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Current developments and examples of sustainable energy technologies

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Federal Ministry
Innovation, Mobility and Infrastructure
Republic of Austria

Austria's cities as innovative leaders

in climate action and sustainable development

Large, mid-sized and small Austrian towns and cities are preparing for the future: as pioneering cities in the "Climate-neutral City" mission, their aim is to become climate-neutral by 2040 – and in doing so, reducing CO_2 emissions while enhancing quality of life, driving economic growth, and ensuring secure resources for all through innovative solutions.

Photo: Municipality of Ternitz

Cities as drivers of change

Austria's towns and cities are undergoing a radical transformation. As centres for innovation, technology and social change, they have huge potential when it comes to actively shaping the path towards climate neutrality. Around 75 per cent of global CO_2 emissions are generated in towns and cities. At the same time, urban areas consume around 78 per cent of global energy. These figures clearly show that climate objectives can only be achieved with the active involvement of towns and cities.

Photos from L to R: City of Graz, City of Graz, Municipality of Ternitz, Municipality of Tulln

More and more large, mid-sized and small towns and cities in Austria are taking on a pioneering role and implementing innovative measures aimed at achieving climate neutrality as rapidly as possible. Their efforts are supported through the "Climate-neutral City" research initiative of the Federal Ministry for Innovation, Mobility and Infrastructure (BMIMI) and the Climate and Energy Fund, which accompany towns and cities on their path towards climate neutrality.

PIONEERING CITIES SHOW HOW IT WORKS

The public authorities of ten Pioneering cities with more than 50,000 inhabitants have already formed an official partnership with the BMIMI as part of the mission. This partnership is aimed at establishing additional resources, capacities and expertise, and developing strategies and climate-effective solutions for the energy and mobility transformation as well as the circular economy. The Pioneering cities are enshrining the objective of climate neutrality in their administrative structures, driving forward their climate, energy and environmental measures through research, technology and innovation, and implementing the first climate-neutral neighbourhoods. This is creating learning environments that other Austrian communities will be able to benefit from.[1]

SHARING KNOWLEDGE – ACCELERATING PROGRESS

Networking and exchanging knowledge are specifically being promoted as part of the accompanying process. The cities benefit from each other by sharing tried-and-tested technologies, experiences and insights, e.g. from their trial projects. They receive support in this from experts who offer practical guidance and formats for communication on topics such as mobility, buildings and energy, as well as developing urban structures and processes.

GREATER QUALITY OF LIFE FOR EVERYONE

Climate-neutral cities are not just important players when it comes to social transformation. They also offer their residents a higher quality of life – with more green spaces, better air quality, lower energy costs, attractive mobility options, and new jobs in sustainable industries.

In this edition (continuing on from our 4/2024 edition), we present additional large, mid-sized and small pioneering Austrian cities that are developing and implementing different strategies and solutions for their specific challenges on the path towards climate neutrality.

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WANTED: SMALL AND MID-SIZED TOWNS AND CITIES FOR PIONEERING CITY PARTNERSHIP

The "Climate-neutral City" mission is now going one step further: the Climate and Energy Fund is looking for ambitious (pioneering) cities for a partnership between multiple public authorities modelled on that of large cities through its call for proposals, "Pioneering City – Partnership for sustainable small and medium-sized Cities" [2]. The objective is to accelerate efforts to implement climate protection, climate change adjustments and the circular economy in the municipalities. Around EUR 3.6 million in funding is available 2025 for this purpose from the Federal Ministry for Innovation, Mobility and Infrastructure (BMIMI). Small and mid-sized towns that have not yet participated in the Mission can also submit applications for this.

[1] see eia 4/2024: www.energy-innovation-austria.at/issue/eia-2024-04-en/?lang=en

[2] www.klimafonds.gv.at/foerderung/pionierstadt-partnerschaft/

#green without boundaries

View of the city of Villach, photo: Michael Stabentheiner/Region Villach Tourismus Gmbh

Many new impulses for a climate-resilient Villach

Villach's internal city processes are currently focused on further developing the framework conditions needed for sustainable transformation. A specially developed system helps integrate the objective of climate neutrality into all relevant administrative tools.

Villach has some particular challenges to overcome: municipal services such as the electricity supply, district heating and mobility services are operated by third parties and not by the city itself. The city therefore relies heavily on partnerships, having already established the Villach Climate Alliance several years ago in the aim of bringing together all key stakeholders and implementing joint projects. Companies and the city's population are also involved in some pioneering projects. The city currently sees the evaluation and alignment of municipal tools with the objective of climate neutrality as a key lever in the sustainable implementation of climate targets. The human resources required for this purpose were successfully built up within the scope of the partnership with the BMIMI.

THE "CLIMATE FIT"- PROCESS

The city of Villach is implementing a comprehensive internal process as a key governance element aimed at establishing and continuously optimising sustainable, climate-friendly structures, responsibilities and tools. Politicians and the city administration are firmly behind the project. The process is being supervised by Villacher KlimaFit GmbH, a company established by the city. The city has developed a special system for evaluating and adapting all municipal tools, which can be used to assess municipal contracts, guidelines and measures in terms of their level of "climate neutrality maturity" (on a scale of 0 to 9).

Deputy Mayor Sarah Katholnig, Michael Siter (from the Photovoltaics Task Force), Mayor Günther Albel, Ursula Lackner (Head of Sustainability and Energy Management) Photo: City of Villach

"Creating the right framework conditions is the key for us in achieving sustainable transformation", explains Deputy Mayor and Sustainability and Energy Officer Sarah Katholnig. "We want to formulate the framework in such a way that every tool contributes towards the topic of climate neutrality and helps us to achieve our climate targets. We have developed our own classification system for this purpose based on the technology readiness level (TRL)."

The evaluation can be applied for instance to dedicated zoning plans, urban construction contracts and building culture guidelines, as well as to research projects in which the city participates. Around 20 municipal tools are currently being analysed and developed.

THE WESTBAHNHOF DEMO PROJECT

The new municipal requirements are to be implemented, among other places, in the Westbahnhof railway station demonstration area. In cooperation with Austrian Federal Railways (ÖBB) as owner of the land, a new city district is being built here with subsidised and privately financed housing, commercial areas, a nursery school, as well as recreational and green spaces. The framework conditions for developing a climate-neutral neighbourhood at this location were defined by the city and the urban development contract was approved by the city council. The plan for the demo area is to be used as a blueprint for developing further climate-neutral neighbourhoods in Villach.

A PIONEER IN RENEWABLE ENERGY SOURCES

In the next few years, the city of Villach aims to produce more electricity from renewable energy sources than the total amount consumed by all municipal buildings. Villach is a pioneer in the Alpe-Adria region through its development of previously unused municipal land for the purposes of generating solar power. The city's renewable energy community went into operation in summer 2024. The number of production plants has already been increased to 31 and the number of procurement plants to 546. Commissioning of the 3.1 MWp open space PV system represented a milestone. At just under four hectares in size, it is the largest municipal facility in Carinthia. Together with all the other municipal facilities, it reduces CO_2 emissions by 1,200 tonnes per year and is also used for agricultural purposes.

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Linz, Photo: City of Linz/Dworschak

LINZ WITH AMBITION X 3

Achieving climate targets through innovation and cooperation

The city of Linz has developed a broad strategy across multiple organisations in its aim to become climate neutral by 2040. Under the slogan "Linz mit Ambitio3xn" the city is developing sustainable solutions in three key areas of innovation, i.e. in urban administration, in the Franckviertel district and the inter-city transfer of knowledge.

The activities in Linz are based on three strategic pillars: the main pillar is the climate neutrality concept with its 52 measures aimed at reducing greenhouse gas emissions by 90 per cent by 2040 and offsetting a maximum of 10 per cent of remaining emissions. Other important fundamentals are the Linz City Strategy (objectives and methods for holistic urban development) and the Climate Change Adaptation Concept, which was used to develop further specific recommendations and measures for the city.

BUILDING UP RESOURCES STRATEGICALLY

Linz relies heavily on cooperation with external partners on its path towards climate neutrality. The funds from the partnership between multiple public authorities for instance are not only used in the city's own administration, but also for establishing skills and expertise at the municipal partner companies, including LINZ AG für Energie, Telekommunikation, Verkehr und Kommunale Dienste (the city's company responsible for energy, telecommunications, transport and municipal services) as well as GWG Gemeinnützige Wohnungsgesellschaft der Stadt Linz (the non-profit housing association of the city of Linz).

"We have taken an innovative approach in Linz when it comes to establishing skills and expertise by designing a process that covers multiple organisations," explains Hanna Mayrhofer, who heads up the Linz with Ambitio3xn project. "We are convinced that the development of a climate-neutral city is a complex issue that touches on many different areas and that the challenges can only be overcome by working together. We can already see in the second year that our strategy is bearing fruit, with new follow-up projects emerging across various organisations."

INNOVATIVE URBAN PLANNING INSTRUMENTS

Linz is realigning the cooperative planning process and the urban planning committee in order to embed climate neutrality aspects in urban development on a sustainable basis. The tools underwent a comprehensive analysis by the project team and are currently being redesigned to actively integrate key aspects of climate neutrality throughout the entire process – from planning to implementation. "For example, all projects covered by the two instruments are to be reviewed for compliance with the klimaaktiv standards", explains Mayrhofer. "This ensures that urban development is in line with the objectives set out in the city of Linz's climate neutrality concept."

Neighbourhood days in the Franckviertel district, photo: City of Linz

LEARNING FROM ONE ANOTHER

In addition to networking with other pioneering Austrian cities as part of the "Climate-neutral City" mission, the city of Linz is also sharing its expertise and new findings with other cities and municipalities in Upper Austria. The "Upper Austria Climate Governance Dialogue" was organised in spring 2025 as one of the events for this purpose, and around 400 Upper Austrian municipalities were invited[1]. The objective was to discuss challenges and potential solutions on the path towards climate neutrality, thereby creating a space in which knowledge, challenges and helpful experiences could be shared.

Upper Austria climate governance dialogue, photo: City of Linz/Andreas Brugger

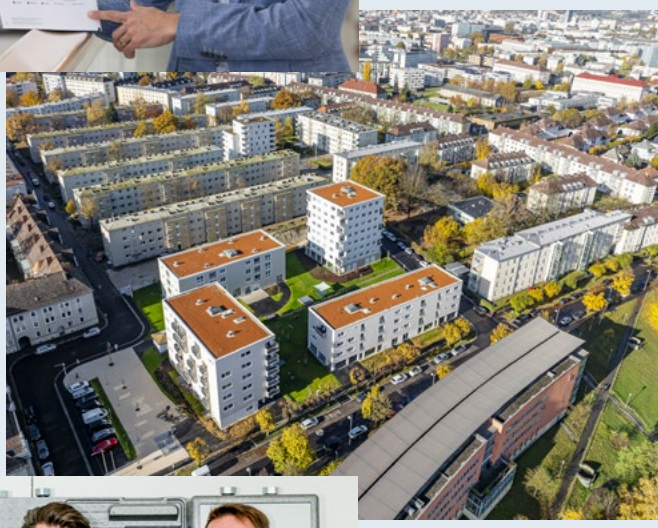
GREENHOUSE GAS MONITORING

A greenhouse gas emissions balance sheet was drawn up for the city of Linz for the first time in 2019 as part of the climate neutrality concept. The city is working on a system for monitoring greenhouse gas emissions at least every two years in order to map their progress towards becoming a climate-neutral city and their remaining GHG budget. The results are presented to Linz city policymakers to help them in their governance processes. "The first presentation took place this October at the extraordinary Climate City Senate meeting on the GHG balance of the city of Linz for 2023", says Mayrhofer.

Establishing city-wide GHG monitoring by Andreas Safron, photo: City of Linz/ Sandra Deimling

THE FRANCKVIERTEL PILOT DISTRICT

Franckviertel is a district of Linz that mostly contains buildings dating from 1919 to 1944. One focus of the project here is the decarbonisation of the energy infrastructure. Many of the buildings and apartments are still supplied with gas, often with a dual infrastructure consisting of gas and district heating, which is expensive to maintain. The objective is to expand district heating, reduce the costly dual infrastructure and encourage and support citizens to switch to district heating.



The Wimhölzel-Hinterland housing scheme in the Franckviertel district, photo: PTU P.H.

FINANCING CLIMATE NEUTRAL BUILDINGS

Housing developers in the non-profit sector depend on Upper Austrian housing subsidies to implement their building projects, yet there are conflicts regarding the current subsidies and aspects of climate neutral construction and renovation. Led by Sonja Bauernschuster from the Pioneering City team, the Linz not-profit housing association GWG is currently working intensively on realigning the funding guidelines. All non-profit organisations in Upper Austria are invited to collaborate in a two-year process as part of the "Gemeinnützige Bauwende OÖ" (Upper Austria Non-Profit Construction Transition) project, which kicks off in the autumn of 2025.

Expansion of district heating by Gerald Schweitzer and Mario Panian, photo: LINZ AG/Doris Reinthaler

klimaneutralestadt.at/en/projects/pioneer-cities/linz-wit-ambitio3xn.php

www.linz.at/umwelt/linzmitambitio3xn.php

[1] www.linz.at/medienservice/2025/202505_131189.php

Public transport to the centre, photo: Schiffer

City logistics, photo: Schiffer

Reininghaus district, photo: Schiffer

THE "HOUSE OF GRAZ" LEADS THE WAY

Together for climate protection

The City of Graz drew up a climate mitigation plan back in 2022, thereby launching a comprehensive process aimed at achieving its climate targets. The starting point for this is the "House of Graz" itself: the Graz city administration and all municipal companies are implementing a number of measures and encouraging more than 8,000 employees to work together towards the climate neutrality objective.

The process began by drawing up an initial climate balance sheet, which showed the specific areas in which CO_2 emissions are generated in the city. Based on that the Graz Climate Protection Plan containing 400 detailed measures for the City of Graz was developed. The strategy is being applied on three levels: the City of Graz itself is leading the way by setting a good example and pursuing the objective of achieving climate neutrality by 2030. The second level involves creating sustainable services, structures and framework conditions for climate-friendly living and business in Graz. Finally, the third level focuses on Graz-based companies' own initiatives as well as the involvement and participation of citizens.

"We want to start decarbonisation with ourselves – at what we call the 'House of Graz'," explains the city's climate protection officer Thomas Drage. "A lot has already been achieved here structurally: our climate team is growing continuously and the topic has been firmly integrated in all relevant areas of administration, such as construction, mobility, energy, procurement and urban planning. New employees in Graz learn about climate protection during onboarding and are involved in the participatory process."

THE "KLIMALICHT" SHOWCASE PROJECT

The "Klimalicht" [1] (Climate light) project is testing climate-friendly lifestyles in a very concret. To this end, a total of 14 employees working for the city administration changed their daily routines entirely in the summer of 2024. Along with their families, they gave up meat, car journeys and air travel for one month, focusing instead on a healthy vegetarian diet and clean forms of mobility. All their journeys were made on foot, by bicycle or using public transport. They then shared their experiences with their colleagues and discussed tips for climate-friendly behaviour. The result: they were able to reduce their carbon footprint by up to 80 per cent. The "Klimalicht project" has also attracted a lot of attention beyond Graz and is currently being implemented for a second time.

PHOTOVOLTAIC MASTER PLAN

In the field of energy, the City of Graz is focusing on renovating buildings, using photovoltaics for own electricity generation and switching to alternative fuel vehicles. The PV master plan [2] laid the foundations for the large-scale construction of municipal PV systems. The plan envisages total investment costs of around EUR 34 million in the first implementation package between 2024 and 2026 and identifies around 50 rooftop sites, two open spaces and a large-scale facility at Graz Airport. This first expansion package (26.5 MW) enables coverage of around one third of the House of Graz's projected total electricity demand of around 79 GWh/a. This will result in savings of approx. 5,700 tonnes of CO_2 emissions, equating to a 12 per cent reduction in CO_2.[3]

ATTRACTIVE MOBILITY OPTIONS AND MORE GREEN SPACES

Enhancing the appeal of sustainable forms of mobility is an important lever in achieving the objective of climate neutrality in Graz by 2040. Numerous measures are therefore being implemented aimed at mobility transformation, including continuous expansion of the public transport network, extension of the cycle path network as part of the Graz cycling initiative and designs for a number of attractive new footpaths. The city is also focusing strongly on urban greening projects and the planning and implementation of additional green spaces, parks and water areas.

On the way, photo: Schiffer

THE CLIMATE PACT: TAKING RESPONSIBILITY

The "Klima-Pakt#bindabei" (Climate Pact) was launched in Graz in 2024 to join forces in Graz. All business people, organisations, associations, companies and stakeholders as well as private citizens were invited to take active responsibility for the objective of climate neutrality by 2040. The pact includes a clear commitment on the part of individuals and organisations to see themselves as part of the solution, to reduce emissions within their own sphere of influence and to encourage others to do the same. By October 2025, 94 companies have already signed the Climate Pact. This will make it possible to reach a total of 50,000 employees on the topic of climate protection. "Companies such as Siemens and Andritz, as well as other major employers such as hospitals and universities, are taking part in the Climate Pact", reports Thomas Drage. "But the pact has also already been signed by lots of one-person businesses and around 500 private citizens. These are important ambassadors who actively discuss the topic within their communities and on social media."

EXCHANGES WITH OTHER PIONEERING CITIES

The City of Graz is using its participation in the "Climate-neutral City" mission to rapidly drive forward its measures towards climate neutrality, to link up with other Pioneering cities and to benefit from exchanging experiences. Many of the insights gained in Graz have already been successfully presented and passed on to others.

"A lively exchange of ideas takes place as part of the support process", explains Doris Wiederwald from the Graz Department for Climate Protection and Funding Projects. "We are able to discuss our experiences in the many topic-based focus groups as well as take away important findings. We presented the Graz Climate Pact for instance within this framework and also exchanged expertise on the topics of carbon accounting and green budgeting. The partnership has resulted in a very dynamic environment where experts from the Pioneering cities work together constructively on equal terms and share their knowledge."

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Klimapakt#bindabei (Climate Pact) for private citizens, photo: MDZ – Markt der Zukunft (Market of the Future)

[1] stadtgraz.buzzsprout.com/2116889/episodes/15261585-projekt-klimalicht-ein-monat-fleisch-und-autofrei-leben

[2] www.holding-graz.at/de/photovoltaik-masterplan-fuer-das-haus-graz/

[3] as at March 2025

Lienz, Photo: Brunner Images

LIENZ

Energy balance based on scientific methods

The town of Lienz is relying on its work with the Austrian Institute of Technology (AIT) when it comes to developing its climate neutrality roadmap. The energy balance shows the details of where the CO_2 emissions arise and where energy savings are possible. Based on this, the town is drawing up its scenario for the future.

The climate neutrality roadmap was based on an energy and CO_2 balance by sector and energy carrier for 2023, as well as a collection of socio-economic and technological data from the town of Lienz.

"We received an excellent qualitative analysis and therefore for the first time detailed figures that we are able to build upon," says Jasmina Steiner from the Location Development, Economy & Marketing Department of the town of Lienz.

Using the AIT model MAED-City, they were able to work out various scenarios for the town's future development. In addition to the reconstructed model for 2023, the experts at the AIT also created a business-as-usual model and a climate neutrality scenario up to 2040. Based on these, the key action areas and steps to be implemented in achieving climate neutrality were then defined. "We see which measure has the greatest effect and what the costs are, i.e. what matches our budget. That`s where we start and we rank the projects in this order", explains Steiner. The plan is that implementation of the measures will be accompanied by a KPI-based monitoring concept in future in order to support tracking for the climate neutrality being targeted.

ATTRACTIVE TOWN CENTRE

The mobility transformation is a key issue, as Lienz is a central hub for the entire region given its role as administrative centre of the Lienz district. "We developed a local pedestrian traffic concept in order to increase active mobility and therefore quality of life in the town centre, and also redesigned around two-thirds of the town centre in recent years as an area that gives priority to pedestrians", reports the project manager.

EXPANDING INFRASTRUCTURE

Expanding the broadband infrastructure is an important prerequisite for the sustainable transformation process in Lienz and the entire region. All of the town's public buildings have had broadband connections since 2017, giving them the infrastructure they need e.g. to use smart energy technologies. Lienz also works with the surrounding municipalities of Planning Association 36 (Lienzer Talboden). The infrastructure has also been expanded across this area in recent years here. For example, there are plans for real-time energy monitoring to be used in future in order to identify and exploit potential savings in public buildings.

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TULLN

Key objectives and measures for climate neutrality

Nibelungenplatz, photo: Municipality of Tulln

Tulln embarked on its journey toward climate neutrality by 2040 with its "Climate-Manifesto" back in 2019. The town is an e5 municipality– part of Austria's national programme for energy-efficient and climate-active communities – and has also anchored climate protection as a central topic in its Local Development Concept (ÖEK). The strategic objectives and necessary measures for the transformation process were laid out in its Climate Framework Strategy.

Deputy leader of the town's Environment, Energy and Water Management Department Ingrid Scharf explains: "Important topics such as energy-related spatial planning and CO_2 monitoring have already been incorporated into our development concept. We were able to use this as a base. The major topic areas were broken down, ongoing and planned projects were summarised and the necessary measures developed to allow us to achieve our climate targets." The Pioneering city project provided important support in this regard.

"Lively exchanges take place with other towns and cities as part of the accompanying support process. We have seen lots of other good examples and have been able to take away some insights for our own process," reports project manager Ingrid Scharf.

>>>> continued on next page

DRIVING THE ENERGY AND MOBILITY TRANSFORMATION FORWARD

The town's wholly-owned energy company, Tulln Energie GmbH, is actively committed to transforming the energy system. It supports, for example, the creation and operation of renewable energy communities such as the Tullnerfeld Energy Community and the Wagram Energy Community, in both of which the town holds a stake. The storage of renewable energy sources for the future is an important topic. Innovative solutions (such as a combination of a PV system and a storage system) are currently being examined for the municipal waterworks. Tulln is focusing on attractive and environmentally friendly services when it comes to mobility. These include the nextbike bicycle sharing system and the LISA Tulln project, an e-shuttle service with more than 50 stops in the town, which also connects to Tullnerfeld railway station.

URBAN DENSIFICATION POLICY

"Careful use of the land is a very important aspect for us when it comes to urban development", says Ingrid Scharf. "This is a policy that has already been laid down in the climate manifesto and the development concept, and which we are currently pursuing with various redensification building projects." One successful project aimed at making the town centre more attractive included the redesign of Nibelungenplatz. The town's residents were able to help shape plans for restoring permeability and greening of the central square, which has now become a popular meeting place and venue for events.

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EISENSTADT

A tree for every resident by 2030

A project team from three municipal departments in the capital of Burgenland province has developed a climate neutrality roadmap with scientific support. The key topics are energy, mobility, buildings, waste and sustainable urban development.

Domplatz city bus, photo: Peter Opitz

Eisenstadt City Hall, photo: Peter Opitz

"Eisenstadt has been committed to sustainability and climate-friendly action for many years, and therefore continuing on our path as a Pioneering city for climate neutrality was just the next logical step", reports Verena Brandt, who is managing the project. Together with experts from Burgenland's research agency Forschung Burgenland as well as the Austrian Institute of Technology (AIT), strategies and measures have been developed over the past few months in order to achieve the objective of climate neutrality by 2040.

SUSTAINABLE TRAFFIC CONCEPTS

Numerous climate-friendly projects have already been successfully implemented in the past in the mobility area. Eisenstadt is a compact city and its residents do not need to rely on cars, as most routes can be covered on foot or by bicycle. The cycle path network and footpaths have undergone significant expansion and been given a more attractive design. The city is also currently making every effort to reduce commuter traffic. Numerous measures are being implemented here to raise awareness and improve existing services. The city bus service has been expanded significantly, with four lines currently running every half hour in the city that are used by around 1,500 passengers every day.

"We switched the buses to electric vehicles at the start of the year," says the project manager. "This was a major step as it means that microtransit and local public transport services in Eisenstadt are now completely emission-free."

MORE GREEN SPACES IN THE CITY

Another key topic is urban greening. Eisenstadt is very active in this area and has set itself an ambitious objective of planting one tree for each of the more than 16,000 residents of Eisenstadt by 2030.

CITIZEN PARTICIPATION

Citizen participation is an integral component in decision-making and transformation processes. A "citizens' budget" of EUR 35,000 is allocated in the budget plan for each district every year. The city's residents have the opportunity of putting forward their own ideas in a participatory process and of developing specific projects, which are then implemented by the city. While the focus was on youth issues in 2024, the budget is expected to be used for climate neutrality projects in the coming year.

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Spring clean, photo: Municipality of Judenburg

Judenburg, photo: Heinz Mitteregger/Foto Mitteregger

Judenburg

Climate protection as a hallmark

Climate protection measures have a long tradition in Judenburg. The town has had its own environmental department since 1986 and upholds a continuous commitment to environmentally friendly development. As a Pioneering city, Judenburg is building on existing concepts and activities and focusing on making the town even more attractive through climate protection and adaptations to climate change.

Environmental protection has long formed part of the town's core values. Judenburg joined the Climate Alliance in 1992 as the second municipality in Styria to do so and has been a member of the e5 programme (for energy-efficient and climate-active communities) since 2006[1]. The municipality is seen as a pioneer and has already received multiple awards. This provided important impetus and firmly anchored the topic of climate protection in the public consciousness. "We have our own municipal utility companies which are wholly owned by us: this is also a key lever", reports Eva Volkar from the municipality's administrative management office. "We are in a good position when it comes to sustainable electricity production. The municipal utility companies operate a hydropower station as well as wind and photovoltaic power plants. They are an important and highly committed partner and also e.g. actively promote the expansion of district heating."

BUILDING ON RESULTS AND ADVANCING CONCEPTS

Judenburg is using its participation in the Pioneering city programme to continue with its successful concepts. The strategy involves building on existing knowledge, restructuring data and results, and leveraging synergies in a targeted manner.

"The first step we took when drawing up our climate neutrality roadmap was to take stock of what we already have", explains project manager Eva Volkar. "This includes e.g. our e5 audit results, our concepts for energy space planning and pedestrian traffic, as well as the results from a large number of studies and programmes. All the available data and results are exploited and incorporated into our roadmap."

The e5 audit provides some guidance, covering the relevant categories, key indicators and, among other things, an online energy accounting system. The municipality is receiving support from the Graz-based company 4ward Energy Research GMBH as a scientific partner in drawing up emissions balances and determining potential savings.

GUIDING ENERGY POLICY AND FLAGSHIP PROJECTS

The town used the annual e5 planning workshop to develop a guiding energy policy that also serves as a vision and objective for the climate neutrality roadmap. The guiding policy defines the key areas of activity and important flagship projects for the coming years. In relation to the energy sector, this includes the renovation and expansion of the municipal power plant (from 6.2 million kilowatt hours to 27.3 million kilowatt hours of electricity production per year) and the expansion of district heating from waste heat from the Zellstoff Pöls industrial plant. Other important projects also include designs for new cycle paths and footpaths, the renovation of the municipality's own buildings, attractive mobility services and measures for adapting to climate change and for revitalising the town centre.

Judenburg relies on strong networks and cooperation with many different stakeholders when implementing all of these projects. The town works closely with partners that include representatives from the municipal utilities and city marketing departments, the Upper Styria and Styria energy agencies and from the province of Styria. Exchanges with the municipalities in the e5 network and with the climate energy model (KEM) and climate change adaptation model (KLAR!) regions are also important.

klimaneutralestadt.at/en/projects/pioneer-cities/judenburg.php

[1] www.e5-gemeinden.at/english/en/e5-programme

Ternitz

Climate neutrality as a cross-cutting issue

The town of Ternitz is able to draw on a wide range of activities and memberships and is using its upcoming organisational reform to integrate the topic of climate neutrality across all relevant areas of municipal administration.

The green heart of the town, photo: Municipality of Ternitz

Ternitz was an e5 municipality, is part of the Schwarzatal KEM region and was named an "Energy Role Model Municipality" in the LEADER region of Lower Austria South in 2023. Ternitz now has the opportunity of focusing on the town's specific individual requirements and potential as part of the Pioneering city programme.

"In my opinion, the Climate-neutral City mission is the tailor-made solution from among the various options available. We are able to improve our strengths here and develop a programme that suits the town well," says Town Administrator Gernot Zottl as he describes the added value of the mission.

The process of developing a climate neutrality roadmap for Ternitz is proceeding in a highly structured manner. It requires broad support at both the political level and throughout the entire administration in order for it to be implemented successfully. "Committed employees who are interested in the topic have offered their services here in all relevant areas of business and they are doing a great job. Following a number of workshops involving the general public, stakeholders and experts, we have developed a vision that forms the basis for the climate neutrality roadmap currently being produced", reports Zottl.

INTEGRATING CLIMATE-RELATED TOPICS

Structural reform is pending currently in the municipality, as responsibilities have shifted within the 20-year-old organisational chart. The town aims to use this process to ensure that the issues of climate protection and sustainability become firmly established components. "Sustainability is an issue that affects many different departments, such as construction, the building authority and public relations", explains Zottl. "We are also planning for instance to do a climate check on all decisions in future. This means that we examine each measure carefully to determine whether it is climate-friendly, climate-neutral or harmful to the climate."

Ternitz solar power plant, photo: Municipality of Ternitz

ENERGY AND MOBILITY TRANSFORMATION

The energy transition has been a key topic in Ternitz for a long time now. The town already has a large number of photovoltaic power plants. One of the first citizen participation models in Austria for PV systems was launched in Ternitz back in 2013 in the form of the Ternitz solar power plant. New approaches and services need to be developed in the area of sustainable mobility. Zottl: "A small town in the Middle Schwarzatal valley faces no practical constraints that would support or encourage the switch from motorised private transport to public transport. There is little in the way of a 'push' here, which makes it all the more important for us to focus on the 'pull' effect, i.e. promoting the appeal of alternative mobility solutions."

RENOVATION OF A WORKERS' HOUSING ESTATE

The "Kooperativ Ternitz" project (Ternitz Cooperative, involving new cooperative models for climate-resilient revitalisation of residential areas) aims to revitalise an old workers' housing estate in a variety of ways. A comprehensive concept for sustainable neighbourhood development is being prepared here, which in addition to the renovation of existing building stock, also involves measures for climate change adaptation, new mobility concepts, local amenities and the revitalisation of public spaces. The close cooperation between the owner SAG Schwarzatal and the charity Caritas Stadtteilarbeit, which brings important social aspects into the development process, represents a forward-looking approach.

klimaneutralestadt.at/en/projects/pioneer-cities/ternitz.php

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