

SOCIAL DIALOGUE IN CIRCULAR ECONOMY

REPORT 2024



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Summary report on the implementation of the project
“Social Dialogue in Circular Economy”.

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More information and materials can be found on the website at:

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FOREWORD

Ladies and Gentlemen,

We are presenting you with a report that has been produced as part of the project “Social Dialogue in Circular Economy”. Employers of Poland, knowing how important this topic is for Polish entrepreneurs, were the first to take up the challenge of measuring the state of knowledge about circular economy (CE) and the expectations of entrepreneurs in terms of, among other things, legislative changes to improve the efficiency of business operations in circular economy.

The project aimed to address the consequences of the COVID-19 crisis, in particular to improve the capacity of the national social partner in cooperation with the EU cross-sectoral social partner, SGI Europe.

Over the past few years, the circular economy has become a key objective on the European political agenda. There is growing interest in circular economy among various stakeholders. The COVID-19 crisis has accelerated the need to foster a better understanding and raise awareness of the challenges of transitioning to circular economy.

Polish entrepreneurs are extremely interested in circular economy and related regulations, which mainly come from the EU. The aforementioned entrepreneurs come from a wide range of industries, from waste management and processing, through energy and utilities, to food and white goods production.

The transition to a circular economy is an essential part of the decarbonisation of the European economy and a guarantee for the EU’s economic and social development. Many sectors will have to adapt or even drastically change the technologies they use, with employers very keen to do so.

My hope is that the report will meet your needs and address at least some of the entrepreneurs’ concerns.

Rafał Dutkiewicz
President of Employers of Poland

Dear Partners and Collaborators,

It is with great pleasure that I address you on behalf of SGI EUROPE, the EU social partner representing employers in the sector of public services, with a shared vision and commitment to supporting sustainable practices across Europe. Through our collaboration with the Employers of Poland, we have embarked on a transformational journey to promote “social dialogue in a circular economy”.

At the heart of this initiative lies our shared commitment to raising awareness of the crucial importance of adapting business models to the principles of a circular economy. By involving member companies of Employers of Poland, we aim to boost a meaningful dialogue on both a national and European platform. Together, we seek to exert impact on the regulatory framework, foster innovation and push for the adoption of circular economy standards in the business community.

As we follow the path towards a circular economy, it is important to bear in mind the serious legislative challenges facing employers at European level. The EU’s ambitious objectives and directives regarding the circular economy create both opportunities and obstacles for companies seeking to adapt to sustainable practices. Navigating this complex regulatory landscape requires a joint effort to align operations, compliance with changing standards and innovations in a way that drives environmental management while ensuring profitability.

Through a collaborative approach that emphasises the exchange of best practices, we are creating a dynamic framework for the exchange of knowledge between stakeholders at different levels. By bridging the gap between national and European perspectives, we aim to drive innovation, increase sustainability and stimulate positive change in our economic ecosystem.

However, such a transformation comes not without its challenges. Poland, like many other countries, faces obstacles in meeting EU targets related to renewable energy and circular economy practices. It is imperative that we face these obstacles by developing tailored solutions, enabling businesses to navigate regulatory complexities and promoting a culture of compliance and fair competition.

Moving forward, our project aims to develop practical guidelines and best practices that will enable Polish employers in both the private and public sectors to adopt circular economy models. Using a multi-faceted approach that includes surveys, workshops and stakeholder engagement, we are paving the way to a more sustainable and resilient future for all.

With this project, we are hoping to set a leading example at a practical level for all European businesses and companies.

I would like to express my deep gratitude to all our partners, stakeholders and collaborators who have contributed to the success of this initiative to date. Together, let us continue to promote sustainability, innovation and shared prosperity as we follow this transformative path towards a circular economy.

Valeria Ronzitti
SGI EUROPE Secretary General



Employers of Poland



Employers entrusted to deliver
Sustainability Growth Innovation



Funded by
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SUMMARY

The report “Social Dialogue in Circular Economy” is a document summarising a project supported by the European Union to promote and implement circular economy practices in Poland. The project was implemented in response to the need to understand how Polish companies can adapt to the requirements and challenges of the transition to sustainable business models that minimise waste and maximise reuse of resources.

The report analyses studies, workshops, and surveys conducted among entrepreneurs, identifying the main barriers and challenges to more effective implementation of the circular economy. The problems identified include frequently changing regulations, a lack of consistency in enforcing existing law and difficulties in adapting to rapidly changing market requirements.

In response to these challenges, the project has focused on several key areas. The first was to identify obstacles to adaptation to circular economy models. Another area is building the competence of entrepreneurs to understand and implement legislation on a circular economy. The project also enabled the exchange of experiences and best practices between participants at national and international level, which was mainly carried out through workshops and seminars.

The report highlights the importance of designing appropriate solutions for businesses that would enable them to implement circular economy models more effectively. On this basis, recommendations and guidelines have been developed to support entrepreneurs in transforming their business.

Raising awareness of the benefits of a circular economy was another important objective of the project. Thanks to education and information activities, it has been possible to increase the knowledge and involvement of entrepreneurs in decision-making processes related to sustainable development principles.

The report “Social Dialogue in Circular Economy” provides valuable guidance and recommendations on how Poland can accelerate the adaptation of the circular economy, emphasising the need to continue social dialogue, education and cross-sectoral cooperation.

OBJECTIVES OF THE PROJECT

The project outlines specific objectives to be achieved as part of the transformation towards a circular economy:

- **Identifying the challenges of adapting to a circular economy**

Poland faces challenges in meeting EU targets for renewable energy practices and a circular economy. Despite the existence of a substantial waste management sector, comprising some 8,000 operators and 80,000 employees, many obstacles remain. Entrepreneurial activities are hampered by frequently changing regulations and lack of enforcement of existing laws, leading to non-compliance and unfair competition.

- **Capacity building in legislative work on a circular economy**

The fast pace of regulatory development at national level prevents thorough consultation with stakeholders such as Employers of Poland. There is also a need to improve skills and build relationships at European level in order to effectively engage in social dialogue and understand new regulations. The aim of this project is to strengthen capacity in these areas.

- **Creating a framework for the exchange of practices between national and European levels**

The exchange of best practice is key to improving capacity. This will be done through workshops with a diverse group of participants from different organisations, business groups, NGOs and experts.

- **Designing solutions for businesses to adapt to circular economy models**

As part of the project, guidelines and best practices will be developed to help Polish employers make an effective transition towards a closed loop. This includes ensuring that the voice of business is taken into account when shaping relevant policies.

- **Raising awareness of the importance of adapting business models to a circular economy**

The project aims to increase understanding and boost engagement in national and European dialogue on a circular economy among Employers of Poland member companies. This includes influencing draft regulations and aligning business models with circular economy standards.



METHOD

The project's implementation method involved conducting a survey and organising workshops and multi-stakeholder meetings, preparing recommendations and disseminating them within the collaborating organisations, their members and associated stakeholders.

The survey was conducted between 20.11.2023. and 22.12.2023 in Poland. The survey questionnaire contained 21 questions (including survey metrics).¹ During the survey, open-ended questions were supplemented with dictionary answers to help the respondent complete the survey. A research sample of somewhat over 1,000 interviews was obtained. The subject scope of the study covered Enterprises participating in the CE process. In order to ensure the greatest reliability of the responses received, the survey sample was selected among entities mainly involved in manufacturing, services that can have the greatest impact on the CE process. The sample was selected according to stratified random sampling. The first stratum was the provinces, where the distribution of the sample was directly proportional to the number of enterprises registered in each province according to the Central Statistical Office (CSO). The next layers were company size by the number of employees and industries. The questions in the survey were grouped into three thematic groups: entrepreneurial awareness and knowledge of a circular economy, entrepreneurial activities in relation to CE elements, and knowledge and implementation of CE principles at the economy-wide level (macroeconomic approach).

This was followed by 3 thematic workshops (2 in Poland, 1 in Brussels) and a conference summarizing the research phase of the project (in Warsaw). Each workshop had a separate theme to enable a deeper understanding of the different aspects of a circular economy. Each workshop featured experts and speakers with experience in the issue under discussion, from both the private and public sectors. The purpose of this workshop was to make recommendations how to ensure progress in each area so that a circular economy can thrive, providing workers with development and well-paying jobs. The workshop was organised in a hybrid mode, in order to allow the presence of as many participants as possible.

The final written results of the project include:

- survey results,
- a study report summarizing the results of the survey, interviews and the results of the 3 workshops,
- promotional report for distribution,
- final report collecting all data from the survey and workshops.

1. List of questions – Appendix no. 1 in the Annex

SURVEY

There is a strong need to improve knowledge on European Social Dialogue among Polish stakeholders, which is why we started the project by conducting a survey, which allowed us to identify specific needs, show weaknesses and propose solutions, which were further implemented within the project. The thematic content of the survey focused on the area of circular economy, which is of great importance to many of our members, including both companies and organisations.

The object of the survey was the Companies participating in the CE process. In order to ensure the greatest reliability of the responses received, the survey sample was selected among entities mainly involved in manufacturing, services that can have the greatest impact on the CE process.

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SURVEY RESULTS:

The results of the awareness survey conducted among entrepreneurs on a circular economy led to the following conclusions:

- 65% of the entrepreneurs surveyed had encountered the term CE. The greatest awareness among industries is among companies involved in packaging, paper, glass processing, broadly defined manufacturing and services.

- 66% of surveyed companies agree with CE objectives as the right direction for changing the waste management system.
- Entrepreneurs view their role in developing awareness related to CE negatively at each stage.
- 73% of entrepreneurs are willing to build consumer awareness towards increased social acceptance of socially sensitive investments. Medium and large companies focus on building awareness and on education, while smaller companies indicate more cooperation/communication with local governments.
- 76% of entrepreneurs believe they receive too little information related to CE and its challenges.
- The greatest educational support regarding CE is needed in respect of production methods (44%), followed by product design (24%).
- 52% of the companies surveyed pointed to Employers of Poland as the entity responsible for educating entrepreneurs about CE.
- 40% of entrepreneurs believe that Employers of Poland as an entity should work for the implementation of CE-friendly law.

The following results were obtained with regard to entrepreneurial activities:

- 56% of entrepreneurs encountered the term CE in the context of waste recycling, a further 21% in the context of sustainability.
- CE mainly affects companies in terms of:
 - PET material selection (44%),
 - penalties and fees (22%),
 - product fees (16%).
- 90% of respondents believe that the lack of an Extended Producer Responsibility (EPR) system in place affects company's business, and 52% of them consider the most beneficial EPR system to be the one that generates the least costs.
- 59% of respondents are not in a position to incur more costs (investments) related to CE in order to achieve their targets by 2035.
- The biggest problem is reported by micro companies (67.8%). The industry that resents the extra costs the most is that of packaging/paper/foil.
- The biggest challenge for entrepreneurs in implementing CE is:
 - lack of funds for additional investments (25%),
 - lack of incentive from the government (20%),
 - lack of knowledge regarding CE implementation (20%),
 - legislative changes (18%).
- 40.3% of entrepreneurs expect funding for CE implementation.
- Another 50% expect practical training in this area, access to technology, know-how.

In relation to the overall economy and progress in the macroeconomic context, respondents expressed the following opinions:

- According to entrepreneurs, achieving a municipal waste recycling rate of 65% from the current 40.3% is achievable for 50.9% of the companies surveyed.
- According to entrepreneurs, achieving a packaging waste recycling rate of 75% from the current 45.5% is achievable for 51.1% of the companies surveyed.
- According to entrepreneurs, achieving a municipal waste landfilling rate of 10% from the current 43% is achievable for 38.2% of the companies surveyed.
- 41% of respondents believe that the most significant actions to implement CE effectively were taken by citizens. Local authorities were involved in the smallest percentage.
- Entrepreneurs have a negative view of the speed of implementation of the CE system components.
- 93% of respondents believe that the deposit return system will bring improvements in the recycling of packaging materials.
- Entrepreneurs who disagree indicate too low deposit fees as the main reason.
- The biggest weakness of the implementation of the CE system in a company according to Respondents is the lack of resources to finance it (23%). Another is the lack of knowledge of how to do it practically in the company (17%). In the case of micro companies, the biggest weakness is the financial burden, and for the rest companies – the lack of financing for CE activities.



PROJECT RESULTS

In line with the project's objectives, each workshop featured experts and speakers with experience in the topics covered, both from the private and public sectors. The aim of this workshop was to make recommendations for ensuring progress in each area so that a circular economy can evolve, providing economic growth and well-paid jobs for workers.

Workshop topic areas included:

1. Workshop 1 – Extended Producer Responsibility: the current situation in the EU and Poland, EU and national legislation on this topic, market feedback from interested companies and their organizations, barriers to development in this area;
2. Workshop 2 – Waste management: the current situation in the EU and in Poland, EU and national legislation in this area, market feedback from interested companies and their organisations, barriers to development in this area;
3. Workshop 3 – Energy (mainly the waste-to-energy aspect): the current situation in the EU and in Poland, EU and national legislation in this area, market feedback from interested companies and their organisations, barriers to development in this area.

Extended producer responsibility (EPR)

Workshop 1 took place in Bydgoszcz on 31 January 2024 in cooperation with Employers of Pomerania and Kuyavia. The main topic of discussion in the circular economy was the increased producer responsibility and its implications for the business sector.

Extended Producer Responsibility (EPR) is an approach to environmental policy in which producers bear significant responsibility – financial and/or physical – for the treatment or disposal of post-consumer products. Assigning such responsibility could encourage manufacturers to take environmental considerations into account when designing their products.

The main objectives of the EPR are:

- Reducing waste: encouraging manufacturers to design products that are easier to recycle, reuse or dispose of in an environmentally friendly way.
- Shifting the financial burden: Shifting the costs of waste management from taxpayers and local authorities to producers and consumers of products, by aligning economic and environmental outcomes.

- Encouraging product redesign: encouraging manufacturers to design products that have a lower environmental impact throughout their life cycle, including the use of materials that are easier to recycle or more durable.

Extended producer responsibility is closely linked to the principles of a circular economy, the aim of which is to keep resources in use for as long as possible, extract the maximum value from them during their use and recover and regenerate products and materials at the end of their life cycle. EPR serves as a strategic approach to achieving these goals by involving manufacturers in the management of their products' life cycle. EPR is linked to circular economy principles in various ways.

The first and basic idea of EPR to strengthen the implementation of circularity in the economy is Design for Sustainability. EPR encourages manufacturers to: design products that are easier to repair, reuse, recycle or safely dispose of at the end of their life. Such an approach helps reduce waste and promotes resource efficiency, i.e. the key premises of a circular economy.

Furthermore, the EPR encourages the extension of the life of products, making manufacturers responsible for the post-consumer phase of their products. EPR encourages manufacturers to create more durable products, which extends the life cycle of products and reduces the frequency of replacement, which saves resources and energy.

As EPR programmes often include requirements for the collection and recycling of materials, manufacturers are motivated to use materials that can be easily recycled to minimise the costs associated with product disposal, supporting thereby the circular economy's objective of closing the cycle of resource use. In addition, resource efficiency is promoted through incentives to use less material and replace non-renewable resources with renewable ones.

Finally, EPR plays a crucial role in changing consumption patterns. EPR policies can exert influence on consumers by highlighting the environmental impact of their consumption choices. Products designed in accordance with EPR regulations can promote more sustainable consumption patterns, in line with the closed-loop economy's emphasis on responsible consumption.

The EPR system can vary in the way it is implemented, sometimes involving the creation of handover programmes, recycling initiatives or financial schemes such as deposits or fees to cover end-of-life disposal costs.

The European Union is leading the way in implementing extended producer responsibility as part of its broader waste management and circular economy strategies. EPR regulations in the EU aim to minimize waste generation, promote recycling, recovery and environmentally friendly disposal of waste. Key aspects of EPR regulations in the EU include:

Waste Framework Directive²:

This Directive provides the legal framework for waste management in the EU, including the EPR principles. It requires Member States to ensure that manufacturers or original distributors of products take responsibility for the whole life cycle of their products, in particular for their handover, recycling and disposal.

Directive on packaging and packaging waste³:

This particular directive requires producers to take responsibility for the management of packaging waste. It includes measures to prevent the production of packaging waste, promote recycling and other forms of recovery of packaging materials and reduce the overall environmental impact of packaging.

WEEE Directive (waste electrical and electronic equipment)⁴:

The WEEE Directive sets collection, recycling and recovery targets for all types of electrical equipment. It imposes an obligation on producers to finance the collection, processing and recovery of waste electrical equipment.

Directive on batteries⁵:

The directive makes manufacturers responsible for the collection and recycling of used batteries and accumulators, from everyday-use AA batteries to industrial and automotive batteries.

2. Directive 2008/98/EC on waste and repealing certain Directives: <https://eur-lex.europa.eu/EN/legal-content/summary/eu-waste-management-law.html>

3. European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste, <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex:31994L0062>

4. Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE), <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32012L0019>

5. Directive 2006/66/EC on batteries and accumulators and waste batteries and accumulators, <https://eur-lex.europa.eu/EN/legal-content/summary/disposal-of-spent-batteries.html>

Directive on end-of life vehicles (ELV)⁶ :

The ELV Directive is targeted at the automotive industry and requires manufacturers to create vehicles and components that are easier to recycle. It also obliges manufacturers to accept vehicles at the end of their life cycle for recycling and recovery.

Although the deadline for the implementation of the EPR was January 2023, the system has still not been implemented in Poland. Legislative work and consultations on the implementation of EPR in Poland are still ongoing and no specific solutions have been adopted.

The EPR bill presented in 2022 was widely criticized, with the main reasons for dissatisfaction being the amount of the proposed rates and the lack of control over where the funds collected from EPR would go. In addition, the system not only failed to guarantee the effective achievement of its objectives, but also was tax-like in nature. The system proposed in 2022 did not meet the requirements of the Directive and did not fully implement its provisions.

Participants in the public discussion point out that the EPR system, in order to effectively meet environmental objectives, should take into account the entire value chain and process from collection to waste management. Furthermore, it is advisable to incentivise producers to reduce the size of the waste stream and to market recyclable packaging.

Entrepreneurs also draw attention to the lack of predictability and stability associated with the failure to introduce a comprehensive EPR model in Poland.

The survey conducted by Employers of Poland as part of the “Social Dialogue in Circular Economy” project indicated widespread interest among entrepreneurs in completing the EPR system as quickly and efficiently as possible. 90% of respondents said that the lack of Extended Producer Responsibility (EPR) system in place was undermining the business. Respondents indicated a dependence on the entire value chain and collaboration within it. Furthermore, 52% of entrepreneurs believe that the most beneficial EPR system is the one that generates the lowest possible costs. However, with regard to the design of the system, opinions are divided according to the size of the company: micro and small companies prefer a system that places as little financial burden on entrepreneurs as possible (60.2%), while large companies tend to favour a EPR system that ensures the availability of production raw materials (37%) over where the funds collected from the EPR will go. In addition, the system not only failed to guarantee the effective achievement of its objectives, but also was

6. Directive 2000/53/EC of the European Parliament and of the Council of 18 September 2000 on end-of life vehicles, <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A32000L0053>

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Which EPR system would be beneficial to the entrepreneur?

- *financial liability*
- *accessibility of raw material*
- *as cost-effective as possible*

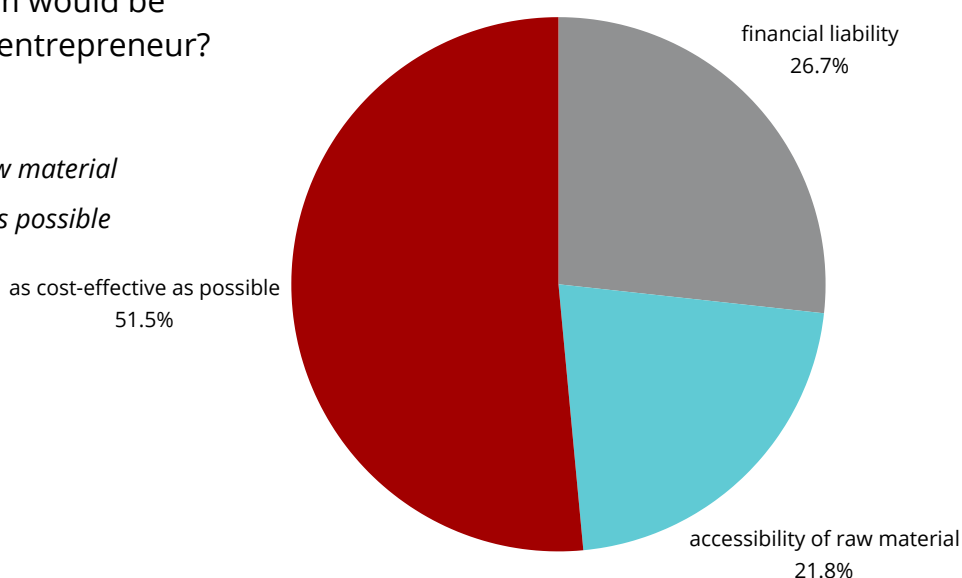


Figure 1. Respondents' answers to the question "What kind of EPR system would be beneficial to an entrepreneur?"

Entrepreneurs see a major opportunity to improve the recycling situation in the introduction of an effective deposit return system. 93% of respondents believe that it will increase the recovery of raw materials from packaging materials. However, in the group that disagrees with this position (7% of respondents), more than half of the entrepreneurs believe that the reason may be that the deposits are too low.

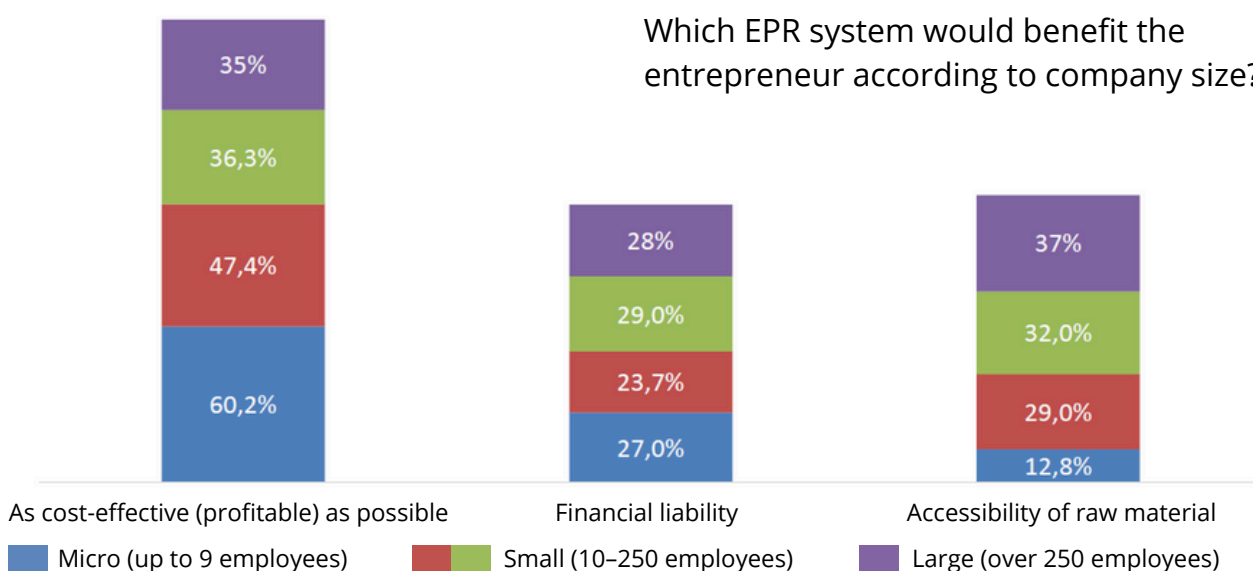


Figure 2. Respondents' answers to the question "Which EPR system would benefit the entrepreneur according to company size?"

Entrepreneurs also emphasize the possible operational problems associated with the implementation of the deposit return system law, e.g. that a scenario could materialise where small shops included in the system mainly collect the deposit, while large outlets mainly return it to consumers.

Entrepreneurs are also concerned about the projected costs of introducing the system and the lack of clarity on the required reporting.

In the discussion on the shape of the EPR system in Poland, local authorities also have a clear opinion, pointing out that it is the municipalities that have the responsibility for meeting the recycling levels. The local authorities request is: to base the EPR system on the existing municipal systems while retaining their full authority over waste with adequate funding for the process. Furthermore, with reference to Article 8a of the Waste Directive, they stress that producers of packaged products are to be responsible for covering the entire net costs of separate collection, transport, preparation and recycling of their products or articles.

In summary, the survey conducted by Employers of Poland as part of the “Social Dialogue in Circular Economy” project identified the following issues of importance to entrepreneurs in the context of EPR:

- including the entire value chain associated with the packaging recovery organisation in the EPR system,
- adding incentives for producers to reduce the size of the waste stream,
- introducing incentives for the marketing of recyclable packaging,
- clear communication on the costs of implementing the EPR system,
- possible rapid introduction of the EPR system.

Waste management

Workshop No. 2 was held in Warsaw on February 21, 2024, and its main topic was the waste management system in Poland in relation to a circular economy.

In Poland, municipal waste is administered by municipalities, dictating how it is managed. They supervise and control waste management processes, selecting contractors through tenders for waste collection and management. Legislative obligations provide for the enforcement of waste recovery and recycling standards and the reduction of landfilling. In recent years, a change has taken place: less waste is going to landfill, and recycling and recovery rates have increased. The landscape now includes thermal treatment plants, mechanical-biological treatment plants, composting plants and methane fermentation plants, in line with practices in developed EU countries.

The future policy must focus on waste prevention, the development of a circular economy and public environmental education in order to meet the EU’s recovery and waste recycling commitments. Proper management of municipal waste, guided by the principles of the waste hierarchy, is essential for sustainable resource use and economic growth. Economic instruments such as environmental charges and deposit return schemes are common in waste management in the EU.

According to the European Environment Agency⁷, the amount of municipal waste generated per capita in Poland rose sharply between 2004 and 2015, reaching 319 kg. Subsequently, the level of waste generated fell to 272 kg and increased again in the following years, reaching 346 kg in 2020. The upward trend after 2014 is attributed to factors such as population growth and increased consumption.

7. European Environment Agency, Early warning assessment related to the 2025 targets for municipal waste and packaging waste. Country Profile. Poland, <https://www.eea.europa.eu/publications/many-eu-member-states/poland/view>

Poland's municipal waste generation level of 346 kg per capita in 2020, however, is still lower than the European average of 517 kg per capita in the same year. The projections include a continuation of the growth trend in waste disposal levels: to 408 kg per capita in 2025 and 522.5 kg per capita in 2030.

Levels for separate waste collection are on an upward trend. In 2021, the share of separately collected waste in the total municipal waste generated increased to 39.8% from 37.9% in 2020.

The total weight of selectively collected waste increased from about 4,975 thousand tons in 2020 to about 5,440 thousand tons in 2021 (by 9.3%). In Poland, there was approximately 143 kg per capita of selectively collected municipal waste (130 kg the year before). In addition, more than half (60.0%) of the municipal waste generated in 2021 was destined for recovery (8,207.0 thousand tonnes), of which approximately 3,680.7 thousand tonnes of municipal waste (26.9% of the amount of municipal waste generated) was destined for recycling. However, this means that 40.0% of the total amount of municipal waste generated was destined for disposal processes, of which 38.7% of the total generated waste was destined for landfilling, and 1.2% of the total generated waste was destined for thermal conversion without energy recovery.⁸

Entrepreneurs point to a number of changes that the current waste management system requires. The most important of these concern the stabilization of regulation in this area and the enforcement of the law for market participants.

Increasing the transparency of regulations and assessing the impact of new regulations in the context of existing regulations are also highlighted. Barriers limiting the development of the waste management market include:

- lack of an integrated approach to the waste management system, the goal of which should be to achieve economic and environmental efficiency with rational use of existing instruments,
- lack of stable conditions and incentives for investment in the sector and limited research and development facilities to guarantee support and technological development of the sector,
- bottlenecks in the issuing and updating of sectoral decisions and integrated permits: the waiting time for the issuance of a permit is 2–3 years on average, and as a result of legislative changes there is an almost constant need to apply for relevant permits,
- lack of ongoing dialogue with entrepreneurs and representatives of the waste management sector.

8. CSO, Environmental Protection 2023, <https://stat.gov.pl/obszary-tematyczne/srodowisko-energia/srodowisko/ochrona-srodowiska-2023,1,24.html>

A discussion held as part of the “Social Dialogue in Circular Economy” project confirmed the concerns voiced by entrepreneurs. In addition, with regard to the system and the objectives of Poland’s waste management plan, entrepreneurs expressed rather pessimistic expectations in terms of quantitative targets for the level of recycling of municipal and packaging waste. According to 50.9% of the entrepreneurs interviewed, by 2030 a municipal waste recycling rate will amount to 65% of the waste collected. The greatest pessimism is seen in the transportation, automotive, fuel extraction, energy and packaging industries.

Assessment of achieving a 65% recycling rate of municipal waste by industry

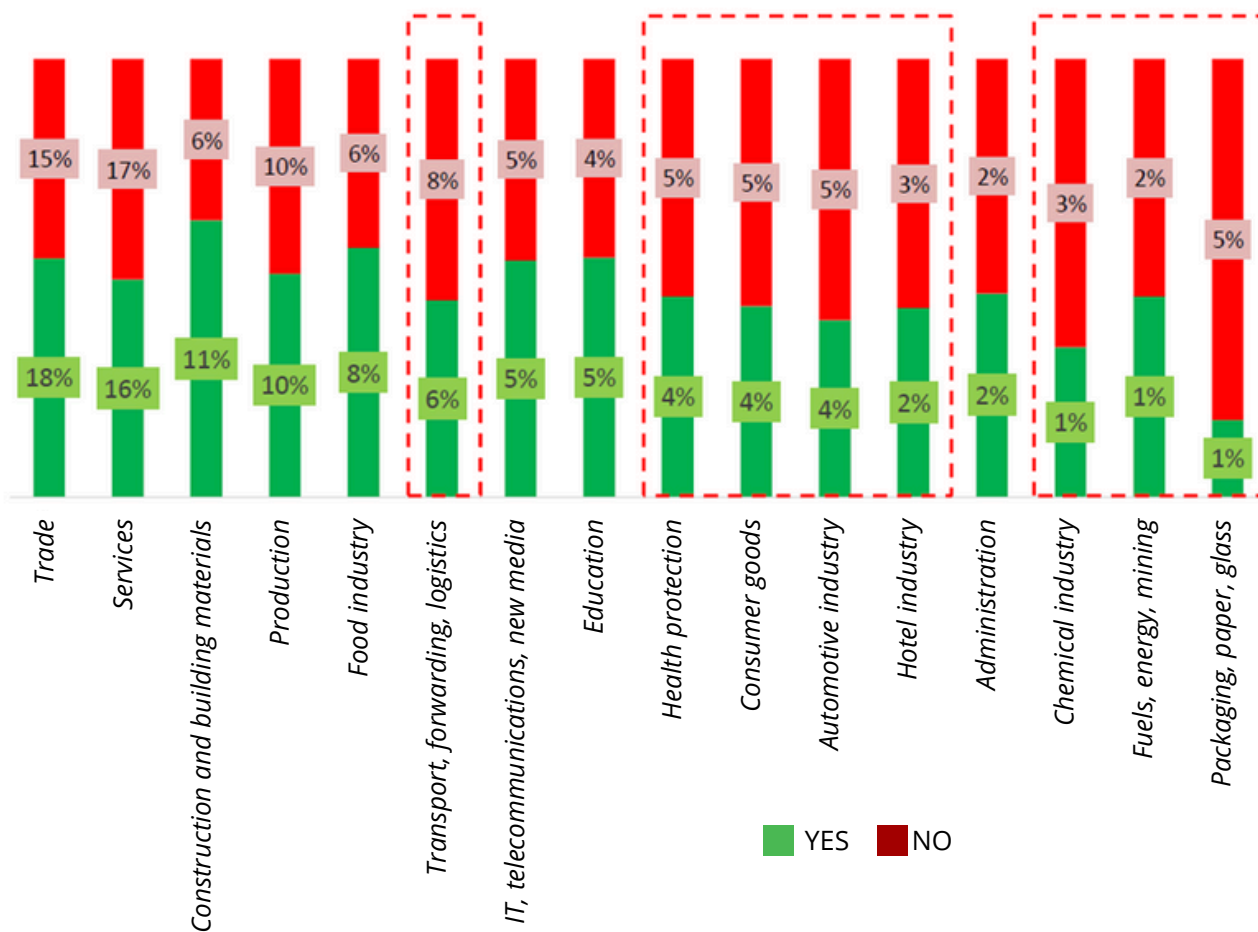


Figure 3. Respondents’ assessment of achieving municipal waste recycling rate of 65% by industry.

Regarding packaging waste targets, opinions of entrepreneurs are also distributed relatively evenly: With regard to packaging waste targets, entrepreneurs’ opinions are also quite evenly distributed: 51.1% believe in achieving the target recycling rate of 75%. However, the industry composition of the most pessimistic group of entrepreneurs is different in this respect, which includes services, manufacturing, automotive, education and packaging, paper and glass production.

Assessment of achieving a 65% recycling rate of packaging waste by industry

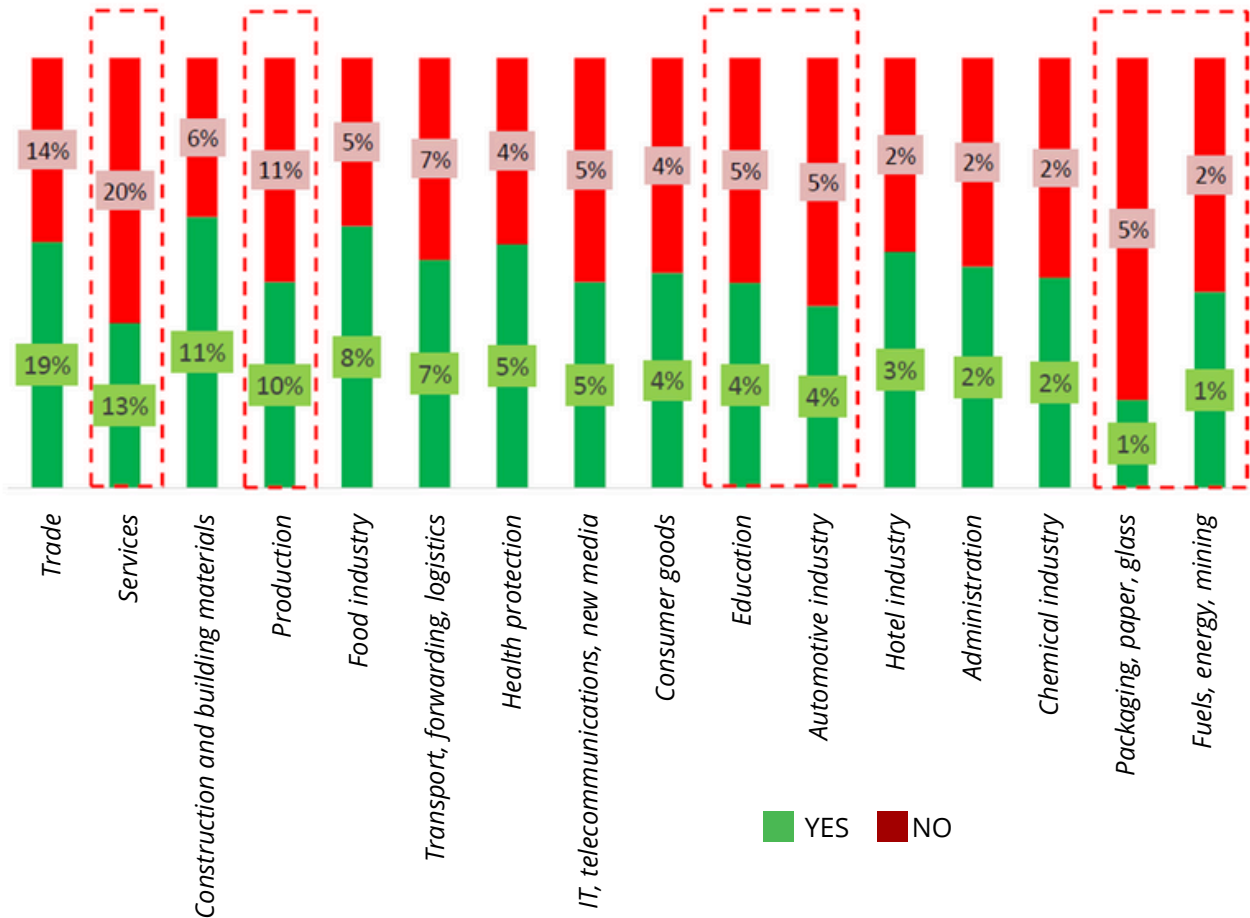


Figure 4. Respondents' assessment of achieving packaging waste recycling rate of 75% by industry.

Respondents were least confident about the chances of reducing municipal waste landfilling to below 10%. Only 38.2% of the entrepreneurs interviewed are convinced that there is a chance of reaching this level.

Summarising the opinions of entrepreneurs expressed during the quantitative survey and the workshops, it can be concluded that the most important requests of entrepreneurs in the area of waste management as an element of a circular economy concern: the simplification of the system, the implementation and stabilisation of regulations (including the EPR) and the need to support the management of the recycled raw material stream in production. There are also requests for the implementation of eco-design guidelines for products and packaging, as a first and essential step in the transformation towards circularity.

Recovering energy from waste

Workshop No. 3, on the topic of recovering energy from waste, was held on April 11, 2024 in Brussels in a hybrid mode. It was devoted to legislative and regulatory issues in the area of energy recovery as one of the strategies of a circular economy.

With respect to the 2040 climate goals, the Waste-to-Energy strategy contributes to achieving them by:

- promotion and implementation of a circular economy paradigm,
- dissemination of low- or zero-carbon solutions,
- development of carbon value chains through recycling and carbon dioxide capture and storage technologies,
- implementing cooperation and partnerships within energy-intensive industries,
- reducing landfilling and thereby reducing uncontrolled methane and CO₂ emissions.

The workshop presented the positions of the social partners on Waste-to-Energy processes. Municipal Waste Europe (MWE), when referring to the waste hierarchy, stressed that thermal waste treatment is only one method of energy recovery; others involve biological energy recovery methods using anaerobic bacteria. However, there is still a shortage of infrastructure in Europe for the use of anaerobic digestion. The European Waste Management Association (FEAD) addressed the current regulatory challenges of the waste-to-energy recovery industry, inter alia in terms of taxonomy⁹. According to FEAD, the potential to reduce CO₂ emissions in the waste management sector will only materialise if recycling and WtE opportunities are fully exploited. FEAD's position also indicates that if an action is in line with the waste hierarchy, it does not undermine the environmental objectives of the EU Taxonomy, in particular a circular economy. The inclusion of technologies in the taxonomy depends on them meeting certain environmental sustainability criteria, such as performance levels, emission limits and waste handling protocols. The rationale for including WtE technology in the taxonomy is currently under discussion.

In their statement, the representative of CEWEP (Confederation of European WtE Plants) also addressed the taxonomy and the inclusion of WtE. It was pointed out that despite its significant contribution to climate change mitigation, a circular economy and pollution prevention, WtE is currently overlooked. EU best practice in waste management includes WtE to treat residual, non-recyclable waste.

9. Taxonomy is a classification system established by the EU to improve the sustainability of investments. By defining what qualifies as an environmentally sustainable business, the taxonomy helps investors, companies, issuers and project promoters to make more informed decisions, thereby increasing the transparency and reliability of sustainable finance.

Including WtE in the taxonomy would provide clear criteria for sustainable waste treatment, encouraging investment and supporting EU waste management goals. CEWEP advocates the development of technical selection criteria for the inclusion of WtE in the taxonomy. In the speech, examples of plants and infrastructure using WtE technology were also highlighted.

The two obvious and most important benefits of operating a waste-to-energy plants are the reduction of municipal waste ending up on landfills and the production of heat and electricity from waste. In addition, they contribute to the creation of new jobs, the reduction of coal consumption and the reduction of greenhouse gas emissions. Post-processing waste that is a by-product of thermal waste treatment (e.g. slag) has economic applications, e.g. in road construction, and fly ash is managed in manganese and potassium salt mines.

The benefits of using waste-to-energy technology cover three areas: sanitation, energy and resource recovery. In the area of sanitation, WtE contributes to the elimination of pathogens and harmful substances, in energy production it replaces primary fossil raw materials while being a local and reliable source, while raw material recovery concerns, for example, metals and minerals from dust and bottom ash.

Challenges in the field of energy recovery from waste include: the risk of overuse of WtE processes in the waste management system and a too lengthy permitting process for facilities using anaerobic digestion. In addition, operational problems of incineration plants can be highlighted, such as the lack of selective collection of NO₂ gas cylinders and vaporizers used.

Identified needs at community level for waste-to-energy include:

- further developing the capabilities of WtE facilities,
- implementing the waste hierarchy,
- achieving the landfilling targets,
- upgrading facilities toward greater energy efficiency,
- preparing the framework for the development of technologies for the capture and use of carbon dioxide,
- creating a single CO₂ market, including: transport infrastructure, increased investment and integration with EU energy policy,
- including residual waste and CCU in the treatment taxonomy.

With regard to thermal waste treatment facilities, the main challenges identified include:

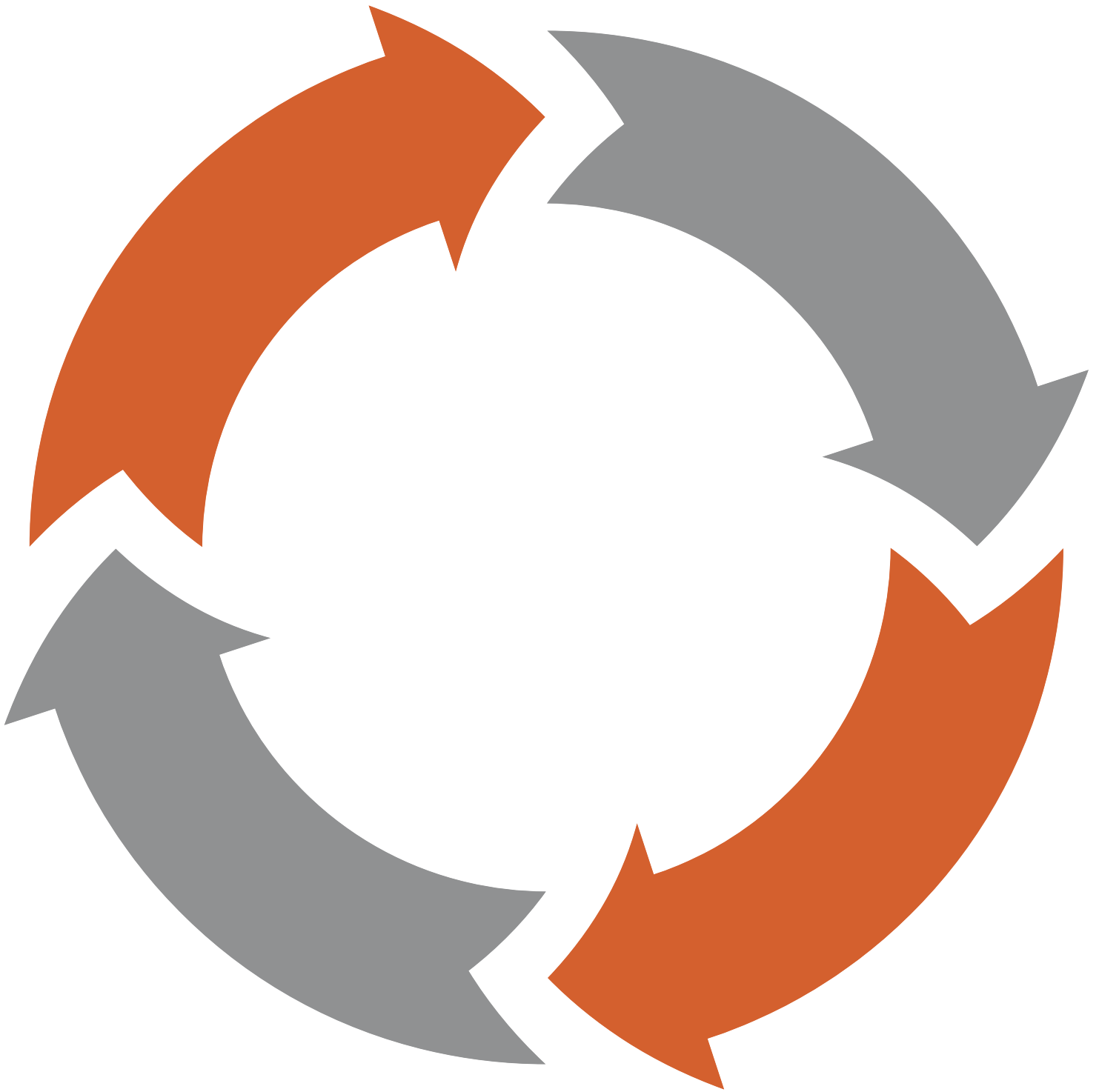
- presenting NIMBY attitude,
- perceiving incineration as competition for recycling,
- no inclusion of WtE in the taxonomy,
- failure to define the term “significant growth” in the taxonomy regulation and failure to distinguish between types of waste.

Poland’s Waste-to-Energy system currently includes nine facilities, with three more in the final stages of development. Nevertheless, the call for applications for the program to co-finance the construction of more WtE infrastructure facilities, using funds from the Modernization Fund, is now ending. The budget for achieving the program's objective under the Modernization Fund is PLN 6 bln, including PLN 2 bln for non-refundable forms of financing and PLN 4 bln for refundable forms of financing.

Currently operating facilities are located in the following cities:

- Białystok: The waste incineration plant in Białystok has been in operation since 2016 and processes up to 120,000 tons of waste annually.
- Bydgoszcz: The Thermal Municipal Waste Treatment Plant in Bydgoszcz disposes of mixed municipal waste and combustible bulky waste.
- Konin: The waste incineration plant in Konin has been in operation since 2015 and processes up to 94,000 tons of waste annually.
- Cracow: The Thermal Waste Treatment Plant in Cracow has the capacity to process 220,000 tons of waste per year.
- Poznań: The Thermal Municipal Waste Treatment Facility is designed to convert mixed municipal waste, with a capacity of 210,000 tons per year.
- Rzeszów: The waste incineration plant in Rzeszów has been in operation since 2018 and processes up to 100,000 tons of waste annually.
- Szczecin: The waste incineration plant in Szczecin opened in December 2017, with a capacity of about 150,000 tons per year.
- Warsaw: The Solid Municipal Waste Disposal Plant (ZUSOK) is located in the Targówek district of Warsaw and has been in operation since 2000.
- Fortum Zabrze: The CHP plant in Zabrze uses RDF and has a total plant capacity of 225 megawatts.

Approximately 14.5 million Mg of waste is generated annually in Poland, of which 4.5 million Mg is residual waste with a calorific value that is neither reusable nor recyclable. Current capacity allows for the management of approximately 2.5 million Mg of this waste, with the remainder being abandoned or diverted to landfills in violation of regulations. This represents a major opportunity for the creation of a waste-to-energy recovery system, especially with existing financial support for the establishment of infrastructure.



SUMMARY OF THE PROJECT

The objectives of the project were defined as follows:

- 1. Identifying the challenges of adapting to a circular economy:** The project involves identifying barriers to Poland's alignment with circular economy and renewable energy standards at the EU level. These challenges include frequent changes in regulations, a lack of administrative will to enforce compliance, and shadow economy activity that harms honest entrepreneurs.
- 2. Building competence in respect of circular economy legislation:** The project aims to develop the skills and knowledge necessary to actively participate in the national and European dialogue on a circular economy. Competence development is also aimed at a better understanding of upcoming regulations, international and cross-sectoral cooperation and more effective participation in legislative processes.
- 3. Creating a framework for exchanging practices between the national and European levels:** Under the project, an exchange of good practices between different organisations and institutions, both national and transnational, is being planned. This exchange is expected to take place mainly in workshops with a wide range of participants, which is expected to contribute to the development of the organisation's competences.
- 4. Designing solutions for companies adapting to circular economy models:** The aim is to prepare a set of guidelines, recommendations and good practices that will enable Employers of Poland to become an important partner in the area of a circular economy. It is important that the voice of business is articulated, heard and taken into account in decision-making processes.
- 5. Raising awareness of the importance of adapting business models to a circular economy:** The project involves increasing the knowledge and awareness of members of Employers of Poland about a circular economy. The planned activities are expected to make members more active, from providing feedback on draft regulations to increasing the compliance of business models with circular economy guidelines.

In summary, the project's objectives are ambitious and focus on transforming and adapting the Polish economy and businesses towards sustainability and a circular economy, addressing thereby today's environmental and regulatory challenges.

The report “Social Dialogue in Circular Economy” is a document summarising a project supported by the European Union to promote and implement circular economy practices in Poland. It presents the results of research, workshops and surveys conducted among entrepreneurs and sets out recommendations and guidelines for the future.

Identifying the challenges of adapting to a circular economy

The report points out the numerous challenges Polish entrepreneurs face in adapting to a circular economy. Barriers identified include frequent changes in regulations, lack of consistency in enforcement, and difficulty in complying with regulations without compromising fair competition. This directly relates to the project’s objective of identifying adaptation challenges.

Building competence in respect of circular economy legislation

The project focused on developing skills and knowledge crucial for effective participation in legislative processes at the national and European levels. Through workshops and consultation sessions, the ability of entrepreneurs to actively participate in social dialogue was increased, which reflects the second goal of the project.

Creating a framework for exchanging practices between the national and European levels

A series of workshops were organised as part of the project, which enabled the exchange of experiences and best practices between different market actors. These activities fostered the building of bridges between entrepreneurs and institutions at different administrative levels, which addresses the third objective of the project.

Designing solutions for companies adapting to circular economy models

The report summarizes the results of a survey conducted among entrepreneurs that helped identify needs and expectations for future regulations. Based on this, recommendations have been developed to help companies adapt to the requirements of a circular economy. This addresses directly the fourth objective of the project.

Raising awareness of the importance of adapting business models

The project has significantly contributed to raising awareness of a circular economy among entrepreneurs. The education and outreach activities were implemented not only to raise awareness, but also to engage entrepreneurs in shaping appropriate sustainable business practices.

RECOMMENDATIONS

During the process of surveying and interviewing entrepreneurs, specific proposals and conclusions emerged on how to accelerate the transformation of the Polish economy towards circularity. These include the following calls for action:

HOW TO RAISE AWARENESS?

Communication:

- social advertisements on ATL and BTL media targeting different audiences (Entrepreneurs, Citizens, Local Governments),
- showing best-practice of CE implemented in companies,
- demonstration of Citizens-Government-Entrepreneur cooperation,
- targeting messages to the youngest audience in elementary schools, preparing materials for teachers.

Training:

- webinars on CE implementation in companies,
- webinars on CE implementation in local governments,
- exchange of know-how in projects of international companies.

Channels for reaching entrepreneurs/stakeholders:

- mailing to companies,
- call center campaigns.

The above outreach channels can be used to maximize conversion to a webinar/training attendance.

WHAT WILL HELP YOU MANAGE YOUR BUSINESS?

- Hotline – first line of support for companies/authorities implementing CE.
- Audits to help the company learn what it could change to comply with CE-related recommendations, where to get additional technological knowledge.
- Subsidies for the purchase of off-the-shelf solutions to the recycling issue – not just on a competitive basis.
- Product certification - “I am ECO”.

WHAT WILL IMPROVE CE IMPLEMENTATION?

Organization of international know-how exchange meetings in major cities in Poland, e.g., a series of quarterly/semi-annual meetings with the greatest potential for change. Support programs that take into account different groups of entrepreneurs from subsidies to education.

The above survey results, especially the suggestions made by entrepreneurs, were then used in formulating the substantive content of the workshop and in the next stage of the project, i.e. communication and popularization.

Annex:

Appendix no. 1. List of questions

Questions asked in a survey on the state of knowledge about a circular economy (CE) and the expectations of entrepreneurs in terms of, among other things, legislative changes to improve the efficiency of business operations in circular economy.

Q1. Have you come across the term Circular Economy?

Q1a. In what context?

Q2. To what extent does a Circular Economy affect your company?

Q3. Do you think that the main principles of the Circular Economy indicate the right direction for changing the Waste Management System?

Q4a. Do you think that Poland as a country will meet the Circular Economy objectives adopted for 2035, i.e: achieve a municipal waste recycling rate of 65% from the current 40.3%?

Q4b. Do you think that Poland as a country will meet the Circular Economy objectives adopted for 2035, i.e: achieving a waste recycling rate of 75% for packaging waste from the current 55.5%?

Q4c. Do you think that Poland as a country will meet the Circular Economy objectives adopted for 2035, i.e: reducing municipal waste landfilling to no more than 10% from the current 43%?

Q5. Which of the following entities has currently taken sufficient action to implement a Circular Economy effectively?

Q6. Do you believe that the continued lack of EPR (extended producer responsibility) system in place is undermining your business?

Q7. What kind of EPR system would benefit you?

Q8. How do you assess the pace of implementation of CE system elements in terms of design? / in terms of production? / in terms of logistics? / in terms of service? (where 1 means – very bad, and 7 – very good)

Q9. Do you believe that the deposit return system once adopted will improve the recycling of packaging materials?

Q10. How do you assess the role of Entrepreneurs in creating awareness related to CE, in particular the social acceptance of socially sensitive investments (incineration plants, sorting plants, biogas plants, etc.) at the product design stage? / at the product purchase stage? / at the production stage? / at the distribution stage? (where 1 means – very bad and 7 means – very good)

Q10. How do you assess the role of Entrepreneurs in creating awareness related to CE, in particular the social acceptance of socially sensitive investments (incineration plants, sorting plants, biogas plants, etc.) at the logistics stage? / at the product end-of-life stage? / at the marketing and communication stage? (where 1 means – very bad and 7 means – very good)

- **Q11.** What are we as Entrepreneurs able to do to increase public acceptance regarding socially sensitive investments (incineration plants, sorting plants, biogas plants, etc.) or systems supporting CE (EPR, deposit return system, etc.)?
- **Q12.** As an Entrepreneur, am I able to incur more costs (investments) related to CE in order to achieve my targets by 2035?
- **Q13.** In your opinion, what is the greatest CE-related challenge faced by Polish entrepreneurs?
- **Q14.** What kind of support do Polish entrepreneurs expect with respect to CE?
- **Q15.** Do you think you receive enough information related to CE and its challenges?
- **Q16.** What is the extent to which you need the most educational support regarding CE?
- **Q17.** Who should be responsible for the education of entrepreneurs on CE?
- **Q18.** What do you see as the biggest weaknesses in the implementation of the CE system?
- **Q19.** In your opinion, what role should Employers of Poland play as a social partner in the implementation of CE in Poland?

Survey metrics

- **Q20.** Province
- **Q21.** Company size
- **Q22.** Industry

List of abbreviations

ATL – above the line marketing
BTL – below the line marketing
CCU – Carbon Capture and Utilisation
CE – circular economy
CEWEP – Confederation of European Waste-to-Energy Plants
CSO - Central Statistical Office in Poland
EPR – Extended producer responsibility
FEAD – European Waste Management Association
MWE – Municipal Waste Europe
WtE – Waste to Energy

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