



D.1.3.1 Short synthesis report

Activity 1.3. Joint development of a strategy framework for the promotion and establishment of circular lifestyles in cities / city centre National Report - Poland



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A. National level (Poland)

1. Presentation of strategic papers

The concept of a circular economy has gained significant attention in Poland in recent years, recognized as a promising approach to address environmental challenges while fostering sustainable economic growth. Poland's commitment to circular economy is evident in its strategic initiatives, policy frameworks, and ongoing research endeavours. Poland's circular economy strategy prioritizes several key areas for development:

- Innovation and Collaboration: Fostering collaboration between industry and science to drive innovation in circular economy solutions.
- Secondary Raw Materials Market: Establishing a robust market for secondary raw materials to promote resource efficiency.
- Sustainable Production and Consumption: Ensuring high-quality secondary raw materials derived from sustainable practices.
- Expanded Services Sector: Encouraging the growth of the services sector to reduce reliance on material consumption.

Poland's circular economy priorities align with the broader EU objectives of promoting employment, economic growth, and industrial innovation. Waste management plays a central role in Poland's circular economy strategy. The country prioritizes waste prevention, effective waste management practices, recycling initiatives, and infrastructure investments to reduce waste generation and promote resource recovery. Poland also recognizes the importance of shaping consumption patterns to align with circular economy principles. Initiatives such as the sharing economy, servicisation, and digital platforms are gaining traction as tools to encourage sustainable consumption behaviours.

Municipal wastewater treatment plants offer promising opportunities for resource recovery and circularity. Poland is exploring innovative approaches to extract valuable resources from wastewater, such as nutrients, water, and energy

While Poland has made significant advances towards embracing the circular economy in national strategies, there still exists a gap between its aspirations and the actual implementation of circular economy principles. The 2030 National Environmental Policy rightly identifies this gap, highlighting the need for further progress in integrating circular economy across all stages of the life cycle and in both the social and economic spheres.

a. Strategy for Responsible Development

The Strategy for Responsible Development was adopted by the Polish Council of Ministers in 2017. The Strategy proposes a new approach to the country development that emphasizes both responsibility and social and territorial sustainability. It defines the key challenge as a need to restructure the economic system to ensure that it benefits all members of society. Circular economy paradigm is considered as important in several areas, such as:

- ensuring non-energy minerals and fossils for industry;
- application of circular economy in the waste management;
- spreading the circular economy in rural development (Council of Ministers of the Republic of Poland, 2017).









Circular economy however is not considered in cross-sectoral dimension. circular economy is implemented in selected individual sectors, but it does not address the need for systemic change to create a truly circular economy.

b. Roadmap of the Transition to a Circular Economy

The Roadmap was adopted by the Polish Council of Ministers in 2019 and is an integral part of the Strategy for Responsible Development. The Roadmap addresses key challenges that Poland is currently facing and supports the creation of conditions for an increase in the income of Polish residents while simultaneously fostering cohesion in the social, economic, and territorial dimensions.

The Roadmap establishes four main priorities for the transition of the Polish economy towards circularity:

- Sustainable industrial production
- Sustainable consumption
- Bioeconomy
- New business models

The focus of sustainable industrial production is primarily on managing waste generated by mining, processing industries, and power generation. This includes analysing the potential utilization of mining waste stockpiles and developing guidelines for waste-free coal-based power generation. Additionally, plans are in place to establish a platform for secondary materials trading. The primary limitation of this priority is its excessive focus on the mining and power generation industries, with limited support for other sectors, such as manufacturing or construction, which contribute significantly to waste generation. Some of the planned activities are rather basic, such as an awareness campaign for life cycle assessment (LCA).

The sustainable consumption priority emphasizes data collection on waste streams, monitoring of existing regulations, and the development of legislative changes for hazardous waste. A key aspect is preventing food waste by introducing regulations on the appropriate handling of products with an expiring "best before" date. An awareness-raising campaign is planned for consumers.

According to the Roadmap, the bioeconomy sector is considered an important but underutilized and not fully recognized industry from the circular economy perspective. Multiple activities are planned, including status quo analyses and information campaigns. The establishment of government and industry working groups is intended to develop further strategies and action plans.

The new business models priority aims to create an enabling environment for circular economy development. This includes legislative and taxation changes, concepts development, and the introduction of circular economy as one of the Key National Specializations.

The Roadmap is of a rather general nature, identifying challenges and establishing primary priorities for the transition towards CE. However, it fails to set specific goals and objectives, does not cover all sectors of the economy, and proposes superficial actions such as developing analyses and conducting awareness-raising campaigns.









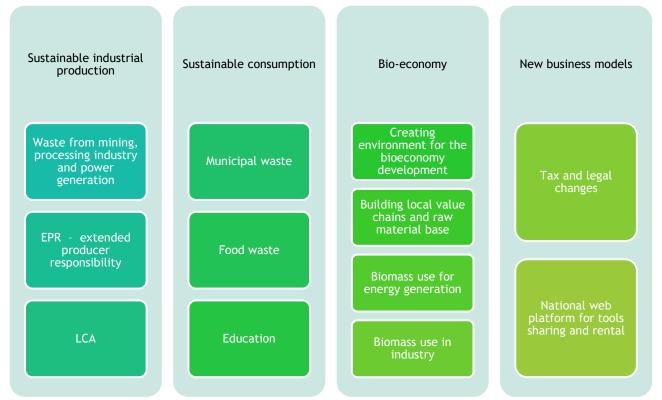


Figure 1 Priorities of the transistion towards circular economy in Poland (Source: own work based on (Council of Ministers of the Republic of Poland, 2019b)

c. National Raw Materials Policy

The National Raw Materials Policy was adopted by the Polish Council of Ministers in 2022 and forms an integral part of the Strategy for Responsible Development. It defines the state raw materials policy as a project aimed at developing an efficient and effective system for managing all types of minerals and mineral resources throughout the entire value chain (Council of Ministers of the Republic of Poland, 2022a). Circular economy is considered as one of the main objectives, but only in the context of recovering raw materials from anthropogenic deposits.

d. National Strategy for Regional Development 2030

The National Strategy for Regional Development 2030 was adopted by the Polish Council of Ministers in 2022. It lays out the country's regional development challenges up to 2030, defines key directions and principles, outlines regional policy goals for 2030, specifies actions to be taken by the government, local governments, and other stakeholders involved in implementing this policy, and establishes the NSRD's implementation system and financial framework. The Strategy sets the main objective as "effective use of endogenous potentials of territories and their specialization to achieve sustainable development of the country, which will create conditions for the growth of income of Polish residents while achieving coherence in the social, economic, environmental and spatial dimensions" (Council of Ministers of the Republic of Poland, 2022b).

The strategy recognizes the transformative potential of circular economy in addressing environmental challenges and fostering economic growth. The Strategy emphasizes the importance of circular economy as a strategic approach to sustainable investment and a mean for strengthening regional competitive advantages. Circular economy is however acknowledged in limited areas, such as waste management, food waste prevention, and water and sewage management.









e. National Waste Management Plan 2028

The National Waste Management Plan 2028, adopted in 2023 by the Polish Council of Ministers, presents an analysis of the current state of waste management, forecasts changes in waste generation, defines goals and directions for waste management policy, and outlines tasks to be implemented (Council of Ministers of the Republic of Poland, 2023). The plan sets objectives for waste management, including:

- Aiming for a recycling and preparation for reuse rate of 55% for paper, metals, plastics, and glass from municipal waste streams in 2025 and 65% in 2035.
- Minimizing landfilled waste to 30% in 2025 and 10% in 2035.
- Supporting product reuse and waste prevention, with a particular focus on food waste prevention.
- Ensuring the maintenance of recycling efficiency levels for used batteries and accumulators.
- Achieving an appropriate level of recovery and recycling of waste generated from products, including packaging waste, used tires, and waste oils.

The Plan effectively translates the principles of circular economy into practical waste management practices. It encompasses a wide range of economic sectors and diverse waste streams. However, some areas, such as end-of-life vehicles, textiles, and construction waste, are not adequately represented in the Plan.

f. National Environmental Policy 2030

The National Environmental Policy 2030, adopted in 2020 by the Polish Council of Ministers, outlines a comprehensive approach to environmental protection and sustainable development in Poland. The policy identifies circular economy as a key direction of interventions, particularly in the area of waste management (Council of Ministers of the Republic of Poland, 2019a). Additionally, the policy emphasizes the importance of education towards sustainable consumption patterns and the development of a Raw Materials Policy. It outlines a range of main actions and specific tasks to promote circular economy and achieve sustainable waste management practices in Poland. The main areas of intervention include:

- Prioritizing waste management according to the hierarchy of waste handling methods: prevention, reduction, reuse, recycling, recovery, and disposal.
- Developing waste recycling infrastructure and technologies: the aim is to increase the capacity and efficiency of waste recycling facilities and encourage the development of innovative recycling technologies.
- Maximizing the use of waste as raw materials: to promote the utilization of waste as a valuable resource for secondary raw materials, reducing reliance on virgin materials.

The Policy proposes also the implementation of specific tasks, such as:

- Supporting investments related to waste management, including waste prevention, proper waste management, and waste recycling infrastructure.
- Evaluating the municipal waste management system and introducing necessary corrections to improve efficiency and effectiveness.
- Supporting research and development of innovative environmental technologies and new business models for waste recovery and utilization.
- Promoting circular economy practices in public procurement through green public procurements.
- Developing a concept for municipal wastewater treatment plants to fully implement circular economy principles.









From the circular economy point of view, the Policy presents limited focus beyond waste management. It primarily focuses on waste management aspects of circular economy, neglecting other crucial dimensions such as product design, manufacturing processes, and consumption patterns. A broader approach that encompasses the entire product lifecycle is essential for achieving a truly circular economy.

g. Energy Policy of Poland until 2040

The Energy Policy of Poland until 2040 was adopted by the Polish Council of Ministers in 2021 and forms an integral part of the Strategy for Responsible Development (Council of Ministers of the Republic of Poland, 2021). The Policy establishes the framework for the energy transformation in Poland. It provides a comprehensive overview of the current state and challenges facing the Polish energy sector and outlines three core pillars that underpin the Policy (Figure 2), upon which eight specific objectives have been established. To achieve these objectives, the Policy details a range of necessary actions and strategic projects. Additionally, the document outlines a territorial approach to energy policy implementation and identifies potential funding sources for the initiatives. The key provisions of Policy are the development of renewable energy sources (RES), improvement of energy efficiency, and improvement of air quality. By 2040, half of the installed capacity is to be composed of zero-emission sources. The transition towards zero-emission sources is understood as shifting away from a fossil-fuel-based economy. Renewable energy sources are to contribute to at least 23% of Poland's final energy consumption in 2030.

The policy incorporates the principles of circular economy by promoting the utilization of resources in a sustainable and efficient manner. This approach is evident in several key areas:

- use of biomass, such as agricultural waste and forest residues, for energy generation
- development and deployment of biofuels for transportation
- use of heat from incineration plants
- promoting the adoption of energy-efficient technologies and practices.

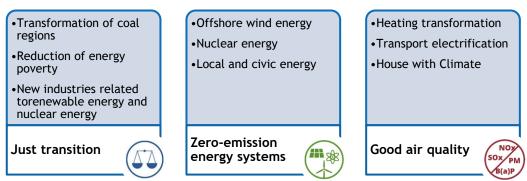


Figure 2 Thre pillars of the Energy Policy of Poland until 2040. Source: (Council of Ministers of the Republic of Poland, 2021)

h. Productivity Strategy 2030

The Productivity Strategy 2030 was adopted by the Polish Council of Ministers in 2022. It defines a strategy for the development of the Polish economy by 2030 (Ministry of Development and Technology, 2022). The Strategy aims to make the Polish economy more competitive by focusing on technological advancement, knowledge-based growth, and digital, green, and organizational transformation of Polish enterprises. The strategy outlines a variety of support instruments to help implement the strategy and achieve its goals.

The document highlights the importance of circular economy and Industry 4.0 as key drivers for optimizing raw materials management in Poland's economic development. To foster circular economy practices, the document outlines specific initiatives, including:







- Establishing and expanding secondary raw materials markets,
- Promoting circular economy in the plastics industry,
- Supporting the development of bioplastics,
- Encouraging environmental management systems (EMS) and certifications.

2. Organisations and initiatives supporting circular economy - national level

a. National Chamber of Commerce for Environmental Protection (Ogólnopolska Izba Gospodarcza Ochrony Środowiska)

The National Chamber of Commerce for Environmental Protection (Ogólnopolska Izba Gospodarcza Ochrony Środowiska) is a trade association representing over 100 companies in Poland that are involved in waste management. The Chamber gather together packaging recovery organizations, companies that introduce packaging to the market, companies that produce packaged products, and companies that produce electrical and electronic equipment (Ogólnopolska Izba Gospodarcza Ochrony Środowiska, 2023).

The Chamber was founded in November 2014 to represent and protect the interests of its members, who are committed to creating, maintaining, and promoting a sustainable waste management system. One of the Chamber's main goals is to promote environmental protection, taking into account actions that combine pro-environmental ethical principles, high environmental awareness, and economic efficiency of its members.

In order to increase the position of Polish companies in the waste management sector, the Chamber creates conditions for effective dialogue with representatives of public authorities, the scientific community, consumers, and the media. Specifically, Chamber's activities include:

- representing the interests of its members to public authorities,
- promoting the circular economy, including the development of new technologies and business models,
- raising awareness of environmental issues.

The Chamber is a leading voice for the waste management sector in Poland. The Chamber's work is essential to promoting sustainable waste management and protecting the environment.

b. Polish Zero Waste Association (Polskie Stowarzyszenie Zero Waste)

The Polish Zero Waste Association is a non-profit organization dedicated to promoting sustainable waste management practices and fostering a circular economy in Poland. Their mission is to transform public understanding of resources by preventing waste at its source, encouraging zero-waste lifestyles, and advocating for a transition to a closed-loop economy (Polskie Stowarzyszenie Zero Waste, 2023).

The association collaborates closely with both public authorities and the private sector to support the implementation of zero-waste principles. This collaboration encompasses a wide range of activities, including:

• Community engagement: The association organizes events, workshops, and community initiatives to raise awareness and encourage collaboration among individuals and organizations. For instance,









they launched the "With Your Own Cup" campaign, promoting the use of reusable cups for takeaway coffee and highlighting its environmental benefits and positive impact on café owners' reputations.

- Individual empowerment: The association provides comprehensive educational resources and tools for individuals to adopt zero-waste practices in their daily lives. They offer workshops, training programs, and online resources to help individuals reduce their waste generation, reuse and recycle materials, and adopt eco-friendly habits. For example, they developed an educational set for primary school teachers to enable them to conduct lessons on zero-waste lifestyles.
- Business and industry support: The association provides guidance and support to businesses and industries transitioning towards circular economy practices. They offer workshops, training programs, and consulting services to help businesses reduce their waste footprint, adopt ecofriendly production processes, and design products for circularity.
- Policy advocacy: The association actively advocates for policies that support the circular economy and promote waste reduction. They engage in public consultations, lobbying efforts, and educational campaigns to influence policy decisions that align with zero-waste principles. For instance, they initiated the "Kaucja Wraca!" information campaign, which translates to "The Deposit Returns!", advocating for the introduction of a mandatory deposit system for single-use and reusable beverage containers in Poland.

c. Polish Society of Circular Economy (Polskie Towarzystwo Gospodarki Obiegu Zamkniętego)

The Polish Society of Circular Economy (Polskie Towarzystwo Gospodarki Obiegu Zamkniętego) is a non-profit organization dedicated to promoting sustainable waste management practices and fostering a circular economy in Poland. The society's mission is to enhance waste management, energy security, environmental protection, and climate protection in Poland (Polish Society Of Circular Economy, 2023).

The Society's activities focus on the following areas:

- Waste management: The society works to improve waste management practices in Poland, including the recycling and reuse of materials, the reduction of waste generation, and the development of new waste management technologies.
- Energy security: The Society actively promotes Poland's energy security by advocating for the production of energy from domestic energy sources, including renewables, and the recovery of anthropogenic energy resources.
- Environmental protection: The Society works to protect the environment in Poland, including the reduction of air pollution.
- Climate protection: The Society works to protect the climate in Poland by reducing greenhouse gas emissions.

d. The Institute of Environmental Protection - National Research Institute (Instytut Ochrony Środowiska)

The Institute of Environmental Protection - National Research Institute (Instytut Ochrony Środowiska) is a leading research organization in the field of environmental protection, supervised by the Polish Ministry of Climate and Environment. The Institute's primary objective is to establish a scientific and technological foundation for environmental protection, provide knowledge to state and local government administrations and economic entities, and raise the level of ecological awareness and shape the ecological attitudes of society. The Institute's activities encompass a broad spectrum of environmental concerns, including air quality, waste management, climate change, protection of the Earth's surface, protection against noise,









emission management, sustainable development, ecotoxicology, environmental analyses, research, and ecological education (Instytut Ochrony Środowiska, 2023).

e. National Fund for Environmental Protection and Water Management (Narodowy Fundusz Ochrony Środowiska i Gospodarki Wodnej)

The National Fund for Environmental Protection and Water Management (NFOŚiGW) is a Polish government agency established in 1989. Its primary mission is to effectively and efficiently support environmental activities, with a particular emphasis on actions concerning the absorption of EU funds managed by the Fund. NFOŚiGW finances and co-finances pro-ecological projects, providing assistance to entrepreneurs, local governments, state administration, universities, NGOs, and private individuals (National Fund for Environmental Protection and Water Management, 2023).

The Fund has played a pivotal role in implementing programs that improve the environment and protect climate in Poland. Currently, the Fund's activities are focused on addressing climate change and combating air pollution. The Fund supports initiatives that promote the use of renewable energy sources, enhance energy efficiency, and foster a circular economy. These efforts span across households, enterprises, and regions, contributing to a more sustainable and environmentally responsible Poland.

B. Below national level - city and district

3. Circular City strategic documents

a. Development Strategy for Municipality of Brzeg Dolny 2022-2030

The Municipality of Brzeg Dolny adopted in 2022 the Development Strategy for 2022-2030 (Municipal Council of Brzeg Dolny, 2022b). This strategy outlines the goals and objectives for the growth and development of the municipality. The strategy sets the basis for the implementation of the scenario "Sustainable specialization", which focuses on the chemical industry as the main driver of economic growth. However, the strategy also emphasizes the need for innovation, cooperation between companies, and collaboration with research institutions. The goal is to create an innovative area where not only production takes place, but also innovation is generated and implemented. The scenario also assumes a stable growth of the population, which should lead to demographic balance while reducing pressure on the natural environment. The implementation of the "Sustainable specialization" scenario will lead to the creation of conditions for the multifaceted (economic, social, spatial) and sustainable development of the municipality based on intelligent specialization that utilizes its endogenous potential.

Despite the circular economy is not specifically mentioned in the Strategy, its principles are supported through several specific objectives of the Strategy, including the following:

- Strengthening the innovation of companies and increasing the use of modern environmentally friendly technologies
- Development of infrastructure and services that protect the environment
- Adaptation of the city to the effects of climate change
- Revitalization of degraded areas and heritage sites









These objectives, while not directly related to the circular economy, are aligned with its principles of reducing waste, reusing resources, and maximizing resource utilization. By implementing these objectives, the municipality can contribute to the transition to a circular economy in Brzeg Dolny.

b. Environmental Protection Programme for the Municipality of Brzeg Dolny 2022-2025

The Environmental Protection Programme for the Municipality of Brzeg Dolny is a strategic document adopted in 2022 (Municipal Council of Brzeg Dolny, 2022a). The document describes environmental protection issues within the municipality, with a particular focus on problematic areas caused by unsustainable economic development. It also presents specific proposals for actions aimed at resolving these issues. The document establishes ten strategic objectives related to different intervention areas, such as climate and air quality, water management, waste management, or geological reserves. The Programme serves as a robust framework supporting the principles of the circular economy through a comprehensive approach to reduce environmental impact and promote sustainable practices. The proposed waste management strategies, including waste minimization, recycling, and improved collection systems, align with circular principles by emphasizing the importance of a closed-loop system. The programme's educational activities promoting waste minimization and increased raw material recovery levels further reinforce its circular economy objectives. In the field of water management, the application of the hierarchy of water use, optimization of water consumption, and proper management of non-municipal sewage further contribute to the circular economy's philosophy of responsible resource exploitation. A long list of activities supporting the improvement of energy efficiency of buildings, including the shift towards low-emission heating fuels, aligns with the circular economy's emphasis on resource optimization. Lastly, the emphasis on rational mineral extraction combined with reclamation and revitalization efforts demonstrates a commitment to sustainable resource utilization within the community. Overall, the municipal environmental protection programme is a comprehensive initiative that not only addresses environmental challenges but also actively promotes the circular economy by integrating sustainable practices across various domains.

c. Sustainable Energy Action Plan (SEAP) for the Municipality of Brzeg Dolny

The Sustainable Energy Action Plan (SEAP) for the Municipality of Brzeg Dolny is a strategic document adopted in 2021 (Municipal Council of Brzeg Dolny, 2021). It identifies specific actions, targets, and timelines to achieve energy efficiency, renewable energy, and greenhouse gas (GHG) emissions targets, contributing to the realization of the EU's climate and energy goals. The strategic goal of the SEAP is to reduce the demand for final energy, thereby lowering CO2 emissions.

Despite not directly focusing on circular economy, SEAP plays An important role in supporting the principles of a circular economy. By prioritizing the development of low-emission energy sources and promoting highly efficient alternatives such as natural gas and LPG boilers, the SEAP encourages a circular approach by optimizing the use of resources and minimizing waste. The emphasis on the thermal modernization of buildings, along with the gradual replacement of less efficient devices, not only enhances energy efficiency but also aligns with the circular economy's emphasis on longevity and resource conservation. Furthermore, the SEAP's focus on renewable energy technologies like photovoltaics, heat pumps, and heat recovery systems contributes to the circular economy by harnessing sustainable resources and minimizing environmental impact. Lastly, the plan's commitment to raising awareness and educating residents about emissions underscores the circular economy's holistic approach, emphasizing the responsible management of resources throughout the entire lifecycle. In essence, the SEAP serves as a strategic framework that not only addresses energy and emissions targets but also promotes a circular and sustainable approach to resource management within the Municipality of Brzeg Dolny.









4. Organisations

There are 56 local organizations registered and actively working in the municipality of Brzeg Dolny (Urząd Miejski w Brzegu Dolnym, 2023). he majority of these organizations operate in the field of sports, bringing together inhabitants of specific villages or supporting people with disabilities. None of the organizations focus exclusively on promoting the circular economy.

However, the circular economy is promoted in Brzeg Dolny by the Local Action Group - Odra Riverbanks Land. This group comprises partners and representatives of various communities in the Oder Valley who are united by a common goal of sustainable development in rural areas within the Oder River Valley (i.e., the municipalities located along the Oder Route between Brzeg Dolny and Głogów).

C. Findings from stakeholder interviews

5. Interview questions

"Core questions":

How would you define circular economy and circular lifestyle?

Do you follow EU and national level efforts, targets? How do you measure your contribution/benchmark your activity?

Do you have any information about the environmental attitude/awareness level of citizens (if yes, from what sources)?

What are the barriers, trends and opportunities of circular lifestyles in cities?

Is there any strategic document on CE (CLS) or related to sustainability issues, available in your city/district? If yes:

- Since when?
- Most important targets?
- How was it developed? (By the municipality/consultant/academia etc.)
- What is its timeframe?
- · What is its progress, monitoring?

Are other instruments for promotion planned? If yes, which ones?

Who are the main actors in switching to a circular lifestyle and what are their roles?

From your point of view, what is needed to strengthen the circular economy and a circular lifestyle?

Potential further questions:

(What organisation is responsible for waste management in your city? What is the influence level of the municipality on its operations?)

How is recycling managed? What is the level of recycling and how does it change (improve)?

Are there any significant local NGOs dealing with circular economy issues? (e.g. recycling, food waste reduction, charity shops...)

(Are there any specific groups of citizens observable?)









(What is the relationship of citizens and political stakeholders?)

(How are the citizens involved in decision making processes?)

Are there awareness-raising campaigns and/ or citizen participation processes around the circular economy?

6. Sumarry of interviews

a. Artur Michałek, Vicemayor - Municipality of Brzeg Dolny

The circular lifestyle is about making an effort to utilize what we already have. In a way, it is a throwback to the past, a reminder of the communism times when empty shelves in shops were a common sight in Poland. The perfect example of this is the Polish custom of serving tomato soup on Mondays, derived from Sunday broth. This tradition is observed every week in a lot of traditional Polish household, regardless of the current level of awareness about the circular economy.

One of the ways to assess a municipality's commitment to the circular lifestyle is to examine its waste separation practices. According to the waste management company's evaluation, waste segregation patterns have remained relatively unchanged over the years. This is primarily attributed to small and medium-sized enterprises that are reluctant to segregate their waste and pay the associated disposal fees. These companies often resort to dumping their unsorted rubbish in forests and vacant properties. We know this from annual reports and the number of prosecutions and fines initiated by the municipality.

Residents generally perceive the Municipality's employees as capable of making swift decisions to address waste management issues. They feel confident in reporting illegal waste dumping and anticipate a prompt response from the authorities. The municipality, responsible for waste management, conducts tenders approximately every three years to secure contracts for the collection of five waste fractions: paper, glass, plastic, bio, and mixed. Additionally, residents receive two large bags of rubble collection for free per year as part of their waste management fee (€7.80 per person, with composting €6.60 multiplied by the number of residents in the household). This generous service is unique in the region and possibly even in Poland, and residents are taking advantage of it since the market price for such a service is approximately €90.

One of the primary obstacles to transitioning to a circular lifestyle is the affluence of some residents. Additionally, altering ingrained habits requires stepping out of one's comfort zone, which can be challenging for adults. Therefore, I believe that children and young people hold immense potential in this regard, as they have no deeply ingrained habits to break.

Elements of the circular economy can be observed in local small and medium-sized enterprises. For instance, a tire exchange and repair shop accepts old tires, which are then transported to another company for tire reprocessing. The local market features a stall selling second-hand furniture, and the municipality boasts successful second-hand shops. Furthermore, there are a shoemaker and a laundry with loyal clientele. I am also aware of companies that collect electronic waste, and schools and villages often organize these collections themselves. Residents of our municipality utilize online platforms to buy and sell second-hand items. Additionally, there are Facebook sales groups where the same transactions occur on a smaller, localized scale.

Unfortunately, residents are not significantly involved in the decision-making process. For example, only a few residents attended consultation meetings for the Development Programme of the Municipality of Brzeg Dolny.









b. Agata Chwiszczuk, Smart villages programme coordinator- Local Action Group - Odra River Banks Land

Circular lifestyle involves the conscientious practices of reusing, repairing, borrowing, sharing, renewing, and minimizing waste to extend the longevity of products. Embracing this lifestyle entails an emphasis on repairing items, particularly clothing, as a simple task that individuals can undertake themselves. Regrettably, many young people lack basic skills, such as sewing on a button, often opting to purchase new items instead. Our organization actively advocates for the restoration of goods, reduction of packaging, and the streamlining of supply chains; however, we do not currently quantify our activities with Circular Economy performance indicators.

At the municipal level, I am not aware of any established guidelines or strategic documents in the field of circular economy. While larger cities, such as Wrocław, may possess similar documentation, the absence of comprehensive guidelines at the local level poses a challenge. A predominant barrier to achieving circularity is the limited awareness surrounding waste management. Individuals often fail to segregate their waste and influenced by the convenience of nearby markets, opt for excessively packaged products. This is largely attributed to a lack of awareness and education on circular economy topics. Unfortunately, the recycling landscape has shown minimal improvement over the years, with an insufficient number of places where people can give away or sell things they no longer use.

Major negative contributors to the circular economy include corporations involved in the production of white goods and IT equipment that may be irreparable. These large entities wield significant influence in shaping consumer attitudes toward shopping habits. Despite their capacity to drive circular initiatives, the visible efforts in this regard often stem from non-governmental organizations managing charity shops in larger urban centers. Notably, these NGOs view their activities as missions rather than solely profit-driven enterprises—an uncommon perspective in a landscape where most charity shops are operated by profit-oriented companies.

In our region, the manifestation of Circular Economy practices is primarily evident through community fridges and flea markets that offer localized services. Despite possessing the financial means to opt for more durable products, individuals tend to prioritize affordability, succumbing to corporate manipulations such as those seen during events like Black Friday, resulting in an influx of unnecessary purchases. Furthermore, there is a noticeable disengagement from decision-making processes that could instigate positive changes in this domain. The prevailing indifference indicates a general lack of concern among individuals.

c. Jarosław Iskra - vice governor of the Wołów district

The term Circular Economy remains unfamiliar to the residents of our district. I define it as the 3R approach—reduce, reuse, recycle. My focus on Circular Economy issues is limited to current everyday life topics, primarily sourced from local web portals and district community groups. I do not actively monitor efforts at the national or EU level but am keenly interested in grassroots local initiatives, particularly those related to sharing and trading. Personally, I engage in selling items I no longer use, swapping for others, and borrowing.

Initiative groups visit the district office periodically to seek support for organizing events that align with Circular Economy principles, such as ecological picnics. The Wołów District plays a pivotal role in promoting the circular economy through active involvement in organizing community initiatives. The district office registers NGOs, some of which engage in ecological activities, albeit as one-off actions, such as workshops. Addressing the lack of education emerges as a crucial aspect of overcoming the main barrier to a circular transition. Early education, starting from kindergarten, along with informational campaigns promoting a 'refuse' attitude, is essential for fostering positive changes in our lives.









Despite these efforts, there is a concerning observation of residents segregating waste in a less conscientious and organized manner. Access to data on the tonnage of recycled and non-recycled rubbish from three municipalities indicates a consistent increase, reflecting our society's excessive consumerism. Technical barriers to segregation, such as inadequate containers, exacerbate the issue. Previous container designs allowed children to independently dispose of bottles, but recent modifications, requiring reaching and lifting a heavy flap, hinder such participation. On a national level, legislative efforts to introduce a deposit system signify a substantial step toward improving recycling rates.

Locally, the interest in waste management initiatives seems lacking, but a growing sense of responsibility for the common good is noticeable. While some groups actively engage with the district or municipality on matters that concern them, the general lack of awareness about social consultations persists. Many residents are uninformed about these events as they do not regularly check the official websites of the Wołów District. Perhaps it is time to contemplate additional promotional and informational activities to engage citizens in the decision-making process.

d. Jakub Łukojko - Chairman of the Environmental Commission of the Municipal Council of Brzeg Dolny

The circular economy is about the circulation of materials, maximizing their utility, and prolonging their lifespan. Personally, I adhere to EU regulations related to the Circular Economy that directly impact my life, such as the standardization of chargers within the EU and regulations concerning electric cars. This commitment is mirrored in my surroundings, evidenced by practices like clothes swaps among colleagues at my workplace. On a municipal level, a positive trend is observed as more customers bring their containers to the meat shop and reusable bags to the bakery. The municipality's initiative to provide heart-shaped containers for collecting plastic caps has proven successful. Additionally, the local market, featuring regional producers of vegetables and fruits, is thriving, offering opportunities for purchasing second-hand clothing and furniture. My primary source of information regarding environmental attitudes is derived from conversations with residents, friends, and personal experiences.

Despite these positive signs, the most significant hurdle in transitioning to a circular lifestyle is a lack of education. Our reliance on a comfortable lifestyle hampers our imagination regarding the environmental impact of our daily choices and behaviors. The prevailing low awareness allows us to avoid making efforts in this regard.

To address this, initiating educational activities, particularly targeting young people, is essential. The younger generation is more aware, open-minded, and adaptable to change. Drawing knowledge from the internet, they possess broader horizons than adults but also harbor high expectations. Therefore, the educational offerings should be innovative, interesting, non-standard, and diverse to capture their interest.

Opportunities for fostering a circular lifestyle include clothing swap campaigns, information initiatives within schools, and interactive activities involving residents, such as circular happenings. Currently, circular lifestyles remain a niche, with individuals involved not assuming leadership roles or initiating actions in urban spaces. A significant gap exists in public participation in decision-making processes, evident by the absence of residents at meetings addressing crucial issues like the alteration of the zoning plan for a waste incineration plant. Addressing these gaps through increased awareness and engagement is critical for the broader adoption of circular principles in our community.









D.Summary

Document title	Available online	Level	Timeframe	Additional information
Strategy for Responsible Development	https://www.gov.pl/web/fundusze- regiony/informacje-o-strategii-na- rzecz-odpowiedzialnego-rozwoju	natio nal	2017-2030	
Roadmap of the Transition to a Circular Economy	https://www.gov.pl/web/rozwoj- technologia/rada-ministrow-przyjela- projekt-mapy-drogowej-goz	natio nal	2019-2023	
National Raw Materials Policy	https://www.gov.pl/web/klimat/pol ityka-surowcowa-panstwa dokument	natio nal	2022-2050	
National Strategy for Regional Development 2030	https://www.gov.pl/web/fundusze- regiony/krajowa-strategia-rozwoju- regionalnego	natio nal	2022-2030	
National Waste Management Plan 2028	https://bip.mos.gov.pl/strategie- plany-programy/krajowy-plan- gospodarki-odpadami/uchwala-nr-96- rady-ministrow-z-dnia-12-czerwca- 2023-r-w-sprawie-krajowego-planu- gospodarki-odpadami-2028/	natio nal	2022-2028	
National Environmental Policy 2030	https://bip.mos.gov.pl/strategie- plany-programy/polityka- ekologiczna-panstwa/polityka- ekologiczna-panstwa-2030-strategia- rozwoju-w-obszarze-srodowiska-i- gospodarki-wodnej/	natio nal	2019-2030	
Energy Policy of Poland until 2040	https://bip.mos.gov.pl/strategie- plany-programy/polityka- energetyczna-polski-do-2040-r/	natio nal	2021-2040	
Productivity Strategy 2030	https://www.gov.pl/web/rozwoj- technologia/strategia- produktywnosci-2031	natio nal	2022-2030	
Development Strategy for Municipality of Brzeg Dolny 2022- 2030	https://bip.brzegdolny.pl/urzad,a,36 445,strategia-rozwoju-gminy-brzeg- dolny-na-lata-2022-2030.html	local	2022-2030	
Environmental Protection Programme for the Municipality of Brzeg Dolny for the period 2022- 2025	https://bip.brzegdolny.pl/urzad,a,35 927,uchwala-rady-miejskiej-w- brzegu-dolnym-nr-xlv27822-w- sprawie-przyjecia-programu-ochrony- srodowiska-d.html	local	2022-2025	
Sustainable Energy Action Plan (SEAP) for the Municipality of Brzeg Dolny	https://bip.brzegdolny.pl/urzad,a,34 032,uchwala-rady-miejskiej-w- brzegu-dolnym-nr-xxxi20021-z-dnia- 10-lutego-w-sprawie-zmiany- uchwaly-rady-m.html	local	2022-2025	

Organization name	Homepage	Level of activity	Туре	Additional information
National Chamber of Commerce for Environmental Protection (Ogólnopolska Izba Gospodarcza Ochrony Środowiska)	http://www.oigos.pl/	national	NGO	
Polish Zero Waste Association (Polskie Stowarzyszenie Zero Waste)	https://zero- waste.pl/o- nas/#nasza-misja	national	NGO	









Polish Society of Circular Economy (Polskie Towarzystwo Gospodarki Obiegu Zamkniętego)	https://psce.com.pl/? page_id=123⟨=en	national	NGO	
The Institute of Environmental Protection - National Research Institute (Instytut Ochrony Środowiska)	https://ios.edu.pl/en/	national	Researc h	
National Fund for Environmental Protection and Water Management (Narodowy Fundusz Ochrony Środowiska i Gospodarki Wodnej)	https://www.gov.pl/web/nfosigw-en/	national	Govern mental agency	
Local Action Group - Odra Riverbanks Land	https://lgdodra.pl/	regional	ngo	
Municipality of Brzeg Dolny	https://brzegdolny.pl/	local	local authori ty	The municipality of Brzeg Dolny is made up of the town of Brzeg Dolny and 13 villages. It covers an area of 94.4 km2, which is less than 14% of the area of the Wolow County.
Wolow district office	https://www.powiatw olowski.pl/asp/start,0	local	district authori ty	The district comprises: urban and rural gminas: Brzeg Dolny, Wołów rural communes: Wińsko towns: Brzeg Dolny, Wołów









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