

# EMPOWERING LOCAL AUTHORITIES TO ACCELERATE THE CLEAN ENERGY TRANSITION: THE LOCAL GOGREEN PROJECT

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## ABSTRACT

Local and regional authorities are a decisive lever for the European Union (EU) to achieve the 2030 climate and energy targets and to advance towards the European Green Deal goal of climate neutrality by 2050. Small municipalities are lagging behind in the transition to a clean energy environment and suffer from a lack of knowledge, motivation and resources (human, organisational and financial) to help achieve these goals. The LOCAL GoGREEN project aims to build a replicable methodology to promote a clean energy transition (CET) of small municipalities through capacity building, participatory decision-making and collaborative actions. Six municipalities in six EU countries are used as pilot cases on which to test the proposed methods to support the implementation of CET. These pilot municipalities will also form the basis for extending the experience, lessons learnt and good practices to a group of neighbouring municipalities in order to increase the impacts of the project. This will be supported by a transnational knowledge acquisition, analysis, sharing and capitalisation system that will provide technical guidance and support for building sustainable energy communities. The study presents the methodological approach pursued by LOCAL GoGREEN and the first results obtained in the first year of activity, in particular in terms of local working groups and self-assessment reports carried out by the pilot municipalities.

*Keywords: clean energy transition, integrated climate and energy plans, capacity building, LOCAL GoGREEN, empowerment, participation.*

## 1 INTRODUCTION

Actions undertaken at the local level are decisive for the achievement of the European Union 2030 climate and energy targets (Directive EU/2023/1791) and for progressing towards the European Green Deal goal of climate neutrality by 2050. Since 2010, Rosenzweig et al. [1] have recognised the key role of local communities in planning effective actions to address the climate crisis and this role has been consolidated over time. In recent years, cities of different sizes and levels of preparedness have committed themselves to setting interim greenhouse gas (GHG) reduction targets and developing tools and measures to achieve these targets (e.g., energy efficiency actions, increased use of renewable sources, etc.). European

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cities are striving, each according to their possibilities, to achieve a clean energy transition and carbon neutrality of current energy systems [2].

This is being pursued by integrating green transition issues into local planning, fostering community engagement, promoting the use of renewable energy and optimising resource allocation. Through such actions, local authorities also play a significant role in accelerating the local and national transition to a more sustainable and energy-efficient future [3]. In particular, they provide information to national energy and climate plans [4] so that their needs, challenges and opportunities are taken into account in national-scale planning.

However, many small and medium-sized municipalities are lagging behind in the clean energy transition because they struggle to determine effective actions [5] mainly due to a general lack of expertise, experienced technical staff and financial resources [6]. On the other hand, there is evidence that municipalities led by active, informed and aware authorities 'are generally more successful than others in carrying out clean energy policies' [7]. From this picture emerges the need to support municipalities on the path to decarbonisation by strengthening the skills and capacities of their political and technical staff.

The European LIFE22-CET LOCAL GoGREEN (LGG) project (<https://localgogreen.eu/>) aims to help accelerate the clean energy transition in six small communities in Bulgaria, Croatia, Slovenia, Italy, Germany and Spain. The aim is to improve the skills of local authority staff in the field of clean energy transition, but also to increase the motivation, collaboration and commitment of stakeholders and to enable effective and efficient knowledge transfer. This will be achieved through multifaceted activities including stakeholder engagement, capacity building, analytical tools for energy planning, pre-feasibility studies, roadmaps, and action plans.

The LGG pilot municipalities will first be guided in characterising their current energy systems, and then move on to build a robust and locally specific pathway towards low-carbon communities by 2030. This will be achieved not only by piloting medium-term integrated climate and energy measures in the participating countries, but also by supporting the development of long-term investment projects necessary for the low-carbon transition envisaged by 2050. Capacity building and networking will be exploited to create a receptive environment for replication, standardisation and upscaling beyond the six pilot cases.

The purpose of this study is to introduce the basic methodology underpinning the LGG approach and to present the first results obtained in the first year of operation. It is structured into four sections. Section 2 presents the methodological approach followed by LGG. Section 3 presents the results of the engagement activities of key stakeholders through the creation of local working groups (LWGs) and the self-assessments carried out by the six pilot municipalities, while Section 4 presents the conclusions and future developments of this study.

## 2 METHODOLOGICAL APPROACH

The LGG project is based on three main pillars (Fig. 1): knowledge transfer, acquisition and capitalisation. The aim is to identify tailor-made sustainable energy solutions, supported by sound technical assessments and expert advice, and to enable a long-term capacity-building and networking program through broad collaboration and stakeholder involvement. In this framework, local authorities act as a bridge to the key players in the energy market (entrepreneurs, citizens, development agencies and financial institutions), supporting their proactive role and guiding the process towards CET.

Six municipalities in six EU countries (Bulgaria, Croatia, Slovenia, Spain, Italy and Germany, as shown in Fig. 2) will act as pilots to build and test a replicable methodology to



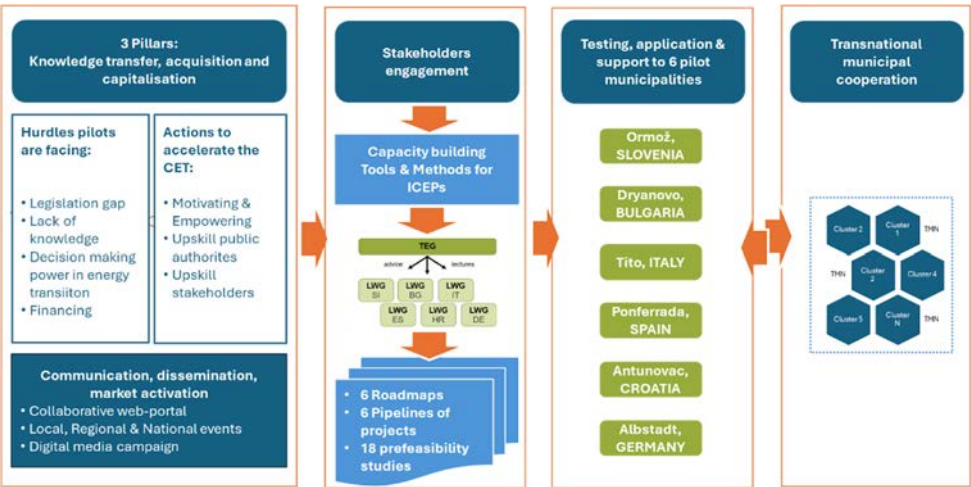


Figure 1: Overview of the main components of LGG.

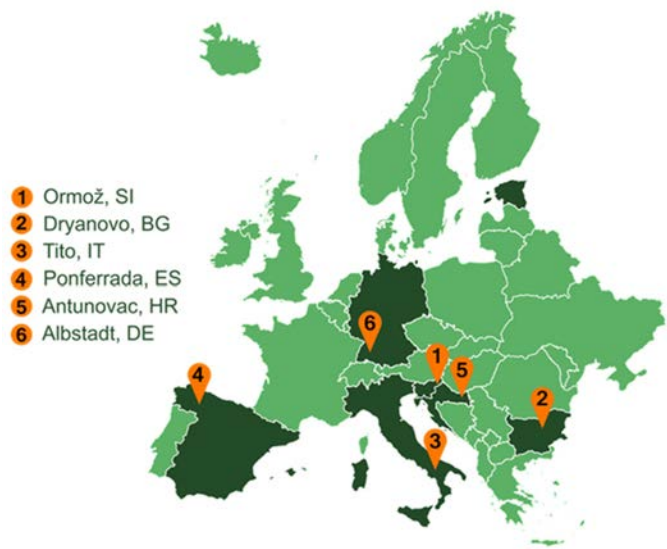


Figure 2: Geographical distribution of LGG pilot municipalities.

accelerate the transition to clean energy. Municipalities will be supported to increase their capacity to build integrated climate and energy plans (ICEPs) to meet energy needs while maximising cost-effectiveness, efficiency, socio-economic benefits and emission reductions.

The implementation of ICEPs will start with an accurate description of local energy balances and the related GHG emissions. Pilot municipalities will also be assisted in providing an appropriate regulatory framework for ICEPs, as well as bankable contracts, investment in modern green infrastructure and management capacity, and mobilisation of investments from EU-funded programmes and the private sector.



Supported by the national project partners and the LWGs and taking into account the local specificities and planning vision of the pilot municipalities, the LWG project activities will focus on at least three of the following five priority areas:

1. Sustainable transportation and e-mobility (TRA);
2. Energy efficiency of buildings (EEB);
3. Expansion of renewable energy generation (RES);
4. Land use planning for increased carbon absorption (LUC);
5. Waste-to-energy (WTE).

Three sets of results are expected from the project activities in the pilot municipalities: six roadmaps (one for each pilot), i.e., strategic documents including action plans, six project pipelines (one for each pilot), i.e., concrete actions for project development, and 18 pre-feasibility studies (three for each pilot, focusing on three selected priority areas).

Based on the experience gained by the LGG pilot municipalities, the methods and results will be transferred to a group of neighbouring municipalities in order to scale up the benefits of the project. To further accelerate and support the transition on a broader basis, the pilot municipalities will be supported by:

- a transnational municipal network (TMN) to create opportunities for cooperation between key stakeholders and municipalities to support the clean energy transition process and promote further ICEPs. The TMN will further accelerate and support the transition on a broader basis by sharing knowledge, lessons learnt and best practices.
- a transnational expert group (TEG) to act as a technical assistance hub, providing knowledge, expertise and capacity to meet further requests for technical, financial, regulatory and policy assistance. The TEG will act through the LWGs by providing CET-related scientific and technical knowledge and best practices for use in pilot municipalities and municipal clusters. The TEG will thus act as a think-tank and collaborate with other pan-European advisory bodies, maximising the project's impact at the international level.

The first activities in less than one year of the LGG project focused on the creation of LWGs in each pilot municipality and the design and preparation of the self-assessment report (SAR), as described in the following two subsections.

## 2.1 LWGs

The creation and continuous operation of LWGs in the LGG project is an essential component to ensure the implementation of ICEPs at local level.

In the initial phase, LWGs are established in each pilot municipality under the coordination of the respective national project partners. LWGs are based on the selection of key stakeholders and local representatives capable of ensuring a comprehensive coverage of the three selected priority thematic areas.

A common spreadsheet template was implemented and transferred to the national teams together with explanatory documentation to support the pilot cities in identifying the main stakeholders for each priority area. The template consists of six spreadsheets: an introductory one, with step-by-step guidelines and deadlines, and five detailed tables per priority area, containing information on members/organisation, number of participants, description/role, name, function, telephone number, email.

Table 1 provides an extract of the template provided for one of the five priority areas.



Table 1: Key information requested for the identification of key stakeholders in LWGs: the template for the priority area ‘Sustainable Transport and Electric Mobility (TRA)’.

| Key individuals and/or organisations                                                                                                                                        | Description of their possible role in achieving the goals in the priority area                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Residents</b>                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Users of fossil fuel cars, bus and tram drivers, electric vehicle owners                                                                                                    | Promote carpooling, electric cars; encourage other locals to switch to EV with their positive experience and demonstration of advantages, bikes, etc.; sustainable transportation.                                                                                                                                                                                                                                                                                                                                   |
| <b>Local governments</b>                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Municipality, large nearby cities, mobile phone operators, national/local power companies                                                                                   | Ensure a safe and reliable connection between cities and municipalities; provide charging stations for electric vehicles in strategic locations; municipal programs for sustainable transportation; support the expansion of charging stations for electric vehicles; develop digital platforms and mobile applications to provide real-time information on traffic situation; provide the municipality with reliable and efficient electricity that can be used to operate charging stations and electric vehicles. |
| <b>Businesses</b>                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Public transport, national and local car manufacturers, transportation planners and engineers, Delivery companies, ridesharing services, service and maintenance businesses | Promote convenient routes; invest in electrification; offer a variety of EV models; promote the adaptation and transformation of EV for emission reduction and air quality improvement; ensure the efficient operation, longevity and sustainability of public transportation vehicles and EV.                                                                                                                                                                                                                       |
| <b>Financiers</b>                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| European Union                                                                                                                                                              | Finance transportation and e-mobility initiatives through various funding programs.                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| National and regional government, municipality                                                                                                                              | Support sustainable transportation and e-mobility through various funding mechanisms and policy initiatives; co-finance projects; ensure that municipalities and local authorities have the necessary resources to implement sustainable transport projects; develop sustainable transport and mobility strategies; attract funding and support for initiatives.                                                                                                                                                     |
| Banks                                                                                                                                                                       | Offer low interest rate loans to the municipality, transportation providers and private companies; invest in equity for start-up companies developing sustainable transportation solutions.                                                                                                                                                                                                                                                                                                                          |



Table 1: Continued.

| Key individuals and/or organisations | Description of their possible role in achieving the goals in the priority area                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Non-profit organisations             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| NGO                                  | Bring expertise, resources, and commitment to community involvement to effectively address the challenges and opportunities of the transition to a more sustainable transportation system; provide experts to local governments in developing sustainable transportation policies and plans (policy development); promote education and awareness with campaigns on transportation options and promote behavioural change among residents; provide technical assistance, research and data on transportation patterns, energy consumption and transportation-related emissions, as well as collaboration and networking for understanding and engagement in sustainable transportation initiatives. |
| Educational institutions             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Schools and colleges                 | Integrate the concept of sustainable transportation into classes; offer courses including transportation engineering, e-mobility and urban planning; organise field trips to facilities, projects, debates, competitions and case studies centred on sustainable transportation solutions.                                                                                                                                                                                                                                                                                                                                                                                                          |
| Media                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| TV, social media and radio           | Spread news about the importance of the issues; ongoing projects and positive changes in society; motivating locals to do their part by participating.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

2.2 SARs

To support the definition of CET pathways based on a detailed knowledge of energy and GHG emission baselines, a common template for a SAR was developed and transferred to support the six pilot cities/municipalities.

The purpose of the SAR is to describe the case study and issues related to the three priority areas selected per each pilot municipality, describing the main reasons. The municipalities are assisted in the development of the SAR by the national project partner established in each pilot municipality, benefiting from interactions with members of the LWGs, in particular for the collection of detailed data at local level.

The SAR template consists of the following seven sections plus a mandatory annex:

- Introduction to the case study, the three chosen priority areas, describing the main reasons.
- The multi-level governance system in each country: Description of the main legislative framework (at national and sub-national) that drives the policies of the municipality.
- The pilot municipality: General information on geography, climate, demography and socio-economic data, commitments for climate mitigation and adaptation, coordination and organisational structures and availability of dataset and decision support tools.



- Plans, strategies and actions in the selected priority areas: Description of the current and strategic initiatives and urban planning instruments. List of current and previous projects in the city/municipality with possible interactions with the LGG project.
- Existing infrastructures: Description of the current state of infrastructure in each pilot municipality, according to the chosen priority areas.
- Challenge and opportunities: List of critical issues and opportunities in the implementation of actions and measures in each of the selected priority areas.
- Conclusions: Brief summary of the selected priority areas with a brief reference to the actions to be implemented.
- Annex 1: A table containing key performance indicators to track project progress and performance based on the LIFE-based monitoring webtool.

The SAR sections, therefore, encourage municipalities to explore their country's multilevel governance system and to reflect on and describe the possible interactions of strategic initiatives and urban planning tools with the LGG project. In addition to summarising specific local characteristics and relevant issues related to the five project priority areas, the SAR helps municipalities describe the current state of infrastructure in the pilot municipalities, highlighting critical issues and opportunities in implementing actions and measures in each of the selected priority areas.

Furthermore, the SARs will serve as a starting point for the strategy building process through a peer review process, both locally and transnationally (through interactions with TEG and TMN).

### 3 PRELIMINARY RESULTS

The main results that emerged at the end of the first year of the LGG project's activities are presented in the following subsections, with specific reference to two main preparatory activities: stakeholder involvement through the LWGs and the first draft of the SARs developed by representatives of the pilot municipalities under the coordination of the national partner.

#### 3.1 Choice of the key priority areas and involvement of key stakeholders in LWGs

The main priority areas selected by the six pilot municipalities are depicted in Fig. 3.

Fig. 3 shows that all municipalities considered strategic to work on the energy efficiency of buildings and the expansion of renewable energy generation, while five out of six (83%) chose the sustainable transportation and e-mobility as their third priority area, with the exception of Antunovac (Croatia), which opted for land use planning for increased carbon absorption. Waste-to-energy was not chosen by any of them, probably due to the fact that these processes are often managed by consortiums of municipalities, so planning actions must be coordinated between multiple local authorities.

The selection of the main stakeholders to be involved in the LWGs was the first step carried out in the pilot cities (Fig. 4).

Fig. 4(a) shows that a total of 218 stakeholders have been involved, of which 30.7% in Dryanovo (Bulgaria), followed by 24.3% in Albstadt (Germany) and 21.1% in Antunovac (Croatia). The sum of the number of stakeholders per priority area (312) is higher than the total number of stakeholders, due to the interest and involvement of some of them in more than one priority area. Fig. 4(b) shows that more than one third of stakeholders have been involved both in the priority area 'Expansion of renewable energy generation' and 'Energy

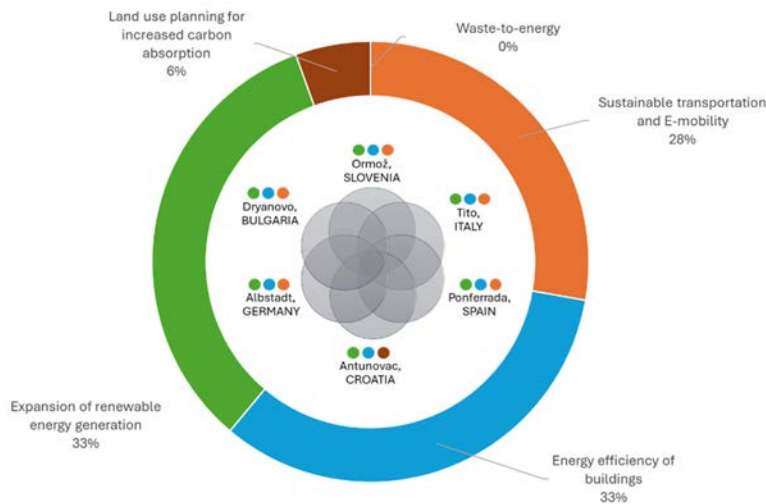


Figure 3: Overview of the key priority areas selected by pilot municipalities.

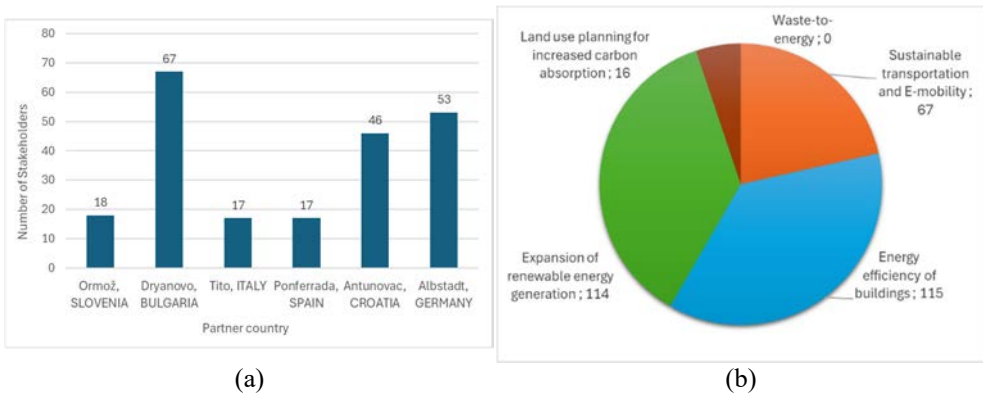


Figure 4: (a) Number of stakeholders involved in LWGs per partner country; and (b) Per thematic area.

efficiency of buildings’, 21.5% in ‘Sustainable transportation and e-mobility’, 5.1% in ‘Land use planning for increased carbon absorption’. Since waste-to-energy was not selected as a priority area by any of the pilot municipalities, obviously there are no stakeholders involved.

The LWG-based approach used allows for a gradual and continuous involvement of stakeholders from the very first months of the project, tailoring actions and initiatives to the specificities of each municipality and its chosen priority areas.

A first round of meetings with selected stakeholders were conducted in each of the pilot municipalities to lay the foundation for the project and were closely monitored at the project coordination level. During these meetings, the project’s objective and activities were presented by the national project partners, the priority areas were discussed in detail with

LWGs, and the proposals and interests of the stakeholders regarding the thematic areas were collected. Representatives of the municipalities actively participated in these sessions.

The information obtained through the compilation of the LWG template was also useful in creating a comprehensive list of key stakeholders for each pilot city, helping to build and maintain connections, keeping stakeholders informed of the project's progress (and organising their input at specific stages), thus increasing chances of success of the project.

To coordinate the LWGs, keep track of meetings and exchange new information, a calendar of meetings was organised for the pilot municipalities. In particular, pilots were encouraged to hold at least two LWG meetings per year (i.e., six over the entire project) for each of the three priority areas, organising them separately or together, if deemed more effective, and choosing, in collaboration with stakeholders, whether to hold them in person or online. In addition, a template has been prepared for each pilot municipality in which partners will specify, on a case-by-case basis, where and how the meetings will be held.

### 3.2 First outcomes of the SAR exercise in pilot municipalities

The initial results obtained from the SAR exercise for the pilot municipalities are shown in Table 2. It contains general information about the pilot municipalities and briefly describes the national and local energy and climate planning framework in which they will operate under the LGG project.

Table 2 shows that all pilot municipalities have an energy planning tool with short or long-term objectives. The situation is quite different on the climate planning front: three out of six

Table 2: First results of pilot municipalities through SARs: Key indicators and state of the art of planning (data retrieved from the GCoM website as 22 May 2024).

| General description                                                                                                                                                                                                                                                                          | Availability of energy and climate plans                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Ormož, Slovenia</b>                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <p><i>No. of inhabitants: 11,920</i><br/> <i>Surface area (km<sup>2</sup>): 141.6</i></p> <p>Located in northeastern Slovenia, the municipality of Ormož is part of Prlekija, a province between Mura and Drava. It lies between the Slovenian–Croatian border, Gornja Radgona and Ptuj.</p> | <p><b>GCoM <i>adhesion date</i>:</b> 27 September 2021<br/> <b>Action plans and progress:</b> under validation<br/> <b>GHG reduction targets:</b> –40% by 2030, –80% by 2050</p> <p>Ormož has a local energy concept (LEC) adopted in 2021 and built according to the national methodology. Compared to a SECAP, LEC does not include a climate component and measures to adapt to climate changes.</p>                                                                         |
| <b>2. Dryanovo, Bulgaria</b>                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <p><i>No. of inhabitants: 7,369</i><br/> <i>Surface area (km<sup>2</sup>): 248.5</i></p> <p>Dryanovo is a municipality in the Gabrovo district of north-central Bulgaria.</p>                                                                                                                | <p>The Municipal Energy Efficiency Program of the Municipality of Dryanovo 2021–2027 was adopted in 2020 and aims to reduce energy consumption in all economic sectors – fuel and energy end-users: municipal buildings, industry, transportation, services, and households. The implementation of this program will, therefore, lead to (1) reducing heat loss and improving the energy efficiency of buildings; and (2) reducing GHG emissions and improving air quality.</p> |

Table 2: Continued.

| General description                                                                                                                                                                                                                                                        | Availability of energy and climate plans                                                                                                                                                                                                                                                                                                                                                            |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>3. Tito, Italy</b>                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                     |
| <p><i>No. of inhabitants:</i> 7,134<br/><i>Surface area (km<sup>2</sup>):</i> 283</p> <p>The municipality of Tito is located in southern Italy, Basilicata region (province of Potenza).</p>                                                                               | <p><b>GCoM adhesion date:</b> 27 June 2011; approval date: 2 July 2012</p> <p><b>Action plans and progress:</b> n/a</p> <p><b>GHG reduction targets:</b> –20% by 2020</p> <p>An SEAP was developed in 2012 and aimed to reach a reduction of 20% of CO<sub>2</sub> emissions until 2020 compared to 1990.</p> <p>A renewable energy community of the municipality is currently being developed.</p> |
| <b>4. Ponferrada, Spain</b>                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                     |
| <p><i>No. of inhabitants:</i> 63,747<br/><i>Surface area (km<sup>2</sup>):</i> 283</p> <p>Ponferrada is the capital of the El Bierzo region, located northwest of the province of León, Spain.</p>                                                                         | <p><b>GCoM adhesion date:</b> 30 October 2020</p> <p><b>Action plans and progress:</b> under development</p> <p><b>GHG reduction targets:</b> –40% by 2030</p> <p>An emissions reduction plan (ERP) was elaborated in Ponferrada in 2021 aimed at reducing the emissions by 2025 (base year 2019). Current target in the ERP is 3% reduction of CO<sub>2</sub> until 2025.</p>                      |
| <b>5. Antunovac, Croatia</b>                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                     |
| <p><i>No. of inhabitants:</i> 3,411<br/><i>Surface area (km<sup>2</sup>):</i> 56.8</p> <p>Antunovac is a rural municipality in Osijek-Baranja County, Croatia.</p>                                                                                                         | <p>In 2021, the municipality drafted the document: ‘Inventory of the environmental and natural resources of the Municipality of Antunovac’.</p>                                                                                                                                                                                                                                                     |
| <b>6. Albstadt, Germany</b>                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                     |
| <p><i>No. of inhabitants:</i> 47,271<br/><i>Surface area (km<sup>2</sup>):</i> 134.4</p> <p>Albstadt is located in the Swabian Jura mountains, halfway between Stuttgart and Lake Constance. It is part of the Zollernalbkreis district in Baden-Württemberg, Germany.</p> | <p>A climate action plan was developed in 2015 to achieve a 90% reduction in CO<sub>2</sub> emissions through 2050 compared to 1990. The city is currently developing a municipal heating action plan: due to several changes in federal law, the city must reduce heating CO<sub>2</sub> emissions to 0%.</p>                                                                                      |

(50%) pilot municipalities have joined the Global Covenant of Mayors (GCoM) initiative, but only one pilot municipality (Tito, Italy) developed a Sustainable Energy Action Plan (SEAP) with the goals of reducing GHG emissions by 20% by 2020. The other two municipalities (Ormož, Slovenia and Ponferrada, Spain) still have their GCoM plans under validation.

Outside the GCoM framework, Albstadt (Germany) developed a climate action plan in 2015 that aims to achieve a 90% reduction in CO<sub>2</sub> emissions until 2050. Also relevant is the fact that in four out of six countries (67%) CO<sub>2</sub> reduction is mandated by the national energy climate plan.

#### 4 CONCLUSIONS AND FURTHER DEVELOPMENTS

The LGG project aims to support local authorities in accelerating the clean energy transition with a project-oriented methodological approach, based on a long-term strategic vision and structured engagement with local and transnational stakeholders.

To this end, it promotes the creation of a stable and committed institutional structure over time, capable of integrating economic sectors and stakeholders, and of inserting into the regional planning procedures of each local context.

The preliminary phase of the activities, which concerned the definition of the working method and the activation of the LWGs, required significant involvement of local stakeholders in each pilot country.

Energy efficiency of buildings and expansion of renewable energy generation were the most addressed priority areas, followed by sustainable transport and electric mobility and spatial planning for increased carbon absorption. At the same time, a working method based on a common template (SAR) was defined and transferred to the pilot municipalities to help them describe and evaluate their initial starting situation in terms of energy, greenhouse emissions and related infrastructure.

With regard to the starting planning framework the SAR exercise has shown that although all pilot municipalities have an energy planning tool the situation is less advanced as concerns the climate planning tools. Notably, only the German municipality of Albstadt serves as a frontrunner in the project partnership, having developed a climate action plan in 2015 that aims to achieve a 90% reduction in CO<sub>2</sub> emissions through 2050. The other pilot municipalities are, however, lagging far behind, with only Tito having approved an SEAP with GHG reduction targets now firmly stuck at 2020.

The already operational LWGs and the drafted SARs provide a solid foundation on which the pilot municipalities will outline their long-term goals through three action plans for each selected priority area. These detailed documents will break down the specific actions and tasks to be completed to achieve the objectives outlined in the roadmap.

The action plans will provide a list of potential projects (project pipeline) for each pilot municipality, and in collaboration with the municipality and key stakeholders, three projects will be selected to move forward. For these three projects in each pilot municipality, an investment plan and pre-feasibility studies will be developed, to determine whether the projects are worth pursuing.

Parallel to this, the next steps will include the launch of the TMN and TEG, which will strengthen the project's impact beyond the local communities involved in the pilot projects and support replication and upscaling, as well as the dissemination of project results.

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