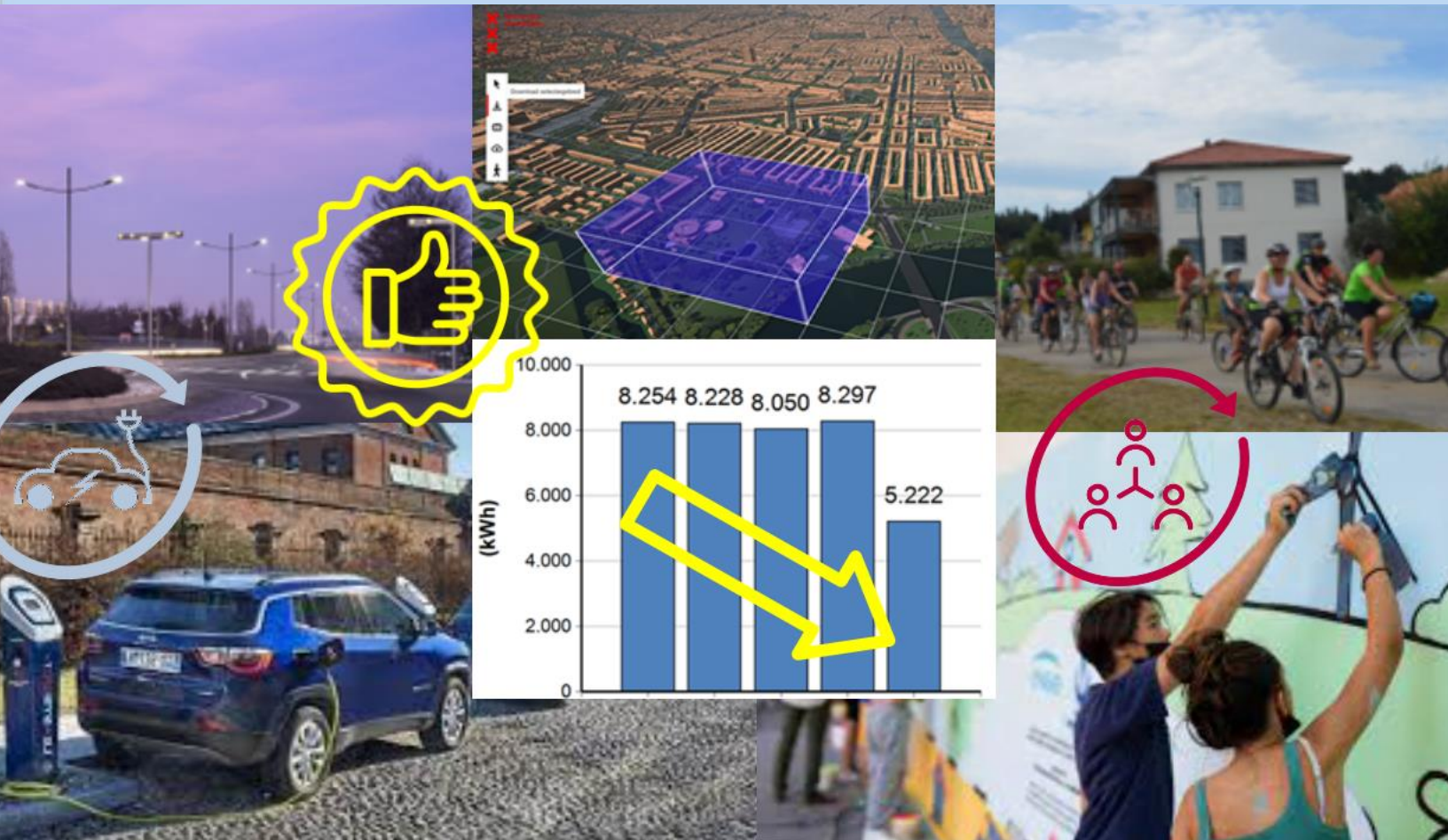




simply positive

T6.4 Local Authorities' Policies to Support Positive Energy Districts

July 2024



Leader: DENK

Dissemination Level

PU	Public	X
CO	Confidential	

History

Version	Description	Lead author	Date
V1	Collection of policies	DENK	Feb 2024
V2	Review	DENK	Apr 2024
V3	Feedback on review	DENK	Jun 2024
V4	Final document	DENK	Jul 2024

Disclaimer

This project has received funding in the framework of the PED Program, which is implemented by the Joint Programming Initiative Urban Europe and SET Plan Action 3.2. The project is supported by the Austrian Ministry of Climate Action, Environment, Energy, Mobility, Innovation, and Technology (BMK) and the *RVO (the Netherlands Enterprise Agency)*, reference number *ERANETPED-02767306*. This work was supported by a grant of the Ministry of Research, Innovation and Digitization CNCS/CCCDI – UEFISCDI, project number PED-JPI-SIMPLY POSITIVE, contracts number 325/2022 and 326/2022, within PNCDI III and by a grant of the Ministry of Education and Merit - Department for Higher Education and Research, project number PED_00042, from the Fund for Investment in Scientific and Technological Research (FIRST/FAR) and/or Special Accounting Account no. 5944.

Contents

Executive Summary	5
Scope	5
Document structure	5
1. Sustainability strategy.....	7
1.1. Reșița.....	7
1.2. Amsterdam	11
1.3. Großschönau.....	12
2. Non-binding measures.....	15
2.1. Settimo Torinese	15
2.1.1. Energy efficiency	15
2.1.2. Renewable energy	16
2.1.3. Sustainable mobility	17
2.1.4. Energy flexibility	18
2.1.5. Inclusiveness & affordability	19
2.1.6. Other.....	20
2.2. Reșița.....	21
2.2.1. Energy efficiency	21
2.2.2. Sustainable mobility	21
2.3. Amsterdam	22
2.3.1. Energy efficiency	22
2.3.2. Innovative technologies.....	22
2.3.3. Ownership of Energy	23
2.3.4. Other.....	24
2.4. Großschönau.....	28
2.4.1. Energy efficiency	28
2.4.2. Renewable energy	29
2.4.3. Sustainable mobility	30
2.4.4. Energy flexibility	31
2.4.5. Energy autarky	32
2.4.6. Ownership of energy	33
2.4.7. Inclusiveness & affordability	34
2.4.8. Other.....	35

3. Regulatory measures	37
3.1. Settimo Torinese	37
3.1.1. Energy efficiency	37
3.1.2. Sustainable mobility	38
3.2. Reșița	40
3.2.1. Energy efficiency	40
3.2.2. Renewable energy	40
3.2.3. Sustainable mobility	40
3.2.4. Inclusiveness & affordability	41
3.2.5. Other	41
3.3. Amsterdam	43
3.3.1. Inclusiveness & affordability	43
3.4. Großschönau	49
3.4.1. Energy efficiency	49
3.4.2. Renewable energy	50
3.4.3. Sustainable mobility	50
3.4.4. Inclusiveness & affordability	51
3.4.5. Other	52

Executive Summary

The focus of this deliverable, T6.4, titled " Local Authorities' Policies to Support Positive Energy Districts " explores the actual strategies and regulations used by local authorities for addressing climate change, energy autonomy, and efficiency. These strategies can vary from non-binding measures, such as raising public awareness and rewarding good practices, to regulatory measures, such as enforcing mandatory regulations.

Together with T6.1, T6.4 will serve as a reference for the D6.3 "SIMPLY POSITIVE best practice Booklet", the final report of the WP6 "Participation concepts to trigger Cities' engagement onto the pathway towards PEDs" which will highlight the main project achievements, best practices, lessons learned and recommendations for successful city and stakeholder engagement.

Scope

In the context of task 6.4 and Deliverable 6.3, the present report is used to collect relevant information on policies which may support the development of Positive Energy Districts within the focus districts.

Deliverable D6.3. (Best practice Booklet) will use as input information gathered within tasks 6.1. and 6.4, highlighting best practices, lessons learned and recommendations for successful city and stakeholder engagement, as well as other information from the main project achievements.

The scope of this document is to collect available possibilities that may trigger successful city and stakeholder engagement for local creation of PEDs and PENs.

Document structure

The present report is structured in three main categories, following the description of task 6.4:

- **Sustainability strategy**
- **Non-binding measures**
- **Regulatory measures**

A city sustainability strategy is a comprehensive plan that outlines a municipality's approach to addressing critical environmental, social, and economic challenges while striving for long-term sustainability and resilience. It serves as a roadmap for local governments to enhance the quality of life for residents, promote economic growth, reduce environmental impact, and ensure social equity within the city.

Non-binding measures refer to policies, agreements, or actions implemented by authorities or organizations that lack legal enforceability. These measures are characterized by their voluntary nature, as they do not impose legally mandated obligations or requirements on individuals, businesses, or governments. Instead, they serve as recommendations, guidelines, or expressions of intent, encouraging cooperation and suggesting best practices.

Regulatory measures refer to authorities-initiated actions and policies aimed at achieving sustainable development. These measures are legally binding and are enacted to regulate and guide activities across sectors, industries, and organizations to align with sustainable practices. Regulatory measures encompass a range of interventions, including the establishment of environmental regulations, emissions standards, resource management laws and other legal provisions that promote sustainability objectives.

Each section is divided (except the “Sustainability strategy”) in 8 sub-categories which represent the specific dimension which the measures aim to improve, that each FD could choose from for elaborating on their practices. These sub-categories have been defined in relation to their potential in supporting the development of PEDs and PENS:

1. Energy efficiency
2. Renewable energy
3. Sustainable mobility
4. Energy flexibility
5. Energy autarky
6. Ownership of energy
7. Inclusiveness & affordability
8. Innovative technologies
9. Others

These sub-categories represent the possible end-objectives for implementation of the measures. Their mapping within the current document aims to provide a structured data collection format, while also encouraging the addition of other objectives in the “other” category.

1. Sustainability strategy

1.1. Reșița

Vision and goals

The municipality of Reșița envisions a transformative shift towards a resilient, inclusive, and sustainable city, where urban regeneration, green initiatives, and technological innovation drive the community's progress. As outlined in its strategic document, Reșița aims to:

- Foster a knowledge-based and innovation-driven economy
- Promote a green and competitive economy efficient in resource use
- Encourage high employment and social and territorial cohesion

The comprehensive goals encompass a wide array of sustainability areas such as carbon reduction, energy efficiency, waste management, clean transportation, and equitable access to resources. By aligning with European strategies such as Europa 2020 and leveraging funds like NextGenerationEU, Reșița is committed to achieving carbon neutrality and transforming itself into a model "green city."

Baseline assessment

Current Environmental Conditions

Strong Points

- **Air Quality:** The municipality of Reșița has seen ongoing improvement in air quality, despite occasional PM10 level overshoots. An efficient data collection system is in place to monitor these changes.
- **Water Quality:** Underground water bodies maintain a good quality, with consistent maintenance. Surface water bodies are in good condition, demonstrating the effectiveness of local environmental policies.
- **Waste Management:** Significant investments have been made in sewage/domestic wastewater infrastructure, integrating management systems and moving towards compliance with the county's waste management plan for 2020-2025. Efforts have also resulted in decreased noise pollution in parks, recreational areas, and schools. The proximity of green forest areas contributes positively to local air quality and recreational activities.

Weaknesses

- **Green Space Development:** Some green spaces require improved landscape architecture.
- **Water Treatment:** The absence of a tertiary purification step for wastewater is noted.
- **Sewage Network:** Frequent clogging and dysfunction of domestic and storm sewers exist, with under-sizing causing issues for the population's connection. Approximately 112.5 to 120 km of peripheral street areas lack proper sewage networks.
- **Waste Management:** Non-selective waste collection practices prevail, and there are significant, yet non-compliant investments in waste management systems. There are also eight identified polluted sites within the municipality, emphasizing the need for regulatory compliance and risk management in urban planning.

Opportunities

- **Energy Efficiency:** European funds offer opportunities to increase energy efficiency in buildings, mitigating air pollution from individual thermal power plants, especially regarding dust emissions.
- **Infrastructure Development:** There are available funds earmarked for enhancing water and sewage infrastructure.
- **Noise Pollution Management:** Future plans to create comprehensive noise maps will aid in expansion planning and development, considering noise pollution sources. The existence of a risk management plan for floods also indicates a proactive approach to disaster risk reduction.

Economic Conditions

Strong Points

- **Industrial Tradition:** There is a tradition of a strong industrial sector in Reșița, with local companies seeing an increase in turnover and profits post-2011, indicating efficient work productivity.
- **Competitive Clusters:** The city has developed competitive economic clusters, underpinned by high administrative capacity for absorbing grants and implementing European-funded projects.

Weaknesses

- **Income Levels:** The population's wage income remains below the national average, affecting both general and sectoral levels.
- **GDP per Capita:** Despite a high growth rate, the GDP per capita is low, indicating room for economic improvement.
- **Infrastructure:** Connectivity issues persist with pan-European transport lanes, and the transport infrastructure does not fully meet current needs.
- **Economic Decline:** A pronounced economic decline before 2011 has long-term impacts, compounded by the decline in both the industrial and service sectors, particularly affecting small to medium-sized enterprises.
- **Innovation and R&D:** The knowledge-based economy has a low impact on the total economy, with virtually non-existent research and development capacity, highlighting a need for investment in innovation.

Opportunities

- **Regional Development:** The potential for zonal polarization must be capitalized by activating the area's urban influence, suggesting an opportunity for strategic urban expansion and development.
- **External Funding:** There are opportunities for obtaining external funding for developmental projects with significant economic impacts, enhancing the regional allocation of development funds and local economic diversification.

Action plan

The action plan is structured around strategic objectives, with a focus on smart, sustainable, and inclusive growth. These objectives are aligned with the European Commission's priorities for 2019-2024 and are aimed at making a significant impact on local development. The plan includes:

Open City Initiative: Reșița aims to become an open city, valuing and fostering innovative and creative ideas. The city plans to position itself as a digital transformation hub and an open space for piloting digital solutions from various companies, especially focusing on the interconnectivity of these solutions. The ultimate goal is to stimulate the development of the ICT sector within the city.

Digital Transformation: Medium-term strategies for Resita include significant investments in digital infrastructure and education, support for the university environment, and promotion of public-private interactions through digitization. This includes the development of digital services, creation of innovation ecosystems incorporating spaces for incubators and accelerators, and support for pilot projects enhancing urban connectivity.

Urban Vitality: The city's vitality will be cultivated through specific indicators such as youth engagement, prosperity, civic participation, cultural activities, and robust local businesses. These indicators will be monitored and stimulated to enhance the quality of life and ensure active, efficient public administration.

Collaboration with Metropolitan and Local Areas: Essential collaborations with local communities and integration with the strategic plans of the County Council are seen as vital for mutual growth and avoidance of non-functional, formal links. Such partnerships are necessary for sharing best practices and resources.

Connectivity and National/International Presence: Strengthening connections with major urban areas, particularly Timișoara, is crucial. The city's strategy aims to create significant, symbiotic relationships with these communities to avoid the potential for resource drain and identity dilution.

Marketing and Identity Promotion: Development of a marketing plan to communicate the city's new strategic identity and promote an attractive community image. Participation in the development process is essential, moving beyond imposed regulations to become a structural characteristic of the city. This would involve participatory budgeting, urban participation centers, and permanent community working groups.

Administrative Capacity: Continuous development of the city's administrative capacity is vital for maintaining a competitive edge. Ongoing investments in enhancing the capabilities of local administration are paramount.

Education and Talent Retention: Building quality education at all levels is key, coupled with strategies to retain educated young people within the city, aligning with strategic urban priorities.

University and Specializations: The university's character should be strengthened, aligning specializations with the city's strategic priorities, ensuring a quality education that contributes to smart urban community development.

Cultural and Green City Development: The multicultural aspects and the city's green, healthy environment, connected to nearby mountain areas, represent significant potentials for the future. Projects aimed at enhancing these characteristics are seen as fundamental to the city's development.

Project Package Assembly: Two categories of projects will be assembled – a core group of essential projects, vital for the city's success and mandatory implementation, and a flexible group that can be continuously updated to adapt to emerging needs and opportunities.

The realization of these goals hinges on the active involvement of:

- **Local Government:** The Municipality of Reșița spearheads planning and implementation, underpinned by urban development strategies and green policies.
- **Educational Partners:** Collaborations with educational institutions are crucial, particularly for fostering innovation and aligning educational outcomes with the needs of a sustainable urban economy.
- **European Partners:** Engagements with European entities provide both strategic and financial backing, crucial for implementing the ambitious targets set forth in Reșița's sustainability and regeneration projects.
- **Private Sector and NGOs:** These groups are engaged in various capacities, from contributing to the design and execution of urban projects to advocating for green initiatives and community programs.

Monitoring and reporting

The monitoring of the Sustainable Integrated Urban Development (SIDU) implementation will be conducted annually. The assessment will be executed by the Management Unit and the Operative Group, or an external specialized entity, to provide objectivity and specialized insight. This approach ensures that assessments are not only aligned with project timelines but are also comprehensive and reflective of the strategic cycle's end.

Specific KPIs identified:

Urban Regeneration KPIs:

- Minimum of 2 "infill" development projects targeting areas larger than 2 hectares, to be in the design phase by 2027.
- At least 2 rounds of small-scale urban renewal projects and 4 funded mini-interventions by 2027.
- Creation of a local entity by 2023 to manage urban regeneration processes and interactions with community stakeholders and developers.

Green City and Infrastructure KPIs:

- Increase in resident satisfaction with green spaces to 80% by 2023.
- Achieve 100% selective waste collection by 2025.
- Establishment of a 'Reșița – Green City' partnership framework between City Hall and residents' associations by 2022.

Climate Adaptation KPIs:

- Implementation of at least 4 measures related to flood risk reduction by 2024.
- Production of flood risk management plans and hazard maps by 2023.

Cultural and Social Development KPIs:

- Enhance the cultural infrastructure to achieve a resident satisfaction score of at least 7 out of 10 by 2027.
- Develop leisure and relaxation facilities to increase resident satisfaction to 7.5 out of 10 by 2027.

Educational Development KPIs:

- Establishment of an Educational Hub in partnership with within 4 years to foster ongoing educational initiatives.
- Awarding a minimum of 30 innovation and research grants by 2025 to support collaborations between the educational sector and local businesses.

Administrative Efficiency KPIs:

- Functionality of GIS system by 2025.
- Annually collect data related to the use of online services by citizens and businesses, aiming for 25% online collection of taxes and fees by 2025.
- Increase the percentage of municipal employees participating in annual digital competency training to 30% by 2023.

Indicator Criteria

As stipulated by the European Commission's Manual on sustainable urban development strategies (2020), KPIs must adhere to the following criteria to ensure they serve their intended purpose effectively:

- Relevant: Indicators must directly correlate with the strategic objectives, demonstrating clear progress towards the desired outcomes.
- Accepted: They should be established with the consensus of staff and stakeholders, ensuring all parties understand and agree upon the indicator's role and responsibility.
- Credible and Unambiguous: Indicators need to be comprehensible to non-experts, avoiding any ambiguity, thereby facilitating a common understanding and straightforward interpretation.
- Simplicity in Monitoring: Data collection for these indicators should be feasible at reduced costs, avoiding complex and resource-intensive methods.
- Resistant to Manipulation: KPIs must be robust enough to withstand handling, ensuring that data remains trustworthy and immune to distortion.

Reporting Cycle

The evaluation of SIDU implementation is planned for the end of each strategic cycle, with findings reported to the relevant stakeholders. This report will provide a comprehensive overview of the status of each indicator and outline steps for further action or adjustments as needed. This process will uphold the principles of Better Regulation guidelines set forth by the European Commission, ensuring a high standard of governance and transparency.

Education and outreach	Public awareness campaigns and community education are fundamental elements of Reșița's sustainability strategy. Initiatives such as "Green School Projects," local environmental workshops, and public forums on sustainable living practices are aimed at empowering residents and businesses to participate actively in sustainable practices.
Green certifications	Reșița has engaged its efforts to obtain green certifications for public buildings and infrastructure. Although specific certifications, such as BREEAM, have not been mentioned, the city is working towards aligning its public buildings with EU standards for energy efficiency and environmental impact. Any notable achievements will be contingent on ongoing and future projects as outlined in the strategic document.
references / link:	The information for this sustainability strategy is derived from the "Strategia Integrată de Dezvoltare Urbană a Municipiului Reșița 2022-2030," available online on the municipality's official website, and discussions held with local stakeholders during the strategic planning process. https://www.primariaresita.ro/portal/cs/resita/portal.nsf/AllByUNID/B1056A1679027F7DC2258AE40036AD8C/\$FILE/STRATEGIA%20INTEGRATA%20DE%20DEZVOLTARE%20URBANA%20A%20MUNICIPIULUI%20RESITA%202022-2030.pdf

1.2. Amsterdam

<p>Vision and goals</p>	<p>Maximum generation of solar energy on roofs</p> <p>As part of the roadmap Amsterdam Climate Neutral (2020) the city of Amsterdam has set the ambitious target for solar energy. The installation of solar panels on roofs is technically straightforward and, in most cases, represents a profitable investment. The sustainability strategy envisions the installation of solar panels on both individuals households and business buildings. It aims at maximizing the PV usage in case of new constructions, renovations and even in the case of protected areas. It is backed up by regulations and reinforced by communication campaigns organized by organizations such as "De Zoncoalitie" and "Regionaal Energieloket." The chosen approach ensures that opportunities are available for everyone while setting a positive example. The goal is to inspire everyone in the city, remove obstacles, and create a climate conducive to better utilization of the potential for large-scale solar energy generation.</p> <p>Several national regulations play a crucial role in determining the payback period of solar panels, exerting a significant influence on the growth of the number of solar panels in Amsterdam. It is imperative that these national regulations remain favourable for the installation of solar panels on roofs.</p>
<p>Baseline assessment</p>	<p>-</p>
<p>Action plan</p>	<p>Solar Energy Strategy:</p> <ol style="list-style-type: none"> 1. Inclusive Approach and Establishing the Zoncoalitie Platform: <ul style="list-style-type: none"> • Zoncoalitie assists residents in starting solar energy generation. • It guides residents in placing panels on their roofs and connects them with solar cooperative projects. 2. Heritage and Protected Areas: <ul style="list-style-type: none"> • Promoting awareness of installing solar panels in protected cityscapes and on monuments. • An online map indicates suitable rooftops, and a dedicated office assists residents in the permit application process. 3. Supporting Cooperative Solar Initiatives: <ul style="list-style-type: none"> • Collaboration with energy cooperatives, making municipal and partner rooftops available for cooperative projects. • The Zoncoalitie connects residents without suitable rooftops to cooperative initiatives. 4. Assistance for Private Homeowners: <ul style="list-style-type: none"> • Collective purchasing initiatives incentivize private homeowners to install solar panels. • Special focus on making solar adoption attractive citywide through collective initiatives. 5. Guidance for Homeowners' Associations (VvE's): <ul style="list-style-type: none"> • Facilitating sustainable transformation of VvE properties through advice, support, and possible loans for solar projects. 6. Acceleration at Housing Corporations: <ul style="list-style-type: none"> • Collaboration with housing corporations to ensure solar panels are incorporated into new constructions and renovations. • Exploring scaling solar projects while ensuring affordability for residents. 7. Engagement with Businesses: <ul style="list-style-type: none"> • Encouraging businesses, especially those with large rooftops, to contribute to sustainable energy by installing solar panels. • Active engagement with large rooftop owners, including negotiations with major companies and the harbour. 8. Community Organizations and Schools: <ul style="list-style-type: none"> • Supporting community organizations, schools, and sports complexes in implementing solar projects. • Fostering awareness and participation in sustainable energy. 9. Double Use of Space and Solar Parks: <ul style="list-style-type: none"> • Exploring solar panel installations on highway slopes and at Park & Ride locations. • Cautionary consideration for solar projects in specific landscapes and on water if other options are insufficient or mandated by national regulations. 10. Innovation and Efficiency:

	<ul style="list-style-type: none"> • Emphasis on innovative applications of solar panels, exploring lighter panels for industrial roofs and integration with building elements. • Collaboration with energy companies to implement smart grid solutions for efficient solar energy utilization. <p>Action Plan Summary:</p> <ul style="list-style-type: none"> • Support for solar installations in protected areas and on monuments. • Collective initiatives for rooftop solar adoption among housing corporations. • Provision of advice and support to VvE's for solar projects. • Organization of collective purchasing of solar panels for residents. • Communication on innovative solar energy generation possibilities. • Deployment of solar panels on municipal properties.
Monitoring and reporting	KPIs: Specific figures for the annual increase in solar panel capacity (e.g., 50MW per year. By 2030, the city aims to cover all municipal buildings with solar panels, fulfilling half of the city's potential (550 MW). Between 2040-2050, the goal is to achieve a scenario where all suitable roofs are covered with solar panels.
Education and outreach	In Amsterdam, education and outreach initiatives regarding PV policies are actively facilitated by organizations such as "De Zoncoalitie" and "Regionaal Energieloket." These entities play a vital role in informing and engaging the community about solar energy possibilities, including the benefits, available subsidies, and the technical feasibility of PV installations. Through educational programs, workshops, and outreach campaigns, these organizations contribute to raising awareness, addressing concerns, and promoting the adoption of solar energy solutions among residents and businesses in Amsterdam. Additionally, collaborative efforts with local municipalities and government bodies further enhance the dissemination of information and encourage the uptake of PV policies across various sectors.
Green certifications	-
references / link:	Public: routekaart_amsterdam_klimaatneutraal_2050.pdf (sharepoint.com) RES 1.0 Noord-Holland Zuid (sharepoint.com)

1.3. Großschönau

Vision and goals	<p>Energy guidelines as part of the e5-program 1</p> <p>The aim of the municipality Großschönau is to be energy self-sufficient in the areas of electricity, heating and mobility by 2030.</p> <p>In the energy guidelines, published as part of the e5-program, Großschönau has set itself the following goals:</p> <ul style="list-style-type: none"> • Increase the energy efficiency in the areas of heating in existing buildings, new construction and electricity. • 100 % heat and domestic electricity from renewable energy sources • Savings of at least 15% of CO₂ emissions from 2021 to 2030 in the mobility sector • Address topics such as climate change adaptation and sufficiency as cross-cutting issues across all fields of action • Comprehensive public relations work and awareness-raising measures <p>¹ The e5-program encourages and supports Austrian municipalities to modernize their energy and climate protection policies, to save energy and thus costs and to use renewable energy sources. It is represented by the non-profit association "e5 Austria - Program for Energy Efficient Communities".</p>
Baseline assessment	<p>Strengths of the region:</p> <ul style="list-style-type: none"> • Natural resources are available (e.g. biomass, wind, sun, ...) • Region with a large proportion of forest coverage • Many years of experience in the energy sector • Numerous energy projects already implemented • Population already sensitized to the topic of renewable energies and energy efficiency since the early 80s due to many projects for awareness raising like the yearly organization of an environment and energy fair in Großschönau, the first passive house village for test living, the energy adventure exhibition SONNENWELT and the Research and Competence Center Sonnenplatz , the Climate- and Energy Model Region Lainsitztal that organizes many events, information campaigns and advises the population since 2010 and regularly information concerning different sustainability topics in the local newspaper

- Companies with core competencies in the field of renewable energies and energy efficiency located in the region
- Well-developed services of general interest (childcare, medical care, volunteer work, broadband supply, local supply and farmers' stores...)
- Well-established healthcare and rehabilitation facilities
- High level of personal commitment from the population thanks to comprehensive educational work on the part of the municipality, the SONNENPLATZ Großschönau GmbH, the SONNENWELT and the Climate- and Energy Model Region Lainsitztal

Weaknesses of the region:

- Long distances to central areas mean that people from urban centers contribute little to value creation in our region
- Distance to urban amenities such as university and university of applied sciences locations or cultural offerings
- Attracting or retaining a sufficiently well-educated workforce in the region
- Mobility (lack of public transportation; many commuters, ...)
- Below-average income situation due to high proportion of agriculture
- Disadvantage of public funding in financial equalization due to the graduated population key (preference for urban areas)

An "energy transition" in the municipality of Großschönau and in the region brings many opportunities for the region:

- Population can save on energy costs
- Increase in purchasing power
- Jobs created in the energy sector (e.g. green jobs, ...)
- Added value remains in the region
- Increased security of supply
- Population growth through immigration / less emigration
- Positive commuter balance
- Positioning as an energy region

Action plan

The e5-Team of the municipality established a work plan with several fields of action, a description of the goals and the projects to reach these goals including a leader and a time plan for each project. This work plan functions as guideline and is adapted twice a year. In half-yearly meetings the e5-team discusses actual to dos according to this plan.

The following paragraphs give an insight in several fields of action:

Energy efficiency:

By increasing the renovation rate to 3%, the great potential of existing buildings is to be exploited. The target for new buildings is to ensure that they are at least built to low-energy standards. This will be achieved by staggering the municipal housing subsidy on the development fee. In the area of electricity, measures are planned in the public sector (e.g. replacement of indoor lighting) and awareness-raising for the population.

Renewable energy:

There is great potential in the use of biomass in the municipality's forests and solar energy. The aim is to promote the generation of electricity from photovoltaic systems through a citizen participation model and the use of marginal agricultural land, among other things.

Mobility:

CO₂ savings are to be achieved by switching to e-mobility, promoting walking and cycling, creating everyday cycle paths, forming carpools and increasing efficiency, etc.

Articles in the community newspaper, events and special campaigns should help to achieve the above-mentioned goals.

Monitoring and reporting

e5-municipalities undergo an evaluation by an independent commission every 4 years and are then awarded for their achievements in the climate and energy sector. Successful e5-municipalities are awarded with one to five "e" - depending on the degree of implementation of the possible energy efficiency measures. The catalog consists of six fields of action in which the municipality can become active:


- Development planning and regional planning

	<ul style="list-style-type: none"> • Municipal buildings and facilities • Energy supply and infrastructure • Mobility • Structure and organization • Communication and coordination <p>Further monitoring and reporting are carried out through the regular keeping of an energy accounting for municipal buildings and the preparation and presentation of an annual municipal energy report. During this, the development of heat and electricity consumption and CO₂ emissions of public buildings and vehicle fleets as well as the proportion of renewable energy are recorded and further recommendations for action are derived.</p>
Education and outreach	Events, articles in newspapers, especially in the newspaper of the municipality, social media, on the website of the municipality, leaflets, etc.
Green certifications	The municipality of Großschönau was able to achieve the following results in the assessments: 1st certification 2012: eee (55.0%, 2012). 2nd certification 2014: eeee (63.7%, 2014) 3rd certification 2018: eeeee (84.1 %, 2018) 4th certification 2022: eeeee (85.8%, 2022).
references / link:	Direct contact with municipality representatives http://www.grossschoenau.gv.at/page.asp/-/e5 https://www.e5-niederoesterreich.at/e5-gemeinde-grossschoenau

2. Non-binding measures

2.1. Settimo Torinese

2.1.1. Energy efficiency

Measure title	EUROPA - Energy Efficiency Subscription for Deep Renovation with Performance Guarantee (Horizon 2020 EU project)	
Type	Non-binding	
Initiator	Piedmont Region (Leader of the project)	
Location	Piedmont (one of the pilots)	
Population targeted	TBD	
Period of implementation	01/10/2020 – 30/09/2023	
Description	<p>The EUROPA project brings together the expertise of 9 European partners to simplify and improve the approach to the deep retrofitting process of residential buildings. They want to offer stakeholders a better model through a unique regional One-Stop-Shop, a desk open to the public that provides energy consultancy. The experts available at the One-Stop-Shop help to develop the Energy Efficiency Subscription, that is a set of technical and procedural specifications and standard contractual agreements to obtain energy savings guaranteed by the retrofitting of residential buildings. Additionally, they provide interested parties with technical support services to facilitate the start of the renovation process. The partners want to ensure that the common goal of accelerating the wave of building renovation can be implemented in every pilot region where the One-Stop-Shop is activated: Piemonte is one of the pilots. Through the EUROPA project, a One-Stop-Shop was delivered. It facilitates and/or enables coordination of all stakeholders across the user journey in 5 different European countries. Led by the regional partners, the One-Stop-Shops enable alignment and support of all stakeholders in the deep renovation process of residential buildings. A Energy Efficiency Subscription was delivered, or a set of technical specifications, procedures, and standard contractual arrangements to ensure guaranteed energy savings from the deep renovation of residential buildings. Thanks to the project, it is also ensured an acceleration to the renovation wave across Europe through EUROPA digital onboarding using the SUNSHINE platform to guarantee a simple and better renovation journey.</p>	
Expected/determined outcomes	<p>The expected outcomes of the EUROPA project can be summarized as follows:</p> <ul style="list-style-type: none"> • Simplified Approach to Deep Retrofitting: The project aims to simplify and improve the approach to deep retrofitting processes for residential buildings by leveraging the expertise of 9 European partners. • Introduction of a Regional One-Stop-Shop: EUROPA introduces a unique regional One-Stop-Shop integrated with the Energy Efficiency Subscription to offer stakeholders a better model for coordinating deep renovation efforts. • Provision of Technical Support Services: Interested parties receive technical support services to facilitate the initiation of the renovation process, ensuring smoother and more efficient implementation. • Implementation in Pilot Regions: Partners aim to ensure that the common goal of accelerating building renovation is realized in every pilot region where the One-Stop-Shop is activated, including Piemonte. • Alignment and Support: These One-Stop-Shops enable alignment and support for all stakeholders involved in the deep renovation process of residential buildings, ensuring coordinated efforts and optimal outcomes. • Delivery of Energy Efficiency Subscription: The project delivers an Energy Efficiency Subscription, comprising technical specifications, procedures, and standard contractual arrangements to ensure guaranteed energy savings from deep renovations. 	

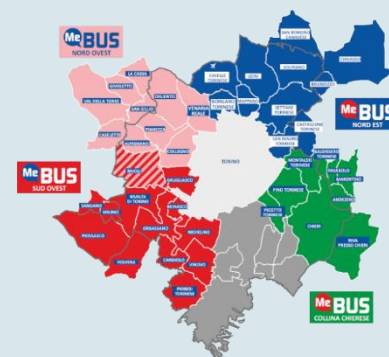
	<ul style="list-style-type: none"> • Acceleration of Renovation Wave: EUROPA ensures an acceleration of the renovation wave across Europe through digital onboarding using the SUNSHINE platform, guaranteeing a simpler and improved renovation journey for all stakeholders.
references / link:	https://europaonestop.eu/it/homepage/

2.1.2. Renewable energy

Measure title	Comunità Energetiche Rinnovabili: formazione e sportello per le imprese del Piemonte Renewable Energy Communities: training and help desk for businesses in Piedmont
Type	Non-binding
Initiator	Sportello Energia Piemonte (Piedmont Energy Desk) - Piedmont Region
Location	Piedmont
Population targeted	TBD
Period of implementation	2021 – currently open
Description	<p>After completing a trial period, the Piedmont Energy Help Desk, launched in December 2021 through a collaboration between the Piedmont Region and Environment Park, with funding from the European EUROPA H2020 project, is now fully operational.</p> <p>The help desk serves as a new public service catering to the citizens of the Piedmont area. It offers free consultations aimed at addressing questions and concerns of property owners interested in undertaking energy retrofitting projects on their homes. The Help Desk assists them in understanding technical and financial aspects related to implementing the intervention, initiating their projects, and navigating the building renovation market with appropriate information tools to achieve greater energy savings and faster return on investment. In a time more critical than ever due to rising energy costs, the urgency to revitalize our region's building stock has become paramount. Therefore, the Help Desk's activities can serve as an indispensable tool for citizens.</p> <p>Numerous national incentive opportunities exist to cover some or most of the costs associated with energy retrofitting private buildings. However, property owners may also encounter various challenges, such as interpreting regulations and incentive mechanisms, identifying professionals or market operators for planning or executing interventions, and estimating required investments, among others.</p> <p>The training and help desk service consists of three online appointments during which experts will clarify several central aspects regarding CER (Community Energy Resilience) and remain available to participants to address their questions.</p> <p>The sessions will cover:</p> <ul style="list-style-type: none"> • The national regulatory framework. • Economic incentives and the legal context of reference. • The construction and management phases of Renewable Energy Communities
Expected/determined outcomes	<p>The initiative endeavors to streamline the process of embarking on energy community renovations, whether on a small or large scale, aiming to make it as accessible as possible. Given the intricate nature of regulations, the multitude of available incentive mechanisms, and the technical specifications involved, individuals may feel overwhelmed by the process, deterring them from pursuing such renovations or installations.</p> <p>This service plays a crucial role in providing essential support to empower individuals to initiate an energy transition confidently. By offering guidance and assistance, it ensures that everyone can navigate the complexities of energy community projects, thus fostering widespread engagement in sustainable energy practices.</p>
references / link:	https://pie.camcom.it/sostenibilita/transizione-energetica/comunita-energetiche-rinnovabili-formazione-e-sportello-le-imprese-del-piemonte https://www.comune.cuneo.it/it/news/dettaglio/periodo/2022/10/24/lo-sportello-energia-piemonte-offre-consulenza-gratuita-ai-cittadini.html#:~:text=Lo%20Sportello%20Energia%20Piemonte%20%C3%A8,consulenza%20personali%20in%20uffici%20dedicati

2.1.3. Sustainable mobility

Measure title	MeBUS - Trasporto a chiamata (on-demand bus service)
Type	Non-binding
Initiator	Piedmont Mobility Agency-Piedmont Region
Location	Turin metropolitan area
Population targeted	250.000 inhabitants
Period of implementation	Since 2008
Description	<p>MeBUS is an on-demand transport service financed by the Piedmont Mobility Agency with resources from the Piedmont Region.</p> <p>It is a call-based bus service.</p> <p>To use the service it is necessary to make a telephone reservation on the toll-free number relating to the area of interest (consulting the sectors on the reference map), indicate on which day and time the service is needed, from where to where, calling at least the day before, and the best available solution will be provided. It costs the same as a normal extra-urban line journey and the ticket can be purchased directly on the bus.</p> <p>MeBUS has been active since 2008 and has grown in recent years in various areas of the Turin metropolitan area (more than 40 municipality)</p> <p>The Service was born from the need to provide a sustainable and flexible solution to the requests for strengthening local public transport made by Municipal Administrations in recent years. With MeBUS the service is used only when really necessary, thus avoiding maintaining underused LPT lines and offering a timely response tailored to the real needs of the user.</p> <p>From 2008 to today, MeBUS has grown both in terms of territories covered by the service, users and kilometers travelled. There are now over 22 thousand people who use the MeBUS annually, with over 160 thousand km/year travelled.</p> <p>This is an important rationalization of the TPL service offering.</p>
Expected/determined outcomes	Increasing of users and kilometers travelled by using public transport
references / link:	Home (mebus.it)



Measure title	Car tax exemption for Electric vehicles
Type	Non-binding
Initiator	Piedmont Region
Location	Piedmont region
Population targeted	
Period of implementation	From 2008 - on going
Description	<p>The car tax in Italy is an annual car tax, applied to all vehicles in circulation, which the owners must pay. This is a tax that must be paid following the regulations in your region of residence.</p> <p>For this reason, individual Regions can provide for particular cases of exemption from this tax, discounts or concessions based on the type of vehicle purchased.</p> <p>A particular case is that of the Piedmont Region, where, owners of vehicles that are totally electric from the outset or powered exclusively by methane or LPG enjoy permanent exemption from paying car tax for an indefinite period. These are among the few cases in which the Regions have agreed not to make those who buy an electric car pay the tax.</p> <p>For dual fuel petrol/methane or petrol/LPG vehicles, from 1 April 2016 there is a five-year exemption from the date of registration. From the sixth year the obligation to pay begins, but the tax is reduced to a quarter for vehicles powered by LPG and a fifth for those powered by methane gas.</p>

Expected/determined outcomes	The expected outcomes of this measure can be summarized Increased Sustainable Mobility: By incentivizing initiatives such as reducing of tax, the Region aims to encourage more people to choose sustainable modes of transportation
references / link:	Esenzioni per autoveicoli elettrici e quelli alimentati a gas metano e gas propano liquido (gpl) Regione Piemonte

2.1.4. Energy flexibility

Measure title	PEAR22 (Piano Energetico Ambientale Regionale)
Type	Non-binding
Initiator	Regione Piemonte
Location	Piemonte
Population targeted	4,356 people
Period of implementation	2022-2030
Description	<p>The project aims to address environmental and energy challenges by developing a comprehensive regional energy and environmental plan. PEAR22 focuses on promoting sustainability, reducing carbon emissions, and enhancing energy efficiency across various sectors such as transportation, industry, and residential areas. The project involves initiatives like increasing renewable energy sources, improving energy infrastructure, implementing energy-saving measures, and promoting sustainable practices. After the approval, in the 2018-2019 biennium, of the various initiatives envisaged by the Clean energy for all Europeans package, presented by the European Commission with the aim of making the Union competitive in the energy transition, and the “Piano Nazionale Integrato Energia e Clima” (PNIEC), significant developments have occurred in Europe with the definition of the Green Deal 2030, which raised the target for reducing CO2 emissions from -40% to -55% by 2030 compared to 1990 and set the goal of net zero emissions by 2050 for the European continent. Furthermore, the recent transposition into national legislation of the Directive on the promotion of renewable energy sources (so-called RED II) is noteworthy. National implementing measures and the updating of the PNIEC are therefore waited for alignment with the new European targets. The Plan takes on a strategic significance projected into the next decade because it provides our territory not only with a planning tool in the energy and environmental fields, whose guidelines will lead us to achieve the objectives stemming from the so-called Clean Energy Package from a perspective of environmental sustainability, competitiveness, and sustainable development, but also because, by enhancing energy and heat from renewable energy sources such as solar, water, biomass, and wind, it puts our region in a position to be less dependent on gas and oil supply and make it as self-sufficient as possible, to safeguard industrial production and civilian electrical use.</p>
Expected/determined outcomes	<p>The PEAR22 sets two main objectives: the first, starting from achieving the goals of the Europe 2020 Strategy, is to align regional policies with those of the Climate Energy package and the PNIEC, anticipating the achievement of the results assigned by the “Strategia Energetica Nazionale”, approved in November 2017; the second - no less important - is to support and promote an entire industrial and research sector, with significant growth opportunities.</p> <p>The strategic planning outlined in the Plan aims to further reduce emissions harmful to health and increase the proportion of energy consumption derived from renewable sources. This will be achieved by decreasing reliance on fossil fuels. In Piedmont, it is projected that energy consumption can be reduced by 30 percent by 2030. More importantly, the aim is to achieve a nearly 50 percent share of regional electricity production from renewable energy sources.</p>
references / link:	https://www.regione.piemonte.it/web/temi/strategia-sviluppo-sostenibile/piemonte-ha-nuovo-piano-energetico-ambientale-regionale-pear2022

2.1.5. Inclusiveness & affordability

Measure title	Free technical assistance service for the energy retrofitting of public buildings
Type	Non-binding
Initiator	Piedmont Region
Location	Piemonte
Population targeted	4,356 people
Period of implementation	2023-tbd
Description	<p>The Piemonte Region invites public entities in the regional territory, either individually or collectively, to express their interest in benefiting from the technical assistance services provided by the GASLESS project, which will be delivered by the Sustainable Energy Development Sector with the active participation of other project partners (Environment Park, PR.I.S.MA., and SCR Piemonte).</p> <p>After conducting a preliminary technical analysis of the buildings, entities whose buildings are selected and deemed suitable from technical, economic, and administrative perspectives for energy retrofitting will have access to free technical assistance services and it will be possible to access the following services, provided free of charge and aimed at energy retrofitting of public buildings:</p> <ul style="list-style-type: none"> • Administrative procedure support; • Preliminary technical analysis of buildings; • Energy audits; • Financial analysis; • Definition of tender notices; • Tender management.
Expected/determined outcomes	<p>The expected outcomes of this measure can be summarized as follows:</p> <ul style="list-style-type: none"> • Increased energy efficiency: By providing support for energy retrofitting, the region aims to improve the energy efficiency of public buildings, leading to reduced energy consumption and lower energy costs over time. • Environmental sustainability: Retrofitting public buildings to be more energy-efficient helps to reduce greenhouse gas emissions and environmental impact, contributing to the region's sustainability goals and commitments. • Cost savings: By optimizing energy use and reducing energy consumption, public entities may achieve significant cost savings on energy bills, allowing them to allocate resources to other important priorities. • Enhanced public infrastructure: Energy retrofitting can improve the overall quality and functionality of public buildings, creating more comfortable and healthier environments for occupants and visitors. • Economic development: The project involves collaboration with various partners, including local businesses and organizations, fostering economic development and job creation in the region's sustainable energy sector
references / link:	<p>https://www.regione.piemonte.it/web/temi/sviluppo/sviluppo-energetico-sostenibile/servizio-gratuito-assistenza-tecnica-per-rigualificazione-energetica-edifici-pubblici</p> <p>https://bandi.regione.piemonte.it/avvisi-beni-regionali/avviso-pubblico-manifestazione-interesse-enti-pubblici-piemonte-supportare-rigualificazione</p>

2.1.6. Other

Measure title	ITACA Protocol
Type	Non-biding
Initiator	Created by ITACA (Institute for innovation and transparency of procurement and environmental compatibility - National Association of Regions and Autonomous Provinces),
Location	Piedmont Region (also in other region of Italy)
Population targeted	4,356 people
Period of implementation	Since 2000
Description	<p>The ITACA Protocol is a tool for assessing the level of energy and environmental sustainability of buildings. Among the most widespread evaluation systems, the Protocol allows the performance of a building to be verified with reference not only to energy consumption and efficiency, but also taking into consideration its impact on the environment and human health, thus promoting the creation of increasingly innovative buildings, with zero energy, reduced water consumption, as well as materials which in their production involve low energy consumption and at the same time guarantee high comfort. The Protocol also guarantees the objectivity of the evaluation through the use of indicators and verification methods compliant with the technical standards and national laws of reference.</p> <p>The Protocol has different purposes in relation to its different use: it is a tool to support planning for professionals, control and guidance for public administration, support choice for the consumer, valorise an investment for financial operators.</p> <p>The ITACA Protocol, born in the early 2000s from the need of the Regions to equip themselves with valid tools to support territorial policies for the promotion of environmental sustainability in the construction sector, was created by ITACA (Institute for innovation and transparency of procurement and environmental compatibility - National Association of Regions and Autonomous Provinces), within the interregional working group for Sustainable Building established in December 2001, with the technical support of iiSBE Italia (international initiative for a Sustainable Built Environment Italy) and ITC -CNR, and approved on 15 January 2004 by the Conference of Regions and Autonomous Provinces. Subsequently, the Protocol was adopted by numerous Regions, as Piedmont, and municipal administrations in various initiatives aimed at promoting and encouraging sustainable construction through: regional laws, building regulations, tenders, urban plans, etc.</p> <p>The Protocol is derived from the SBTool international evaluation model, developed as part of the Green Building Challenge research process, and contextualized to the Italian territory in relation to the reference legislation and its environmental characteristics.</p> <p>The principles on which the tool is based are:</p> <ul style="list-style-type: none"> • the identification of criteria, i.e. the environmental themes that allow the various environmental performances of the building under examination to be measured; • the definition of reference performances (benchmarks) with which to compare those of the building for the purposes of attributing a score corresponding to the relationship between the performance and the benchmark; • the “weighing” of the criteria that determine their greater and lesser importance; • the final synthetic score which defines the degree of improvement of the overall performance compared to the standard level.
Expected/determined outcomes	Assessing the sustainability of construction interventions
references / link:	registroprotocolloitaca.org/protocollo.asp Protocollo ITACA Edifici Regione Piemonte

2.2. Reșița

2.2.1. Energy efficiency

Measure title	Programul Casa Verde - The Green House program
Type	Non-biding
Initiator	The administration of the environment fund
Location	Romania
Population targeted	Individuals and legal persons domiciled in Romania
Period of implementation	Ongoing
Description	Casa Verde is a financing program intended for individuals or legal entities, designed to increase energy efficiency and reduce greenhouse gas emissions, by using renewable resources in family households and/or reducing energy consumption , by using photovoltaic panel systems with a minimum power of 3 kW, for the production of electricity necessary for own consumption and the delivery of the surplus to the national grid. The program represents an important step towards protecting the environment and reducing monthly electricity bills. The program encourages individuals and legal entities to install photovoltaic panels in order to reduce energy consumption.
Expected/determined outcomes	Reduction in overall energy consumption, leveraging renewable energy, and support for environmental protection.
references / link:	https://www.afm.ro/sisteme_fotovoltaiice.php

2.2.2. Sustainable mobility

Measure title	Programul Rabla Plus (Vehicle Replacement Program)
Type	Non-biding
Initiator	Administrația Fondului pentru Mediu (Environmental Fund Administration)
Location	Nationwide, including Resita
Population targeted	Individual and legal entities, both public and private, with professional domicile in Romania
Period of implementation	2020-2024, with provisions for updates and future sessions
Description	The Programul Rabla provides financial incentives to individuals and businesses to replace old vehicles with new, energy-efficient, and non-polluting road transport vehicles. The initiative aims to reduce greenhouse gas emissions in transportation by encouraging the adoption of vehicles with low energy consumption.
Expected/determined outcomes	Decreased emissions of greenhouse gases, reduced energy consumption in transportation, and increased uptake of environmentally friendly vehicles.
references / link:	https://www.afm.ro/vehicule_electrice.php

Measure title	Car tax exemption for Electric vehicles
Type	Non-biding
Initiator	ANAF (National Agency for Fiscal Administration)
Location	Nationwide, including Resita
Population targeted	Owners of electric and hybrid vehicles registered in the municipality
Period of implementation	Ongoing as per the local council's decision
Description	The local council, in accordance with the Fiscal Code, has established tax incentives for owners of electric and hybrid vehicles. Hybrid vehicle owners are eligible for a minimum of 50% reduction in vehicle tax, while owners

	of electric vehicles are exempt from paying this tax altogether. This measure is intended to encourage the adoption of more environmentally friendly vehicles, reduce greenhouse gas emissions, and support the transition to sustainable mobility.
Expected/determined outcomes	Increased ownership of electric and hybrid vehicles, reduced emissions from transportation, and advancement towards the municipality's environmental goals.
references / link:	Legea nr. 227/2015 privind Codul fiscal – Cap IV, art 469. https://static.anaf.ro/static/10/Anaf/legislatie/Cod_fiscal_norme_2023.htm#A468

2.3. Amsterdam

2.3.1. Energy efficiency

Measure title	Zet ook de knop om (Connected to Solar Energy Strategy Points 4,7 and 10)
Type	Non-binding
Initiator	Dutch Government (Ministry of Economic Affairs and Climate Policy)
Location	The Netherlands
Population targeted	Households and offices
Period of implementation	Ongoing (2027)
Description	The campaign encourages households and businesses to adopt energy-saving practices, such as limiting shower time and adjusting thermostat settings. Dutch companies and entrepreneurs are urged to save energy in their premises, including lighting, heating, and ventilation. The government sets an example by reducing heating in 200 government offices by an average of 2 degrees in winter and minimizing cooling in summer.
Expected/determined outcomes	<ul style="list-style-type: none"> Increased adoption of energy-saving practices among households and businesses. Participation of Dutch companies and entrepreneurs in energy-saving initiatives. Reduced energy consumption in government offices.
references / link:	Public: https://zetoothdekнопom.nl/

2.3.2. Innovative technologies

Measure title	Zonatlas Amsterdam (Connected to Solar Energy Strategy Point 10)
Type	Non-binding
Initiator	The Municipality of Amsterdam and Klimaatverbond Nederland
Location	Amsterdam
Population targeted	Residents interested in installing solar panels
Period of implementation	Ongoing
Description	The Zonatlas Amsterdam offers a comprehensive overview of the solar energy generation potential for each roof in the city. By integrating data such as weather conditions, sunlight exposure, roof angles, and shading, the atlas provides precise insights into the suitability of each rooftop for solar energy generation. Leveraging the detailed Actueel Hoogtebestand Nederland (AHN3) dataset in collaboration with cadaster information, it generates a 3D model of the entire city. Key Points: Data Integration: <ul style="list-style-type: none"> Utilizing the AHN3 dataset and cadaster information, the atlas creates a detailed 3D model of Amsterdam.

	<ul style="list-style-type: none"> Analyzing and determining solar irradiance on each roof with a high precision of half a square meter. Eliminates the need for users to input data such as roof angles or building orientation. <p>Calculating Returns:</p> <ul style="list-style-type: none"> Computes the payback period for investing in solar panels on each rooftop. Provides an interactive tool allowing residents to fine-tune calculations, design custom solar installations, and view real-time payback period data. <p>Interactive Features:</p> <ul style="list-style-type: none"> Enables residents in Amsterdam to interactively adjust calculations, create personalized solar installation designs, and explore corresponding payback periods. <p>Environmental Impact:</p> <ul style="list-style-type: none"> Stresses the significance of reducing greenhouse gas emissions and addressing climate change in the context of Amsterdam. Highlights the role of energy efficiency in emission reduction and advocates for transitioning to sustainable energy sources. Emphasizes the environmental benefits of generating electricity through solar panels. <p>Versatile Application:</p> <ul style="list-style-type: none"> Serves as a tool specifically tailored for Amsterdam to promote solar energy on city rooftops. Assists the municipality in assessing the contribution of solar energy to achieving Amsterdam's unique climate goals.
Expected/determined outcomes	Amsterdam wants to stimulate the use of solar energy and has set the following objectives for this: 2022: 250 MW of solar panels (1 million panels) 2030: 550 MW of solar panels, of which 400 MW on large roofs (RES). 50% of the suitable roofs are used. 2040: 1100 MW of solar panels; All suitable roofs are used to generate solar energy.
references / link:	Public: Zonatlas Amsterdam

2.3.3. Ownership of Energy

Measure title	Energiecoöperaties
Type	Non-binding
Initiator	Local residents
Location	Amsterdam (and the Netherlands)
Population targeted	Individuals without suitable rooftops wanting to invest in solar energy.
Period of implementation	Ongoing
Description	Energy cooperatives provide various opportunities. For individuals without suitable roofs, investing in solar energy it is still possible through energy cooperatives. These groups often manage challenging or extensive solar projects. Homeowners associations (VvEs) can seek support for their solar projects through these cooperatives. Individuals with large roofs have the option to make them available through an energy cooperative, offering rentals to nearby Amsterdam residents. Participation in the project is also encouraged, allowing support for those who lack their own roofs.
Expected/determined outcomes	It is expected that 57,500 kWh will be generated annually. A total of 447,026 kWh has already been generated.
references / link:	Example websites of energy cooperatives: home - Ecostrroom.nu Energiecoöperatie Zuiderlicht Energie van lokale bronnen amsterdamenergie.nl WeesperZon Weesp Duurzaam Energie Coöperatie Westerlicht – Duurzaam, schoon en samen. (ecwesterlicht.nl) Zon op Zeeburg - Zon op Zeeburg

2.3.4. Other

Measure title	Tailored Energy Advice for Homeowners' Associations (VvE's) in Amsterdam (Connected to Solar Energy Strategy Point 5)
Type	Non-binding
Initiator	Municipality of Amsterdam
Location	Amsterdam
Population targeted	Homeowners' Associations (VvE's)
Period of implementation	Ongoing
Description	<p>The Municipality of Amsterdam offers free, customized energy advice to Homeowners' Associations (VvE's) through this initiative. Knowledgeable advisors visit VvE properties to assess and recommend energy-saving measures, including the potential installation of solar panels. The energy advisor also assists in the decision-making process within the VvE.</p> <p>The energy advisor covers various aspects:</p> <ul style="list-style-type: none"> • Identifying energy-saving measures. • Recommending suitable solar systems. • Estimating the costs and payback periods for the proposed measures. • Presenting available financing options. • Addressing specific considerations for energy-saving measures in heritage buildings (monumental properties). • Assisting in the internal decision-making process if applicable. <p>How the Advice Works:</p> <ol style="list-style-type: none"> 1. Interested parties submit an application via the registration form. 2. A knowledgeable advisor contacts the applicant to review the registration and schedule an appointment. 3. The advisor conducts an on-site visit, inspecting representative property types and communal areas with the VvE's contact person. 4. Based on the visit, the energy advisor creates a tailored report for the entire VvE. 5. The VvE receives the advice report within 10 days, outlining possibilities for solar panels, energy-saving measures, costs, returns, payback time, financing options, etc. 6. Optionally, the energy advisor revisits to explain the report to the entire VvE. 7. The advisor can assist in the internal decision-making procedure if requested. <p>This free energy advice targets existing VvE's where the majority of apartments are privately owned, excluding new constructions. More information about the application process and other conditions can be found under 'additional information.'</p>
Expected/determined outcomes	The measure aims to improve energy efficiency and reduce costs for participating VvE's, with potential benefits including electricity and gas savings.
references / link:	https://www.amsterdam.nl/veelgevraagd/kan-ik-als-huiseigenaar-of-vereniging-van-eigenaren-we-gratis-advies-krijgen-over-het-besparen-van-energie-en-zonnepanelen-38131-kp

Measure title	Zon op Centrum (Connected to Solar Energy Strategy Points 2 and 4)
Type	Non-binding
Initiator	Municipality of Amsterdam
Location	Amsterdam historical city centre
Population targeted	Residents and property owners in the protected urban area of Grachtengordel (historical city centre)
Period of implementation	Ongoing
Description	The "Zon op Centrum" initiative by the Amsterdam municipality provides assistance to residents and property owners in the protected urban area of Grachtengordel Amsterdam who are interested in installing solar panels. The specialized team offers free advice on possibilities and helps with the application process for a building permit.

	<p>Contrary to common belief, solar panels are often possible on heritage buildings in Amsterdam Centrum. The Zon op Centrum initiative assists property owners in determining the feasibility of solar panels and simplifies the permit application process.</p> <p>The streamlined permit process requires fewer documents for assessment, and in most cases, a limited preliminary investigation is needed.</p>
Expected/determined outcomes	Higher uptake of sustainable measures across residents and property owners in the protected urban area in Amsterdam's city centre.
references / link:	Zon op Centrum: hulp bij zonnepanelen op panden in Centrum - Gemeente Amsterdam

Measure title	De Groene Menukaart (Connected to Solar Energy Strategy Points 2 and 10)
Type	Non-binding
Initiator	De Groene Grachten, developed in collaboration with the municipality and the National Restoration Fund
Location	Amsterdam
Population targeted	Historical building owners and users
Period of implementation	Ongoing
Description	<p>De Groene Menukaart (The Green Menu) is a comprehensive platform designed to guide owners and users of historic buildings, monuments, and protected townscapes in Amsterdam toward energy-saving and sustainable practices. The platform offers:</p> <ol style="list-style-type: none"> 1. Extensive Measures: Over 70 sustainable measures are provided, ranging from quick tips to major renovations. 2. Energy Efficiency and Generation: Information on both energy-saving practices and sustainable energy generation. 3. Tailored for Historic Buildings: Special consideration for monuments and historical structures. 4. Investment and Savings Indication: An overview of the estimated investment and potential savings for each measure. 5. Permit Guidance: Information on when a permit is required for specific measures. 6. Subsidies and Loans: Details on available subsidies and loans to support sustainable initiatives. 7. Downloadable Overview: Users can download a summary of preserved measures for reference. 8. Specific Questions Addressed: Answers to specific questions like installing solar panels on a church, dealing with dampness, and heating old farmhouses with a heat pump. 9. Collaborative Initiative: The Green Menu is an initiative of De Groene Grachten, developed in collaboration with various partners, including municipalities and the National Restoration Fund. 10. Constantly Updated: The platform is regularly updated with the latest information on subsidies, financing, and regulations, making it a central hub for preparing historic buildings for a sustainable future.
Expected/determined outcomes	This initiative is aligned to the general goal of Amsterdam of reduce its CO2 emissions by 55% by 2030 and to 95% by 2050 compared to the reference year 1990. Heat and electricity consumption must therefore be significantly reduced.
references / link:	woonhuizen - Amsterdam (degroenemenukaart.nl)

Measure title	Toolkit Duurzaam Erfgoed (Connected to Solar Energy Strategy Points 2 and 4)
Type	Non-binding
Initiator	Province Noord-holland, Province Gelderland, Cultural Heritage Agency of the Netherlands
Location	The Netherlands
Population targeted	Owners, users and residents of historic buildings
Period of implementation	Ongoing
Description	<p>The website focuses on sustainable solutions for historic buildings that prioritize preserving their monumental values and avoiding technical damage. The toolkit provides practical and tailored guidance, emphasizing coordination of measures for effective results. The toolkit covers structural, installation, energy generation, and behavioural measures. Users can navigate through drop-down menus to find specific problems and corresponding solutions, considering practical feasibility. When a measure conflicts with monument preservation, alternative solutions are suggested. The toolkit offers basic and technical information, including implementation requirements, without endorsing specific product brands. The emphasis is on providing general insights and solutions while allowing flexibility in product choices with small functional differences. Top of Form</p>

Expected/determined outcomes	Higher uptake of sustainable energy measures among owners, users and residents of historic buildings.
references / link:	https://www.toolkitduurzaamergoed.nl/

Measure title	Zoncoalitie (<i>Solar Energy Strategy Point 1.</i>)
Type	Non-binding
Initiator	Alliander (energy grid operator) and the Municipality of Amsterdam
Location	The Netherlands
Population targeted	Property owners (large rooftops) and municipalities
Period of implementation	Ongoing
Description	<p>The Zoncoalitie Association, initiated in 2016 by the Municipality of Amsterdam and Alliander under Amsterdam Smart City, aims to stimulate the solar energy market and contribute to the acceleration of the energy transition. The associated project bureau, established in 2017 independently, informs property owners about solar power possibilities and benefits.</p> <p>The project bureau's advisors are entirely independent, not affiliated with the association's members. They handle subsidy applications, provide unbiased advice on exploitation models, and conduct technical feasibility studies. This results in a project report, enabling providers to submit consistent quotes. Property owners can then choose the most suitable provider from comparable quotes or nominate providers themselves.</p> <p>Zoncoalitie focuses on roofs of approximately 500m2 with high-consumption connections, often owned by real estate investors or funds.</p> <p>Services provided include SDE subsidy applications, technical feasibility studies, obtaining comparable and competitive quotes, advising on exploitation models, offering independent financial advice, and providing guidance on legal and tax aspects of solar power projects.</p>

Expected/determined outcomes	Zoncoalitie assists residents in starting solar energy generation. It guides residents in placing panels on their roofs and connects them with solar cooperative projects.
references / link:	Home - Zakelijke zonnepanelen van A tot Z geregeld (zoncoalitie.nl)

Measure title	Regionaal Energieloket (<i>Solar Energy Strategy Point 4, 5, 6</i>)
Type	Non-binding
Initiator	Various municipalities in the Netherlands
Location	The Netherlands
Population targeted	Home owners and renters
Period of implementation	Ongoing (started in 2014)
Description	<p>The Regional Energy Desk (Regionaal Energieloket) is dedicated to providing a sustainable home for everyone by addressing questions related to home sustainability. They assist in exploring possibilities, understanding subsidies, and finding reliable companies for sustainable measures. Operating on behalf of municipalities, they offer free and unbiased information to homeowners. Additionally, they extend support to renters or those facing energy poverty with practical tips, ensuring that everyone can enjoy a sustainable, comfortable home with reduced energy costs.</p> <p>As an implementation organization for over 100 municipalities in the Netherlands, they leverage their knowledge and expertise to inform and advise building owners on energy-saving measures and broader sustainability initiatives.</p> <p>Municipalities fund their online energy desk and customer service. Construction and installation companies do not pay for a profile page on the energy desk, even if a resident requests a quote through the specialist page. The only scenario where a company pays them is when they take over actual work as part of a project, such as answering resident questions, scheduling appointments, quality assurance, and managing complaints. They maintain equal agreements with all companies to ensure fairness and impartiality.</p>

Expected/determined outcomes	Better informed citizens about possibilities for sustainable energy solutions.
references / link:	Over Rel Regionaal Energieloket

Measure title	Verbeterjehuis Platform (<i>Solar Energy Strategy Point 4</i>)
Type	Non-binding

Initiator	Independent information organization Milieu Centraal, in collaboration with the Netherlands Enterprise Agency (RVO) and the Ministry of National Affairs and Royal Relations (<i>Binnenlandse Zaken en Koninkrijksrelaties.</i>)
Location	Netherlands
Population targeted	Dutch population
Period of implementation	Ongoing since 2019
Description	<p>Verbeterjehuis.nl is a platform designed to assist individuals in saving energy and making their homes more sustainable. The website offers advice tailored to individual situations, addressing questions about home improvements for energy efficiency. The focus is on foundational elements like good insulation and ventilation, with additional steps including solar panels, heat pumps, connections to district heating, solar boilers, and showers with heat recovery.</p> <p>The platform provides informative content on each energy measure, offers a "Verbetercheck" to identify suitable measures for users, calculates the costs and savings of improvements, and includes an "Energiesubsidiewijzer" to check eligibility for subsidies. Users can also find companies to execute these measures through the "Vind een bedrijf" section and explore loan providers in the "Aanbieders van leningen" section.</p> <p>The initiative originated from agreements in the Climate Agreement of June 2019, aiming to reduce greenhouse gas emissions in the Netherlands by half by 2030. Verbeterjehuis.nl consolidates information and advice on energy-saving measures, making it easier for homeowners to take sustainable steps.</p>
Expected/determined outcomes	Education about possible sustainable solutions for housing.
references / link:	Alles over je huis verduurzamen Verbeterjehuis

Measure title	Green Office: Een duurzame gemeentelijke organisatie in 2030 (Connected to Solar Energy Strategy Point 10)
Type	Non-binding
Initiator	The Municipality of Amsterdam
Location	Amsterdam
Population targeted	Municipal Organization Employees
Period of implementation	Ongoing (2030)
Description	Focus on reducing electricity consumption, promoting sustainable alternatives, and increasing the use of electric vehicles among the employees of the municipality. In addition to that the aim is to cover all municipal building rooftops with solar panels by 2030.
Expected/determined outcomes	Quantitative outcomes such as reduced electricity consumption, increased use of electric vehicles, and overall energy reduction.
references / link:	https://www.amsterdam.nl/wonen-leefomgeving/duurzaam-amsterdam/duurzame-gemeentelijke-organisatie-2030/

2.4. Großschönau

2.4.1. Energy efficiency

Measure title	Municipal energy accounting to record the energy consumption data of the municipality's own buildings and identify potential savings
Type	Non-binding
Initiator	The Federal Government of "Lower Austria"; Municipality Großschönau
Location	Municipality of Großschönau
Population targeted	the approximately 1,500 inhabitants of the municipality of Großschönau
Period of implementation	2016
Description	<p>The Lower Austrian Energy Efficiency Act 2012 (NÖ EEG 2012, LGBL No. 7830-0) provides, among other things, the installation of an energy representative for municipal buildings as well as the regular energy accounting for municipal buildings and once a year the preparation and presentation of a community energy report.</p> <p>In the yearly energy report the energy consumption of all municipal buildings is captured in kWh/(m²a), compared with nationwide data and expressed by the categories A to G, where A represents the best and G the worst category. The energy consumption of the whole municipality is provided as well, including recommendations from the energy representative to become more energy efficient.</p>
Expected/determined outcomes	<p>Based on the recommendations of the energy representative the municipality implements energy efficiency measures which will be evaluated in the next period. This helps the municipality to become more and more efficient.</p> <p>One example is the recommendation to exchange all the street lightings to LED, which was implemented in the last years and as a result, electricity consumption has been reduced by approximately 30% since 2019.</p> <p>The recommendation to exchange the oil boiler in the fire brigades and switch to renewable energies was implemented as well, which saves about 2,700 l oil per year.</p>
references / link:	http://www.grossschoenau.gv.at/page.asp/-/e5

Measure title	Energy data survey in households
Type	Non-binding
Initiator	Municipality Großschönau
Location	Municipality Großschönau
Population targeted	the approximately 1,500 inhabitants of the municipality of Großschönau
Period of implementation	2009
Description	<p>The municipality developed a questionnaire for an energy data survey. 50 persons with different backgrounds (from different parts of the municipality, from youngsters to old people, male and female, from auxiliary workers to academics) were trained as "little energy experts" in a crash-course (e.g. about the energy content of different energy sources, the recording of energy consumptions, the conversion from other units to kW and so on) so that they could make the energy data survey. Every household had the possibility to participate on this survey and make an appointment with one of the 50 "energy experts", where the consumption of heat and electricity and information concerning the mobility behaviour of the citizens of Großschönau were collected.</p>
Expected/determined outcomes	<p>69 % of the households of the municipality participated in the energy data survey. The municipality developed an energy certificate for all these households that includes heat, electricity and mobility and shows the result of the specific household as well as the average result of the municipality and gives an insight in what would be possible. Further, every household got a 4-page report with information concerning the energy content and the costs of different energy sources. The results were presented in a final event, as well. In further information events and articles in the local newspaper suggestions for improvements were introduced.</p> <p>Thus, the energy awareness of the citizens of the municipality of Großschönau could be raised, especially of the 50 persons who were trained as little energy experts. These people could act as multipliers in the following years.</p>

references / link:	Direct contact with municipality representatives
Measure title	Ongoing public relations work on climate protection, environmental protection and the energy transition in the municipal newspaper
Type	Non-binding
Initiator	Maria Eichinger, a councillor of the municipality Großschönau
Location	Municipality Großschönau
Population targeted	the approximately 1,500 inhabitants of the municipality of Großschönau
Period of implementation	2015
Description	The local newsletter of the municipality is published 4 times a year and spread in all households in the municipality (edition: 580 pieces). Maria Eichinger, councillor of the municipality, uses this opportunity to reach nearly all of the inhabitants for awareness raising concerning topics like climate and environmental protection and the energy transition. Each time, she selects a different topic – for example because it fits to the season in case of gardening work and biodiversity or because of actual occasions like the raising energy costs. On one or two pages, she describes this topic and gives tips for citizens, what they can do in their everyday life and how they can contribute.
Expected/determined outcomes	Not only because of the ongoing public relation work, but also due to many other measures, the inhabitants of the municipality of Großschönau have a well-developed energy and environment awareness. This is very important to advance the energy transition and force work on climate change and climate change adaptation.
references / link:	Direct contact with municipality representatives

2.4.2. Renewable energy

Measure title	Initiative “fossil fuel free” – conversion from oil heating to renewable energy
Type	Non-binding
Initiator	The Federal Government of “Lower Austria” in cooperation with the Climate and Model Region Lainsitztal
Location	Lower Austria
Population targeted	About 8,000 inhabitants of the Climate and Energy Model Region Lainsitztal
Period of implementation	2019 - 2022
Description	Since 2019, the Climate and Model Region Lainsitztal, together with the Lower Austrian Energy and Environment Agency, has been supporting the population in switching to environmentally friendly heating systems. With the help of an “all-round carefree package”, the aim is to encourage as many oil heating system operators as possible to convert their heating systems. This package includes advice on subsidies, professional advice from an energy consultant and special services such as vouchers for 4 tons of pellets when switching to a pellet heating system or discounts from selected heat pump manufacturers in the region.
Expected/determined outcomes	The 6 municipalities in the climate and energy model region set a good example by converting all municipal buildings and facilities to sustainable heating systems. In the private sector, 50% of the remaining fossil fuel heating systems were also converted to renewable heating systems. Over 200 households have now switched away from oil and gas. This means contracts worth around €3.5 million for the regional installers and subsidies of around €2 million for the residents of the Climate and Model Region Lainsitztal. An annual CO ₂ saving of 7 tons was calculated for a boiler replacement from oil to pellets in a private household.
references / link:	https://www.kem-lainsitztal.at/wir-sind-raus-aus-dem-oe/ https://www.kem-lainsitztal.at/gemeinsam-raus-aus-dem-oe/

Measure title	PV and solar system funding from the municipality
Type	Non-binding
Initiator	Municipality Großschönau

Location	Municipality Großschönau
Population targeted	approximately 1,500 inhabitants of the municipality of Großschönau
Period of implementation	Since 2008
Description	The municipality of Großschönau grants one-off, non-repayable subsidies in the following amounts for the installation of solar, photovoltaic, wind and hydropower systems in private homes: For solar systems: From 6 m ² to 12 m ² of solar cells: € 250 For each additional m ² : €20 (maximum €400) For photovoltaic, wind power and hydroelectric systems: Per kWp: €40 (maximum €400) The above-mentioned values are the currently valid subsidies, which have varied in former years.
Expected/determined outcomes	About 750 kWp of PV systems could be funded with this subsidy up to now and about 3 300 kWp were installed in this period. This means that Großschönau has an output of 2.7 kWp per inhabitant.
references / link:	http://www.grossschoenau.gv.at/page.asp/-/formulare Direct contact with municipality representatives

Measure title	Municipal photovoltaic systems
Type	Non-binding
Initiator	Municipality Großschönau
Location	Municipality Großschönau
Population targeted	The municipality itself
Period of implementation	2009 - 2022
Description	All public buildings in the municipality of Großschönau with a potential area are equipped with photovoltaic systems: elementary school, municipal office, kindergarten/day care facility, fire station Großotten and Friedreichs, building yard and sewage treatment plant in Rothfarn. A PV system is also planned for the roof of the building yard extension. In addition, an electricity storage system with a capacity of 122 kWh including emergency power function was installed in the elementary school. The FTTH data line center for the municipalities of Großschönau, Bad Großpertholz and St. Martin is located there. The storage system therefore enables the maintenance of public information technology/telecommunications in the municipalities, as well as the local heating supply in Großschönau in crisis situations, such as blackouts. The building yard has also already been equipped with a storage system with a capacity of 11.5 kWh.
Expected/determined outcomes	In sum all the PV systems of the municipality produce about 200 MWh clean energy per year.
references / link:	https://www.kem-lainsitztal.at/sonnenstrom-macht-den-bezirk-klimafit/ Direct contact with municipality representatives

2.4.3. Sustainable mobility

Measure title	E-charging stations with free charging until 2023
Type	Non-binding
Initiator	Municipality Großschönau
Location	Großschönau
Population targeted	E-car drivers, that live in or visit Großschönau
Period of implementation	2018 - 2023
Description	In Großschönau 7 charging points for e-cars were installed, 3 for a plug of type 2 with 11 kW and 4 for a plug of type 2 with 22 kW. 2 of them could only be used with a card of the company "ella". 5 could be used for free until the middle of the year 2023 because the municipality overtook the costs and thus enhanced the

	incentives to switch from a fossil to an electric vehicle. Over and above, these charging points use the self-produced energy of one of the photovoltaic systems of the municipality.
Expected/determined outcomes	The free charging stations were an incentive for the whole population of Großschönau to switch from a fossil to an electric car and load for free. There is no data on how many charging processes were made.
references / link:	Direct contact with municipality representatives

Measure title	Free annual pass for public transport issued by the municipality
Type	Non-binding
Initiator	Federal Ministry Republic of Austria – Climate Action, Environment, Energy, Mobility, Innovation and Technology in cooperation with the “ÖBB Personenverkehr AG” (the train company in Austria) and the municipality of Großschönau
Location	Austria
Population targeted	the approximately 1,500 inhabitants of the municipality of Großschönau
Period of implementation	2023
Description	The municipality of Großschönau bought two annual passes that can be shared between different people and used for all public transportations of the “Verkehrsverbund Ost Region (VOR)”, including buses and trains in the Federal States “Lower Austria” and “Burgenland” and all public transportations in Vienna. These two passes can be lent by all persons that have their primary residence in the municipality of Großschönau. There’s an online booking calendar, where the citizens can book the pass. Further, it can be booked by telephone or e-mail or personally in the municipality office. The free loan is limited to a maximum of 3 loans per month and 12 loans per year per person. The ticket will be picked up and returned from the municipal office at the agreed time. If necessary, the card can be picked up the day before if the card is available.
Expected/determined outcomes	The pass was used 228 times in one year.
references / link:	www.schnupperticket.at http://grossschoenau.gv.at/page.asp/-/237.htm

2.4.4. Energy flexibility

Measure title	Projekt GAVE – Determining the potential for load shifting at public facilities in the municipality
Type	Non-binding
Initiator	Sonnenplatz Großschönau GmbH, TU Vienna – ICT Institute of Computer Technology and AIT – Austrian Institute of Technology, founded by the Climate and Energy Fonds
Location	Municipality Großschönau
Population targeted	
Period of implementation	2010
Description	<p>The GAVE project was concerned with user acceptance and the feasibility of technologies for consumer-side energy management (also known as demand side management, demand response, load management). This technology can be seen as one of the key instruments for intelligent power grids of the future. Demand-side management is particularly important because it is foreseeable that the generation side in future energy systems will no longer be as controllable as it is today due to the large number of renewable energy suppliers. To ensure the profitability of renewable energy sources, their supply should be converted as fully as possible into electricity and fed into the grid. Demand side management has an impact on the consumption side, and therefore on people.</p> <p>If the situation is still relatively simple for the control of generation plants (a reduction in feed-in leads to a loss of earnings), the situation with the control of electrical loads is much more complicated. Here, the user</p>

	<p>is restricted in his free decision about the time, duration and sequence of his electrical consumption processes.</p> <p>The municipality of Großschönau tried to find the first valid statements for Austria on the question of feasibility and user acceptance of automated load management. The cross-sector electrical energy consumption of the municipality is modeled using measurement data.</p> <p>Particularly accurate models were used for shiftable loads such as water pumps, air conditioning systems, heat pumps and sewage sludge pumps. Some of the private, public and commercial electricity customers were equipped with sensors and actuators that allow real load shifting to be carried out. The consumers were taking part in a community-wide experiment.</p> <p>The processes equipped in this way were measured and the measurement data was fed into a simulation. In simulation environment, the load shifts carried out for only a few consumers for cost reasons were then scaled to the entire municipality to obtain a statement about the effectiveness of the measures.</p> <p>The aim was to determine how large the load shifting potential of the municipality is without compromising user comfort. In the project, a "best practice catalogue" was drawn up to show, how the integration of flexible loads can work optimally in terms of user comfort and user acceptance.</p>
Expected/determined outcomes	The results of the trial created a lot of experience with such systems and the necessary infrastructure. In summary, load shifting for municipalities is not the method that will solve all the problems of a new grid with many renewable energies, but applying the results of this project in many municipalities would bring relief to the grid.
references / link:	GAVE - Gemeinde Großschönau als virtueller Energiespeicher - Energieforschung - Energieforschung Energieregionen 2011 (ffg.at), page 26 240512 smartgridweek poster gave grossschonau als virtueller energiespeicher (nachhaltigwirtschaften.at)

Measure title	Battery storage in the public school that can offer energy in case of a blackout
Type	Non-binding
Initiator	Municipality of Großschönau
Location	Großschönau
Population targeted	approximately 1,500 inhabitants of the municipality of Großschönau, 1,200 inhabitants of the municipality of St. Martin and 1,300 inhabitants of the municipality of Bad Großpertholz
Period of implementation	2022
Description	The FTTH data line center for the municipalities of Großschönau, Bad Großpertholz and St. Martin lies in the elementary school of Großschönau. The headquarters of the heating plant of the district heating supply for the municipality of Großschönau is also located in this building. An 80,5 kWp photovoltaic system including electricity storage (122 kWh) and emergency power function ensures uninterrupted operation of this regionally important system-relevant infrastructure. The electricity storage system with emergency power function and part of the photovoltaic system were supported by the Climate and Energy Model Region investment funding from the Climate and Energy Fund.
Expected/determined outcomes	The goal of the municipality of Großschönau is to ensure the maintenance of public information technology/telecommunications in the three communities mentioned, as well as the local heating supply in Großschönau, even in crisis situations such as blackouts.
references / link:	Notfallresilienzsystem im Kommunalzentrum Großschönau – KEM & KLAR Lainsitztal (kem-lainsitztal.at)

2.4.5. Energy autarky

Measure title	Waldviertel Energy Pact
Type	Non-binding
Initiator	Martin Bruckner, mayor of Großschönau, and Otmar Schlager from the association "Energy Agency of Regions"
Location	Waldviertel, a part of the Federal State "Lower Austria"
Population targeted	Approximately 217,500 inhabitants of the region Waldviertel concerning to about 100 municipalities

Period of implementation	2013
Description	On the initiative of mayor Martin Bruckner from Großschönau and Otmar Schlager from the “Energy Agency of Regions” and under the auspices of the Waldviertel Economic Forum, a comprehensive “Waldviertel Energy Pact” was created in spring 2013. This is also officially supported by all small regions of the Waldviertel by resolution. The aim of the pact is for the entire Waldviertel region to be able to export an energy surplus from renewable sources by 2030, thereby increasing value creation in the region by at least EUR 400 million (current “energy imports”). Of course, the effects on security of supply and climate protection are just as important as the economic added value.
Expected/determined outcomes	In the year 2019, 41 % of the whole energy mix in the region Waldviertel was produced by renewable energy, thus with district heating systems, logs, biogenic fuels, combustible waste and ambient heat.
references / link:	https://www.wfvv.at/unsere-aktivitaeten/energie.html

Measure title	Energy autarky goals of the “Climate and Energy Model Region Lainsitztal” with the motto “Self-sufficient into the future”
Type	Non-binding
Initiator	Climate and Energy Model Region Lainsitztal
Location	Region Lainsitztal
Population targeted	About 8.000 inhabitants of the Climate and Model Region Lainsitztal
Period of implementation	2009
Description	The “Climate and Model Region Lainsitztal” set itself the following goals:\ <ul style="list-style-type: none"> • Till 2024: power supply from 100% renewable energy sources - in the annual balance • Till 2027: power supply from 100% renewable energy sources incl. external renewable energy supplies • Till 2030: power supply from 100% renewable energy sources produces in the region • Till 2030: 95% of the heat supply from renewable energy sources
Expected/determined outcomes	2020 the region Lainsitztal has a total energy consumption of 354,559 MWh. 61% of the total energy consumption was sourced from renewable energy sources (211,686 MWh). The share of fossil fuels is 39% of total energy consumption. In the electricity sector, 92% of energy currently comes from renewable energy sources. For heat, the percentage of renewables is 80%.
references / link:	https://www.kem-lainsitztal.at/kem-lainsitztal/ueber-uns/

2.4.6. Ownership of energy

Measure title	Establishment of regional energy communities in cooperation with the “Climate and Energy Model Region Lainsitztal”
Type	Non-binding
Initiator	Climate and Energy Model Region Lainsitztal
Location	Region Lainsitztal (consisting of the 5 municipalities Großschönau, Bad Großpertholz, Moorbad Harbach, Sankt Martin, Unserfrau-Altweitra und Weitra)
Population targeted	About 8,000 inhabitants of the Climate and Energy Model Region Lainsitztal
Period of implementation	2023/24
Description	The first regional energy community in Großschönau is currently in the start-up phase. In a first step all production and consumption plants owned by the municipality Großschönau with 32 metering points will participate. In the other member municipalities of the “Climate and Energy Model Region Lainsitztal” - Bad Großpertholz, St. Martin, Unserfrau-Altweitra und Weitra – a further regional energy community will be founded in the year 2024 as they belong to a different substation. Here too, the municipal buildings will be integrated as a first step. As experience is gained, private individuals and businesses throughout the Climate

	and Energy Model Region Lainsitztal will also be invited to participate in these two regional energy communities.
Expected/determined outcomes	By implementing an energy community, the entire population can become part of the energy transition. For the first time, there is an opportunity to make cheaper and cleaner electricity available to everyone involved and to jointly establish a regional electricity marketplace. This can relieve the grid and increase local value creation. The energy community also contributes to the municipality's goal of becoming energy self-sufficient by 2030 and fits in perfectly with the region's slogan "Self-sufficient into the future".
references / link:	https://www.kem-lainsitztal.at/kem-lainsitztal/regionale-erneuerbare-energiegemeinschaft/

Measure title	Citizen participation project with a PV plant of approx. 700 kWp
Type	Non-binding
Initiator	Climate and Energy Model Region Lainsitztal
Location	Region Lainsitztal (consisting of the 5 municipalities Großschönau, Bad Großpertholz, Moorbad Harbach, Sankt Martin, Unserfrau-Altweitra und Weitra)
Population targeted	About 8,000 inhabitants of the Climate and Energy Model Region Lainsitztal
Period of implementation	2018
Description	<p>Since 2018 the Climate and Energy Model Region Lainsitztal offers the construction of photovoltaic systems through a citizen participation model in cooperation with "Helios Sonnenstrom GmbH" from Freistadt.</p> <p>Advantages for roof owners:</p> <ul style="list-style-type: none"> • No expense for roof owners during the first 20 years • Roof owners receive a photovoltaic system as a gift after 20 years • After that, continuous income in your own pocket through further electricity production • Roof owners can choose between 2 models during the 20 years: <ul style="list-style-type: none"> ○ Profit sharing model: Roof owners receive a usage fee in the form of an annual cash payment of €3/kWp (at an electricity price of 8-12 cents). From an electricity price of 14 cents, the roof owners receive additionally 30% of the additional revenue. ○ Electricity usage model: Roof owners have the option of purchasing electricity from the photovoltaic system at a low price. Now, the electricity price is expected to be around 15 cents/kWh. <p>Requirements:</p> <ul style="list-style-type: none"> • South, south-east and south-west facing roof area with at least 200m² available • Examination of the suitability of the location by Helios Sonnenstrom GmbH • If the decision is positive: Operation of the system for 20 years by Helios Sonnenstrom GmbH <p>In the year 2022 the model had to be adapted due to a new law concerning the expansion of renewable energies.</p>
Expected/determined outcomes	37 PV-systems with a total output of 1,086 kWp could be installed.
references / link:	https://www.kem-lainsitztal.at/pv-buergerbeteiligung/ Direct contact with representatives of the Climate and Model Region Lainsitztal

2.4.7. Inclusiveness & affordability

Measure title	Housing subsidy by the municipality of Großschönau
Type	Non-binding
Initiator	Municipality Großschönau
Location	Municipality Großschönau
Population targeted	the approximately 1,500 inhabitants of the municipality of Großschönau
Period of implementation	2010
Description	For the building on a plot of land in Lower Austria, a development tax must be paid to the municipality. The amount of this tax varies among the municipalities. Furthermore, the municipalities can decide independently

	<p>whether and in what way they pay back part of the development fee by means of subsidies. In the municipality of Großschönau this pay back takes place using the described housing subsidy.</p> <p>The municipality of Großschönau has decided to link the housing subsidy to the energy consumption of the newly built building.</p> <p>Basically, builders, who are registered with their main residence in the municipality of Großschönau and who undertake to maintain their main residence here for at least 10 years after completion of the subsidized building, can apply for the municipal housing subsidy. Subsidized are 30% of the development fee and the supplementary fee for a maximum of 900 m² of floor space. In addition, a further subsidy of 10% can be applied for in the case of a heating requirement (reference climate) according to the energy certificate for residential buildings up to 30 kWh/m²a and a further subsidy of another 10% in the case of a heating requirement (reference climate) according to the energy certificate for residential buildings up to 10 kWh/m²a (=passive house construction).</p>
Expected/determined outcomes	A total of 42 grant applications have been approved so far and supported with a total amount of € 156,841.78
references / link:	http://www.grossschoenau.gv.at/page.asp/-/formulare

2.4.8. Other

Measure title	Narrow road width for residential streets
Type	Non-binding
Initiator	Municipality Großschönau
Location	Municipality Großschönau
Population targeted	approximately 1,500 inhabitants of the municipality of Großschönau
Period of implementation	2000
Description	<p>Since 2000 all streets, that are used as footpath and driveways in settlements, are limited to a width of 4 meters and to ensure the safety of pedestrians an allowed speed of 30 km/h. Usual in Austria is a width of 6 meters and additionally a pathway of about 1.2 meters.</p> <p>The edge of the road was paved 2 m wide with gravel turf as a parking strip.</p> <p>Thus, soil sealing within the community can be minimized, which is very important for ensuring water infiltration and preventing floodings.</p>
Expected/determined outcomes	On the one hand lots of investment costs could be saved because 1 m ² sealed area costs between 50 and 100 €. And on the other hand, the sealing of surfaces could be kept to a minimum (only about 50 % in comparison to the usual way).
references / link:	Direct contact with municipality representatives

Measure title	Project of the association INTERKOMM called "Living in Waldviertel" with goals like reducing vacancies in existing settlements
Type	Non-binding
Initiators	5 municipalities in Waldviertel (Etsdorf-Haitzendorf – now called Grafenegg, Hofamt Priel, Horn, Waidhofen/Thaya and Weitersfeld) in cooperation with the company for regional advice "Wallenberger & Linhard Regionalberatung KG"
Location	Waldviertel in Lower Austria
Population targeted	Currently, the association INTERKOMM consists of 64 municipalities
Period of implementation	1999
Description	<p>The aims of the association INTERKOMM are the exchange of experience between municipalities, the sharing of knowledge and resources and the development and implementation of projects from which municipalities and regions benefit in many ways.</p> <p>With its projects, the association aims to support sustainable, regionally appropriate and comprehensive development of the participating municipalities with the following guiding principles:</p> <ul style="list-style-type: none"> • joint practical action by the member municipalities in the form of projects (project competence) • acquisition and handling of information and knowledge (knowledge competence)

	<ul style="list-style-type: none"> • communication with people (social competence) <p>The main goals of the project “Living in Waldviertel” are the reduction of vacancies in existing settlements, the reduction of migration and the generation of influx. This should be achieved through:</p> <ul style="list-style-type: none"> • benchmark systems and individual consulting tools for all member municipalities • a comprehensive homepage with information like available buildings/apartments and building areas and a comprehensive presentation of the region concerning all aspects of life (jobs, health facilities, educational institutions, leisure activities, shopping and cultural facilities, and so on). • A journal that was already published 18 times and delivered in about 300.000 households in Waldviertel, as well as in the nearby big cities Vienna and Linz
Expected/determined outcomes	The Austrian Conference on Spatial Planning (ÖROK) publishes regularly forecasts concerning the population development in the region Waldviertel. Since 2008 these forecasts could be continuously outperformed, except for one year, which means that there is more influx than migration. Only the higher proportion of death compared to births is still causing the population to decline at a slower rate.
references / link:	https://www.wohnen-im-waldviertel.at/ueber-uns/verein-interkomm Direct contact with representatives
Measure title	1 st Climathon of Waldviertel
Type	Non-binding
Initiators	Climate and Energy Model Region Lainsitztal
Location	Waldviertel in Lower Austria
Population targeted	Approximately 217,500 inhabitants of the region Waldviertel concerning to about 100 municipalities
Period of implementation	2022
Description	<p>The association INTERKOMM Waldviertel organized a 24-hour ideas marathon in cooperation with the Climate and Energy Model Region Lainsitztal and the Energy- and Environment Agency of Lower Austria. 25 representatives of municipalities in the region Waldviertel developed ideas in small groups concerning the following topics:</p> <ul style="list-style-type: none"> • Biomass • Mobility and Digitalization • PV-systems and wind energy • Buildings. <p>The groups were accompanied by topic leaders. In addition, experts were connected several times via online conferences to give input and critically reflect on the developed ideas. At the end, the groups presented the ideas they had developed to the jury, who then evaluated it and chose the best ideas. The jury was made up of external representatives as well as all community representatives who took part in the Climathon.</p>
Expected/determined outcomes	<p>One idea was chosen by the jury from every group. This idea was developed in detail by the small groups. The topic leader is now responsible for the implementation of this project.</p> <p>For example, in relation to the topic biomass, the participants tried to find a way to help biomass from Waldviertel achieve price stability. Under the direction of Martin Bruckner, mayor of Großschönau, the following work plan was developed and shall be implemented:</p> <ol style="list-style-type: none"> 1. The largest gas consumers to date (industry) should be offered long-term supply contracts for heat and electricity as a replacement for the previous gas contracts. 2. All biomass heating plants should be converted regulated supply with 7/24 service. 3. In a third step, all private biomass heating systems should be converted. The energy fair “BIOEM”, which has helped to establish automatic biomass firing systems on the market since 1986, can be used as a technology and market platform for this.
references / link:	Der 1. Waldviertler Climathon 2022 Climathon Austria Direct contact with representatives

3. Regulatory measures

3.1. Settimo Torinese

3.1.1. Energy efficiency

Measure title	Bando Efficienza energetica e fonti rinnovabili negli edifici pubblici (Call for Energy Efficiency and Renewable Sources in Public Buildings-Public funding)
Type	Regulatory
Initiator	Regione Piemonte
Location	Piemonte
Population targeted	4,356 people
Period of implementation	2024
Description	<p>The call is aimed at specific categories of regional public entities and promotes investments for reducing consumption and related pollutant and climate-altering emissions in buildings through the implementation of energy efficiency projects and the promotion of the use of renewable energies. Through the resources made available by the FESR, it will be possible to intervene on buildings located in the territory of the Piemonte Region, publicly owned and used for institutional, social, educational, recreational, cultural, and sports activities.</p> <p>The assistance consists of a capital contribution (grant), in accordance with Article 53 of Regulation (EU) 2021/1060 of the European Parliament and of the Council of 24/06/2021, and can cover up to 70% of the eligible investment expenses. The maximum percentage of assistance that can be granted may be increased to 100% in the case of operations carried out by management entities of protected areas and Rete Natura 2000 areas in Piemonte.</p>
Expected/determined outcomes	<p>The expected outcomes of this measure can be summarized as follows:</p> <ol style="list-style-type: none">1. Energy efficiency in public buildings: This action aims to offer beneficiaries the opportunity to make buildings more energy-efficient, thus reducing primary energy consumption and climate-altering and polluting emissions.2. Promotion of the use of renewable energy in public buildings: This action allows public entities the opportunity to reduce climate-altering and polluting emissions through the installation of renewable energy systems for the production of thermal and electrical energy. The interventions under this Action must be combined with energy efficiency measures.
references / link:	https://bandi.regione.piemonte.it/contributi-finanziamenti/bando-efficienza-energetica-fonti-rinnovabili-negli-edifici-pubblici

Measure title	Bando Efficienza energetica e fonti rinnovabili negli edifici pubblici (Call for Energy Efficiency and Renewable Sources in Public Buildings-Public funding)
Type	Regulatory
Initiator	Regione Piemonte
Location	Piemonte
Population targeted	4,356 people
Period of implementation	2024
Description	<p>The call is aimed at specific categories of regional public entities and promotes investments for reducing consumption and related pollutant and climate-altering emissions in buildings through the implementation of energy efficiency projects and the promotion of the use of renewable energies. Through the resources made available by the FESR, it will be possible to intervene on buildings located in the territory of the Piemonte Region, publicly owned and used for institutional, social, educational, recreational, cultural, and sports activities.</p> <p>The assistance consists of a capital contribution (grant), in accordance with Article 53 of Regulation (EU) 2021/1060 of the European Parliament and of the Council of 24/06/2021, and can cover up to 70% of the eligible investment expenses. The maximum percentage of assistance that can be granted may be increased</p>

	to 100% in the case of operations carried out by management entities of protected areas and Rete Natura 2000 areas in Piemonte.
Expected/determined outcomes	The expected outcomes of this measure can be summarized as follows: <ol style="list-style-type: none"> 1. Energy efficiency in public buildings: This action aims to offer beneficiaries the opportunity to make buildings more energy-efficient, thus reducing primary energy consumption and climate-altering and polluting emissions. 2. Promotion of the use of renewable energy in public buildings: This action allows public entities the opportunity to reduce climate-altering and polluting emissions through the installation of renewable energy systems for the production of thermal and electrical energy. The interventions under this Action must be combined with energy efficiency measures
references / link:	https://bandi.regione.piemonte.it/contributi-finanziamenti/bando-efficienza-energetica-fonti-rinnovabili-negli-edifici-pubblici

3.1.2. Sustainable mobility

Measure title	Percorsi ciclabili sicuri (ex DGR 12-5648 del 25/09/2017) – Safe bicycle paths – Public funding
Type	Regulatory
Initiator	Regione Piemonte
Location	Settimo Torinese
Population targeted	46.347 people
Period of implementation	2017-2022
Description	Public funding for the implementation of sections of the VenTo and “Corona di Delizie” Bicycle Paths in San Mauro and Settimo Torinese
Expected/determined outcomes	The expected outcomes of this measure can be summarized as follows: <ul style="list-style-type: none"> • Improved Transportation Infrastructure: Building bicycle paths enhances the municipality's transportation network, providing safer and more convenient routes for cyclists. • Increased Cycling Rates: Accessible and safe bicycle paths can encourage more people to choose cycling as a mode of transportation, leading to reduced traffic congestion and improved air quality. • Environmental Benefits: By reducing reliance on motor vehicles, bicycle paths can help mitigate air and noise pollution and contribute to the municipality's sustainability goals. • Economic Benefits: Investing in bicycle infrastructure can attract tourists and residents who value cycling-friendly environments, boosting local businesses and property values. • Safety Improvements: Separated bicycle paths can increase safety for cyclists by reducing conflicts with motor vehicles and pedestrians, thereby reducing the number of accidents and injuries. • Mode Shift: Encouraging cycling through infrastructure investments can contribute to a shift away from car-dependent transportation systems toward more sustainable and equitable modes of travel.
references / link:	http://www.cittametropolitana.torino.it/cms/comunicati/viabilita/la-citta-metropolitana-vince-il-bando-regionale-per-i-percorsi-ciclabili-sicuri

Measure title	Programma sperimentale di mobilità sostenibile casa - scuola e casa - lavoro (ex dm 208 del 20/7/2016) – Experimental program of sustainable mobility from home to school and home to work - Public funding
Type	Regulatory
Initiator	Ministero della Transizione Ecologica
Location	Settimo Torinese
Population targeted	46.347 people
Period of implementation	2021 – ongoing
Description	The Program involves the financing of projects, prepared by one or more local authorities and referring to a territorial area with a population of over 100,000 inhabitants, aimed at incentivizing initiatives of sustainable

	<p>mobility, including walking bus initiatives, carpooling, car-sharing, bike-pooling, and bike-sharing, the creation of protected routes for travel, even collective and guided, between home and school, on foot or by bicycle, educational workshops and outings with sustainable means, road safety education programs, traffic reduction, pollution reduction, and parking of vehicles near schools or workplaces, also aiming to counter problems arising from sedentary lifestyles. These programs may include the provision of 'mobility vouchers' free of charge to workers who use sustainable means of transportation.</p>
Expected/determined outcomes	<p>The expected outcomes of this measure can be summarized as follows:</p> <ul style="list-style-type: none"> • Increased Sustainable Mobility: By incentivizing initiatives such as walking buses, carpooling, car-sharing, bike-pooling, and bike-sharing, the program aims to encourage more people to choose sustainable modes of transportation, thereby reducing reliance on single-occupancy vehicles. • Enhanced Road Safety: Road safety education programs can help raise awareness about safe transportation practices, reducing the risk of accidents and injuries for all road users. • Traffic Reduction: By promoting alternatives to driving alone, such as carpooling and public transportation, the program aims to reduce traffic congestion, leading to smoother traffic flow and shorter travel times for commuters. • Pollution Reduction: Encouraging the use of sustainable modes of transportation can contribute to a reduction in air and noise pollution, improving air quality and public health.
references / link:	<p>Documento unico di programmazione (DUP), 2023 – 2025, Città di Settimo Torinese https://www.mase.gov.it/pagina/programma-sperimentale-nazionale-di-mobilita-sostenibile-casa-scuola-e-casa-lavoro</p>

Measure title	Limitation of the circulation of particular categories of vehicles for environmental purposes (so-called Environmental ZTL) for the improvement of air quality: ZTL permit for pure electric vehicles
Type	Regulatory
Initiator	Turin Municipality
Location	Turin
Population targeted	Each natural/legal person owner of electric vehicle upon submission of request
Period of implementation	ongoing
Description	<p>The City of Turin, with the resolution of the City Council of 17 October 2023 (act number 637), in derogation of ordinance number. 81355 of 15 April 2015 (relating to the categories of interested parties), has decided to extend, until 31 December 2024, the issuance of a transit permit (Blue category A), free of charge in the traffic zone limited to vehicles " pure electric vehicles" (a vehicle powered exclusively through electric motors. The electricity may come from a battery (battery electric vehicle), solar panel (solar vehicle) or fuel cell (fuel cell vehicle) without the restriction of the registration date and without the restriction of residence.</p> <p>Each natural/legal person can be granted only one circulation permit which is linked to the owner and the vehicle's license plate number. This permit does not exempt you from paying for parking in the blue lines during the established times</p> <p>Allows: Transit and parking on the road surface in the Central ZTL (it is still necessary to pay for parking where applicable)</p> <p>With the exclusion of: Pedestrian areas, streets and lanes reserved for public transport, green areas closed to vehicular traffic</p> <p>Validity: 2 years</p>
Expected/determined outcomes	Pollution Reduction: Encouraging the use of electric modes of transportation
references / link:	Permessi di circolazione in ZTL per veicoli Elettrici puri (Trasporti e Viabilità) (comune.torino.it)

3.2. Reșița

3.2.1. Energy efficiency

Measure title	Energetic and functional rehabilitation
Type	Regulatory
Initiator	The municipality of Resita
Location	The municipality of Resita
Population targeted	The population of Resita Municipality
Period of implementation	2022-2030
Description	Increasing the energy efficiency of at least 800 apartments/private homes and 4 public buildings by 2030. Reduction of non-renewable energy consumption in public institutions with 40% by 2030 Reducing energy consumption
Expected/determined outcomes	
references / link:	Strategia integrată de dezvoltare urbană a municipiului reșița (primariesita.ro): https://www.primariesita.ro/portal/cs/resita/portal.nsf/AlIByUNID/B1056A1679027F7DC2258AE40036AD8C/\$FILE/STRATEGIA%20INTEGRATA%20DE%20DEZVOLTARE%20URBANA%20A%20MUNICIPIULUI%20RESITA%202022-2030.pdf

3.2.2. Renewable energy

Measure title	Setting up a park of photovoltaic panels in Resita Municipality
Type	Regulatory
Initiator	The municipality of Resita
Location	The municipality of Resita
Population targeted	The population of Resita Municipality
Period of implementation	2024-2030
Description	Realization of a new electricity production capacity through the conversion of solar energy
Expected/determined outcomes	Increase in renewable energy capacity, reduction in reliance on non-renewable energy sources, and promotion of green energy within the municipality.
references / link:	https://www.primariesita.ro/portal/cs/resita/portal.nsf/AlIByUNID/B1056A1679027F7DC2258AE40036AD8C/\$FILE/STRATEGIA%20INTEGRATA%20DE%20DEZVOLTARE%20URBANA%20A%20MUNICIPIULUI%20RESITA%202022-2030.pdf https://www.profit.ro/povesti-cu-profit/energie/foto-resita-isi-face-parc-fotovoltaic-pe-o-pasune-20978567

3.2.3. Sustainable mobility

Measure title	The development of sustainable urban mobility by increasing the share of modernized and rehabilitated roads, and the construction of bicycle lanes
Type	Regulatory
Initiator	The municipality of Resita
Location	The municipality of Resita
Population targeted	The population of Resita Municipality
Period of implementation	2021-2027

Description	<p>The development of sustainable urban mobility by increasing by 10% the share of modernized and rehabilitated roads in the municipality of Reșița until 2027 compared to 2020, the increase by 100% of the share of trips by bicycle from the total trips in the urban environment, the construction of at least 5 km of bicycle lanes by 2027, increasing citizen satisfaction by 10% with the quality of public transport by 2027; 100% replacement of current means of public transport with electric ones by 2030.</p> <p>Electric bicycles, rehabilitation and modernization of streets and access roads, rehabilitation of road and pedestrian bridges, roads connecting roads, roads bypassing the Municipality of Resita, water supply and sewerage, as well as non-motorized access in the area of the tourist resort of local interest Secu and connecting it through the non-motorized and car transport infrastructure with the resort of local interest Crivaia, Continuation of the promenade to Lend, Park and Ride Montan overground parking, Park and Ride Central overground parking</p>
Expected/determined outcomes	Enhanced urban mobility, improved quality of public transportation, and contribution to environmental protection by promoting non-motorized transport options.
references / link:	https://www.primariesita.ro/portal/cs/resita/portal.nsf/A1BByUNID/B1056A1679027F7DC2258AE40036AD8C/\$FILE/STRATEGIA%20INTEGRATA%20DE%20DEZVOLTARE%20URBANA%20A%20MUNICIPIULUI%20RESITA%202022-2030.pdf

3.2.4. Inclusiveness & affordability

Measure title	Harmonious development of the central area (new town)
Type	Regulatory
Initiator	The municipality of Resita
Location	The municipality of Resita
Population targeted	The population of Resita Municipality
Period of implementation	2021-2027
Description	<p>Physically and symbolically connecting the old town with the new town/centre.</p> <p>The harmonious development of the central area (the new city) by creating and implementing a regulation of urban aesthetics until 2027. Running a pilot program until 2025 targeting the old area of the Reșița municipality to identify/inventory specific historical and cultural elements (multiculturalism) as well as built heritage that want to be preserved and promoted.</p>
Expected/determined outcomes	
references / link:	<p>Strategia integrată de dezvoltare urbană a municipiului reșița (primariesita.ro)</p> <p>https://www.primariesita.ro/portal/cs/resita/portal.nsf/A1BByUNID/B1056A1679027F7DC2258AE40036AD8C/\$FILE/STRATEGIA%20INTEGRATA%20DE%20DEZVOLTARE%20URBANA%20A%20MUNICIPIULUI%20RESITA%202022-2030.pdf</p>

3.2.5. Other

Measure title	Air quality improvement and monitoring project
Type	Regulatory
Initiator	The municipality of Resita
Location	The municipality of Resita
Population targeted	The population of Resita Municipality

Period of implementation	2021-2027
Description	Reduction of noise, atmospheric and soil pollution so that the municipality of Reșița falls within the limits established by the legal framework until 2024.
Expected/determined outcomes	
references / link:	Strategia integrată de dezvoltare urbană a municipiului reșița (primariesita.ro) https://www.primariesita.ro/portal/cs/resita/portal.nsf/AllByUNID/B1056A1679027F7DC2258AE40036AD8C/\$FILE/STRATEGIA%20INTEGRATA%20DE%20DEZVOLTARE%20URBANA%20A%20MUNICIPIULUI%20RESITA%202022-2030.pdf

Measure title	Construction of underground waste platforms
Type	Regulatory
Initiator	The municipality of Resita
Location	The municipality of Resita
Population targeted	The population of Resita Municipality
Period of implementation	2022-2030
Description	Development of selective waste collection points so that the degree of selective collection reaches 100% in 2030
Expected/determined outcomes	
references / link:	Strategia integrată de dezvoltare urbană a municipiului reșița (primariesita.ro) https://www.primariesita.ro/portal/cs/resita/portal.nsf/AllByUNID/B1056A1679027F7DC2258AE40036AD8C/\$FILE/STRATEGIA%20INTEGRATA%20DE%20DEZVOLTARE%20URBANA%20A%20MUNICIPIULUI%20RESITA%202022-2030.pdf

Measure title	Development of the brand strategy and marketing plan of the Municipality of Reșița
Type	Regulatory
Initiator	The municipality of Resita
Location	The municipality of Resita
Population targeted	The population of Resita Municipality
Period of implementation	2022-2030
Description	Developing a city brand that incorporates elements of existing local identity into a new one paradigm. Adopting a territorial marketing strategy and local identity, initiating a campaign of awareness of at least 3 elements specific to the city brand. Development of a coherent marketing plan to increase the level of identification and adoption of the new brand - development and implementation of at least three urban intervention / urban regeneration projects that directly connect with the new city brand by 2025
Expected/determined outcomes	
references / link:	Strategia integrată de dezvoltare urbană a municipiului reșița (primariesita.ro) https://www.primariesita.ro/portal/cs/resita/portal.nsf/AllByUNID/B1056A1679027F7DC2258AE40036AD8C/\$FILE/STRATEGIA%20INTEGRATA%20DE%20DEZVOLTARE%20URBANA%20A%20MUNICIPIULUI%20RESITA%202022-2030.pdf

3.3. Amsterdam

3.3.1. Inclusiveness & affordability

Measure title	Tax Reduction on Solar Panels (<i>Connected to Solar Energy Strategy Point 2, 3, 4, 5, 6, 7, 8</i>)
Type	Regulatory
Initiator	Dutch Government
Location	The Netherlands
Population targeted	Solar panel owners
Period of implementation	January 2023- present
Description	<p>As of January 1, 2023, the VAT rate for the supply and installation of solar panels on or near a home in the Netherlands is 0%. This applies to both non-integrated solar panels (mounted on roofs or elsewhere) and integrated solar panels (also acting as roofing material). The 0% rate covers various aspects, including the supply and installation of solar panels, necessary work and goods directly related to installation, dismantling followed by installation on another home, and 'Plug and play' solar panels installed on or near a home.</p> <p>Covered by the 0% rate:</p> <ul style="list-style-type: none">• Supply and installation of non-integrated solar panels.• Supply and installation of integrated solar panels (excluding those on new-build homes).• Work and goods directly necessary for the installation and functioning of solar panels.• Dismantling followed by installation on another home.• 'Plug and play' solar panels installed on or near a home. <p>Not covered by the 0% rate (subject to 21% VAT):</p> <ul style="list-style-type: none">• Non-integrated solar panels with multiple functions.• Solar collectors that convert sunlight into heat.• Solar panels on commercial buildings without a residential function.• Solar panels on public buildings and buildings used for public interest activities.• Reinforcement of the roof for solar panel installation.• Milling cabling.• Replacement of the entire fuse box, even if coinciding with solar panel installation.• Supply of a smart meter.• Supply and installation of a bird barrier or snow ramp.• Goods not purchased specifically for solar panel installation.• Supply and installation of a heat pump.• Delivery and installation of a battery pack. <p>Exception for integrated solar panels on new-build homes:</p> <ul style="list-style-type: none">• For installers or suppliers of solar panels, the 0% VAT rate applies to integrated solar panels on new-build homes because they are treated separately from the new-build home. <p>Buyers of new-build homes pay 21% VAT for integrated solar panels as they are considered part of the entire new-build home supply.</p>
Expected/determined outcomes	Higher solar panel installation uptake among homeowners.
references / link:	VAT rate solar panels (belastingdienst.nl)

Measure title	VvE - Winst uit je Woning (<i>Connected to Solar Energy Strategy Point 5</i>)
Type	Regulatory
Initiator	The Municipality of Amsterdam
Location	Amsterdam
Population targeted	Homeowners associations (VvEs)
Period of implementation	Autumn 2023 until

Description	<p>The Winst uit je woning (Profit from Your Home) initiative, in collaboration with the municipality of Amsterdam, offers a collective purchasing program for solar panels and insulation for homeowners' associations (VvE's). This initiative aims to simplify and streamline the process of making homes more sustainable, ultimately leading to significant energy bill savings.</p> <p>Participation in this VvE collective purchasing program is open to those who have received the letter from the municipality of Amsterdam and are members of small VvE's (2 to 8 households) or medium-sized VvE's (9 to 19 households). To join, representatives of the VvE must submit the entire association for a home visit with an independent advisor, and the registration link is provided in the information package email.</p> <p>The available measures during this collective purchasing program include options such as solar panels, floor insulation, and insulated glass. The municipality of Amsterdam's letter specifies which measures are applicable to what VvE.</p> <p>For insulation measures, the VvE receives a collective quote, while each VvE member receives an individual quote for solar panels.</p> <p>The initiative provides a comprehensive information package outlining the process in a clear step-by-step plan. Homeowners can request this information package for free to understand the necessary steps to implement the desired measures.</p> <p>To gain approval for the installation of solar panels, homeowners must organize a General Meeting (Algemene Ledenvergadering - ALV) within the VvE. The information package includes a step-by-step guide on how to collectively decide on installing solar panels. The joint costs are divided over the number of households.</p> <p>In this VvE program, the minimum number of solar panels per apartment is set at four. The allocation is based on the distribution key in the deed of division and each individual's proportional share.</p> <p>It is recommended to inform the insurance provider when acquiring solar panels, as they can be included in the home insurance policy. Specifics may vary depending on the insurance provider.</p> <p>The distribution of roof sections is determined collaboratively among the VvE owners, and Winst uit je woning aims for a fair and transparent allocation based on prior agreements among the VvE members.</p>
Expected/determined outcomes	Higher uptake of solar panels and improved insulation across homeowners' associations.
references / link:	VvE - Profit from your Home (winstuitjewoning.nl)

Measure title	Subsidie Zonnepanelen op Amsterdamse corporatiedaken (Subsidy for solar panels on housing cooperations' rooftops in Amsterdam) (Connected to Solar Energy Strategy Point 5)
Type	Regulatory
Initiator	The Municipality of Amsterdam
Location	Amsterdam
Population targeted	Homeowners associations (VvEs)
Period of implementation	January to May 2022
Description	<p>This subsidy program in Amsterdam aimed to support housing corporations in overcoming barriers to installing solar panels on existing buildings. Only housing corporations with properties in the city of Amsterdam were eligible for this subsidy.</p> <p>Conditions for the subsidy included:</p> <ol style="list-style-type: none"> 1. A maximum subsidy amount of 1 million euros per housing corporation. 2. Installation of solar panels within one year after the subsidy is granted. 3. Subsidies were applicable to future projects, and projects already started are ineligible. 4. Clear documentation of the installation's peak power capacity. 5. Explanation of why installing an equivalent number of solar panels without subsidy is challenging and how the subsidy helps overcome this. 6. Demonstration of how tenants of housing corporations would benefit from the solar panels. <p>The subsidy amount was a maximum of €375 per kilowatt peak power of the solar panel installation, and each housing corporation could receive a maximum of 1 million euros per application period.</p> <p>For subsidies up to €5,000, no accountability was required. Subsidies between €5,000 and €50,000 must be accounted for within 8 weeks after completing the activities, and subsidies above €50,000 must be accounted for after 1 year and 12 weeks.</p>
Expected/determined outcomes	The goal was to increase the number of solar panels on rooftops, benefiting more tenants and creating employment and sustainable job and training opportunities.
references / link:	Restoration Fund Understanding finance, heart for monuments. (restauratiefonds.nl)

Measure title	Sustainability Subsidy Scheme for Owners' Associations (VvEs) <i>(Connected to Solar Energy Strategy Point 5)</i>
Type	Regulatory
Initiator	RVO (Netherlands Enterprise Agency)
Location	The Netherlands
Population targeted	Owners' Associations (VvEs)
Period of implementation	January – December 2023
Description	<p>The scheme provides variable subsidies to Owners' Associations for implementing energy-saving measures or transitioning to natural gas-free heating. This scheme, effective since January 23, 2023, replaces the Energy Saving Own Home Subsidy and the Sustainable Energy Investment Subsidy for VvEs.</p> <p>Eligible measures for subsidy include:</p> <ol style="list-style-type: none"> 1. Energy advice, energy advice with process guidance, and/or the development of a sustainable long-term maintenance plan. 2. Sustainability measures such as insulation, ventilation, and natural gas-free heating (non-PV). 3. Charging point advice (non-PV). <p>Key conditions for the subsidy vary based on the type of measure being applied for.</p> <p><u>Energy Advice:</u> Total Budget: €48,500,000</p> <ul style="list-style-type: none"> • Eligibility: <ul style="list-style-type: none"> • The SVVE is applicable to (mixed) Owners' Associations (VvEs), housing associations, and cooperatives. • What is an Energy Advice? <ul style="list-style-type: none"> • An energy advice offers a comprehensive overview of the current insulation status of the building, delineating energy-saving (insulation) measures and/or sustainable heating options. The report includes advice on the feasibility of options such as connecting to a district heating network, associated costs, and the pros and cons. Additionally, it provides guidance on achieving a Highly Energy-Efficient Package (ZEP) or a Zero-Energy Building (NOM), both allowed if accredited through an umbrella organization. • How to Apply: <ul style="list-style-type: none"> • Per VvE, an application for subsidy can be made once, either for a single building or a group of buildings. • There must be at least one owner-occupied dwelling in the VvE, and the owner must reside there as their main residence. • The subsidy is applied for retrospectively based on the invoice and payment proof. • Applicants should not have received prior subsidy for energy advice from another governing body like a municipality or province. • Subsidy Amount: <ul style="list-style-type: none"> • The subsidy amount is 75% of the invoice (including VAT) but does not exceed the maximum set subsidy amounts.
Expected/determined outcomes	Higher uptake of PV installations across VvEs.
references / link:	Subsidieregeling verduurzaming voor verenigingen van eigenaars (SVVE) (rvo.nl)

Measure title	The Duurzaamheidsfonds (Loan) <i>(Connected to Solar Energy Strategy Point 3, 5, 6, 7, 8)</i>
Type	Regulatory
Initiator	Municipality of Amsterdam
Location	Amsterdam
Population targeted	Companies, social institutions, energy cooperatives or residents' groups
Period of implementation	Ongoing

Description	The Duurzaamheidsfonds (Sustainability Fund) provides affordable loans (1.1 to 1.6% interest) to businesses, social institutions, energy cooperatives, and resident groups for sustainable projects in Amsterdam. These projects include installing solar panels, implementing heat-cold storage, and making buildings more sustainable through energy efficiency. Loans are granted for projects listed on the Duurzaamheidsfonds Measures List, requiring a well-planned project with a balanced budget. The interest rate is 1.6%, but projects with 33% or more self-financing or co-financing are eligible for a 0.5% interest rate reduction, resulting in a reduced rate of 1.1%. Amsterdam-based energy projects with financing needs between €10,000 and €200,000 can apply.
Expected/determined outcomes	Implementation of sustainable project in Amsterdam across businesses, social institutions, energy cooperatives, and resident groups.
references / link:	Sustainability Fund Loan - City of Amsterdam

Measure title	Subsidy for Sustainability initiatives for citizen collectives in Noord-Holland (<i>Connected to Solar Energy Strategy Point 8</i>)
Type	Regulatory
Initiator	Noord-Holland Province
Location	Noord-Holland Province
Population targeted	Citizen collectives in Noord-Holland
Period of implementation	Ongoing
Description	<p>The aim of this subsidy program is to encourage citizen collectives, such as associations, cooperatives, and foundations, to invest in sustainability initiatives in the province of North Holland. Eligible activities include organizing information meetings, hiring experts, deploying employees related to sustainability initiatives, and acquiring necessary equipment for projects. The subsidy covers 100% of necessary costs, up to a maximum of €10,000. The total available subsidy budget is €2023,315.</p> <p>The application process involves preparing necessary attachments, logging in to eHerkenning, and submitting the application. Applications will be processed in order of receipt, and decisions will be communicated within 13 weeks.</p> <p>Some grounds for refusal include infeasible activities or previous grants for the same activities in the current calendar year. Applicants are encouraged to check the implementing regulations for eligibility criteria.</p>
Expected/determined outcomes	Higher uptake of PV in province Noord-Holland.
references / link:	Sustainability initiatives citizen collectives Noord-Holland 2021, subsidy - Province of Noord-Holland

Measure title	Subsidy for Sustainable Initiatives Amsterdam (<i>Connected to Solar Energy Strategy Point 4, 5, 6, 7, 8</i>)
Type	Regulatory
Initiator	The Municipality of Amsterdam
Location	Amsterdam
Population targeted	Residents, entrepreneurs, and societal organizations
Period of implementation	Ongoing
Description	Residents, entrepreneurs, and societal organizations collaborating on sustainable initiatives in Amsterdam can apply for subsidies ranging from €500 to €15,000 from the municipality. The initiatives should align with the themes of the Sustainability Agenda, covering sustainable energy, energy efficiency, circular economy, smart and clean transportation, and climate-resilient urban planning. The subsidy aims to support the preparation phase of initiatives, fostering collaboration, exploring effective measures, financial planning, and building support for implementation. Successful initiatives contribute to the city's sustainability goals, involving and concretizing sustainable practices. The subsidy distinguishes between small (up to €5,000) and large (up to €15,000) applications. Individuals and organizations can apply once for the preparation of a sustainable project aligned with the Agenda for Sustainable Amsterdam, adhering to specific conditions detailed in the information section.
Expected/determined outcomes	Higher uptake of installed energy-saving measures in across residents, entrepreneurs and societal organizations.
references / link:	Subsidie Ruimte voor duurzaam initiatief - Duurzame projecten en Programma's - Gemeente Amsterdam

Measure title	Nationaal Warmtefonds (<i>Connected to Solar Energy Strategy Point 4, 5, 8</i>)
Type	Regulatory
Initiator	Dutch government
Location	Netherlands
Population targeted	Home owners, VvEs and schools
Period of implementation	Ongoing since 2013
Description	<p>The Nationaal Warmtefonds (National Heat Fund) provides responsible and affordable financing for the sustainability of homes and buildings owned by owner-occupiers, homeowners' associations (VvE), and schools. Established in 2013 (formerly known as Nationaal Energiebespaarfonds), the Warmtefonds operates on behalf of the Dutch government, serving as a financier for the energy transition.</p> <p>As a key player in promoting the energy transition for households and educational institutions in the Netherlands, the Warmtefonds collaborates with provinces and municipalities. By December 2022, it had granted over €933 million in Energy Saving Loans, contributing to the financing of more than 153,700 implemented energy-saving measures for 75,000 homes.</p> <p>The Warmtefonds aims to make its financing options accessible to everyone. In addition to the Energy Saving Loan, it has introduced the Energy Saving Mortgage, designed for homeowners with limited borrowing capacity or those whose homes are part of a neighborhood approach by a municipality or housing corporation. These services aim to encourage all residents to participate in the sustainability of their neighborhood or street.</p> <p>With a goal of reaching more than 90,000 households and educational institutions, the Warmtefonds aims to have provided over €1.2 billion in loans for the financing of more than 220,000 realized energy-saving measures by the end of 2023.</p>
Expected/determined outcomes	Implementation of energy-saving measures.
references / link:	Groen licht voor jouw verduurzaming - Warmtefonds

Measure title	Verduurzaming sportaccommodaties Noord-Holland, subsidie (<i>Connected to Solar Energy Strategy Point 8</i>)
Type	Regulatory
Initiator	Noord-Holland Province
Location	Noord-Holland Province
Population targeted	Associations and foundations that own or manage existing sports facilities in the region.
Period of implementation	2023 (to be extended in coming years)
Description	<p>The province provides subsidies for investments contributing to the sustainability of sports facilities, such as solar panels (including roof construction), LED lighting, insulation material, equipment for heat/cold recovery, a heat pump, an energy registration and monitoring system, HR glass, or a solar collector system.</p> <p>The subsidy calculation covers 50% of the necessary costs, up to a maximum of €25,000.</p> <p>The subsidy cap for this program in 2023 is €2,000,000.</p> <p>The main grounds for refusal include activities that are financially infeasible, activities that have started before the application is received, instances where a previous application for the same facility has been approved, and subsidies amounting to less than €5,000.</p>
Expected/determined outcomes	The subsidy program aims to assist associations and foundations in realizing facilities that reduce the environmental impact of existing sports facilities in the province of Noord-Holland.
references / link:	Verduurzaming sportaccommodaties Noord-Holland, subsidie - Provincie Noord-Holland

Measure title	ISDE: Subsidy for making your home more sustainable (<i>Connected to Solar Energy Strategy Point 4</i>)
Type	Regulatory
Initiator	RVO (Netherlands Enterprise Agency)
Location	Netherlands
Population targeted	Homeowners
Period of implementation	Ongoing (updated every year)

Description	<p>The Sustainable Energy and Energy Saving Investment Subsidy (ISDE) offers financial support to homeowners seeking to make their residences more sustainable. Established in 2017, the program has attracted over 160,000 applications this year (2023).</p> <p>Subsidy Amounts:</p> <p>Type of Measure:</p> <ul style="list-style-type: none"> The subsidy amount varies based on the type of sustainability measure. For instance: <ul style="list-style-type: none"> Electric cooking facility: €400 Solar water heater: Up to €4,100 <p>Multiple Measures:</p> <ul style="list-style-type: none"> If multiple measures are implemented within 24 months, the subsidy for insulation measures doubles. Combining insulation with a heat pump, solar boiler, or heat network also increases the subsidy. <p>Calculation Tool:</p> <ul style="list-style-type: none"> Applicants can use the ISDE calculation tool to estimate the total grant amount for multiple measures. <p>Key Points:</p> <ul style="list-style-type: none"> The subsidy aims to encourage sustainable home improvements, including heat pumps, solar water heaters, electric cooking facilities, insulation, and heat network connections. The subsidy amount depends on the type and number of measures implemented. The step-by-step plan and calculation tool assist homeowners in the application process.
Expected/determined outcomes	More sustainable solutions across private housing.
references / link:	ISDE: Subsidy for making your home more sustainable (rvo.nl)

Measure title	Energiebespaarlening (<i>Connected to Solar Energy Strategy Point 4</i>)
Type	Regulatory
Initiator	National Warmtefonds,
Location	The Netherlands
Population targeted	Homeowners
Period of implementation	Ongoing
Description	<p>The loan scheme provides an option for financing energy-saving investments in or around homes. Created by the government, this loan aims to encourage individuals to invest in making their homes more sustainable. The loan features no interest or a low fixed interest rate throughout its entire duration. The borrowed amount is deposited in a construction credit, allowing penalty-free full or partial repayments (with a minimum extra payment of €250). The loan, provided privately, incurs no closing costs.</p> <p>For amounts up to €15,000, applicants can choose between a repayment period of 7, 10, or 15 years. For amounts between €15,000 and €27,000, the options extend to 7, 10, 15, or 20 years. Amounts exceeding €27,000 also offer flexibility in choosing a repayment period.</p> <p>If a person owns a house and has a (joint) income not exceeding €60,000, they can borrow money from the National Warmtefonds at a 0% interest rate.</p> <p>Key conditions include being the owner and occupant of an existing home, a monthly annuity loan structure, borrowing between €1,000 and €27,000 (up to €54,000 for Zero on the Meter, and up to €71,000 for Very Energy-Efficient Package), a 3-month validity for loan applications, and the ability to use 100% of the loan for financing solar panels (and possibly a home battery). All measures must be executed by a contractor or an installer.</p>
Expected/determined outcomes	More sustainable and energy efficient housing in the city.
references / link:	Solar panels - Heat Fund (warmtefonds.nl)

3.4. Großschönau

3.4.1. Energy efficiency

Measure title	Municipal guideline on sustainable construction and renovation of public buildings
Type	Regulatory
Initiator	Municipality Großschönau
Location	Municipality Großschönau
Population targeted	Users of public buildings in the municipality (like kindergarten, elementary school, building yard, municipal office, etc.)
Period of implementation	2021
Description	<p>In 2021, the guideline adopted in 2018 regarding urban planning and architectural tenders and competitions was replaced by the guideline "Sustainable construction and renovation of public buildings in the municipality of Großschönau". This guideline establishes principles for the ecological and energy-efficient construction and refurbishment of public buildings. The following aspects are to be considered:</p> <ul style="list-style-type: none"> • efficient heat demand • efficient use of electricity • renewable energies • limitation of air conditioning (cooling) • health and building ecology incl. ecological procurement. <p>The latest version of the klimaaktiv criteria issued by the Federal Ministry of Climate Action, Environment, Energy, Mobility, Innovation and Technology should be used as the basis for the construction and renovation of public buildings. The highest quality level is to be achieved in the tendering and implementation and verified by the klimaaktiv certification.</p> <p>In any case, the following minimum criteria must be met:</p> <ul style="list-style-type: none"> • Efficient use of heat and electricity • Use of renewable energies for heat and electricity • Health and building ecology incl. ecological procurement • Measures for thermal insulation in summer (avoidance of active cooling) • Consideration of life cycle costs in the cost calculation • Provision for energy consumption optimization • Measures for environmentally friendly mobility. <p>Before constructing new buildings, the refurbishment and use of vacant space should be examined in detail. The lowest possible use of resources through multiple use, renovation and use of vacant space before new construction, as well as extensive avoidance of sealing and land consumption should be aimed for.</p>
Expected/determined outcomes	A ventilation system with heat recovery was installed in the kindergarten. 2023 the extension of the building yard in passive house quality was started and the thermal insulation of the kindergarten is planned.
references / link:	Direct contact with municipality representatives Municipal council decision

Measure title	Municipal council decision on regular further training for employees and e5 team members
Type	Regulatory
Initiator	Municipality Großschönau
Location	Municipality Großschönau
Population targeted	About 20 employees of the municipality and e5 team members, who work as multipliers and thus the whole population of the municipality (approximately 1,500 inhabitants) can profit from this measure
Period of implementation	2021
Description	The municipal council decided on regular energy-related training for employees and e5 team members. Course costs and working hours are covered by the municipality. Focal points:

	<ul style="list-style-type: none"> - Energy management for buildings and facilities (energy accounting) - Specialist excursions and seminars on the topics of environmental protection and nature conservation - Training sessions on environmental responsibility for various target groups - User training (saving energy) - Participation in e5 training courses.
Expected/determined outcomes	Two of the employees of the municipality are qualified as energy experts. The employees and e5 team members participate in about 10-20 workshops per year, covering different topics concerning energy and environment protection.
references / link:	Direct contact with municipality representatives Municipal council decision

3.4.2. Renewable energy

Measure title	Criteria for the dedication of "PV grassland" for the construction of ground-mounted PV systems
Type	Regulatory
Initiator	Municipality Großschönau
Location	Municipality Großschönau
Population targeted	approximately 1,500 inhabitants of the municipality of Großschönau
Period of implementation	2021
Description	<p>The municipality of Großschönau developed a catalogue of criteria for the dedication of "PV grassland". All in all, a maximum of 2 ha can be dedicated. The sites are lined up to the following criteria:</p> <ul style="list-style-type: none"> • Time of personal submission at the municipality • Lower soil climate number should be prioritized (3 levels: till 21, till 23 and till 25) • In case of equivalence, common areas should be given preference over individual owners • A connection point to the electricity grid must be provided. • At least 5% of the electricity generated must be made available to the citizens of the market town of Großschönau free of charge • Consideration of the townscape and landscape • At least 150 meters distance from building land • Written confirmation from a plant operator must be submitted prior to possible dedication <p>If no project is implemented on a dedicated area within 2 years, the municipality reserves the right to re-dedicate the corresponding area.</p> <p>The municipality published this criteria catalog in the local newspaper and asked the citizens to announce available sites. An information event in May 2023 should bring clarification to interested stakeholders and eliminate existing prejudices.</p>
Expected/determined outcomes	20 potential sites could be identified, 2 of them are in the final selection; The implementation is still open. The nature conservation assessment is currently underway.
references / link:	Direct contact with municipality representatives

3.4.3. Sustainable mobility

Measure title	Decision in principle to purchase energy-efficient and environmentally friendly vehicles
Type	Regulatory
Initiator	Municipality Großschönau
Location	Municipality Großschönau
Population targeted	approximately 1,500 inhabitants of the municipality of Großschönau
Period of implementation	

Description	<p>The local council has adopted uniform criteria/requirements for ecologically oriented purchasing. The main prerequisite for any procurement is a careful clarification of requirements.</p> <p>The procurement guidelines apply to the public areas of the municipal office, kindergarten, elementary school, library and building yard in the areas of cleaning, office materials, paper and printing, IT equipment, street lighting, food, civil engineering (sewer and water pipe construction), electricity and vehicles. This resolution also applies to all subsidiaries of the municipality of Großschönau.</p> <p>In the area of "mobility", fuel consumption, the associated emissions and the low pollutant and low noise emissions of new vehicles are particularly relevant. The vehicle must also meet user-friendly, safety-related and ergonomic requirements. It is also important to take life cycle costs into account. When purchasing new cars, an average value of 135 g CO₂/km should not be exceeded. For new delivery vans, an average value of 180 g CO₂/km should not be exceeded.</p>
Expected/determined outcomes	2 electrical vehicles were purchased for the building yard of the municipality, a combi van and a minibus.
references / link:	<p>Direct contact with municipality representatives</p> <p>Decision in principle by the municipal council</p>

3.4.4. Inclusiveness & affordability

Measure title	Municipal council decision for an annual budget for climate-neutral CO ₂ transformation
Type	Regulatory
Initiator	Municipality Großschönau
Location	Municipality Großschönau
Population targeted	approximately 1,500 inhabitants of the municipality of Großschönau
Period of implementation	2021
Description	<p>The municipal council decided on an annual budget for climate-neutral CO₂ transformation: €50 per ton of municipal CO₂ emissions will be made available to promote energy-saving measures and/or the expansion of renewable energy, ideally in the municipal area (e.g. conversion to renewable energy sources for heating, energy-efficient lighting, citizen participation systems, etc.). Not included:</p> <ul style="list-style-type: none"> • major structural investments (new buildings and renovations, transport infrastructure) • distributed energy subsidies • working time (costs) of municipal employees • concepts, expert opinions, studies
Expected/determined outcomes	<p>The CO₂ emissions of the municipality are marginal. There are only some vehicles of the building yard, that need in total about 3,000 l diesel per year. Nevertheless, there are lots of investments concerning sustainability, e.g. 2022 about 150,000 € were invested in the installation of a battery storage in the elementary school, 2023 the extension of the building yard in passive house quality was started and 2024 a PV-system and a battery storage will be installed in the building yard.</p> <p>Thus, the municipality of Großschönau uses more than the needed money for climate-neutral CO₂ transformation.</p>
references / link:	<p>Direct contact with municipality representatives</p> <p>Decision in principle by the municipal council</p>

3.4.5. Other

Measure title	Settlement development concept
Type	Regulatory
Initiator	Municipality Großschönau
Location	Municipality Großschönau
Population targeted	approximately 1,500 inhabitants of the municipality of Großschönau
Period of implementation	1999
Description	Aim of the settlement development concept is the minimization of soil sealing. This concept is binding for land use plannings and foresees e.g. the concentration on proximity to the center and pedestrian connections. Thus, resources for site development (cables, water lines, streets and pavements) can be saved and more plots at the edge of the village can stay for agriculture, forests and biodiversity.
Expected/determined outcomes	Due to the settlement development concepts the streets in settlements are kept as narrow as possible, building land areas became smaller and the municipality concentrated on pedestrian connections to the centre.
references / link:	Direct contact with municipality representatives

Measure title	Municipal council decision on the sustainable organization of events
Type	Regulatory
Initiator	Municipality Großschönau
Location	Municipality Großschönau
Population targeted	approximately 1,500 inhabitants of the municipality of Großschönau
Period of implementation	2021
Description	<p>The municipal council of the municipality of Großschönau has passed a resolution to conserve resources when holding events and to take the following points into account when planning/holding them:</p> <ul style="list-style-type: none"> • Use of predominantly seasonal and regionally produced food and beverages • Organic products should preferably be used • Non-regional foods such as coffee, tea, cocoa and chocolate are sourced from fair trade wherever available • Beverages are purchased in returnable containers (barrels, containers, returnable bottles) if available on the market • Only reusable containers are used for serving drinks to guests • Tap water is offered according to availability and communicated accordingly • Only reusable crockery is used for serving food • Waste is collected in accordance with the regional waste separation system and labelled containers are provided • All printed materials are produced according to the principle of minimal resource consumption • The organizers pay attention to the efficient use of water, electricity, heat and the use of environmentally friendly materials • Where possible, electricity and heat are obtained from renewable sources or self-supply and water-saving sanitary facilities are used
Expected/determined outcomes	In the year 2022 12 events in the municipality of Großschönau could be organized according to the standards of the initiative "Sauberhafte Feste" ("Clean events") of the government of the federal state Lower Austria.
references / link:	Direct contact with municipality representatives Decision in principle by the municipal council