plastic waste requires effort at the local, national, and global levels, therefore close cooperation between different levels of government is crucial, and the exchange of knowledge and experiences between authorities working at a similar level (i.e. between neighbouring municipalities, between EU Member States, etc.) can be beneficial.
- Redirecting plastic waste from landfills and incineration will require robust and targeted legislative action, for which policy makers should work in cooperation with local authorities to design legislative proposals that best address the local context.



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- Boosting the market for secondary plastics will require well-designed incentives and financial instruments, for which policy makers should gain an understanding of and tailor solutions to the needs of the local market and consumer demand.
- Support for good initiatives to boost the market for secondary plastics is necessary and appreciated, to which end current funding opportunities could be further communicated and promoted, and additional funding opportunities explored.
 - In particular, the EEA and Norway Grants present an important supporting mechanism, and a great opportunity at the moment that Romanian actors are encouraged to make use of.

Setting the scene

The event opened with a series of keynote speeches, delivered by representatives from Romania, Norway, the European Commission and IUCN.

Mr Ardelean, Director, Management Directorate, Ministry of Environment, Romania began his opening speech by commending Norway's proposal to amend the Basel convention, which had been accepted, and the European Union's Directive on the reduction of certain types of plastics (hereafter: SUP Directive), approved by the European Council just the day prior. Mr Ardelean highlighted that plastics were a waste posing the greatest amount of difficulty today, and that it would be necessary to first reduce our consumption of it and secondly to manage it. Closing the loop will require investing in technologies, engaging both manufacturers and the recycling industry. The industry employs many people, and solutions that would help them adopt technologies for manufacturing alternative goods using existing plastics would be welcome. As it stands, more than 700 companies among plastic manufacturers are still producing the types of goods listed as banned according to the SUP Directive, and in Romania more than 200 tonnes of such goods were manufactured in 2016, of which 70% were domestic goods; this will need to be tackled. Romania adopted their national waste management plan at the end of 2017. It introduced measures for the management of waste recycling, which aim at incentivizing stakeholders. Previously, just 5-7% of plastic waste was collected, and only 13% of that recycled. The new legislation introduces performance indicators, primarily for waste collection, but also, further along the chain, for grading and recycling waste. The landfill tax in Romania is very low, 30 lei (or 6.5 eur) per tonne; this will be increased in order to help discourage dumping. It is also proposed to introduce a deposit-return system, encouraging consumers to return reusable bottles to the shops for 50 bani (0.1 eur) apiece. Romania had already taken a step beyond the requirements of the EU Directive on plastic bags, and has banned all plastic shopping bags less than 50 microns thick. Romania next intends for retailers to use biodegradable bags for fruits and vegetables, so that these bags may be reused later on, in households, for organic waste. Further, Romania wishes to incentivize eco-design and the use of recycled materials, paying attention to the distinction between recycled and recyclable materials. While the SUP Directive includes a number of essential requirements, Mr Ardelean stressed that Romania also wishes for a set of quality standards, as this would help pave the way for a strong market for secondary plastics.

Mrs Kleven Grevstad, Ambassador of Norway to Romania, presented some global challenges and possibilities provided by the Norwegian grants with respect to combating plastic waste pollution in Europe. She began by mentioning the inter-ministerial meeting (Informal Council of Ministers of Environment of the EU) and the water conference taking place that same week in Romania, where the issue of plastic litter and microplastics is likewise on the agenda. She stressed that these are global problems, requiring action from everyone. Norway is taking action at the national level and beyond. In Norway, littering is



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illegal, and there is a well-functioning waste management system; however, litter still finds its way into the ocean. Additional measures to tackle sources of microplastics are currently being looked into, in particular tyres, artificial turf, paint, and textiles. At the moment, Norway has in place different extended producer responsibility schemes, such as environmental taxes that has led to deposit-return systems for plastic bottles, and is considering extended producer responsibility schemes for plastic equipment from the fisheries and aquaculture sectors. At the regional level, cooperation with the EU is appreciated. Although Norway is not a member of the EU, they enjoy a close relationship, under the framework of the European Economic Area (EEA) and in collaboration through the EEA and Norway grants. Norway is also part of a cooperation with other Nordic countries, who have together designed a Nordic plastic plan. However, the issue of plastic litter and microplastics is still a global problem, requiring global action, and there are huge gaps in the current response. Norway raised this issue first time at the UN Environmental Assembly in 2014. There is currently no multilateral agreement to address these issues in a comprehensive way. This year, in Nairobi, Norway put forward a resolution on strengthened global governance on marine plastic litter. Governments agreed to continue the intergovernmental process consider a stronger governance framework. There is obviously also a need to strengthen the implementation of existing instruments, including the regional seas conventions and regulations under International Maritime Organization. A Norwegian proposal to strengthening the work on marine plastic litter under the Basel Convention has recently been negotiated in Geneva. The Norwegian Government is very pleased with the outcome which includes an agreement to better control export of plastic waste. Norway is contributing to economic and social cohesion in Europe. Through the EEA and Norway Grants, there are considerable funds available for projects co-operation focusing on the reduction of plastic pollution. Environment, climate and energy is an important part of the Memorandum of Understanding between Romania and Norway, signed in October 2016. 15% of the EEA and Norway Grants will go to climate, energy, environment and low emission development. Innovation and business development is another area of priority with an allocation of 45 million euros, half of these funds are available for green innovation projects. EEA and Norway Grants provide great opportunities for development of co-operation between authorities, research institutions and business partners in Romania and Norway.

Mrs Drake, Deputy Director General at the Directorate-General for the Environment of the European Commission, presented the EC efforts to combat plastic pollution, including the EU plastic waste strategy. Recent Eurobarometer surveys have shown over 90% of EU citizens identifying environmental concerns as a top priority. While this is positive, it also places a considerable amount of responsibility on authorities to provide results. Ms Drake stressed that the EU is not planning on banning plastics, as it is a material of many benefits; however, there is certainly the need to manage plastic better. As action is taken, this should be communicated to the many concerned citizens. In 2015, the European Commission put forward the Circular Economy Action Plan; the actions contained therein have either already been delivered or are at present being implemented. This is good news, but it is necessary to go further; something the new Commission will need to take on board will come November 1st. More stringent rules on plastics are needed, as well as better alternatives based on life cycle analyses. At the core of the EU plastics strategy is the protection of our environment; the reduction of marine litter, greenhouse gases, and our dependence on fossil fuels. Part of this strategy, the SUP Directive tackles the ten most commonly found plastic items found on Europe's beaches, as well as fishing gear, which together make up 70% of all marine plastic litter. Further to that, the Directive sets a recycled content target for bottles, and includes a restriction on oxoplastics; approved by the European Parliament weeks ago, and by the European Council just the day prior, the Directive is already shaping worldwide action. The Commission has requested amendments to the



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REACH Directive towards banning intentionally added microplastics to products; this is currently under review for a potential EU-wide ban by mid-2021. Another important initiative is the Port Reception Facilities Directive, acting to prevent marine litter from being discharged at sea. The EU waste legislation was amended last year, establishing stronger requirements on EU member states with respect to food waste and littering; there is a new target to reach 65% recycling of municipal waste by 2035, and reduce landfilling to below 10%. Landfilling of recoverable waste will by the same date need to be phased out completely. Currently, only 42% of plastic packaging waste is recycled in the EU; it is endeavoured to ensure that by 2030 all plastic packaging put on the market is either reusable or easily recycled. The Waste Framework Directive has introduced minimum requirements for extended producer responsibility schemes, wherein fees that producers will pay will need to be based on durability, reparability, reusability, and recyclability, as well as the presence of hazardous substances. Design for circularity, green public procurement, and eco-label schemes will be important instruments for ensuring circularity at the beginning of the loop. Without compromising on food safety, any downcycling of reclaimed plastics into lower quality products, must be avoided. Setting quality standards for sorted and recycled content, and the EU target for 10 million tonnes of recycled plastics to find their way into new products by 2025, will allow the European market for recycled plastics to grow. Finally, the Commission has also launched the Circular Plastics Alliance, with five key areas of work including; 1) collecting and sorting plastic waste, 2) product design for recycling, 3) recycled plastic content in products, 4) R&D and investments (including chemical recycling), and 5) monitoring of recycled plastics sold in the EU.

Mr Arroyo Schnell, Senior Policy Manager at the International Union for Conservation of Nature, began by illustrating the scale of the problem concerning plastic waste, and the fact that the problem is expected to increase in future. Microplastics may now be found in sea salt, and even in our own bodies; and there is a great cost associated with marine plastic pollution (\$13 to \$40 billion per year as tourism, fisheries and shipping revenues are lost). Mr Arroyo Schnell noted that IUCN is not against plastic, as this is a necessary material for our society, even adding an environmental benefit in some cases (like light weighting of vehicles or house isolation). He emphasized that plastic is a luxurious material, and the issue is that we are misusing or using too much plastic: therefore we should start considering that even the consumption should be tackled. He reminded of the key words of First Vice-President of the European Commission Mr. Timmermans: prevention and substitution, and his comparison with the climate change debate, due to the current public support to tackle the plastic pollution. Keeping in mind that the Sustainable Development Goals will not be achieved, if we do not ensure that our natural capital is protected, he highlighted the need to work together, to break the silos, especially working with the private sector. IUCN has been very active in this discussion during the past years, including the publication of a good number of reports; and the plans are to continue even more in future. For the future, Mr Arroyo Schnell mentioned the implementation of the relevant EU policies and legislation, the need to monitor the developments around the multiple commitments made by very varied actors during the past few years, and combatting the microplastics' pollution as some of the key issues to be considered.

Ms Mekki, Senior Advisor at the Norwegian Environment Agency, presented an overview of Norway's policies relating to plastic waste. Norway aims to increase the share of waste that can be brought back into the loop, while endeavouring to safely dispose of the waste which cannot be recycled (e.g. hazardous waste). The Polluter Pays Principle is the key principle on which Norway's waste policies are designed. The main laws that exist at the national level include the Pollution Control Act and the Product Control Act. The main regulations are the Waste Regulation and the Pollution Regulation. In addition, there is a series of financial instruments. Norwegian municipalities are important actors when it comes to tackling



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plastic waste, often collaborating to cover bigger regions. Municipalities have a large degree of freedom with respect to source separation. There is also a strong private sector for waste, which is a growing industry in Norway. That said, Norway still relies on exporting their waste because they cannot process it all domestically. In terms of household waste, approximately 54% goes to energy recovery, 38% goes recycling, and 4% goes to landfill (2016). Approximately 21% of plastics from municipal waste is recycled today, which is still below the current EU target. In order to improve these figures, technological solutions will be necessary (for instance better sorting technology to ensure cleaner waste streams), as well as better monitoring. There are several initiatives ongoing at the national level; amongst these several grants schemes for projects combating marine litter, a newly opened Centre for Oil Spill Preparedness and Marine Environment and initiatives addressing ghost fishing. In 2019, the Norwegian Environment Agency will revise and update the national action plan for marine litter and microplastics. Globally, Norway is working towards a global framework for marine litter at the UN level (UNEA-4) and has proposed the addition of plastic into the Basel Convention, that recently has been agreed upon. In addition, Norway is engaged in several bilateral and regional projects tackling marine litter. Preventing waste is key, and cheaper than cleaning up waste. It is however, currently still very much a priority to clean up the backlog of litter already there.

Mr Ringstad, Programme Director at Innovation Norway, presented a call for proposals to be launched in June, under Innovation Norway's programme <u>SMEs Growth Romania</u>. Innovation Norway is the primary instrument for innovation and business development in Norway, with an office also in Romania. Under the programme SMEs Growth Romania, funding has been made available to private entities within Romania, for initiatives within the focus areas of 1) Green industry innovation, 2) Blue growth, and 3) ICT; the total available amount of funding is 18.5 million EUR. Mr Ringstad invited the representatives from the business sector in Romania, active in the relevant areas, to spread the word about and apply for this support, where normally a third of all applications are successful.

Presentations - examples of solutions from the business sector

Representatives from the business sector in Norway and Romania delivered a series of presentation showcasing their solutions and innovations within the field of plastic waste.

Mr Mørch, Senior Director at Norsk Gjenvinning, a private company in Norway engaged in waste collection, sorting and processing, stressed that 80% of all waste volumes are stemming from commercial, rather than municipal waste. The company collects more than 2 million tonnes of waste each year and recycles 50% of that - together with incineration, it processes 85% of all the waste collected. The company currently has factories in Norway, Denmark, Sweden, and the UK, and it is expanding further. Mr Mørch highlighted that what is needed is to create value for plastic. Norway has some good policies and waste sorting systems in place, for example for collecting bottles and for collecting waste from the farming industry. This is generally quite progressive, but at the same time it is necessary to go further. Household waste has a lower recyclability rate than commercial waste, due to its quality. An advantage that Norsk Gjenvinning has is knowing what their customers, industry, need in terms of materials; the waste management company can thus make sure that they produce and deliver the quality required. This is an important, yet underappreciated, aspect of waste management. While there is still competition on the market with virgin materials, there is a decreasing supply thereof, and the demand for recycled plastics is increasing. The key to boost this market is to stop referring to these materials as waste, but rather as resources. Some common denominators will form part of the answer, namely; there need to be high



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recycling rates, volumes of material at an industrial scale, being processed at an industrial pace, and material flows driven by value. One extremely challenging fraction of plastic waste is degradable plastics, as it reduces the quality and recycling output of other kinds of plastics. For instance, the company recently tried to recycle cups made of degradable plastic that were used at a festival; the issue was that nobody wanted the material. For a circular economy, the value should be the driver, and cooperation and buy-in must be ensured along the entire value chain.

Mr Maldum, CEO at Infinitum, a private company in Norway focusing on the waste collection of cans and bottles, said that the company collected 1.2 billion cans in 2018. The company collected 9300 tonnes of aluminium for recycling; while aluminium is efficient to recycle, plastic is even more so. It is possible to achieve 80% recycled content in all PET bottles in Norway today. Even though Norway has quite an efficient system for collecting and sorting waste, many plastic bottles are discarded elsewhere in Europe and beyond, and end up washing up on the Norwegian coastline; most of the plastic bottles collected by NGO Norwegian Ocean Watch, for example, are foreign. Mr Maldum highlighted, that it is important to take on a resources perspective when dealing with plastic waste pollution; to process and reuse what is collected, and to address consumption as well. Cost-efficiency is crucial to both of these activities. For instance, the deposit-return system in Norway was not a political decision, but rather one that came from the retailers and producers. The issue is that it is still cheaper to produce new plastic than it is to recycle it. The company envisages to introduce a new material cost model, wherein using virgin materials will come with a cost; only in this way will the industry be reusing all of the materials that the company collects. The company has also gone public with all of their figures on waste collection, as they think it crucial in order to raise awareness about some key data among the public. For instance, in terms of weighing collected materials, one needs to consider the packaging with the food residues; in Norway currently waste collection is reported based in tonnage including residues from food.

Mr Minnesjord, **CEO at Green Business Norway**, a professional organization acting on behalf of enterprises in the Environmental Energy & Technology sector, introduced their activities in the field of the circular economy. Their focus areas include improving recycling rates, working towards proper treatment of biodegradable waste, landfill reduction, and profitability improvement. Some waste management innovation trends that the organization is working with, include digitalisation and smart solutions, the use of blockchain, ensuring traceability and introducing new mechanisms for distribution of monetary values, crowdsourcing, and new, innovative solutions for the logistics and collection of waste.

Ms Ruud, Procurement Manager at Nofir, a company, based in Norway, specializing in the collection and recycling of discarded fishing equipment across Europe, introduced Nofir's main activities. Historically ropes and lines from fishing and fish farming have been incinerated, landfilled, dumped or lost in the sea. Nofir now collects these materials from five different continents, dismantles them, and recycles them to create new products. Between 2011 - 2018, Nofir collected 38,483 tonnes of equipment from 16 countries around the world (most in Europe). The company's subsidiaries, focusing on dismantling, are located in Lithuania and Turkey. While gill nets make up the largest proportion of waste from ghost fishing, they are also a very difficult fraction of waste to process as it is voluminous, lightweight, and with low recycling rates. To process gill nets efficiently, Nofir tries to ensure resources are available from the collection and recycling of other fractions (e.g. fish farming nets and cages, trawls, ropes, and purse seine nets). The largest proportion of discarded equipment in general however are fish farming nets originating from northern Europe; while these can only be regenerated chemically, Nofir has a technological solution for this, wherein the material can be regenerated endlessly into material of the same quality as the virgin



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material. Other projects include Healthy Seas, diving for equipment all across Europe, and Bracenet, a success story from Germany, where the nets are used to create jewellery.

Mr Panazzolo, Sales Manager East Europe at TOMRA, a private company based in Norway providing sensorbased sorting equipment for recycling, introduced the company's main activities. As the volumes of collected waste increase, more waste needs to be sorted; sensor-based technology in recycling is necessary as it allows us to automate the process. TOMRA uses a broad sensor portfolio, the most important for plastics for which is near-infrared spectrometry (NIR), making it possible to discern different polymers. With the help of Norwegian grants, the company is able to separate plastics from metals (from WEEE). The company can sort PET, HDPE, PS, PP, film, cardboard, paper, tetrahedral package, fuel, and glass. Recycling sometimes means downcycling, and creating dark-coloured plastics. However, TOMRA can sort by type, polymer and also colour, making it possible to upscale recycling to create products of the same high quality as virgin materials.

Mr Georgescu, Marketing Director at PRODPLAST, introduced the company, one of oldest and once largest plastics producers in Romania. As the industry was on the decline, PRODPLAST looked for a new direction, and in discussing the issues of plastic pollution and food waste, decided to work towards creating 100% compostable products for food waste application. 60% of all waste in Romania is organic waste, which is landfilled, decomposing, and releasing methane. The company saw good examples in the field of food waste from other countries, such as Italy and South Korea, wherein South Korea uses compostable bags for their food and organic waste. Looking for alternatives to fossil-fuel based plastics, PRODPLAST creates bags and bin-liners out of plant-based materials. The company believed Romania is in a good position to make starch-based products, because of its considerable agricultural sector; PRODPLAST collaborates with farmers to make use of their agricultural residues. The company aims to become the first Romanian manufacturer of marine biodegradable products, and in a few weeks will being the test phase for this line of products.

Ms Badiu-Matache, Technical Manager at ECOSISTEM, a company based in Romania dealing with the collecting and recycling of waste, presented ECOSISTEM's core activities. Established in 2002, the company collects and recycles cardboard, metal, glass, WEEE, household waste, and plastic, from open and closed containers. ECOSISTEM places a lot of emphasis on raising the awareness of the private sector and citizens, promoting waste as a valuable resource, and stresses the importance of good relationships with partners. In terms of increasing the collection and recycling of plastic, since the volumes of plastic entering their facilities had been lower than glass, paper, and metal, they have recently upgraded their facilities for processing plastic. Now, the company specializes in recycling specific strands of plastics, and produces only high-quality pellets. From these pellets, produces in the company's processing facilities, ECOSISTEM manufactures industrial plastic sheet or foil for agriculture, construction, lining waste bins, and so on. The company is able to meet their customers' high expectations, and by producing these materials themselves they can ensure they can recycle them again later.

Mr Damov, Vice-President of the Romanian Waste Management Association (ARMD), provided an overview of the association's activities. Established 1999, the association handles about 800.000 tonnes of plastic per year. Members are 100% private organizations, while ARMD is a member of FEAD and ISWA. 350 million tonnes of plastic were produced globally in 2018, while by 2050 this is expected to rise to 1.8 billion tonnes. In 2018, 5% of the plastic produced was recycled; to make sure that by 2050 we are not discarding of even more plastic; we would need to increase our recycling rate to 90%. Plastic can be found in almost



Innovation Norway every product, and there are over 42 types of plastic. These come in many different colours, which makes recycling the products incredibly difficult. Plastics are also porous, so we need to handle contamination. To improve recycling, it would be necessary to keep plastics simple; reduce the number of types of plastic produces (PET, PE and PP would suffice), and to reduce the number of colours. It would be necessary to be responsible; stricter landfill taxes and landfill bans, pay-as-you-throw systems, extended producer responsibility for all plastics. Today we are only tackling plastics found in packaging, but this should be extended to furniture, to clothing, and so on. In Romania, there is an opportunity for doing more; the industry in Romania processes local and European plastic waste, there is a low production cost, and recycling is very cost-sensitive. The industry itself is a little bit ahead of the collection, as there are some state-of-the-art recycling facilities. There is also a market for plastic production, as Romania itself is consuming a lot of plastics. 100% plastic recycled products are made in Romania, products that can also be upcycled. Polyester staple fibres that go back into industry have a longer life than the source the plastic came from (packaging). With these fibres, 84% less CO2 was used than had they been produced from new materials, using crude oil. There is an opportunity for a great future for the Romanian recycling industry.

Final panel discussion and next steps

A panel discussion followed, with panellists including Ms Inger Johanne Wiese (Norwegian Ministry of Climate and Environment, Ms Miriam Mekki (Norwegian Environment Agency), Mr Knut Ringstad (Innovation Norway), Mr Alberto Arroyo Schnell (IUCN), and Mr Thomas Mørch (Norsk Gjenvinning).

Ms Wiese thanked the speakers for interesting contributions and underlined that these have shown that it is important to have national regulations in place, in line with EU directives, to provide the framework for a national waste management system with different actors. A landfill ban, environmental taxes, etc., are necessary parts of an efficient waste management system.

The panel furthermore discussed "How do we approach the issue to make a difference, and which opportunities the Norwegian grants could offer?"

Mr Pop, from the Coalition of the Circular Economy in Romania, posed the question of how transferable is the Norwegian system to the Romanian context? He stressed that currently there is an ongoing discussion in Romania around which type of operator should be collecting plastic waste from households; is it the sanitation company, a private company?

Ms Mekki responded that in Norway, the municipalities have the responsibility to collect each stream of waste from household. They also have the freedom to choose how to do this, and that they can subcontract other partners. What would be the best solution is often discussed and practical solutions are found.

Mr Mørch mentioned that his company works with municipalities by performing a service, that they do not own the materials.

Ms Wiese mentioned that Norwegian municipalities may collaborate in a sort of "twinning cooperation" with similar municipalities in other countries, in terms of size, scale, and so on, in order to find positive ways and ideas of how to move forward. She stressed that it is important to start at the municipal level when looking for potential approaches to waste collection.



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Mr Arroyo Schnell suggested to have a look at the European Commission's Circular Economy Stakeholder Platform <u>webpage</u> for examples or good practices from different EU Member States. He also suggested the potential need for a platform for these kind of exchanges, should these examples not be available in the webpage mentioned.

Mr Pop, from the Coalition of the Circular Economy in Romania, asked whether wastes are handled in separate stream, impacting which companies municipalities choose?

Ms Mekki responded that while municipalities may choose their private collector, they might also choose to compete alongside private collectors.

Mr Maldum, from Infinitum, added that in Germany the shop owns the material. In the Nordic countries, it is the system operator that owns the materials, not the municipality. Municipalities used to own all the waste from homes, hospitals, shops, hotels, restaurants, and so on, until the retail sector asserted that their waste should be classified as industrial waste. Municipalities are now only responsible for municipal, household waste.

Mr Valasutean, from VITALIA Environmental Services, asked what the Norwegian perspective is on thermal treatment technologies for plastics, such as for the production of methanol?

Ms Mekki responded that Norway has not gotten as far on this as they would like for the moment. Right now there is a lot of waste going into incineration; it is necessary to boost recycling, but it is envisaged that the recycled materials are of the same quality or upcycled, rather than downcycled.

Mr Mørch said that the market will decided whether thermal treatment is part of the solution; at the moment it would seem to be a step on the ladder, probably rather used for treating low quality plastics that are not suited for recycling. The long-term solution, however, would be to recycle materials into products that are recyclable, closing the loop.

Mr Damov, from ARMD, inquired whether technologies that would chemically, rather than mechanically, sort and clean plastics are still used in Norway

Mr Mørch responded that there are no chemical treatment solutions on the market in Norway at the moment, but that this might indeed be part of a long term solution. Any new factories that are currently being built are either thermal or mechanical.

Mr Damov, from ARMD, inquired whether, since the target set by Norway seem to be based more on recycling, whether there are any plans to introduce a tax on incineration, similar to the landfill tax?

Ms Mekki responded that this is something that could be looked into.

Ms Wiese stressed the importance to follow that waste hierarchy, reduce, reuse, and recycle as far as possible, with energy recovery and landfills towards the end for the remaining waste, which is then minimized.



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Ms Wiese posed a question to the representatives from Romania, namely what could be seen as the greatest barrier to combatting plastic waste pollution in Romania? And what could, or should, be the first steps towards improving the system?

Mr Pop highlighted that consistency of regulation is an important challenge; in the field of waste management everything is incremental. Secondly, Romania does not have expensive enough alternative to recycling. The landfill tax is low and difficult to calculate, invisible to the citizen. The first ever pay-as-you-thrown schemes should be introduced in July, which will come with its own set of challenges, for instance how much should be paid? At the moment this is invoiced per person, not per kilogram. Furthermore, and of utmost priority to address, is that as of 2019 all of the recyclables coming from households are not financed, leading to them being either dumped or landfilled.

Mr Damov stressed that the best ones at this in Europe, are the Nordic countries, with their strong municipalities and strong balance sheets, meaning they can finance everything themselves. The Southern countries have good expertise, but less financing. In the east, however, there is neither expertise, nor capital. Now, on top of not having the tools to cope with this, municipalities are getting the responsibility for all of the waste; commercial waste in Romania is still considered municipal waste. We are bracing ourselves for lower recyclability rates. The question here is, what is and what can be put on the market? How can SMEs in Romania get access to the waste, to do something innovative with it? If someone wanted to use coffee grounds for greenhouses, according to the law they would not be able to do that because only a municipal waste company can. No municipal waste company will deal with all these waste streams, however, which only freezes all these potential resources. Adding to that, there is a very low level of economic instruments, landfilling in Romania is taxes at 7 eur per tonne, and the landfill cost is between 10 and 15 eur, so dumping is becoming a national sport.

Mr Panazzolo, from TOMRA, stated that the first target should be to recover recyclable waste, while the rest goes to fuel. In Italy, there are some areas pushing for good recycling behaviour, while other parts of the country are lagging behind. Perhaps some regions or municipalities in Romania could start with a good practice to encourage recycling and by extension the rest of the country?

Mr Maldum suggested Romania to steer away from investing in incineration plants for energy, something that Norway did. As a consequence, Norway now imports waste from the UK, ships their own waste to Sweden, all because this has become the cheapest route. He suggested to encourage more collection with deposit-return systems. If you burn plastic, only 20% of the energy is the energy from oil, and 80% is what was used to convert oil to plastic, so you are losing 80%. Material recovery is better also from this perspective.

Ms Prodan, from Future Plus, described the activities of her NGO as a potential good example in Romania. One social enterprise, called Recicleta, collects small quantities of recyclable materials from offices and restaurants, which would otherwise go to landfills as the quantities do not seem economically viable for the municipality to collect. This waste is picked up by volunteers using electric bikes; they collect these small quantities, using the Last Mile delivery model, take them to larger collection containers, and then the municipality picks up these larger quantities. This model is one that helps potentially recover the materials from these small and medium-sized quantities of waste. In the ten years that the enterprise has been around, about 500 000 kg of waste was successfully diverted from the landfill.



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Ms Wiese mentioned that, with regard to the EEA and Norway grants, there is the possibility to make study tours. Several delegations from beneficiary countries have come to Norway to learn about our waste management services, and Romania would be very welcome should they wish to do the same.

Mr Mørch stressed that an overarching issue is the way we still perceive waste; as a problem you need to get rid of. This leads to landfills, to incineration, both of which are cheap, and to barriers to innovation. Waste is a resource, it has value, and it will lead to a circular economy, but for any economy what you need is competition. His company is a commercial player in Norway, which can buy commercial waste in bulk, and be a real player on the market with commodities competing with raw materials.

Mr Arroyo Schnell concluded reminding participants that it can often be a challenge to find the resources and the financial opportunities to make things happen in the environmental field. At this seminar some incredible opportunities were presented, not only financial (through the Norwegian EEA support), but also exchanges of valuable knowledge. Hopefully those in the room -and others that will learn about this discussion today- can take advantage of this in the coming months.











AGENDA

BUCHAREST, May 22, 2019 Hotel Intercontinental, Fortuna Room (21st floor)

- 08.30 9.00 Registration and fresh coffee
- 9.00 Opening speech "Challenges and Opportunities" Mr Ardelean Director, Management Directorate, Ministry of Environment, Romania
- 9.15 Global Challenges and possibilities provided by Norwegian Grants H. E. Mrs Lise Kleven Grevstad, Ambassador of Norway to Romania
- 9.30 EU plastic waste strategy Mrs Joanna Drake, Deputy Director General, DG Environment, EU Commission
- 10.00 Towards a reduction of plastics emmissions Mr Alberto Arroyo Schnell, Senior Policy Manager, IUCN
- 10.15 10.30 Coffee break
- 10.30 Norwegian Policies for Plastic Waste Ms Miriam Mekki, Senior Advisor, The Norwegian Environment Agency
- 10.45 Norway Grants Programme SMEs Growth Romania, "Blue Growth" component, Call for proposals, Mr Knut Ringstad, Programme Director, Innovation Norway
- 11.00 12.15 Presentations of representatives of the business sector and their solutions
 - Norwegian recycling, Mr Thomas Mørch, Senior Director
 - Infinitum, Mr Kjell Olav Maldum, CEO
 - Green Business Norway, Mr Thor Sverre Minnesjord, CEO
 - Nofir, Ms Heidi Ruud, Procurement Manager
 - TOMRA, Mr Davide Panazzolo, Sales Manager East Europe
- 12.15 13.15 Lunch break
- 13.15 14.00 Presentations from representatives of the Romanian business sector in the field of waste pollution management, on plastic use in the national and European context
 - PRODPLAST, Mr Georgescu, Marketing Director
 - ECOSISTEM, Ms Elena Badiu-Matache, Technical Manager
 - ARMD, Mr Constantin Damov, Vice-President
- 14.00 15.00 Discussion panel on "How do we approach the issue and how do we make a difference?" Inger Johanne Wiese, Miriam Mekki, Knut Ringstad, Alberto Arroyo Schnell, Thomas Mørch
- 15.00 15.30 Questions from the audience and conclusions

Moderator:

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