

# DiGreen compass for GREEN cities and municipalities

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#### About this handbook

This is the short version of the English DiGreen Handbook of GREEN good Practice, a result of the project Digital Government for Green Municipalities and Cities - DiGreen. The project is cofunded by the Erasmus+ Programme of the European Union.<sup>1</sup>

The Handbook of GREEN good practice presents good examples of the provision of public services by using green means, which the municipalities and cities are producing "in-house" or using as a private sector product.

The text of the handbook is written in a clear, non-technical language, accessible to the general public, in order to be user-friendly and easy to understand and apply for practitioners. The ecologically provided public services present ways to rationalise the provision of competencies that the municipalities and cities have, engage inhabitants in governance, enhance the provision of public services qualitatively, base public policymaking on evidence, and take transparency and openness into consideration when providing public services.

The importance of targeting municipalities and cities is relevant in terms of their involvement in higher education. Higher education students of public administration, public management, public policy and other similar study programmes also fulfil their practical part of the study at the municipality and city public bodies.

The authors would like to thank all the involved municipalities and cites, which contribution and cooperation in formulating green good practice examples was valuable. Municipalities and cities from which the good examples are presented in this Handbook:

 Austria: Kremsmünster, Linz, Oberösterreichische Zukunftsakademie - think tank for trends and innovation

Italy: Lana, Naturno, Luson

Romania: Bacău, Gura Humorului, Mărăcineni

Slovakia: Kežmarok, Hlohovec

ABOUT THE PROJECT

PROJECT RESULTS

PROJECT TEAM

<sup>&</sup>lt;sup>1</sup> Any communication or publication that relates to the project Digital Government for Green Municipalities and Cities (No. 2021-1-SK01-KA220-HED-000023505) reflects only the author's view, and the European Commission is not responsible for any use that may be made of the information it contains.

# Why is the green transition important?

The "green transition" refers to the shift towards using renewable energy sources, reducing carbon emissions, and promoting sustainable practices in various industries. This transition is important because it addresses the pressing issue of climate change and the need to reduce our reliance on fossil fuels.

Climate change and environmental deterioration threaten the European Union and the rest of the globe. The European Green Deal, Europe's growth strategy, will make the Union a modern, resource-efficient, and competitive economy to meet these problems.<sup>2</sup>

The green transition is significant for the European Union for several reasons:

Climate change: The EU is committed to reducing its greenhouse gas emissions and meeting its targets under the Paris Agreement. Achieving these targets will require significant shifting to more sustainable and low-carbon practices and technologies.

Economic opportunities: Transitioning to a green economy can bring economic benefits to the EU, such as creating jobs and driving innovation in new technologies.

Energy security: Enhancing the use of renewable energy can reduce the EU's dependence on imported fossil fuels, improving energy security and reducing the impact of volatile energy prices.

Environmental protection: The EU is committed to preserving the environment and natural resources. A green transition can help to reduce pollution, protect biodiversity, and improve public health.

Compliance with EU regulations: The EU has several laws and regulations to protect the environment. By transitioning to greener economies, countries in the EU will meet their climate targets and comply with the EU's rules and regulations.

The green transition is vital for municipalities because it can help mitigate the effects of climate change and reduce greenhouse gas emissions, leading to a more sustainable future. By implementing environmentally-friendly policies and practices such as increasing renewable energy sources, improving public transportation, promoting sustainable waste management, and encouraging energy-efficient buildings, municipalities can improve their residents' quality of life, reduce costs, and attract new investments and businesses. Additionally, transitioning to a green economy can create new job opportunities and help strengthen the local economy.

The solutions presented are not just in-house products but also instances of successful cooperation with private organisations. Furthermore, the handbook emphasises the need for a European perspective in the green transition process by studying good practice examples from municipalities in many European countries and bringing them together to give significant help and inspiration to other local institutions looking to undertake new green projects.

The green public services will present ways how to rationalize the provision of competencies that the municipalities and cities have, how to engage inhabitants in governance, how to enhance the provision of public services qualitatively, how to base public policymaking on

<sup>&</sup>lt;sup>2</sup> European Commission (2023). Green transition. Available at: <a href="https://reform-support.ec.europa.eu/what-we-do/green-transition\_en.">https://reform-support.ec.europa.eu/what-we-do/green-transition\_en.</a>

evidence and even how to take transparency and openness into consideration when providing public services.

# Methodology

Considering the significance of the green transition in the public sector, particularly at the local level and for the people, this project set out to find and compile examples of excellent municipal practices. The project partners decided on a unified approach built on a shared methodology to ensure that the examples would be comparable and organized simply for experts in the field to understand. This handbook should serve as a resource for practical, real-world solutions to green issues and a way for political and administrative representatives to get an idea of the associated costs and resources required for their implementation.

To accomplish this, the project partners developed a multi-step methodology that included preliminary desk research, interviews, and in-depth interviews to identify potential good practice cases.

# **Good practices**

This chapter presents examples of GREEN GOOD PRACTICE identified within the DiGreen project. Each example has the same structure to make comparisons simple. Therefore, practitioners could quickly identify examples applicable to their municipality. At the same time, they would have access to crucial success factors, such as costs and potential difficulties when implementing them.

The topics covered by the Good Practice examples are highly diverse. No case focuses on a single aspect, but the examples can be categorized based on their central themes and objectives:

#### **Green energy/Energy Efficiency**

**Renewable Energy Community (Kremsmünster, Austria)** is a project for the joint, regional production and utilization of renewable electricity and heat.

Green Energy for social sustainability (Luson, Italy) is a project to build a hydropower plant.

Our Buildings - Accelerating climate action buildings - strengthening civil society and policy-makers in Romania and Bulgaria (Bacău, Romania) is a project that provides technical support in defining the strategies for building renovation, considering the EU's new requirements in the construction field and the energy efficiency of public buildings.

#### Waste management

Construction of a communal platform for the storage and management of manure and acquisition of equipment for the development of facilities for the storage of manure (Mărăcineni, Romania). The project aims to protect the waters against nitrate pollution and bacteria from agricultural sources and to limit the spread of unpleasant odours and insects.

**Composting plant in the city Kežmarok (Slovakia),** a project to increase the recycling rate of the communal waste and to effectively use biodegradable waste produced in the town.

#### **Promoting Sustainable Development**

**The GemeindeNavi (Austria)**, a project initiated by the Oö. Zukunftsakademie and its partners promote the United Nations Sustainable Development Goals (SDGs) at the municipal level.

**Innovationshauptplatz (Linz, Austria)** is an institution that aims to offer a matchmaking service between citizens, local authorities and businesses. It promotes social innovation and realizes many projects regarding sustainability and climate change.

Six Steps to more energy diversification (Naturno, Italy) is the municipality's project to contribute to the Sustainable Development Goals (SDG) at the local level.

**The "KlimaGemeinde" (Lana, Italy)** - supports municipalities step by step in creating and implementing a sustainable energy and environmental management plan and awards exemplary municipalities with the "KlimaGemeinde" certification.

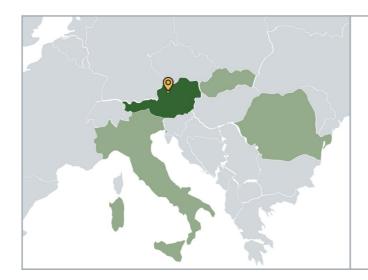
#### Improving environment

**O.A.Z.A.** (Gura Humorului, Romania) - reinforcing devitalized spaces into green areas for the benefit of the community to regain the utility of some degraded soils and improve, revitalize, and reduce air pollution in the urban environment.

**Eco Map in the City of Hlohovec (Slovakia)** - an interactive map intending to support the city's circular economy and digitally present different parts of the circular economy in the City, including collection yards, containers for small electrical waste and used clothing, packaging-free stores, swap markets, events focused on ecological activities and many others.

*Idea Concept Smart Green City (Slovakia)* -The City of Kežmarok adopted a strategic document. The city aimed to utilise modern digital technologies with green and sustainable development in mind. The idea concept followed up on existing solutions in the city, interconnecting them with future activities and focusing on the overall goal of increasing the quality of life of the city's inhabitants.

## Kremsmünster: Renewable Energy Community





Municipality: Kremsmünster

**Country:** Austria Population: 6,710

www.kremsmuenster.at

Google Maps

Renewable Energy Communities (EEGs in German) are the association of at least two participants for the joint, regional production and utilization of renewable electricity and heat. Communities can produce, consume, store and sell this energy together with their citizens, companies or associations. This happens under largely independently determined conditions and prices. Kremsmünster was one of the first municipalities in Austria to establish a EEG.

#### Goals of the project

The EEG enables more efficient use of on-site generation facilities, and the participation of citizens and companies in a community can strengthen social cohesion. Economically, the advantage is that the members of the EEG can buy self-produced electricity within the community at largely independently determined conditions and prices. The prices can remain constant for several years, which can be very advantageous in times of rising energy prices.

#### **Project results**

The EEG in the municipality of Kremsmünster has been running since May 2022. An earlier start was planned, but the necessary and already announced legal basis of the government has been delayed.

In November 2022, the EEG in Kremsmünster had seven members - one producer and seven consumers. These are located in the immediate centre and include businesses such as a butcher's shop, an inn, and a drugstore-perfumery. Until September 2022, only one producer was allowed to feed into the system. Since October 1, 2022, including multiple producers is possible, as the public side has adapted the data exchange and its technical process. An expansion of the EEG is planned for 2023. For example, two small hydropower plants will become part of the EEG. This will make electricity available around the clock. This expansion of the EEG is relatively simple and can be implemented quickly, according to the mayor.

- Renewable energy communities make a valuable contribution to raising public awareness of sustainable energy and climate protection. They strengthen the cohesion of citizens and promote the efficient use of regional energy.
- Sufficient information in advance and enough time and space for discussion and agreement among all parties involved in an EEG are crucial for success.
- For the implementation of an EEG, getting support from experts in legal and bureaucratic matters can be helpful.

# **Tool for Implementation: GemeindeNavi**





Think Tank: Oö. Zukunftsakademie

Country: Austria

www.ooe-zukunftsakademie.at

**Google Maps** 

The GemeindeNavi is a project initiated by the Oö. Zukunftsakademie and its partners. It strives to promote the United Nations Sustainable Development Goals (SDGs) on the local level. Municipalities are encouraged to discuss all the SDGs and their relevance in their local community. Then they develop ideas about how to work towards realizing the SDGs.

#### Goals of the project

The main goal pursued by the GemeindeNavi was to get municipalities to deal with the SDGs. This should encourage local administrations to discuss and focus on issues that usually tend to be ignored or don't get the attention they deserve. The GemeindeNavi should also get municipalities to see all 17 SDGs as equally important for their development. The project should enable municipalities to create innovative ideas in line with the SDGs that support a positive future development for the municipality and its citizens.

#### **Project results**

The most important result of the GemeindeNavi is that this tool, as it was the goal from the very beginning, manages to make the Sustainable Development Goals more approachable and better understandable for local administrations. The GemeindeNavi enables municipalities to discover the SDGs' relevance in their local context. While the first results of a GemeindeNavi workshop, especially the up to 51 ideas found, are pretty clearly visible already at the end of the event, it takes some time to see if there have been any real and long-term effects on the municipality and its local administration, as these 51 ideas are just ideas at this point. To find out about possible results, the GemeindeNavi had in the long run. Up to now, the GemeindeNavi has been carried out in roughly 25 municipalities in Upper Austria.

#### What can be learned?

The GemeindeNavi is a highly useful tool easily applicable to other municipalities.

- It allows administrations and institutions to learn about how to promote sustainability.
- It allows local administration to learn about the relevance of SDGs in their local context.
- It also allows them to learn how to raise awareness about the SDGs in their local community.
- Local administrations can gain new experiences in communication and event preparation, both highly important skills for implementing projects.

# "Klimagemeinde" Lana: A European Energy Award municipality





Municipality: Lana
Country: Italy
Population: 12,617
www.gemeinde.lana.bz.it

**Google Maps** 

The "KlimaGemeinde" (ClimateCommunity) program is a quality management and certification system. It supports municipalities in the creation and implementation of sustainable energy and environmental management plans.

#### Goals of the project

With its certification as a "KlimaGemeinde", Lana has primarily pursued the goal of making itself comparable. A standardized certification also enables benchlearning. For Lana, it's important to be able to learn from others, to be able to compare and see what works elsewhere and what doesn't.

In addition, the municipality is convinced that the "KlimaGemeinde" program also offers a competitive advantage, especially for tourism.

#### **Project results**

Lana was immediately certified as a "KlimaGemeinde Bronze" in the first cycle. The municipality did not rest on its laurels, however, but pressed ahead with its own sustainability and environmental protection initiatives. During the re-certification, Lana was able to achieve the status of "KlimaGemeinde Silver". The municipality has implemented a variety of concrete initiatives and measures in the field of sustainability and environmental protection. The certification has led to more awareness in the municipal administration. Employees are taking a closer look at energy consumption and are committed to realizing savings. The project's communication also helps make the population and tourists aware of the issue.

- An award system creates awareness for the municipal's environmental impact.
- Municipalities are often unaware of all that is already being done, so just the initial gathering of all the initiatives is valuable.
- The use of an established quality management and certification system allows for benchmarks with others.

## Naturno: 6 steps to more energy diversification



The municipality of Naturno has recognised sustainability as a cross-cutting task and has committed itself to the following vision within the framework of the sustainability strategy of the South Tyrolean provincial government.

#### Goals of the project

The Municipality of Naturno wants to make a concrete contribution at the local level to the national and regional sustainability strategy. It is based on the sustainability goals of the United Nations, the *Sustainable Development Goals (SDG)*. They define the requirements of sustainable development for society. The municipality also wants to act as a role model and encourage its citizens and companies to be more sustainable. But it is also about using public funds as efficiently and sustainably as possible.

#### **Project results**

In order to implement more sustainability in the municipality, Naturno has formed a climate and energy team. It consists of representatives of politics and administration as well as external technicians and consultants. The climate and energy team has identified and concretely planned six steps towards more energy diversification, which are now being implemented. In total, new sustainable energy sources of approximately 3,600,000 kWh of thermal energy and approximately 805,000 kWh of solar and hydropower energy per year are to be developed.

In Naturno, economic and social sustainability were considered from the beginning. The simultaneous consideration of all pillars of sustainability is crucial for the municipality to have the necessary financial means as well as commitment by the local population to contribute to environmental protection in the long run.

- Municipalities have a crucial role to implement the Sustainable Development Goals (SDG) at the local level.
- Municipalities become a role model for ecological sustainability for the citizens and businesses.
- Not only environmental protection, but also economic and social sustainability must be considered.

# Luson: Green energy for social sustainability



Municipality: Luson Country: Italy Population: 1,608

www.gemeinde.luesen.bz.it

**Google Maps** 



The Municipality of Luson realized a hydroelectric power plant. However, the generation of green energy was not the primary goal. Rather, they were looking for a sustainable, environmentally friendly way to generate recurring revenue for the municipal budget.

#### Goals of the project

The generation of green energy was not the primary focus for the Municipality of Luson when building the "Lasankenbach" hydropower plant. Rather, they were looking for a sustainable, environmentally friendly way to generate recurring revenue for the municipal budget. Luson's goal was to acquire funds to promote social sustainability. On the one hand, local associations such as the volunteer fire department and music band could be supported. On the other hand, socially disadvantaged and especially young families in the community, were to be given a helping hand.

#### **Project results**

Today, the small mountain community of Luson is in a good financial position: The recurring income from the hydroelectric power plant's electricity production amounts to 400,000 to 600,000 Euro annually. These funds are used for subsidies in the social sector. For example, for the reduction of fees for kindergarten, canteen and summer care for children: Luson offers the cheapest kindergarten care of all municipalities in the region. The village's associations, such as the volunteer fire department or the music band, are also supported with these funds and are in a good position compared to other communities.

The population development of Luson shows that the strategy is working: For a small mountain community, one would assume emigration and population decline. However, the population of Luson is steadily growing.

- Municipalities should strive to identify opportunities to realize (recurring) revenue streams in an environmentally sustainable manner.
- "Green" investments don't have to promote only ecological sustainability but can contribute to the municipality's economic sustainability and thus provide means to improve social sustainability.

# **Composting plant in the City of Kežmarok**



The City of Kežmarok has built its own composting plant to increase the communal waste's recycling rate and effectively use biodegradable waste produced in the city. The reasoning for the project was based on environmental and economic issues. The city protects its own environment and tries to limit unofficial waste dumping. Economically the city saves financial resources related to collecting and disposal of communal waste. As the end product, the Composting plant produces high-quality compost suitable to be used also for organic planting.

#### Goals of the project

The City of Kežmarok aimed to build a centre for biodegradable waste recovery, whereby the collection, recycling, and recovery of biological waste will, as the end product, be returned to the environment. The end product in this matter will be compost suitable for organic planting. Simultaneously, the city will be able to decrease the cost of collecting and disposing of municipal waste and increase the waste recycling rate.

#### **Project results**

The Composting plant uses modern technologies to recycle different types of waste:

- Biodegradable kitchen waste from complex and individual housing of households,
- Biodegradable waste stemming from the maintenance activities of public spaces, such as the city greenery, parks and cemeteries.
- Biodegradable waste from gardens.

The Composting plant has three main parts:

- three enclosed composting boxes intended for the initial phase of the process, including hygienic sanitation, part intended for ripening,
- storage space for various biodegradable waste and compost.

- Significant investments and big projects are harder to implement, but the results bring long-term and sustainable benefits.
- By building its resources, the city is not dependent on third-party private companies regarding biodegradable waste management.
- Direct involvement of the inhabitants is a crucial part of project success.
- Educating the public and explaining city approaches helps to implement the project effectively.

### Mărăcineni: Communal Manure Platform



Municipality: Mărăcineni

**Country:** Romania **Population:** 2,973 Google Maps



The Municipality of Mărăcineni has launched a project to protect the waters against nitrate pollution and bacteria from agricultural sources and to limit the spread of unpleasant odours and insects.

#### Goals of the project

The construction of a concrete platform, rectangular with walls on three sides (without the front side). The platform to be equipped with a basin for collecting effluents and rainwater, with concrete surfaces for the access road, parking for machinery and for the placement of 3 boxes made of reinforced concrete, for recoverable waste that accidentally gets at the platform mixed with manure and a container for hazardous materials.

#### **Project results**

The communal manure platform is fully functional.

#### What can be learned?

Given that almost the entire territory of Romania is in the Danube basin, in 2013, on the recommendation of the European Commission, Romania accepted that its whole national territory complies with the provisions of the Action Program for protecting waters against nitrate pollution from agricultural sources.

Within this new approach, the preparation and implementation by local authorities of "Local Action Plans for the protection of waters against nitrate pollution from agricultural sources" have become mandatory throughout the territory of Romania.

Romania needs investments and strengthening policies, regulations and administrative structures, related services and competencies at national, regional and local levels to help rural areas comply with the requirements of the EU Nitrates Directive. If no local budget is available for this kind of investment, a solution should be sought, such as external funding.

Mărăcineni has found its way to comply with the regulatory framework and be part of the environmental protection solution, making it a good practice example for other regions to follow.

# Bacău: Our buildings - Accelerating climate action buildings - strengthening civil society and policymakers in Romania and Bulgaria



Municipality: Bacău Country: Romania Population: 196,886 https://municipiulhaca

https://municipiulbacau.ro

**Google Maps** 



The Municipality of Bacău has launched a project to provide technical support in defining the strategies for building renovation, considering the new requirements of the EU in the field of construction and the energy efficiency of public buildings.

#### Goals of the project

- a. Supporting local authorities in creating their energy strategy in the short, medium, and long term.
- b. Supporting local initiatives in the field of energy efficiency at the level of educational institutions.
- c. Training of local authorities representatives.
- d. Create, update, and monitor the EMS database at the local level.
- e. Supporting local authorities in the process of efficient energy and environmental policy-making.
- f. Attracting EU investments for energy rehabilitation of public buildings.

#### **Project results**

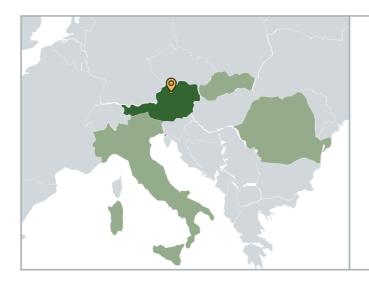
The digital EMS database is functional and constantly updated. The Integrated strategy for the urban development of Bacău Municipality 2021-2027 contains the elements of the Plan for energy efficiency and the Local long-term renovation strategy of public buildings. A school in Bacău (Alecu Russo School) benefited from an energy audit and was accepted in a rehabilitation project funded by the EU. The consumption of utilities decreased in 2021 in educational institutions, a good thing considering the challenging international context.

#### What can be learned?

The municipality would involve more specialists from the City Hall or the Energy Efficiency Office to monitor and explain to the citizens and the representatives of public institutions the benefits of energy efficiency and digitalisation.

It would train specialists at the level of all public institutions via courses, working meetings, and experience exchanges at the national and international levels, including mobilities abroad, to see other successful projects at work in the digital and green transition field.

# Linz: Innovationshauptplatz





Municipality: Linz Country: Austria Population: 208,000 https://www.linz.at/

Google Maps

The Innovationshauptplatz is an institution that aims to offer a matchmaking service between citizens, local authorities and businesses. It also offers a platform to enable citizens to participate in deciding about local matters. Besides that, it also carries out its own activities to promote social innovation and realizes many sustainability and climate change projects.

#### Goals of the project

The Innovationshauptplatz's purpose is to improve the relationship and foster communication between citizens and public administration (in both directions) and allow the people to participate in municipal decision-making and in planning new innovative projects. It also supports citizens in realizing their projects. Its broad network is an important asset, allowing them to connect different actors and support future cooperation. They also see themselves as a driver of social innovation.

#### **Project results**

The Innovationshauptplatz comprises two main components, a website and a publicly accessible office. The website is available at https://innovation.linz.at/, while the office is in the city centre (at the main square – which might explain the institution's name). The website allows users to put forward their own proposals, share their ideas and thoughts to specific questions raised by the local administration and find information about related events in the city.

Besides the office and the website, the Innovationshauptplatz also uses Social Media to share and promote its projects and causes. They have got 3,000 followers on Instagram and 1,300 followers on LinkedIn. The Innovationshauptplatz also offers financial grants for business founders.

- When initiating a project such as the Innovationshauptplatz, it is of the utmost importance to have the support of all relevant politicians.
- While implementing the project as part of the local administration, its quite restrictive policies sometimes were a limitation, but over time enough flexibility was ensured to allow the Innovationshauptplatz to realize many of its ideas.
- The Innovationshauptplatz also proves the importance of stamina when implementing projects in the public sector, as it takes much time to establish the necessary relationship with the citizens.

# Gura Humorului: O.A.Z.A. - Reinforcing devitalizated spaces into green areas for the benefit of the community



Municipality: Gura Humorului

Country: Romania
Population: 11,402
www.gurahumorului.info

**Google Maps** 



O.A.Z.A. project succeeded in reconverting 7,2 ha of degraded and abandoned land placed in the local dendrological park of the city. The land was used to create three theme parks with multiple functions: recreation and leisure areas for the community and tourists.

#### Goals of the project

The project's general objective is to regain the utility of some degraded soils and improve, revitalize, and reduce air pollution in the urban environment.

The specific project objective is the reconversion of degraded and abandoned lands to create three parks/green areas with the functions of recreation and leisure for the community.

#### **Project results**

The O.A.Z.A. project:

- Increased by 78,605 sqm of the area of green spaces in the city.
- Meet the needs for recreational and leisure activities of city residents and tourists.
- Reduced air pollution by providing green spaces that also contribute to the chemical purification of the atmosphere, cleaning the air.
- Improved the aesthetic appearance of the city by landscaping public spaces.

The new investments significantly impact the tourist activity, adding more value to Gura Humorului. It also reflects people's increasing interest in diversified recreational, sports and outdoor facilities, which can be used year-round, with access to all residents of Gura Humorului and tourists.

- This experience has also been taken up by the town hall of Vatra Dornei, which aims to write a project to create a recreational space using disused land.
- The integrated approach is being extended through partnerships with neighbouring territorial administrative units and relevant ministries.

# Idea concept smart green city in Kežmarok



The City of Kežmarok adopted a strategic document called Idea Concept Smart Green City. The concept was prepared in close cooperation with university and private sector professionals. The city aimed to utilise digital technologies with green and sustainable development in mind. The idea concept followed up on existing solutions in the city, interconnecting them with future activities and focusing on the overall goal of increasing the citicens' quality of life.

#### Goals of the project

The overall goal of adopting the Idea Concept Smart Green City was to lead the way in Kežmarok's development and to continue building smart solutions. The interconnection of the city's digital and green activities highlights the necessity to consider the environmental challenges the city has to cope with. This approach should help Kežmarok to become a modern and dynamic city which can utilise new technologies to increase the quality of life in the city.

#### **Project results**

The Idea Concept Smart Green City contains interrelated parts. After a general introduction highlighting the overall mission and explanations of the concept, an analytical chapter presents the existing background of the city. Following the analysis, a proposals chapter specifies areas for the city to focus on. Subsequently, follow-up steps conclude the core part of the idea concept. The analytical chapter of the idea concept summarizes: existing development documentation of the city; own findings based on analysing the city by the experts, which are devoted to the overall condition of the city; energetics, environment and waste; transport; ICT and infrastructure; decision-making; impulses; financing; evaluation of the state of the areas being addressed (energetics and environment, transport, ICT and infrastructure, decision-making, impulses, financing); SWOT analysis and sources of financing.

The proposals chapter formulates the vision, mission, pillars and specific further development possibilities, activities and projects for the City of Kežmarok. According to Vision Smart Green City Kežmarok, the city is seen as: "Kežmarok – smart city for life".

- The city should have a clear vision of its future development.
- Visions of the city should be elaborated in the form of strategies, with clearly formulated projects, activities, responsibilities and funding.
- The interconnection of digital and green goals allows the city to be developed sustainably, with environmental protection at the forefront.

# **Eco map in the City of Hlohovec**



Municipality: Hlohovec Country: Slovakia Population: 19,992 Google Maps

The City of Hlohovec developed an interactive map intending to support the city's circular economy. The city is also trying to educate the public, inhabitants of the city and visitors on the prevention of waste disposal and responsible thinking therein. The aim was to digitally present different parts of the circular economy in the City of Hlohovec, including collection yards, containers for small electrical waste and used clothing, packaging-free stores, swap markets, events focused on ecological activities and many others.

#### Goals of the project

The Eco Map project's overall goal is to support the city's circular economy and contribute to the increase of responsible thinking of the inhabitants. The aim is to prevent waste production, support ecological disposal, and promote events, workshops, discussions and lectures organised in the city on ecological topics. An up-to-date Eco Map should guide the public, inhabitants and also visitors of the city towards ecological activities, events, sharing possibilities, shops and services.

#### Project results

The Eco Map is available via the official web pages of the city. The Eco Map displays all the necessary information, including the exact location, description, contacts and other relevant data about the activity, service or shop. Overall graphical layout and map resolution also help the user quickly orientate himself.

The Eco Map displays a variety of circular economy components, including: collection yards; containers for electrical waste; containers for used clothes, ecological events and activities, sharing possibilities, public Wi-Fi zones, shops and services (unpackaged store, second hand, tool rentals, car service shops, service of electrical appliances, shoe repairs, cleaning and beating, etc.).

- The city should use its potential and employees to develop and manage projects, not be entirely dependent on third-party suppliers.
- Support and promotion of circular economy activities are not self-serving but ultimately lead to decreased waste production in the city and encourage responsible behaviour.
- The city should directly engage the public, civil sector and private sector companies in the city's projects.

### Conclusion

The green transition could be more successful if people share knowledge and implement innovative projects in this regard or get influenced by examples of good practices already applied by others.

This handbook of green good practise is the result of cooperation between the municipalities and the DiGreen team members from four Austria, Italy, Romania and Slovakia and offers a selection of such good examples that help people live an environment-friendly way of life improving at the same time the quality of their lives.

The selected projects cover a wide range of topics, from renewable energy to waste management and improving the environment, all in line with the UN Development Goals and the significant Green Deal objectives.

The information is presented in an accessible language to be easy to use by various citizens. The authors wanted to focus on good practices that are scalable and multiplicable to show in this way that green practices can be easily achieved. The municipalities involved in the project were selected to be complementary and to illustrate different backgrounds. In this way, the stakeholders that read the results presented in this book will be encouraged to adopt green practices based on the diversity of examples from different countries and cultures.

The good practices have been discussed during national and international multiplier events and considered by the representatives of the municipalities involved as inspiring and appliable ideas, helpful in the transition towards a green municipality for the benefit of the communities and the people in general.

While all the countries have implemented national strategies regarding the successful green transition, the comparative analysis of the Green Deal indicators shows that substantial progress may still be achieved in the field of green transport, renewable energy and waste management. The local authorities can have an essential role in boosting the green transition because the bottom-up approach is often more successful and better tailored for local and regional-specific needs. The implemented projects highlight that the circular economy could act as a catalyst for local development and the empowerment of the communities. At the same time, the green transition facilitates innovative solutions to some of the crises the analysed countries face (such as the case of the energy communities that can help mitigate the current ongoing energy crisis).

All the studied examples emphasise the role of green transition in boosting sustainable local development through innovative ideas and practices. While an essential tool for financing specific local development goals, the selected best practices presented in this handbook are also important drivers for boosting green and sustainable development in line with the Green Deal objectives. The presented projects are not only successful steps for speeding up the green transition in the areas of implementation but are also key factors for a continuous and complex focus on the quality of life of the beneficiaries involved.

The readers may learn essential lessons from the people that have already implemented such projects, being aware of the challenges and opportunities arising from them and being better prepared to start new projects in the field of the green transition.

BIBLIOGRAPHY

ABOUT THE AUTORS