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1. LIST OF SELECTED CITIES

Selected Cities for Analysis: *(members of GNLC ESD Cluster*)*

Bonn, Germany *(GNLC membership since 2020)*

Charleroi, Belgium *(GNLC membership since 2020)*

Derry, UK – Northern Ireland *(GNLC membership since 2019)**

Dublin, Ireland *(GNLC membership since 2019)**

Girona, Spain *(GNLC membership since 2022)*

Glasgow, UK – Scotland *(GNLC membership since 2020)**

Groningen, The Netherlands *(GNLC membership since 2019)*

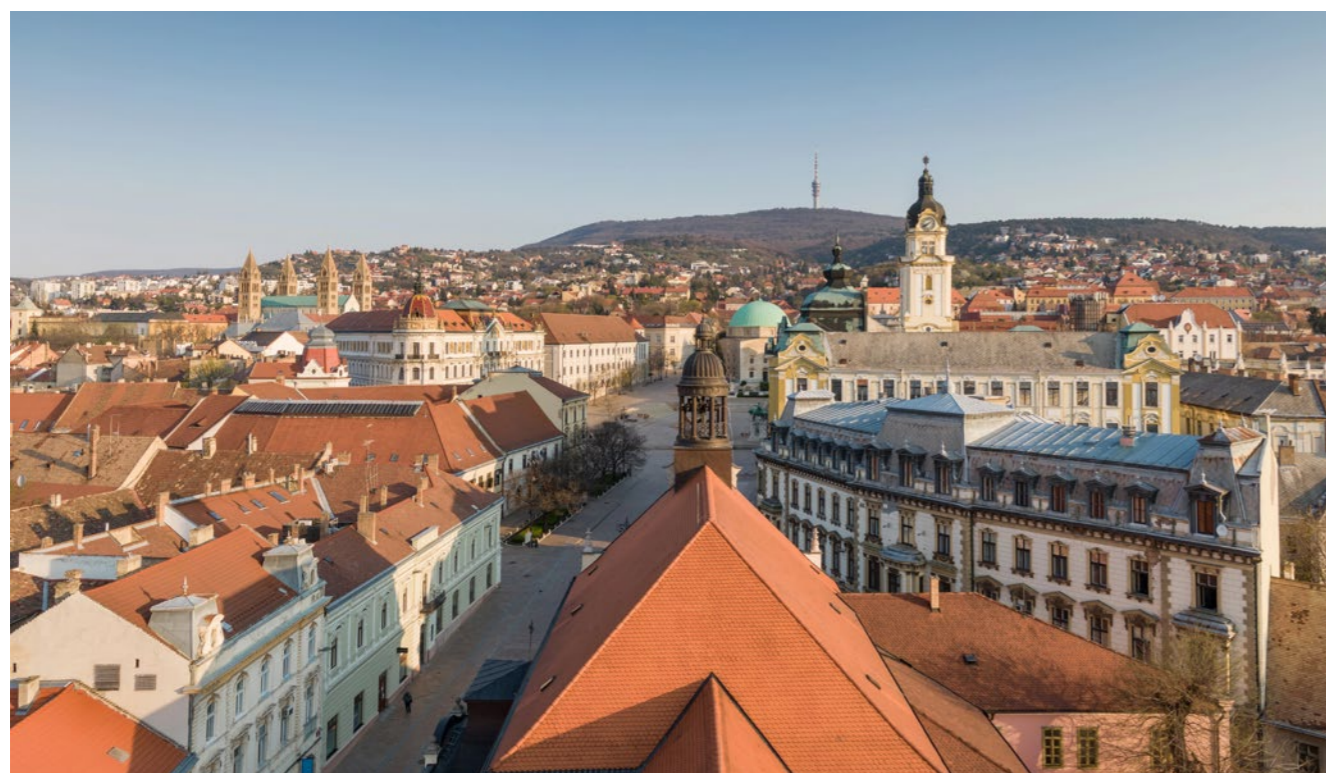
Liège, Belgium *(GNLC membership since 2024)*

Ljubljana, Slovenia *(GNLC membership since 2022)**

Pécs, Hungary *(GNLC membership since 2016)*

Trnava, Slovakia *(GNLC membership since 2022)**

Viladecans, Spain *(GNLC membership since 2016)**



2. FOREWORD

Based on the incoming LEAP II reports from selected learning cities, this short project-work aims at analysing some trends and issues of how learning cities may help in developing the skills and knowledge of citizens in urban communities so as to reach for social cohesion through sharing and transferring knowledge and developing skills through lifelong learning.

The decade-long progress of the UNESCO Global Network of Learning Cities (GNLC) has made it possible to generate a platform for cities across the world to collaborate, on the one hand, in urban developments through specific areas and, on the other, to exchange good practices upon engaging citizens and their communities in order to turn cities into places of smart, creative and learning environments with attention to balanced environments of social, environmental and economic for sustainable futures.

As one of the early-established clusters of GNLC is Education for Sustainable Development (ESD), LEAP II project decided to collect examples of good practice whereby cities of this particular ESD-cluster and cities of other clusters, yet turning attention and majority focuses to climate change, greening and environmental sustainability, would emphasize bridging adult and lifelong learning to developing necessary skills and knowledge for community and citizens having to cope with environmental challenges, climate change based on justice, equity and inclusion.

While UNESCO's 2021 report on ESD implementation Learning Cities underlined the roles and responsibilities of urban communities upon how to respond to climate change and environmental problems by raising knowledge and skills and by sharing effective practices environmental focused lifelong learning (UIL, 2021), the recent communication of ICLC 2024 from Jubail, Saudi Arabia (Jubail Commitment by

3. INTRODUCTION

UIL, 2024) has strengthened our vision and conviction that lifelong learning can effectively help in promoting climate focused education for sustainable development through actions based on engagement and inclusion of citizens through community learning programmes to result in equitable and accessible forms of transformation of urban environments in to green and therefore liveable forms.

An overall aim of this analytical report is to help smaller cities, towns and other respected urban communities become learning cities and learning communities. This report is expected to be considered as a guiding document with references to examples and cases of learning cities' practices as bridges in between citizens and their communities through sustainable solutions, forms of lifelong learning for better urban environment with intercultural and intergenerational collaborations.

LEAP II partners set up a special template as form to work with thematic areas enabling representatives of selected cities to demonstrate specific actions, forms and living examples of urban partnerships in lifelong learning to make ESD focuses real participatory actions which may help other cities to relate to, to learn from, to reflect upon and to compare to. Such approach has helped us in this project to further analyse and to respect diversity by recognising reasons of similarities and differences amongst those selected cities we received reasonable answers, reflections and critical remarks to our questions of LEAP II template.



May we thank here to respondents from selected cities for their support and engagement in sharing with us their good knowledge and experience upon ESD focuses of their cities as UNESCO GNLC member cities.

Five of the selected cities are members of the ESD-cluster of GNLC (*), like Trnava (SK), Glasgow (UK), Dublin (IE), Ljubljana (SI), and Derry (UK), while others like Pécs (HU), Bonn, (DE), Liège (BE), Groningen (NL), Charleroi (BE), Girona (ES), Viladecans (ES) are GNLC members cities not working directly in the ESD-cluster, but have strong focuses on education for sustainable development and clear

commitments towards green and environmental driven practices of climate action supported by adult and lifelong learning. All selected cities are from countries as member states of the European Union. Although, we aimed at selecting cities from each respected regions of Europe, we could not unfortunately receive responses from GNLC members from Scandinavia.

According to LEAP II project principles, our original plan was to provide reports from two GNLC member cities by each LEAP II partner, however, we finally collected twelve reports as completed result for further analysis. The individual reports from selected GNLC member cities are available at LEAP II Share platform for project documentation

Please find below our short analytical report based on our collected findings from LEAP-II reports:

Structure

- Strategic orientations of selected learning cities
- Sustainable development goals currently pursued by selected learning cities
- Specific actions selected learning cities are taking to promote and support ESD goals
- Main stakeholders involved in the development of selected learning cities
- Examples of how selected learning cities promote the development of green competences
- Recommendations for training areas to promote green skills and environmental awareness amongst adults in selected learning cities
- Benefits of becoming a learning city – reflections from selected learning cities
- References

4. STRATEGIC ORIENTATIONS OF SELECTED LEARNING CITIES UPON LIFELONG LEARNING

Learning City **Bonn (DE)** is based on the municipal sustainable strategy (2019) to follow the motto ‘Building Sustainability in Bonn on Books, Bytes and People’. Through education and lifelong learning, existing potentials and commitment of people and institutions in **Bonn** are to be used even further when it comes to finding solutions for a truly sustainable city. The initial focus is on informal learning opportunities, especially in areas of climate-friendly action, economic sustainability and cultural and social participation.



Charleroi's (BE) approach to lifelong learning aligns with priorities of its City Project Plan 2019–2024 which lays out seven particular key actions to create a more sustainable, inclusive and citizen-centred city. While **Charleroi** does not have a specific lifelong learning strategy, principles of lifelong learning are embedded within its broader plan supporting education, skills-building and civic engagement to meet the needs of its diverse population. This plan highlights gender balance as a cross-cutting priority, ensuring that all lifelong learning programmes and public services are accessible and empowering for women and men alike. **Charleroi** reinforces its commitment to lifelong learning, encouraging residents to actively participate in sustainable and inclusive urban community.

Derry (UK) Learning City includes diverse initiatives to promote lifelong learning in their population. It is interesting to highlight here Foyle Learning Community to imply a network of schools and educative centres, Nort West Regional College (NWRC) to provide a wide range of technical and professional courses and workshops, the Learning Cities Festival to celebrate learning, Social Inclusion projects designed and focused on vulnerable groups and Sustainability projects focused on urban agriculture and recycling.

Dublin City's (IE) strategic revolves around sustainability, accessibility and enhancing the overall quality of life for its residents. **Dublin** City Council (DCC) promotes and supports lifelong learning through the **Dublin** Learning City initiative. The purpose of **Dublin** Learning City is to ensure that education and learning is accessible and inclusive for all citizens. They encourage their learners to progress to further and higher education. Together with their community partners in Higher Education Institutes (HEIs), **Dublin** City Council (DCC) and Education and Training Boards (ETBs), they encourage and promote **Dublin** as a welcoming and collaborative city to support all learners, identities and cultures creating a sense of belonging and a learning city for all. They embrace diversity and

celebrate learning cultures in traditional and non-traditional settings. In addition to supporting **Dublin** Learning City, **Dublin** City Council (DCC) celebrates LLL through the annual Learning Festival. DCC also supports LLL through education, community development and social inclusion programmes, e.g. through Learner Support and Engagement Services.

The lifelong learning strategy in **Girona** Learning City (**ES**) is established by the Plan Educativo d' Entorno (Environmental Educational Plan) and seeks to promote educational and social inclusion through the cooperation of many institutions and educational agents. This strategy is framed within the policies of the Generalitat de Catalunya and aims to provide citizens with educational chances, regardless their age, origin or socioeconomic context. The Plan Educativo d' Entorno from **Girona** offers a wide variety of actions and programs focused on the increase of lifelong learning, like adult education programmes, extra-curricular and reinforcement activities for schools, social cohesion activities, library and civic centres' programmes, and alliances and synergies with small local companies to enhance lifelong learning.

Glasgow's (UK) lifelong learning strategy is focused on inclusivity, sustainability, and community engagement. The **Glasgow** Community Learning and Development Plan (2021–2024) promotes digital literacy and financial inclusion through partnerships with local institutions. Key initiatives include outreach programs targeting underserved communities, and **Glasgow's** universities play a major role in fostering environmental awareness and sustainability skills. The city's focus on lifelong learning ties into its broader goal of becoming a climate-resilient, net-zero city by 2030, as seen in the GALLANT project. The implementation of the city's Community Learning & Development Plan is coordinated by **Glasgow** Community Learning and Development Strategic Partnership (GCLDSP).

In **Groningen (NL)**, there is not a specific document on lifelong learning in the city. The official description on the GNLC website says that **Groningen** has a strong cooperation structure that combines education and the labour market. The aim is to make citizens happy and healthy in **Groningen**, with every young person able to grow up to be a healthy and well-adjusted adult. The long-term objectives as a learning city have been established by co-operation and long-term agreements with the city's partners to keep on learning, reflecting, and experimenting. The **Akkoord van Groningen** (the Agreement of **Groningen**) is a collaboration between the municipality, province, knowledge institutions (universities) and the two hospitals in the municipality and region. The strategic agenda is updated every four years to keep with the new development in the main strategic areas of energy, health and digitalization.

Liège (BE) as a Learning City is committed to fostering lifelong learning opportunities for all residents, with a strong focus on sustainability and inclusivity. One prominent initiative is the Green Skills Workshops, which equip citizens of all ages with skills essential for sustainable living, such as energy efficiency, waste management, and sustainable gardening. These workshops, offered through community centres in collaboration with local NGOs, make sustainable practices accessible and relevant to everyday life. Liège's lifelong learning strategy addresses both current economic needs and future sustainability goals, empowering its residents to thrive in an increasingly green economy.

Ljubljana as a Learning City (**SI**) is committed increase the participation of adults in lifelong learning by providing different opportunities for lifelong learning and education. To achieve this goal, The City of **Ljubljana** is ready to provide infrastructure and design programs to make lifelong learning accessible to all adults, regardless of their life situations and other needs. As a learning city, **Ljubljana** provides all citizens with a high-quality life in a green, safe, clean, solidary, tolerant and friendly city, it promotes the city's development into a

learning city in all areas, like education, culture, environmental protection, healthcare, social services, economy, etc. by involving all stakeholders and providing learning opportunities. Also, the City of **Ljubljana** supports diverse artistic creation for all generations, improving the quality of life in the city and protecting and preserving the rich cultural heritage.

Although, the City of **Pécs (HU)** has no strategy on lifelong learning, but Learning City **Pécs** has a strong commitment to environmental, health and cultural/community education with intergenerational and intercultural orientations in a multireligious, multiethnic, therefore, diverse community. As a former cultural capital of Europe from 2010, **Pécs** has aimed at continuing the development and formation effective knowledge transfer as a regional centre of education, science and culture to work for transforming society and economies into a sustainable model based on quality skills as necessary for performance both in social, economic and environmental scopes, for example, in climate actions by being the member of the European NetZero 100-Cities Programme of the EU. Another outstanding format of lifelong learning is the annual Learning City Festival of **Pécs** as a model for community learning with inclusive lifelong learning thematised by local and regional stakeholders, like the University of **Pécs**, learning communities and neighbourhoods and the citizens of **Pécs** as partners of the Learning City Programme.



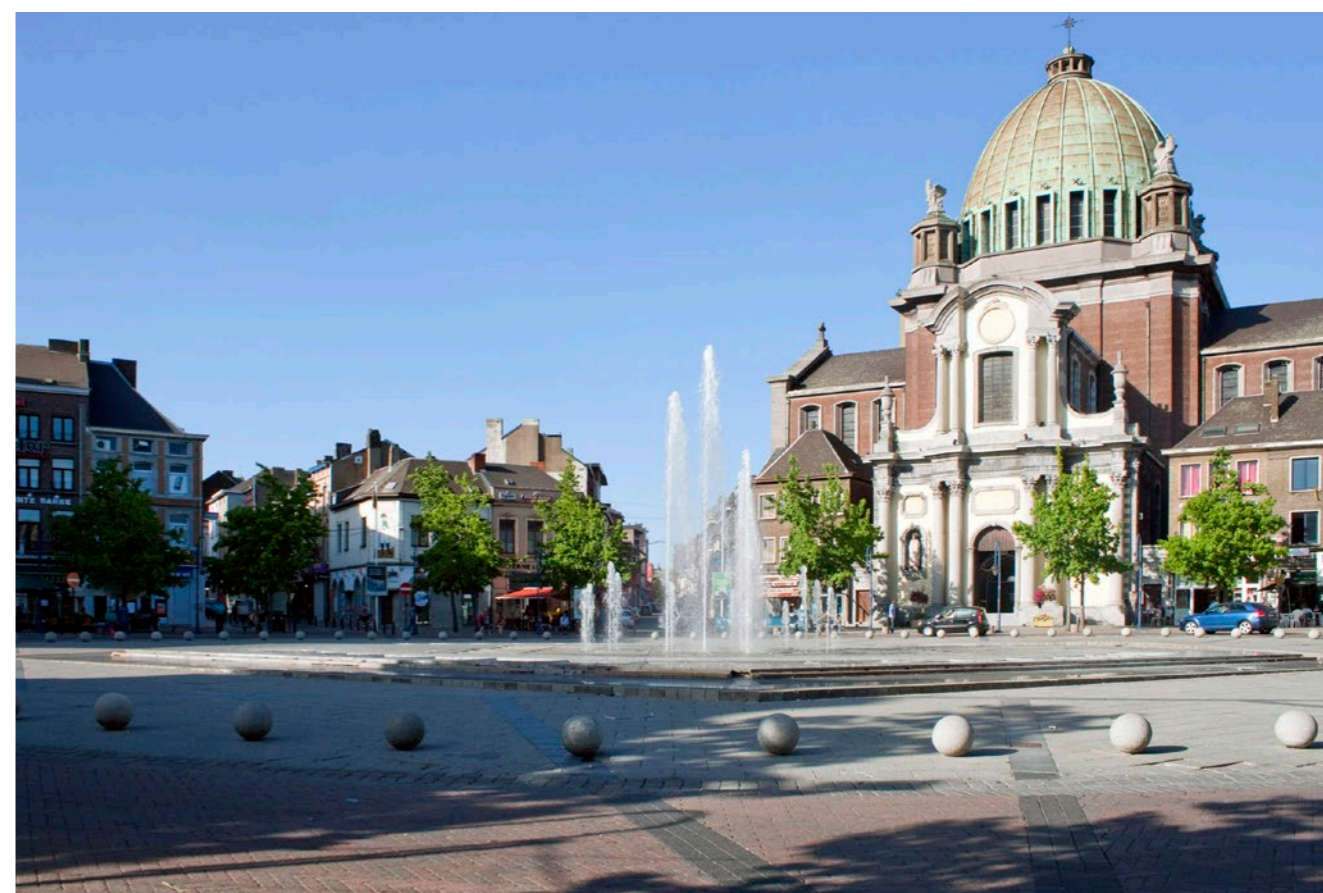
Trnava (SK) does not have a particular Lifelong Learning Strategy, however, the city promotes lifelong learning through a series of strategic initiatives and local programs. In the Low Carbon Strategy for the Municipality of **Trnava** (2022–2027), there are several references to education and lifelong learning related to sustainability. While it emphasizes creating a modern and inclusive education system, improving infrastructure, and promoting lifelong learning for workforce adaptability, it includes enhancing digital skills, supporting professional development, and reskilling citizens for evolving market demands. Also, it does support innovation and entrepreneurship, fostering collaboration between the city, businesses, and academic institutions. Based on the Community Plan of Social Services for **Trnava** (2021–2025), the city also places significant emphasis on education as part of its strategy to address social needs. The plan also supports lifelong learning by offering skills training and community-based learning to improve social inclusion and reduce social risks. Lifelong learning initiatives are specifically targeted at vulnerable groups.

Although, the **Vildecans** City has no specialized strategy on lifelong learning, there is document on The **Vildecans** Strategy 2030 which seeks to make its city more sustainable, educating and caring one. The Strategy was designed through a participatory process. More than 50 people took part in the **Vildecans** 2030 Strategy Steering Group, a governance tool that brings together the public administration with the academic, business and organisational world and they worked with more than 800 inputs from the citizens. There are two main goals - achieving climate neutrality and making **Vildecans** a city with zero school dropouts and where all those born after 2030 have post-compulsory studies. **Vildecans** wants to improve school success rates and expand equal educational opportunities inside and outside the school system through educational innovation and collaboration with relevant stakeholders (such as families, educational centres, associations, and companies).

Sustainable development goals currently pursued by selected learning cities

Learning City **Bonn** is proud of its municipal sustainability strategy to provide an overall framework based on the UN's Agenda 2030 for SDGs and addresses the SDGs by translating them into all municipal fields of action. A particular focus is placed on SDGs 1, 4, 7, 11, 12, 13, 15 and 17. **Bonn** places significant emphasis on fostering knowledge and economic development as part of its education for sustainable development (ESD) policies.

Charleroi's City Project Plan 2019–2024 aligns closely with several Sustainable Development Goals (SDGs), with a particular focus on SDG11: Sustainable Cities and Communities. This goal aims to make cities inclusive, safe, resilient, and sustainable, reflecting the city's commitment to improving urban living conditions, enhancing public spaces, and fostering community engagement. In the scope of SDG4: quality education, **Charleroi** promotes equitable and lifelong educational opportunities for all citizens through its focus on inclusive learning, skill-



building, and accessibility to educational resources. Referring to SDG8: decent work and economic growth, **Charleroi** fosters entrepreneurship and supports local businesses, aiming to create job opportunities and enhance economic growth, especially through training in emerging sectors like green technology and digital skills. As for SDG10: reduced inequalities, the city's emphasis on inclusivity and equality addresses social disparities by offering educational resources, promoting gender equality, and supporting marginalized communities. In accordance with SDG13: climate action, **Charleroi**'s sustainable development actions include programs that raise environmental awareness, encourage green practices, and promote sustainable urban development, thus contributing to climate action. **Charleroi**'s development plan, referring to components of ESD, indicates seven policy priorities as inclusivity and equality, sustainability, effectiveness of public services, Entrepreneurship and business promotion, citizen engagement and democratic participation, a City built for citizens and the Development of a radiant urban centre.

Derry is currently focused on several Sustainable Development Goals (SDGs), including SDG 4: Quality Education – Promoting inclusive and quality lifelong learning opportunities, SDG8: Decent Work and Economic Growth – Enhancing workforce skills and promoting employment opportunities, SDG11: Sustainable Cities and Communities – Encouraging urban sustainability and resilient infrastructure and SDG13: Climate Action – Implementing environmental education programs and promoting sustainable practices. This information is included in the Strategic Growth Plan, which describes the strategic priorities of the city including education, economic growth, sustainability and climate actions. Besides climate action, **Derry** is also focused on community development and environmental sustainability. **Derry** attempts to strengthen local communities through education and the active participation in projects which promote social cohesion, inclusion and long-term sustainability. Apart from these two aspects, **Derry** is also working on knowledge creation and transfer through the cooperation

between educational institutions and local companies, and, on the other hand, the economic development promotes vocational and educational training as well thanks to the participation of the North-West Regional College.

Since the shared Island Network of Learning Cities (IE) supports the achievement of all 17 sustainable development goals (SDGs) in particular SDG4 – Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all, **Dublin** prioritises inclusion, equity and LLL for all with its programmes. **Dublin** City Council is committed to sustainable development, that is development that meets our needs now and won't compromise future generations. DCC responds to SDG11 (making cities and human settlements inclusive, safe, resilient and sustainable) with a strategy that focuses on enhancing environmental, social, and economic sustainability. It seems that because of **Dublin**'s strategic focus on SDG11 and related ESD actions, some particular components of ESD are a policy priority. This means that community-development and knowledge-creation and transfer are key priorities which stand prior to economic development and environmental sustainability, more precisely, they are understood as necessary conditions to reach for both economic development and advancements in environmental sustainability.

Girona is currently focused on the following Sustainable Development Goals (SDGs): SDG4 – Quality education: Promote lifelong learning and ensure inclusive and equitable education. SDG10 – Reduction of inequalities: Ensure social inclusion and equity in access to education. SDG11 – Sustainable cities and communities: Create sustainable urban environments and encourage community participation. **Girona** focuses on Sustainable Development Goal (SDG) 4, which aims to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. The city has implemented various initiatives to enhance education and training, promote equal opportunities, and support lifelong

learning, thereby addressing inequalities and fostering sustainable communities. One of the most representative initiative is **Girona Emprèn**, aimed to promote local economic development and entrepreneurship.



Glasgow is committed to several SDGs, most notably to SDG11 (Sustainable Cities and Communities) through projects like GALLANT, the city focuses on urban sustainability. As for SDG13 (Climate Action), **Glasgow** is integrating climate resilience into urban planning through biodiversity, clean energy solutions, and active travel initiatives. In the case of SDG4 (Quality Education), Lifelong learning is a core component of **Glasgow**'s strategy, with a focus on digital literacy, green skills, and addressing inequalities in education. In addition to climate action, **Glasgow** prioritizes the creation and transfer of knowledge as a crucial component of its sustainability and education strategy. One of the central initiatives in this area is the

GALLANT project (**Glasgow** as a Living Lab Accelerating Novel Transformation), a £10 million program funded by the Natural Environment Research Council (NERC). This project facilitates partnerships between universities, local authorities, and citizens, fostering collaboration to address the city's environmental challenges. It emphasizes a whole-systems approach, where researchers and stakeholders co-develop sustainable solutions that benefit the public health, wellbeing, and economy of **Glasgow**. The GALLANT project is an example of how cities can engage communities in research and planning, encouraging the direct involvement of local residents in mapping biodiversity, tracking bird and mammal species, and contributing to the development of management practices in urban green spaces. Also, the city works to foster social inclusion and improve the overall quality of life for its residents, particularly in disadvantaged areas. Programs such as **Glasgow**'s Community Learning and Development (CLD) Plan are tailored to address socio-economic disparities, with a focus on digital and financial literacy. The GALLANT project contributes to this by regenerating derelict land into spaces for community use, creating ecologically functional areas that also serve social and recreational purposes. Environmental sustainability is at the core of **Glasgow**'s policy agenda, with a strong focus on restoring biodiversity, creating sustainable energy solutions, and developing green infrastructure. One of the key goals of the GALLANT project is to restore and connect habitats across the city, helping to halt biodiversity loss and improve the resilience of ecosystems.

According to the international website of **Groningen**, the city's thematic focus areas reflect those of the European Union and also include sustainability, and climate adaptation. **Groningen** is part of the Net Zero Cities initiative which has strong alignments with UN's Agenda 2030 for SDGs. In this respect, **Groningen** also hosts knowledge hubs like the Energy Academy Europe and the Global Centre on Climate Adaptation.

The City of **Liège** is actively pursuing several United Nations Sustainable Development Goals (SDGs) through its lifelong learning and sustainability-focused initiatives. Key SDGs include SDG4 – Quality education, as **Liège**'s commitment to lifelong learning for all, from green skills workshops to the Eco-Schools program and career guidance at Cité des Métiers, supports equitable, inclusive education and skills training, which are central to SDG 4. In the scope of SDG8 – Decent work and economic growth, by helping workers transition to sustainable sectors, particularly through the Cité des Métiers hub, **Liège** is aligning with SDG 8 to promote inclusive and sustainable economic growth, productive employment, and decent work for all. Referring to SDG11 – Sustainable cities and communities, through workshops on energy efficiency, waste management, and sustainable living, as well as promoting green spaces in schools and neighbourhoods, **Liège** contributes to building sustainable and resilient communities, supporting SDG 11. Responding to SDG13 – Climate action, **Liège**'s focus on environmental education and sustainable practices within the UNI de **Liège** program, Eco-Schools, and community workshops promotes climate awareness and action, aligning with SDG 13's call to combat climate change. These efforts reflect **Liège**'s holistic approach to sustainable development, which combines education, workforce transition, and community engagement to address environmental and social challenges. In **Liège**, public participation and community engagement are central pillars of the city's Education for Sustainable Development (ESD) policy. Recognizing the importance of involving residents directly in sustainability initiatives, **Liège** supports various platforms for citizens to participate in planning and implementing projects that contribute to a greener, more resilient community. One key initiative is **Liège en Transition**, a grassroots program that brings residents together to co-create sustainable solutions in areas like energy conservation, local food production, and green transportation. The Budget citoyen, or participatory budgeting, is another example of **Liège**'s commitment to public involvement. This initiative allows residents to vote on how a portion of the city's budget should be allocated, directly influencing projects that reflect community priorities. Youth For Climate

Liège brings youth voices to the forefront of climate action planning in the city. This local branch of the global Youth for Climate movement collaborates with the municipality to develop climate policies, engage in school strikes to raise awareness, and participate in city planning discussions.

Ljubljana Learning City, according to the strategic vision of lifelong learning, has set to pursue actions close to SDG4 on Quality Education and LLL opportunities for all and SDG11 on Sustainable Cities and Communities in accordance with SDG13 on Climate Action, yet SDG15 for Life on Land with strong concerns to biodiversity are very much pursued as inter-connected areas of action through lifelong learning in **Ljubljana** as a city with green and sustainability concerns tied up to environmental protection and consciousness. Realistic order of priorities in **Ljubljana** would make Environmental sustainability to stand as first, Knowledge creation and transfer as second, Economic development as third and Community-development be considered as fourth. However, one may rather realise that those aspects are equally important for the Municipality of **Ljubljana** to promote under ESD umbrella activities in association with various stakeholders to support climate action focuses and efforts in greening **Ljubljana** with social and community dimensions of skills developments and knowledge transfer through community development.

Learning City **Pécs** has made several efforts in the last ten years to address almost all SDGs by claiming a transversal role for SDG4 referring to quality education and lifelong learning opportunities for all. However, a strong attention to SDG11 on Sustainable cities and communities turned **Pécs** as a learning city to dedicate attention and concentrated actions to vulnerable social groups with learning difficulties to receive support and help through inclusion, access to education, training, social care through basic skills development, VET-based employment programmes, community education, etc. Although **Pécs** is a member of GNLC

Cluster in Health and Well-being, SDG13 on Climate Action has recently become a priority since Pécs has also joined the EU's NetZeroCities Programme. In the scope of ESD components, Learning City Pécs has demonstrated that almost all components support one-another. As an example, to pursue the goal of environmental sustainability, it is necessary to have an engaged community as a core condition.

In the scope of SDG 11 (Sustainable Cities and Communities), Trnava has placed a strong emphasis on sustainable urban planning, particularly focusing on expanding green spaces, improving public transport, and ensuring energy-efficient infrastructure. Through the Low Carbon Strategy, the city is developing eco-friendly transport solutions, such as building extensive cycling routes and creating electric vehicle infrastructure. Furthermore, urban development projects prioritize the inclusion of energy-efficient and sustainable building practices. The city's Program of Economic and Social Development also highlights the importance of ensuring that urban growth remains aligned with environmental sustainability. As for SDG4 (Quality Education), Trnava integrates educational initiatives within its broader development strategies, with a strong focus on accessible education for all. The city supports both formal and non-formal education, with special programs aimed at upskilling its population to meet labour market demands. In particular, the Program of Economic and Social Development (PHSR 2014-2025) encourages lifelong learning as a way to enhance workforce adaptability and foster social inclusion. Through programmes such as Learning City Trnava, the city promotes continuous learning opportunities, from early childhood to adult education, ensuring education is equitable and lifelong. Through its Low Carbon Strategy, Trnava is actively working towards mitigating climate change referring to SDG13 (Climate Action) by reducing its carbon footprint and promoting renewable energy. The city has implemented a range of projects to enhance energy efficiency in public and private buildings, increase the use of solar energy, and promote

waste reduction. In addition, the city hosts public workshops and educational campaigns aimed at raising awareness about climate change and encouraging citizens to adopt more sustainable lifestyles. Referring to ESD components, Trnava places a strong emphasis on community-based learning, social inclusion, and fostering connections between various stakeholders in the educational space. According to the Application for UNESCO GNLC Award 2024, the city has created a network of more than 200 organizations engaged in education, focusing on inclusion and community activation. Initiatives like the ConnectTT project support the integration of foreigners into the community through language courses and cultural workshops. Trnava's focus on lifelong learning is highlighted through projects that target various demographics, including marginalized groups, seniors, and youth. The Learning Mothers program supports women on maternity leave in improving their skills and preparing them for re-entry into the workforce. Similarly, the HOTSPOT project enhances digital literacy among seniors, teaching them how to navigate modern technologies and stay socially connected. Trnava also prioritizes green education through its Low Carbon Strategy, where citizens are involved in learning about renewable energy solutions, energy-efficient housing, and sustainable urban development. Public workshops, community initiatives, and collaborations with schools focus on teaching practical green skills that align with the city's goal of reducing its carbon footprint and promoting sustainable living.

Viladecans thematic focus areas reflect those of the European Union and includes also sustainability and climate adaptation. Within the city's strategies and its activities, we recognise SDG4: Quality Education – Promotion of inclusive and quality lifelong learning opportunities, SDG8: Decent Work and Economic Growth – Increasing workforce skills and promotion employment opportunities, SDG11: Sustainable Cities and Communities – Promotion of sustainable cities and resilient infrastructure and SDG13: Climate Actions.

Specific actions selected learning cities are taking to promote and support ESD goals

In the City of **Bonn**, other actions of promoting and supporting ESD goals to be realised are based on fostering collaborations amongst stakeholders, mobilising a number of education and training institution with formal, non-formal and informal backgrounds, promoting lifelong learning and making use of urban public spaces with innovative character. A specific example is the so-called 'Leerstand als Begegnusraum', using vacant property as place for various encounters.

Charleroi actively promotes Education for Sustainable Development (ESD) through community-based initiatives that engage citizens in creating a more inclusive, resilient, and sustainable city. A key element of this approach is an Open Call for Citizens to Take Action, where residents are encouraged to propose and implement projects that strengthen the local social ecosystem. Supported by the city, these initiatives foster civic responsibility and contribute directly to **Charleroi**'s sustainability goals. **Charleroi** empowers citizens to actively contribute to ESD goals by addressing social, economic, and environmental challenges within their neighbourhoods. This open call approach not only builds a stronger, more connected community but also ensures that sustainability and inclusivity are driven by collective efforts across the city.

Derry Learning City is trying to promote and support ESD goals through fostering collaboration among stakeholders. **Derry** promotes cooperation among schools, universities, companies and community organizations to create a cohesion learning environment. **Derry** is promoting lifelong learning through initiatives and programs such as the organization of the Learning Cities Festival. Also, **Derry** is making innovative use of urban spaces, through the implementation of urban agricultural projects and community learning spaces in public areas and demonstrates the innovative use of public spaces to promote both learning and sustainability.



Dublin is trying to develop ESD-oriented local policies and strategies by building on national strategic plan to implement at local level through DCC strategic plan. **Dublin** also tries implementing lifelong learning initiatives for systematic and comprehensive ESD capacity development - through **Dublin** Learning City to effectively mobilize its resources in every sector to promote inclusive learning from basic to higher education; to revitalize learning in families and communities; to facilitate learning for and in the workplace; to extend the use of modern learning technologies; to enhance quality and excellence in learning; and to foster a culture of learning throughout life. As a learning city **Dublin** fosters cross collaboration efforts to share knowledge, enhance community development and promote economic and environment sustainability. In doing so, the city enhances individual empowerment and social inclusion, economic development and cultural prosperity, and sustainable development by mobilising formal and informal education institutions to engage in local communities for ESD and through

Dublin Learning City, collaborating partners as 6 higher education institutes, the **Dublin** City ETBs and community groups provide formal and informal education initiatives: making innovative use of local spaces for ESD. Moreover, one can discover sustainable urban development in DCC strategic plan for promoting lifelong learning initiatives for adults on ESD with intergenerational focuses. There is a significant approach to inclusive lifelong learning through **Dublin** Learning City initiatives – festival, development of learning neighbourhoods by fostering collaboration among multiple stakeholders.

In the focus of promotion and support for ESD goals, **Girona** fosters collaboration among stakeholders through **Girona** SmartCity, which is a program that involves the collaboration between **Girona** City Council, University of **Girona**, Fundació i2CAT, Eurecat and technology companies such as Telefónica to develop smart and sustainable city projects. Also, **Girona** promotes lifelong learning in the frame of Escoles Verdes, which is a program that involves local schools to promote environmental education and sustainability from an early age, promoting sustainable habits that last a lifetime. On the other hand, there is La Caseta, an online service which provides citizens with information about activities and initiatives that promote lifelong sustainable habits. **Girona** is also making innovative use of urban spaces by UdG Scientific and Technological Park to use urban spaces for research, innovation and education, providing an environment that encourages continuous learning and sustainability. **Girona** tries to mobilize formal, non-formal and informal education and training institutions by Xarxa de Centres Cívics which is a network of civic centres that offer a wide range of training activities, workshops and courses for all ages, facilitating access to formal, non-formal and informal education. The city is using public spaces in several innovative forms. **Girona** +Neta is an initiative that transforms public spaces into green and clean areas, organizing community activities for cleaning and maintenance, promoting sustainability and practical learning about waste management.

Glasgow Learning City is strongly committed to promote ESD goals based on collaboration. The GALLANT project is an outstanding example of such partnership with a number of stakeholders so as to map biodiversity, to improve urban green spaces and to trail innovative solutions for sustainable energy and urban resilience. On the other hand, **Glasgow**'s universities, especially University of **Glasgow** and its Centre for Research & Development in Adult and Lifelong Learning (CR&DALL) play a significant role in promoting LLL and to engage citizens in educational initiatives for developing green skills and competencies. The Community Learning Development (CLD) supports lifelong learning by generating educational opportunities for underserved communities and their members with an inclusive approach. **Glasgow** is very much concerned about transforming urban spaces into multifunctional areas that promote, in accordance with ESD, ecological restoration and community well-being. One of the innovative dimensions of this urban transformation is the City's focus on restoring biodiversity so as to enhance ecological resilience of **Glasgow**.

Groningen is a city of education and education, being understood quite broadly, contributes also to the overall goals of ESD, namely by making choices which support sustainability, which make difference when it comes to sustainability. A very important part of the city life and policy is fostering collaboration. For example, there is a local agreement among schools, health care providers, employers and other players to support, among others, lifelong learning. National government supports this effort with various types of subsidies and grants. With regard to adults and adult learning, they also play an important role that is more intuitive or automatic, rather than planned or requested. Since the primary schools are an important meeting place for the adults, i.e. parents, they support the parents when they spot a gap for example in parents' digital or language competences.

Liège has adopted several strategies to promote Education for Sustainable Development (ESD) by fostering collaboration, broadening educational access, and creatively using urban spaces. In this respect, **Liège** encourages partnerships between public institutions, local businesses, and NGOs to align resources and expertise on sustainability initiatives, like **Liège en Transition**, for a cohesive city-wide approach. **Liège** engages formal, non-formal, and informal education providers. Programs include sustainability workshops in community centres, after-school activities, and vocational training at Cité des Métiers, building skills across age groups. Lifelong learning is central, with UNI de **Liège** and community centres offering courses and workshops on green practices like energy efficiency and waste reduction, empowering citizens to adapt sustainable practices at every life stage. **Liège** repurposes urban areas for sustainability, creating community gardens, solar installations, and urban beekeeping sites, blending environmental goals with hands-on learning. “Green corridors” along bike paths and informational signage in parks promote informal environmental learning, while public spaces host pop-up events and workshops, bringing sustainability education into daily city life. In these ways, **Liège** actively advances ESD by engaging the community, enhancing education access, and reimagining urban spaces for sustainability. Relevant to mention is also the city’s commitment to environmental stewardship. The city is investing in renewable energies and has implemented a comprehensive waste management strategy. **Liège** is expanding its urban green spaces, including parks, gardens, and riverfronts.

A significant action in the City of **Ljubljana** is intergenerational input provided through community organisations with highly sensitive concern on green and sustainable issues be discussed, promotes and emphasized in forms of local and regional campaigns, collective actions to learn city and community with attention to change, innovative focuses, intercultural exchange and community dialogue



in accordance with relevant SDGs. The City of **Ljubljana** combines its roles and responsibilities of being a learning city with enhancing building blocks of a city of learning. Actions to pursue participation and performance in learning through collaborative actions in libraries, museums and other cultural settings of particular districts of the City, the Municipality of **Ljubljana** supports social cohesion be emphasized by socially sensitive forms of community learning for sustainable environments in physical, social/community and environmental perspectives. One example is an open approach to relate to the role of BITE Art Festival in the scope of green city. Moreover, **Ljubljana** has developed all the necessary infrastructure and design programs to make lifelong learning accessible to all adults, regardless of their life situations and other needs.

The City of **Pécs**, represent a certain amount and form of each and all actions relevant to ESD developments. Lifelong learning at local and regional levels became seriously addressed after the millennium, when Hungary joined the EU with full membership. It took around a decade to turn those initiatives into real actions with some early and piloting activities to promote and develop learning communities, neighbourhoods and cities. As a concrete result of partnerships with PASCAL International Observatory, the City of **Pécs** became a member of UNESCO Global Network of Learning Cities in 2016 with a good mindset aimed to engage a number of communities, to mobilize people through learning and to make use of educational potentials of relevant stakeholders in **Pécs**. It is necessary to enhance each type of listed activities of ESD from various forms of partnerships to lifelong learning actions in community by broadening urban community places into lifelong learning platforms to collect and share good knowledge to understand and to respond to challenges of social, economic and environmental realities. The Family Centre at Misina-Peak of Mecsek Mountain just above the City is a profound example of promoting environmental awareness, community identity and belongingness in accordance with SDGs for inclusive and equitable social structures as a collective response to community needs to develop environmental skills and responsibilities through ESD by accessible programmes and events of that particular community space, also offered by a number of partner organisations.

Trnava is actively working on initiatives to develop a Learning City through community-based projects such as the School of Teachers and Biznis Point, which aim to improve skills in education and business. The city emphasizes lifelong learning through events like the Week of Lifelong Learning, fostering collaboration between various educational organizations, and focusing on accessible learning opportunities for all ages. This reinforces the city's goal of

creating an empowered community with good knowledge and skills. **Baterkáreň** is a multifunctional space in **Trnava** dedicated to environmental education, reuse, and sustainability. The initiative offers workshops, events, and practical guidance on topics such as upcycling, zero waste, and sustainable living. **Baterkáreň** also runs Swap Markets, where people can exchange items, thus promoting the circular economy and reducing waste. It plays a key role in **Trnava's** efforts to educate citizens on sustainability practices through interactive learning. Environmental and educational awareness are promoted through cultural programs like the Learning **Trnava** Festival, which gathers educational institutions, NGOs, and local businesses to present a variety of learning opportunities for the public. Events like this help foster a culture of continuous learning and community engagement also in sustainability topics.

Viladecans implemented several programmes to promote a healthy energy culture, as well as contests where the saving actions of institutions were rewarded. Regarding health, the city implemented hygiene programmes, as well as mental health campaigns aimed particularly at vulnerable populations. The project **Vilawatt** seeks improvement of the quality of life, to promote among citizens the culture of energy saving, by providing them with tools to make this possible, and develop a local platform to integrate all local efforts in the way of energy transition. The objective is multiple and really ambitious: to reduce the energy bill, to reverse the gains of this decrease in improving the housing, and to boost the local economy. The project **GreenMob** - Multimodal journey planner for sustainable travel aims to address the challenges of urban mobility by promoting sustainable transport options, reducing pollution and providing a certified CO2 emissions calculator. In terms of education and environmental awareness, **Viladecans** participates in the programs of the Metropolitan Area of Barcelona.

Main stakeholders involved in the development of selected learning cities

Bonn has a very active and committed civil society. Many city offices cooperate closely with civil society. They take up the concerns of civil-society actors and support them with know-how and/or as cooperation partners. In addition, the **Bonn** City Council regularly awards funding to civil-society groups and initiatives that can annually submit funding applications for development education and global learning projects as well as for local implementation of the 2030 Agenda. The Adult Education Centre **Bonn** is an important ESD stakeholder in the City of **Bonn** and a pioneer in communicating the SDGs throughout Germany. Its educational programs on the SDGs highlight different aspects of each Sustainable Development Goal. Starting with the local level, the Adult Education Centre also links its educational offers to the activities in the field of sustainability in various countries of the Global South, highlighting the importance of this work. Numerous



development organizations and institutions from **Bonn** work closely with the Adult Education Centre and share the perspectives from countries of the Global South at joint events. The Adult Education Centre **Bonn** is also a very active member of DVV international. The Office for Local Sustainability sends out newsletters with educational offers around sustainability and organizes the annual **Bonn** Rundum nachhaltig – Festival (**Bonn** – all about sustainability- festival). It coordinates the long standing involvement and various activities as a Fair Trade Town, the annual Fair Trade Week program and the activities as a “Bio-City”. The Department of International Affairs and Global Sustainability organizes numerous public events with an ESD-approach such as Europe Day, UN Day or the **Bonn** SDG Days as well as ESD-based training courses such as the digital “Info-Lunch” series for staff of the city administration, or the digital “Tea Time Education” series for all interested in educational topics.

There are three major groups of stakeholders as partners of **Charleroi** Learning City involved in promoting Education for Sustainable Development (ESD) in **Charleroi**. Local residents are active participants in **Charleroi**'s open call for citizens to take action, where they initiate projects addressing social and environmental issues. Community members are instrumental in neighbourhood garden initiatives, climate action groups, and civic activities that support social cohesion, climate resilience, and inclusivity. These grassroots efforts help build a culture of sustainability and strengthen community-driven approaches to ESD. A second group is of NGOs, associations, and social economy operators play a crucial role in advancing ESD in **Charleroi**. Through various capacity-building programs, they focus on supporting marginalized communities, tackling discrimination, and promoting social equality. These groups are essential in implementing inclusive programs within the social economy and facilitating projects that foster environmental awareness, inclusivity, and resilience. Thirdly, **Charleroi**'s

business sector, particularly in the fields of green economy, technology, and social entrepreneurship, is a key stakeholder in ESD promotion. Local companies and startups contribute to sustainable urban development, particularly through projects tied to circular economy practices. The city also supports businesses in adopting sustainable practices and creating green jobs, which aligns with **Charleroi**'s broader economic and environmental objectives. Those stakeholders work collaboratively, supported by **Charleroi**'s policy initiatives and capacity-building resources, to build a comprehensive ecosystem that advances sustainable development, social equity, and environmental responsibility throughout the city. Together, they create a robust framework for ESD that is citizen-centred and community-driven.

Main stakeholders which participate in the promotion of ESD in the City of **Derry** can be rendered into six categories, the first one as civil society members, represented by the Nerve Centre and the Playhouse. The Nerve Centre participates in community projects and inclusion programs by providing workshops and training sessions focused on technologies, social media and digital arts for young people, while the Playhouse community organization provides spaces and resources for artistic and educational activities in order to foster social inclusion and community development. A second category is third sector representatives comprised by the Triax Neighbourhood Management Team, focusing on urban regeneration and community projects in order to promote educational and sustainable initiatives in the area of Triax in **Derry**, and by Foyle Hospice to carry out educational activities in raising awareness of sustainable practices in the field of health. A third category is Industry and business, represented by Seagate Technology to collaborate with local institutions such as the NWRC to develop formation programs in the field of technology and advanced manufacturing. Another body here is Allstate Northern Ireland to provide programs to develop digital abilities in cooperation with schools and universities to provide their students with a wider formation in this field.

Fourth category is Culture and Arts' operators (i.e., Museums) are represented by the Tower Museum to enhance the heritage within their programs and initiatives such as school visits about **Derry** and its environment. The Siege Museum provides educative programs based on the learning of local heritage and environment. Fifth category is Vocational Education and Training centres, represented by The North West Regional College (NWRC) provides a wide range of technical and professional formation in the fields of technologies, health, business and sustainability. Its narrow cooperation with local companies is relevant in accordance with local needs. As sixth, **Derry** Youth and Community Workshop (DYCW) provides young people with formation programs to develop their skills in order to facilitate their integration in the job market.



In **Dublin**, specific stakeholders as collaborating partners are formulating the **Dublin** Learning City platform so as to make learning recognised as an inclusive participatory action dominated with the principle of inclusion and equity of collection and sharing. In this regard, stakeholders aim at developing participation and better performance in learning, especially amongst vulnerable groups to reach for social cohesion and active citizenship. Practical and intensive forms knowledge transfer amongst citizens and their communities result in socially driven, yet sustainable forms of lifelong learning supported by specific programmes and services responding characteristically tailored to public needs and community/neighbourhood demands. Again, **Dublin** Learning City is Co-Chaired by Marino Institute of Education (MIE) and Dún Laoghaire Institute of Art, Design and Technology (IADT) as the lead partners, along with University College **Dublin** (UCD), Trinity College **Dublin** (TCD), National College of Art and Design (NCAD) and the RCSI University of Medicine and Health Sciences. They also work in partnership with **Dublin** City Council, City of **Dublin** Education and Training Board (CDET) and **Dublin** Dun Laoghaire Education and Training Board (DDLETB).

At local and municipal stakeholder level, **Girona** has created the so-called Red de Ciudades Educadoras de las Comarcas Gerundenses (XCECG) which aims to empower small towns from the province with the aim of developing local policies regarding education. This network has annually organized the Jornadas de la Red XCECG since 2017. **Girona**, as the capital of the municipality, is in charge of the coordination of activities and policies. XCECG comprises several municipalities, while there are several other stakeholders at regional and national levels who collaborate with **Girona**, like Agència de Salut Pública de Catalunya, Associació de Celías de Catalunya, Centres de Formació d'Adults (CFA), Depart. d'Educació de la Generalitat de Catalunya, Institut Català d'Energia (ICAEN), Localret, Telefonica, Tragisa and Uni de **Girona** (UdG). International stakeholders support **Girona** as

Learning City, like UNESCO, OECD, Eurocities, Global Compact Cities Programme, European Council Intercultural Cities Programme.

In **Glasgow**, several stakeholders participate in the enhancement of ESD in the city. Universities and research institutions have a key role as the University of **Glasgow** and CR&DALL lead research and community engagement efforts, especially through the GALLANT project. Local government, since **Glasgow** City Council collaborates with universities and businesses to embed sustainability into the city's planning and operations. Also, Community organizations plays a stakeholder role since various NGOs and local groups are actively involved in promoting environmental awareness and community resilience.

In **Groningen**, the university is an important player in the field of promoting the ESD, and they dot many activities. All of the groups, like civil society members, third sector representatives, industry and businesses, culture and arts organisations and VET centres mentioned, are considered important stakeholders and they all should be receptive to the sustainable development goals. There are environmental NGOs which are very active, but they are not very visible as the general public is already well aware of the need to be environmentally responsible.

In **Liège**, there are five identifiable kinds of stakeholders have particular roles and responsibilities in the development of the learning city. Civil Society movements labelled as Grassroots movements, such as **Liège** en Transition and Youth for Climate **Liège**, engage residents in sustainability projects like local food production and climate advocacy, fostering community involvement in ESD initiatives. Third sector representatives as Non-profit organizations and NGOs are crucial for outreach and education, partnering with schools and community centres to deliver workshops and training on sustainable practices. They also facilitate public consultations and participatory budgeting, amplifying community voices in sustainability planning.



In the scope of industry and business, local businesses contribute to ESD by adopting sustainable practices and collaborating with educational institutions like the University of **Liège** and Cité des Métiers. They support workforce training programs for green jobs, aligning economic development with sustainability goals. Cultural institutions, including museums, raise environmental awareness through exhibitions and events that connect sustainability themes to the arts. They engage the public in discussions about climate change and biodiversity, making cultural spaces important for ESD. VET centres like Cité des Métiers provide specialized training for green sectors, ensuring that residents acquire skills for sustainable careers. Their focus on lifelong learning aligns with the city's economic transition toward sustainability.

In **Ljubljana**, main stakeholders are the Municipality of **Ljubljana** (MOL), Education and training providers, cultural institutions and organisations – libraries, galleries and museums, the University of the Third Age-U3A **Ljubljana**, public education institutions, the University of **Ljubljana**, kindergartens, Slovenian Government,

Slovenian Institute for Adult Education/Andragoske Center Slovenije-ACS, urban planning organisations and civil engineering enterprises, the City of Learning platform, art platforms and organisations, civil society groups/NGOs, SMEs and larger firms engaged in SD and green transition having been recently emphasized by recent EU-initiatives, and environmental protection groups and platforms/ green organisations and NGOs.

In the City of **Pécs**, main stakeholders participating in the promotion of ESD are collaborative partners of the House of Civic Communities, an organisation to provide a Learning City **Pécs** Platform to offer a ground where each and all stakeholders are equal to show interest and needs for developing community lifelong learning and education with a principle of collecting and sharing with a mindset of inclusion, equity and belongingness to raise knowledge, skills and to empower citizens. Main stakeholders are the Municipality of **Pécs**, the University of **Pécs** and most its Faculties, Civil Society Organisations, Institutions of Public Education and VET, Cultural institutions and organisations, like museums, libraries, galleries, cultural and community centres, organisations of sports and recreation, **Pécs**-Baranya Chamber of Commerce and Industry, SMEs and multinational firms. A partner of **Pécs** Learning City is the UNESCO National Commission of Hungary in Budapest.

In the City of **Trnava**, main stakeholders are Local Government, as the City Council of **Trnava** coordinates sustainability and educational programs, including those related to climate action, green spaces, and lifelong learning initiatives. Educational Institutions are also involved as schools and universities, including the University of **Trnava**, work closely with the local government to integrate sustainability into the curriculum, offering courses and training that focus on green skills, climate action, and social inclusion. NGOs and Community Groups have a special role and commitment, like numerous NGOs, such as Lifestarter and Baterkáreň, collaborate with the city to provide resources and support for sustainability projects, from community gardening to renewable energy initiatives.

Examples of how selected learning cities promote the development of green competencies



The development of green competencies is well-promoted by specific actions in **Bonn**. One should indicate here the example of Development of a sustainable cultural and sports strategy. The City develops and communicates “green competences” to a broad public through numerous participatory processes e.g. for the development of a sustainable cultural strategy or the development of guidelines for a sustainable **Bonn** sporting landscape. Numerous stakeholders are always involved in these processes. The process for a sustainable cultural strategy began in May 2022 with a major kick-off event, continuing with several strategic building blocks of dialog, knowledge and visions. In 2021, the city’s Sports Office developed recommendations for action on the topic of “sport and sustainability” in a joint effort with a number of sports clubs and the **Bonn** Municipal Sports Association. In 2023, the Sports Office together with the **Bonn** Municipal Sports Association and the Centre for Sustainable Leadership (ZNU) at Witten/Herdecke

University, founded the “Sustainable Sports Clubs **Bonn**” initiative. All **Bonn** sports clubs are invited to join in. In a first step, guidelines for sports in **Bonn** are to be developed in diverse workshops. A second example is the Participatory Process **Bonn4Future** based on joint municipal commitment as an approach off lifelong, experiential learning through participation processes. With climate action days and four climate forums on various aspects such as construction and housing or transport, randomly selected people of all ages, occupations and income groups with and without a migration background were involved in developing ideas and finding solutions for climate-neutral urban development following introductory expert inputs. The process also attracted great international attention and was presented in various international forums. The results of the participatory process **Bonn4Future** were integrated into the climate plan of the City of **Bonn**, including in the design of the so-called climate districts, which were planned to be opened in four districts of **Bonn** in autumn of 2024. As recommended in the **Bonn4Future** process, they are intended to enable **Bonn** residents to help shape change on their own doorstep.

Charleroi fosters green competences among its younger citizens through initiatives like the Gilly School Forest project, also known as Bring Nature into the Classroom. Located within the Royal Athenaeum of Gilly, this initiative offers students a hands-on education in ecology, sustainability, and environmental responsibility, directly addressing the legacy of industrialization in the region. At the Royal Athenaeum of Gilly, students engage in a weekly environmental course that introduces them to concepts like biodiversity, climate action, and sustainable practices. This program transforms traditional learning by immersing students in practical ecological knowledge, fostering an understanding of their role in environmental stewardship. The Gilly School Forest provides a natural, outdoor learning environment where students interact with their surroundings. By transforming parts of the school’s landscape into green spaces, students can

study native plants, learn about the importance of soil and water conservation, and observe local wildlife. This environment supports active, inquiry-based learning and allows students to connect with nature firsthand. The initiative was driven by community collaboration, as local residents and educators shared a common vision to establish a greener identity for Gilly. Students participate in the maintenance and development of the school forest, learning practical skills such as tree planting, composting, and waste reduction. This involvement instils a sense of responsibility and reinforces community bonds. The Gilly School Forest helps students develop an understanding of sustainable living practices and equips them with competences they can carry into adulthood. These include resource conservation, recycling, and climate-conscious decision-making, all of which are critical for transitioning to a more sustainable local economy.

In **Derry**, the Green Skills Academy, promoted by the North West Regional College (NWRC), is an initiative focused on providing formation specialized in green competences. This academy is focused on the formation of students in growing sectors of green jobs towards a more sustainable economy through particular actions as Green formation courses and workshops, collaboration with local industry to guarantee the formation and subsequent incorporation of students in the job market and the support for local green entrepreneurs. A second example is Zero Waste North West since it is a community organization which promotes sustainable waste management and reduction through education, awareness and formation through actions of workshops focused on practical skills to help users reduce waste, repair items, re-use old belongings, etc. with the aim of promoting sustainable habits, educative programs which develop green competences, focused on the importance of reducing, reusing and recycling, in schools, and awareness campaigns: They conduct campaigns to educate the public on the benefits of a zero-waste lifestyle and how to adopt sustainable practices in daily life. As third example, South West College is providing Renewable Energy Training Program to imply the formation of renewable energies and attempts to

develop digital competences regarding the use of renewable energies. Although it is located in the South West, it also contributes and collaborates narrowly with other institutions from **Derry** that have an impact in the North West region through actions as Technical Training in Renewable Energy to offer specialized training in the installation and maintenance of solar, wind, and biomass energy systems, Practical Laboratories whereby Students have access to laboratories and practical simulations where they can learn and experiment with renewable energy technologies in a controlled environment, and the programme of Professional Certification to provide industry-recognized certifications, enhancing the employability of graduates in the renewable energy sector.

Mapping Green **Dublin** has grown from **Dublin** 8 with the aims to recognise and draw attention to the value of lived experiences in developing community greening plans more generally. The project responds to recent research by the Environmental Protection Agency (EPA) and the Health Service Executive (HSE) that has highlighted the importance of green space and urban greening on health and wellbeing. Increased interaction with greenspace leads to more positive health outcomes but greening strategies must be fit-for-purpose. Place matters!



They propose a place-based approach to green strategy-making that draws on and responds to community concerns and aspirations, and then engages with policymakers to explore how community visions can inform and be supported by more formal policies and plans. Another example is Festival of **Dublin** Learning City which is based on online and in person events from walking tours, talks, arts & crafts, workshops, exhibitions, music and much, much more. The main idea has been to make **Dublin** Learning City Festival to provide an event for everyone based on needs and interests in learning through collaborative participation in community-based learning. The Festival of **Dublin** Learning City has a strong commitment to develop green skills amongst citizens, community members and within neighbourhoods. This example is also providing the connection in between local, national and European initiatives around promoting and advocating green city developments with sustainable focuses based on intergenerational collaborations. The third example is Green Schools Ireland - Leading environmental management and education programme for schools. Promoting long-term, whole-school action for the environment, Green-Schools is a student-led programme with involvement from the wider community. Eco-Schools is a fundamental initiative which encourages young people to engage in their environment by allowing them the opportunity to actively protect it. It starts in the classroom, it expands to the school and eventually fosters change in the community at large.

In **Girona**, the first example refers to Escoles Verdes (Green School Program) aims to integrate environmental education within the official curriculum at schools. It promotes sustainable habits and environmental concerns among students. Key actions reflects School projects such as school gardens and crops, energy saving programs and recycling campaigns in the school. Another action is Formation for teachers. Resources are provided to improve the teachers' environmental competence. The third action is Extra-curricular initiatives, such as school trips and free air activities where students can learn from local biodiversity and the importance of environment. A second example indicates the role and impact of



the Setmana de l'Energia Sostenible (Week of Sustainable Energy) which is an annual event organized by the Adjustment de **Girona** (**Girona**'s City Council) in collaboration with different local institutions and companies. It aims to raise population's awareness about the importance of energetic efficiency and the use of renewable sources. Its key actions are Talks and conferences held by experts and addressed both to professional and non-expert audiences. Secondly, they organise Workshops and seminars where citizens can learn about the installation of solar panels, energy saving systems and other sustainable technologies. Thirdly, Information points scattered around different locations of **Girona** where professional provide citizens with their expertise and advice on positive energetic habits both at home and the workplace. The third example is **Girona** SmartCity, an integral initiative which seeks to integrate technologies and sustainability in order to improve the management of resources and the life quality of people and inhabitants from **Girona**. This project deploys a wide use of technologies to optimize different urban services so as to transform **Girona** into a more efficient,

sustainable and connected city. Key actions are Smart water management, through the implementation of sensors to monitor the distribution of water consumption and the detection of water leaks in real time, Smart watering systems, through the implementation of irrigation systems in gardens and parks which are conditioned by weather conditions and the humidity of soil. Smart public lighting is another key action through the implementation of LED lights controlled and monitored by sensors aimed to reduce energetic consumption. Further actions related to smart and sustainable goals are Installation of Solar Pannels, Efficient public transport, through the implementation of information systems, Shared bicycles which may be picked from stations scattered around strategic points and locations of the city and the Implementation of the application **Girona** en Verde, where citizens may find information about waste management, energetic consumptions tips, quality of the services in the city, among others.

In **Glasgow**, the GALLANT project (**Glasgow** as a Living Lab Accelerating Novel Transformation) is a flagship initiative that addresses **Glasgow**'s climate resilience by engaging citizens in various environmental initiatives. Funded by the Natural Environment Research Council (NERC), this £10.2 million project aims to transform **Glasgow** into a climate-resilient city through a collaborative "living lab" model. Key components include biodiversity restoration, where citizens actively participate in mapping and enhancing green spaces throughout the city. The project also focuses on sustainable land use, transforming derelict urban areas into functional green spaces, which both improve biodiversity and act as flood management systems to reduce climate risks. Another central aspect of the GALLANT project is low-carbon energy solutions. This involves developing renewable energy systems at the community scale, empowering citizens as "active energy citizens." A second example from **Glasgow** is that the City promoting active travel as part of its broader sustainability strategy. The Active Travel Strategy 2022-2031, developed by **Glasgow** City Council, aims to significantly reduce car

journeys by encouraging walking, cycling, and wheeling as the primary modes of transportation. By enhancing cycling infrastructure and promoting safe pedestrian routes, the initiative helps reduce carbon emissions while fostering healthier lifestyles. In collaboration with the GALLANT project, **Glasgow** is also working on mapping travel patterns and conducting community engagement to understand perceptions of active travel. A third example refers to **Glasgow**'s commitment to developing sustainable low-carbon energy solutions as a key pillar of the city's green competence development. The Community Energy Research component of the GALLANT project focuses on creating localized renewable energy systems that are designed, co-created, and managed by the community. These energy solutions include heat networks and energy-harvesting technologies that support **Glasgow**'s goal of becoming a net-zero city by 2030.

Groningen organizes its policy or strategy work through teams and there are teams for various aspects related to green competences – for example a team for climate action, a team for heat, a team for energy, a team for fuel. A typical topic within the area of green competences, waste separation, does not seem to be an issue in **Groningen** any more, as people have learnt the skill and separate rather responsibly. The issue now is rather to reduce waste or build a circular economy. There are many repair shops or places financed by the city, which assist people in repairing things and prolonging thus their life. Such repair shops often also create new job positions and provide work to unemployed people. The city of **Groningen** and the province support the members of the Circular **Groningen** Association to work together towards the Circular Economy. The goal is to use 50% fewer primary raw materials in **Groningen** by year 2030 and by 2050 to become 100% circular. To achieve these ambitious goals there are 5 types of activities realized, mainly supporting the cooperation and exchange among the members of the association: 1. Chains & Innovation, 2. Knowledge & Learning, 3. Association programme – bringing in new members, 4. Entrepreneurship & Procurement, 5. Campaign and Lobby.

Liège actively promotes the development of “green competences” through its participation in the Circular Wallonia initiative, which is the Wallonia region’s strategy for implementing a circular economy. This initiative is structured around five priority action lines and encompasses a comprehensive set of 60 concrete measures aimed at achieving ten specific ambitions related to circular economy practices in the region. By engaging in the Circular Wallonia initiative, **Liège** focuses on several key projects that emphasize reducing waste, reusing materials, and fostering sustainable production and consumption patterns. These efforts help build the necessary skills and knowledge among residents and local businesses to transition toward a more circular economy. Circular Wallonia is a comprehensive strategy aimed at fostering the principles of a circular economy throughout the Walloon region of Belgium. It is designed to create a more sustainable economic model that minimizes waste, optimizes resource use, and promotes environmental protection. The initiative reflects a commitment to transitioning from a traditional linear economy—characterized by a “take-make-dispose” approach—to a circular model that emphasizes reusing, recycling, and regenerating materials. **Liège** plays a vital role in the implementation of Circular Wallonia by participating in various projects that align with its principles. Key activities include local initiatives as the city supports projects that focus on reducing waste, such as community recycling programs. It also relates to business collaboration as **Liège** collaborates with local industries to encourage the adoption of circular practices. This includes providing training and resources to help businesses optimize their operations for sustainability, thereby creating green competencies in the workforce. Public awareness campaigns play a key role as educational campaigns aimed at informing citizens about the benefits of the circular economy and encouraging them to adopt more sustainable behaviours in their daily lives. Finally, innovation and research are promoted by the approach that **Liège** encourages innovation in circular economy practices through partnerships with research institutions and universities. This collaboration helps to drive advancements in sustainable technologies and business models.

In **Ljubljana**, the example of Slovenian Third Age University Students as Garden Volunteers in the University Botanic Gardens **Ljubljana** is a profound case. Slovenian Third Age University began developing a programme joining voluntary work, training and education upon inspirations coming from the EMIL network (A European Map of Intergenerational Learning) and the Lisbon Calouste Gulbenkian Fund’s gardens. Students attend both educational programmes and activities of Slovenian Third Age University and those delivered by the University Botanic Gardens **Ljubljana**: they do gardening jobs, they keep studying and they pass on their knowledge to visitors, spread knowledge on the importance of botanical gardens for maintaining of biotic diversity, they contribute ideas for popularization of botanical gardens, and liaise between the University Botanic Gardens **Ljubljana** and various civil organisations, social groups and generations. Consequently, the local community has started recognizing older garden volunteers’ potential for its own well-being. Moreover, this project enables the necessary transformation of a public institution enabling its approaching the members of the community. A second example is a Local Action Group Harmony Between town and Countryside in the area of **Ljubljana** Grosuplje, and Škofljica, a local action group named



Harmony between Town and Countryside has been formed, which has prepared a local development strategy. The strategy identifies four measures for co-financing operations: Creating jobs, Developing basic services, Environmental protection and nature conservation, and Increased inclusion of youth, women, and other vulnerable groups. As part of the intergenerational home operation, free regular monthly opportunities for exchanging experiences and knowledge, for mutual learning and socializing, were offered primarily to children and the elderly. Creative workshops were organized, covering traditional knowledge (paper flowers, Slovenian bouquet, Janška butara), cuisine, cultural heritage, etc. A third example is CoFarm4Cities, in which programme the Municipality of **Ljubljana** (MOL) joined the EU project “Development and Testing of an Urban Farming Model through Pilot Interventions in the Central European Region – Urban Farming in Central Europe.” The project examines solutions offered by cities in Central/Eastern Europe and based on these, develop and test a model for sustainable land use for urban farming as a driving force for environmental and social transformation. It will build on preserving local agricultural traditions and introduce innovative sustainable and socio-economic aspects.

The Learning Festival of **Pécs** is the main vehicle for promotion of lifelong learning in general including building of green competences and competences for sustainability. The festival provides learning programmes for different generations and different communities in the town to strengthen trust and belonging as well as a commitment to sustainable development and environmental care. The Festival programme regularly includes green topics. For example, the motto of the Festival in 2024 was “**Pécs** – the sustainable learning city, Green City – sustainable knowledge transfer and skills development”. Another example is Knowledge Exchange Platform of the Learning City Programme. This initiative was created in 2019 to support internationally driven knowledge exchanges via webinars, conferences, workshops, and other specific programmes. A third example is the

participatory actions of **Pécs** as part of the NetZeroCities Programme of the EU to realise the lifelong learning activities and community outreach/awareness raising actions to strengthen green skills and consciousness upon economic and social benefits of twin transition (green and digital) based on the European Green Deal.

Baterkárez in **Trnava** hosts workshops on upcycling, zero waste living, and sustainable resource management. These workshops empower citizens to develop practical green skills, promoting environmental responsibility at both the individual and community levels. A second example is how local schools, supported by **Trnava**'s educational institutions, integrate sustainability into their curriculum through programs that teach students about renewable energy, biodiversity, and sustainable urban development. Thirdly, the city organizes public workshops on renewable energy, teaching residents how to install and maintain solar panels and other clean energy technologies, which is part of its broader Low Carbon Strategy.

Viladecans City Council considered the project GreenMob as a good opportunity to promote sustainable urban mobility that can contribute to achieving the City Mission to make **Viladecans** an emission neutral city by 2030, as well as to promote more environmentally responsible citizen behaviour. The project GreenMob – Multimodal journey planner for sustainable travel in the framework of the EIT Urban Mobility initiative. It aims to address the challenges of urban mobility by promoting sustainable transport options, reducing pollution and providing a certified CO2 emissions calculator. The project will develop a journey planner that will integrate various modes of transport, providing users with detailed information on routes, timetables, fares and real-time updates, recognising the mode of transport used and calculating its emissions. This feature will enable users to make informed decisions considering the environmental impact of their travel choices, reducing CO2 emissions, promoting sustainable and environmentally friendly transport and increasing sustainability and data awareness.

Examples of the urban-based development of sustainability awareness

In the City of **Bonn**, the well visited and popular urban House of Nature is a certified ESD competence centre with numerous offers. It aims to make it possible to experience forests and ecosystems with all senses. The focus is on learning through play. Temporary exhibitions provide information on topics such as healthy eating, waste avoidance, conscious consumption and natural spaces, often in cooperation with partners, e.g. with Oro Verde on the subject of the rainforest. All exhibitions are accompanied by an educational program. It offers free educational workshops to educational institutions in **Bonn** and maintains an inclusive forest mobile. In cooperation with the Adult Education Centre, it offers numerous events on biodiversity that appeal to families and children as well as adults. Another example is the so-called Abenteuer Learner, which is a as a regional agency of education for sustainable development. Funded by the Youth Department of the City of **Bonn**, it offers numerous inclusive workshops for children and youngsters, including an inclusive art project “Sustainable **Bonn**” in cooperation with an artist. Abenteuer lernen offers children numerous ESD opportunities to gain experience and skills, aiming at children with and without handicaps, with high talent and especially at children with social difficulties and from disadvantaged life situations. Also, there are a number of public ESD events as The City of **Bonn** provides information about sustainability activities and stakeholders in **Bonn** and the surrounding area through numerous public event formats, e.g. the **Bonn-Rundum nachhaltig** Festival (**Bonn** all-round sustainability festival), the **Bonn** UN Day, the Europe Day or the **Bonn** SDG Days. The events are offered in close cooperation with civil-society actors, **Bonn** NGOs and UN- or other international institutions based in **Bonn**. One may mention the impact of ‘Bönnsche Viertel – Living Space for People’ which is a frame for two model districts as an important part of the accelerated mobility transition. Various campaigns were held in these two model districts in 2023 to engage with local people on the topic of active,

safe and sustainable mobility. Residents, initiatives and cultural workers spent a summer discussing what they want for their district and what potential the reorganization of traffic holds out for a vibrant neighbourhood. The internal administrative Info-Lunch training series “We and the 17 Goals” invites all city employees to get to know one component of the overall municipal sustainability strategy and related activities in more detail once a month. In a 45-minute digital session, colleagues from a wide range of departments present their measures for implementing **Bonn**’s first sustainability strategy. Since 2023, Learning City **Bonn** has been offering a new format: the digital series Tea Time Education. Once a quarter, there will be an educational impulse with discussion at Tea Time in the afternoon. The guiding theme of the Tea Time Education series 2023 and 2024 was: Education for Sustainable Development (ESD) in **Bonn**.



Charleroi actively promotes sustainability awareness through a range of initiatives aimed at fostering environmental stewardship and enhancing green spaces. Key projects include a structured Action Plan for Sustainable Energy and Climate, the Nature in the City initiative, and the development of Nature Districts. These programs collectively engage citizens, offering them both practical tools and shared spaces to increase ecological consciousness and participate in climate action. Action Plan for Sustainable Energy & Climate has been formed to tackle climate change, **Charleroi** has implemented a comprehensive Action Plan that outlines 50 targeted actions designed to reduce emissions, promote energy efficiency, and increase climate resilience. Two dedicated resources, the House of Energy and the Energy Counter, provide essential support to citizens, offering guidance on reducing household energy consumption, adopting renewable energy sources, and improving overall energy efficiency. The 'Nature in the City' project enhances **Charleroi's** urban landscape by increasing public access to green spaces. With over 20 green areas—ranging from parks and gardens to designated spaces for urban agriculture—**Charleroi** promotes a harmonious balance between urban living and biodiversity. **Charleroi's** Nature Districts initiative is a city-wide program that reclaims and revitalizes underutilized urban areas. This process involves three stages—diagnosis, programming, and development—to assess local needs and incorporate resident input in the transformation process. These districts also provide residents with a platform to witness and participate in urban sustainability projects, which heightens their awareness of the importance of ecological preservation and responsible urban development. **Charleroi's** urban renewal project, titled “**Charleroi: the (re)conquest of the West,**” represents an ambitious effort to requalify over 2,200 hectares of land, heavily influenced by the region's industrial heritage. This project is more than just an infrastructural transformation; it is a holistic approach aimed at enhancing public spaces, boosting economic activity, and fostering social cohesion.



The City of **Derry** can represent the promotion and development of sustainability awareness through the program of Eco-Schools as a global initiative that is implemented in **Derry** through Keep Northern Ireland Beautiful. This program involves schools at all educational stages to promote awareness and responsible environmental action. It is one of the most representative initiatives in terms of environmental and sustainability awareness in the region. Its key actions are Green certification as the schools which participate in this program are awarded a green flag, an international acknowledgement for their efforts towards sustainability. It also has thematic projects in which students participate in projects on recycling, biodiversity, energy, and water, helping them develop a deep sense of environmental responsibility. This example reflects strong student participation since Eco-Schools committees are made up of students, ensuring that young voices are central to environmental decision-making. The Foyle Reeds Project is another outstanding initiative addressed to **Derry** and Strabane

District Council in association with environmental organizations. The Project is based on the restoration and improvement of damaged areas of River Foyle, promoting biodiversity and awareness about water ecosystems with key actions of Habitat Restoration, Educational Programs of educational activities for schools and the community, highlighting the importance of wetlands in environmental sustainability and Community Participation to allow the community to actively participate in restoration and conservation tasks. The third example is the Sustainability Initiatives of North West Regional College to promote sustainability both inside and outside the campus life. These initiatives are based on education of both students and university staff in terms of the importance of sustainability and the procedures on how to contribute to its improvement in daily lives with a job prospect. Its Key actions are Educative programs, the Reduction of Carbon Footprint to reduce its carbon footprint, such as installing solar panels and promoting energy efficiency in its buildings and Community Engagement: NWRC organizes workshops and events on sustainability open to the community, fostering a broader dialogue on environmental issues. **Derry** has also implemented a Digital Learning and Innovation Hub that provides resources and training in digital skills and technology for all ages. This hub is designed to reduce the digital divide and prepare citizens for the future workforce in an increasingly digitized world.

In **Dublin**, The Cycle to Work Scheme (generally known as the Bike to Work Scheme) is a tax incentive scheme to encourage employees to cycle to work. Under the scheme, an employer can pay for a new bicycle (including bicycle accessories) and the employee then repays the cost in regular instalments from their gross salary. An employer does not have to take part in the scheme. However, if they do, they must offer it to all their employees. If one self-employed, he/she is not entitled to avail of the Cycle to Work Scheme unless paying PRSI as an employee in addition

to one's self-employed work. A second example of sustainability awareness is the Tidy town Initiative. The national SuperValuTidyTowns competition is an annual contest organised by the Department of Rural and Community Development. The competition is supported by the title sponsor SuperValu and many other agencies. The City of **Dublin** is an active participant in the competition through its Neighbourhoods and Districts. **Dublin** City Council is an advocate of the programme in association with other municipalities across the country. The third example is WEEE Ireland as a not for profit organisation, committed to delivering cost effective compliance on behalf of our Producer Members. WEEE Ireland has been operational since 2005 and has been the Scheme of choice in Ireland maintaining majority market share across all sectors. WEEE Ireland operates under the approval of the Minister for the Environment, Climate and Communications so as to collect and recycle electrical, battery or lighting waste. This program is also available for producers and retailers. **Dublin** City is an active agent and supporter of this programme. The Learning Neighbourhood Project is supported by a steering group comprised of staff from **Dublin** Learning City and North Inner City Adult and Community Education Forum. Their vision of **Dublin's** North Inner City is a thriving and dynamic area where inclusive education is secured through collaboration and shared support. They work closely with learning providers and residents in the North Inner City to sustain lifelong learning practices. The network is representative of a broad range of services and projects, in particular those that are engaged in the provision of adult and community education in **Dublin's** North Inner City. Also, they developed a special Learning Trail Map. This map highlights opportunities for learners in **Dublin's** North Inner City, such as, adult & community education, personal & social development, Community Employment schemes, Art & performance, and Local Training Initiatives.

In the context of the development of 'Sustainability Awareness', **Girona +Neta** is a initiative which seeks to improve the cleaning and the waste management in the city, with a strong focus and target on education and citizenship's awareness about the importance of recycling and reducing waste. Key actions of this initiative are Education and adult's awareness, through the organization of workshops and talks in schools, civic centres, local associations and other common spaces. These activities focus on the separation of waste, recycling and waste reduction. Another action is Citizenship participation, in common cleaning sessions, while Recycling infrastructure, through the installation of specific containers scattered around key locations of **Girona**. Dia de la Terra is an annual event organized by the Ajuntament de **Girona** (**Girona's** City Council) to celebrate the Earth Day. It is aimed to raise population's awareness about the importance of looking after the environment and promoting sustainable habits. It implies Educational workshops about recycling and reduction of waste, Workshops and seminars which give recommendations



and tips about the care of urban gardens and crops, Talks and conferences, Street markets with eco-friendly products, Walks around green spaces and rural paths and Cultural activities as representations, concerts, games, among others. Finally, **Girona**, Ciutat Activa i Saludable is an integral program carried out by the Ajuntament of **Girona** (**Girona's** City Council) and seeks to promote a healthy lifestyle among citizens from **Girona**. This program includes a series of activities, infrastructures and campaigns to raise awareness and improve both physical and mental health of population. **Girona** participates in the international network of Educating Cities, sharing and learning from good practices from other cities to continually improve their learning and sustainability strategies. In addition, the city has developed the **Girona** 2030 Strategic Plan which includes specific objectives for education, sustainability and economic development.

One of **Glasgow's** key initiatives in raising sustainability awareness is through its Gallery of Modern Art (GoMA), which actively engages the public in environmental themes through creative means. The "GoMA at Home" program offers free art courses and events that focus on the intersection of art and sustainability. A notable example is the "Use as Much Pressure as Possible" installation, which highlights environmental and social issues through collaborative artwork by prominent artists. GoMA's exhibitions often address climate change and sustainability, using art as a medium to explore the relationship between humans and nature. The museum also hosts sustainability-themed workshops, such as "Sustainable Fashion", which teaches the public how personal choices, like fashion consumption, impact the environment. GoMA's exhibitions, such as "Drink in the Beauty", encourage visitors to reflect on the changing landscapes and the human impact on nature. The GALLANT project supports **Glasgow's** sustainability awareness efforts by conducting public workshops that focus on climate action and sustainable living. These workshops are part of the project's broader goal of using the city as a "living lab" to trial innovative solutions for

urban sustainability. The GALLANT project engages with local communities to educate citizens about the benefits of biodiversity restoration, active travel, and low-carbon energy solutions. By combining creative arts, community engagement, and hands-on workshops, **Glasgow** effectively promotes sustainability awareness and fosters a deeper understanding of environmental issues among its citizens. **Create4Glasgow**: As an impact of COP26 (The UN Climate Change Conference in **Glasgow**), **Glasgow** launched **Create4Glasgow**, a participatory art project designed to give young people a voice in addressing the city's environmental challenges. Over 1,800 youths voted on key climate priorities, such as air pollution and water pollution. Participants were invited to create artworks addressing these challenges, showcasing their visions for a sustainable future. The **Glasgow** Science Centre also plays a key role in promoting environmental awareness through its "Our World, Our Impact" initiative. This climate change public engagement program uses science and technology to educate the public about the environmental challenges we face. Through digital science festivals like "Curious About Our Planet", the Centre provides educational outreach that focuses on sustainability and climate action. The **Glasgow** Green Deal which launched as a nine-year action plan, aims to reshape **Glasgow**'s economy and position it as a global leader in climate action. The program focuses on reducing carbon emissions, creating sustainable jobs, and building resilience to climate change. This initiative will involve major investments in infrastructure, renewable energy, and green technologies, while ensuring that the transition to a net-zero economy is just and inclusive for all residents. **Glasgow** is also a leader in smart city technologies. The city's Smart City Strategy integrates advanced digital infrastructure and open data to create a more connected, efficient, and sustainable urban environment.

There is a colourful platform financed by the city called Sustainable **Groningen** <https://duurzaamgroningen.nl/> which offers practical hints or tips for the citizens on how to make the decisions or choices that are for sustainable life. The categories



of topics covered include the following: The House – insulation, grants and useful tips, Garden and surroundings – Everyone wants green around them, Waste and Reuse – Dispose of your waste sustainably, Food – Buying local, preparing and storing sustainably, Shopping – Buy second hand, repair, Doing business – All about responsible entrepreneurship, Transport services – Sustainable from A to B. The sustainable behaviour is quite developed and became integral to the lives of citizens. The municipality also offers some grants or subsidies to help people with their investments into renovations or changes of technology at homes. There are many applications from people. The city distributes flyers among citizens on different topics, for example on how to make gardening more sustainable or how to keep the rain-water in the country, in the soil. Another area of activities is textiles and issues derived from the fast fashion. In **Groningen** there are many vintage shops, or second hand shops and they organise a number of events, for example clothes swaps.

In **Liège**, the Climate Active Neighbourhoods (CAN) project is a significant initiative that exemplifies how **Liège** promotes sustainability awareness among its residents while contributing to broader climate goals. Running from 2016 to 2019, this European project, funded with nearly €8 million, aims to reduce CO2 emissions in rural areas of North-West Europe, including **Liège**, by empowering local authorities to implement effective low-carbon strategies. CAN's main objectives are reducing CO2 emissions, capacity building for local authorities and collective empowerment amongst citizens, community organisations to foster shared commitment to sustainability. The CAN project promotes those involved in developing and implementing projects, which enhances their engagement and investment in sustainable practices. There are several Bottom-up initiatives to a paradigm shift that allows residents to propose and implement tailored solutions that address their specific needs and contexts. This empowers citizens to take action on sustainability, promoting behavioural changes that enhance environmental



awareness and instil a “green attitude”. Educational programs and workshops focus on sustainability practices to help residents understand the importance of reducing carbon footprints and encourage the adoption of energy-efficient behaviours at the household and community levels. Through Local schemes for energy efficiency CAN project facilitates the development of local schemes that target energy consumption in high-use areas and underprivileged communities. By implementing energy-saving measures and promoting renewable energy sources, the project helps residents see tangible benefits, reinforcing their commitment to sustainable living. An important initiative relevant to climate action in **Liège** was the Climate Chance Europe 2024 Wallonia Summit. This significant event underscored **Liège**'s commitment to addressing climate change adaptation and showcases the city's leadership in regional and European climate discussions. The summit contributed to the European work led by the Belgian Presidency on climate change adaptation, culminating in the creation of the **Liège Declaration**. This ambitious roadmap aimed to establish key priorities for climate adaptation, marking a crucial milestone in the ongoing efforts of the Belgian Presidency of the EU Council.

Examples from **Ljubljana** relate to a strong commitment to sustainability awareness by “**Ljubljana on the Path to Carbon Neutrality**” info-point as this information hub was established in November 2023 as part of the European UP-SCALE project, under the framework of NetZeroCities and the Mission 100 Climate Neutral and Smart Cities by 2030. The purpose of the “**Ljubljana on the Path to Carbon Neutrality**” Information Point is awareness-raising, education, and counselling, as well as the organization of events and workshops, aimed at bringing complex topics such as climate change, carbon neutrality, decarbonization, green transition, technologies, and innovations closer to the public. Another example is PSLifestyle project (where PS stands for Positive and Sustainable) enables residents of eight European countries to adopt a more positive, sustainable, and healthier lifestyle by reducing their carbon footprint. The project achieves this by establishing a

carbon calculator to assist residents in adopting even more sustainable behavioural patterns for a sustainable lifestyle. The carbon calculator was developed with the help of users within the framework of the Living Lab **Ljubljana**. The third example is RAISING AWARENES OF SUSTAINABLE DEVELOPMENT as a public-private partnership that carries out a project of energy retrofits and renovations on a number of public buildings in **Ljubljana**, including schools and kindergartens. The Programme aims to enrich the educational process in primary schools and kindergartens, by providing contents and innovative teaching methods that directly contribute towards higher awareness among children about the need for higher energy efficiency, rational use of resources and sustainable development. Lifelong Learning Weeks in Slovenia have played a significant role in promoting ESD oriented environmental and climate sensitive adult public to get engaged in lifelong learning activities with concerns to skills and competence developments in the scope of community, work, social responsibilities and active citizenship.

In **Pécs**, the Municipality contributes to the development of sustainability awareness as well as building green competences indirectly, through the support to NGOs and citizen initiatives. The city uses the participatory budget process to finance community initiatives. The participatory process is organised along the following basic scheme: Making the financial framework available, making the operational team and rules by the town - Brainstorming and submitting ideas by citizens - Selection of feasible ideas by the town - Voting by citizens - Implementation by the town. The city also established a **Pécs** City Civic Framework for funding the activities of civic organisations. The application process and coordination of this scheme is done by the House of Civic Communities, that is also the coordinator of the Learning Festival. Other examples within the city include Green Bridge Foundation, the EcoCity-EcoRegion Foundation which focus on community-based development of environmental skills with inter-generation approach (parents, districts, schools, neighbourhoods). Their actions are primarily based on gamified community learning and problem-based knowledge transfer. The Senior Academy

of **Pécs** promotes sustainable development goals and related knowledge and skills through active aging programs (e.g. environmentally focused lectures, seminars and excursions) and community based, inclusive dialogue.

In the case of **Trnava**, one can mention Batekáréň's Swap Markets a Batekáréň runs regular Swap Markets where citizens can exchange items, promoting the circular economy and raising awareness about sustainable consumption and reducing waste. The Learning **Trnava** Festival gathers various stakeholders in education to promote sustainability awareness through interactive exhibits, workshops, and public events. It highlights the importance of community involvement in sustainability. As for Public Environmental Campaigns, the city conducts campaigns focused on waste reduction and energy conservation, often in collaboration with local NGOs like Lifestarter, to educate the public also on sustainable living practices.

In terms of air quality, the city's current approach to informing, raising awareness and engaging citizens is based on making available to all citizens of the municipality, the air quality data from the different sensors so that they can have the quality of the air they breathe (Through the viewer on the Sentilo/Smart Region platform). In 2019 the City approved a Declaration to become a city free of single-use plastic (2019) and several campaigns to raise awareness among citizens. Environmental education and awareness raising in the area of noise reduction are carried out through the proposals that the Barcelona Metropolitan Area has developed and made available to the municipalities. There are workshops such as: "Let's catch the noise!", "Stop noise", "Shhh.... Children's advice not to make so much noise", "The guardians of silence", "Acoustic traffic light exhibition". Enhancing the learning communities in energy culture and neutral-carbon to raise awareness, there were so-called Vilawatt Learning Communities - four learning communities set up: for citizens, schools, professionals (85 companies) and the retail sector (53 members).

Recommendations for training areas to promote green skills and environmental awareness amongst adults in selected learning cities

Bonn has had good experience with involving citizens in strategic sustainability processes. In this way, these individuals and institutions are not only involved in finding and proposing solutions for a sustainable city, but also assume ownership of the process. They learn through participation, in many cases change their awareness and behaviour, successfully becoming multipliers along the way.

Charleroi has formulated a list of recommendations upon the promotion of green skills and environmental awareness amongst adults:

1. Find simple ways to save energy at home
2. How to reduce, reuse, and recycle
3. Starting your own garden
4. Keeping water use low
5. Choosing greener transportation options
6. Understanding climate change in everyday life
7. Protecting local plants and animals
8. Making your home eco-friendly
9. Eating local and seasonal foods
10. Getting involved in community clean-up events

Derry has formulated four recommendations in this focus:

Renewable Energy Education: Develop programs that teach the installation and maintenance of renewable energy technologies.

Sustainable Agriculture and Food: Offer courses on sustainable farming techniques and the importance of local and organic food.

Waste Management and Recycling: Provide educational programs that teach efficient waste management and recycling techniques.

Green Building: Offer trainings in sustainable construction techniques and energy efficiency in buildings.



Dublin Learning City provides a number of programmes to support adult and lifelong learning with environmental awareness: Education and community programmes aimed at people of all ages, from early childhood through to adulthood and seniors. These programmes include workshops, classes and events on topics ranging from literacy and numeracy to digital skills and literacy, arts and culture. Libraries and Community Centres provide resources and facilities offering opportunities for learning, research and skill development. These spaces host events, provide access to resources and technology and offer educational materials. Partnerships and Collaborations with local educational institutions, businesses, non-profits and community groups to expand access to LLL opportunities including online access. Support for Adult Education through a network of Education and Training Boards (ETBs) aimed at upskilling and reskilling residents to enhance their employment prospects and overall well-being. The ETBs also provide subsidies, grants or other forms of support for community-based adult education providers.

Girona Learning City has recognised that three key actions that should be carried out to work in an efficient way so as to reach both the target population and the goals of different alternatives. Therefore, it is crucial to establish a network of associations. Before tackling any action, even before setting a planning of activities and initiatives, there must be a connection between the different institutions which are going to take part in the organization of each alternative. At first, and according their own experience as a learning city, they find it more useful to work at a small scale with the participation of local institutions (Diputació, Department d'Educació and Generalitat) and local private institutions (La Caixa). In relation to the organization of alternatives, there is an organism in the Ajuntament de **Girona** known as Mesa Técnica. In this department, representatives from the different departments of the city council meet to know local needs and, therefore, they are communicated to the Mesa de Coordinación de Recursos, which is in charge of the management of personal, economic and social resources to deploy an initiative. Finally, directly connected with the previous aspect, it is highly crucial to meet local needs in order to establish realistic and feasible goals for the city.

In **Glasgow**, numerous initiatives focused on green skills and environmental awareness are already underway, with a wide range of stakeholders - including local government, universities, NGOs, and community organizations - actively involved. These stakeholders regularly coordinate their efforts through formal partnerships, such as the **Glasgow** Community Learning and Development Strategic Partnership (GCLDSP), ensuring that the city's sustainability goals are met through collective action. As for Community Energy Solutions, there is a growing need for education around community-led renewable energy solutions. Training programs could focus on developing knowledge about decentralized, renewable energy systems such as community heat networks, solar panels, and wind power projects. This aligns with **Glasgow's** GALLANT project, which emphasizes

empowering citizens as “energy citizens,” actively participating in the city's clean energy initiatives. Training programs could include practical sessions on energy conservation, managing renewable energy systems, and understanding energy storage technologies. In the focus of Sustainable Urban Development, **Glasgow** prioritizing urban regeneration through projects like the Clyde Climate Forest and retrofitting homes for energy efficiency, training in sustainable construction, green infrastructure, and biodiversity restoration should be a priority. These training areas would prepare citizens for roles in sustainable urban planning, habitat restoration, and flood management, crucial for mitigating the impacts of climate change. **Glasgow's** Active Travel Strategy (2022-2031) promotes cycling, walking, and wheeling as key components of reducing emissions and fostering healthy living. Training programs that equip individuals with the skills to plan, promote, and maintain sustainable travel infrastructure will support this initiative.

What appears to work in **Groningen** is the connection of skills to the individual situation of people - if they see personal benefits from a certain behaviour, they are more likely to take it up. So it is advisable that all training or awareness raising activities should be related to practical activities that improve the (financial) situation of people. It is good to organise events like gatherings, festival or exhibitions to spread knowledge or increase awareness in the community rather than a structured training activity. Another important skill is to be able to fix things, in and around the house. A lot of information should be spread, and promotion made so that people are aware that when making choices they should make sustainable choices, like when deciding if driving cars or taking public transport or flying planes versus a more sustainable way of travel.

In **Liège**, the learning city focus has formulated the following areas for development through potential trainings:

1. Sustainable energy management
2. Waste reduction and recycling
3. Sustainable agriculture and gardening
4. Climate change awareness
5. Water conservation techniques
6. Sustainable transportation
7. Eco-friendly consumer practices

In **Ljubljana**, learning city experience claim that training areas should focus on the following topics based on collaborations with education and VET providers for adult population to improve green skills and environmental awareness: SaveTheHomes project in **Ljubljana** should provide further outreach and awareness raising amongst adults through MOPE, Ekosland and other respected local communities to overcome challenges of sustainability upon NetZero goals in City to emphasize successful building renovation and climate change promotion with clean energy sources be prioritised. Preservation of folk heritage be tied up to U3A programmes and intergenerational and intercultural focused Autumn Festivals/lifelong learning weeks to involve more adults and their communities in various parts of **Ljubljana**. Schools and university can play a significant role in this. More adults ought to be prepared to Circular Economy and to the formations of improving lifelong learning ecosystem in town in which not only VET providers, training centres, but ACS, CSOs, cultural organisations, e.g. libraries and museums can further develop their learning provision.

Pécs Learning City emphasize trainings so as to develop Communication skills of people having to with communities since it is important to communicate relevant topics effectively to the people. It is also important to include vulnerable groups in dealing with issues of learning city programmes with attention to equity measured to reach for inclusion and access. There is also a great potential in intergenerational learning so as to reach up to collaborative urban development.

Referring to Circular Economy, **Trnava** indicated that it could expand its focus on the circular economy by offering more comprehensive training in waste reduction, recycling, and sustainable consumption practices. These skills are increasingly important in reducing environmental impact at the local level. As for Renewable Energy Education, the city could benefit from further promoting hands-on workshops and certifications related to renewable energy systems, enabling more citizens to participate in the transition to green energy. Based on **Trnava's** ongoing efforts in sustainable urban planning, training in green infrastructure, eco-friendly construction practices, and energy-efficient building design should be further developed.

The town of **Viladecans** is very much concerned with energy and they prepared a comprehensive approach how to start with energy saving and energy consumption, renewable energy etc. It is a topic that needs to be included in education of adult population.



Benefits of becoming a learning city – reflections from selected learning cities

The City of **Bonn** has significantly benefitted from the Learning City initiative, which has enhanced its capacity to address sustainability challenges and foster community engagement. By aligning its educational strategies with the principles of Education for Sustainable Development (ESD), **Bonn** has cultivated a collaborative environment where diverse stakeholders, including civil society, educational institutions, and local businesses, work together toward common goals. This effort will not only benefit the local population but also serve as a model for regional, national, and international initiatives aimed at achieving the Sustainable Development Goals (SDGs). The lessons learned from **Bonn**'s experiences can provide valuable insights for other cities embarking on similar journeys, particularly in fostering collaborative networks and engaging diverse communities in the quest for a sustainable future.

Charleroi sees the benefits of being a learning city through opportunities through increased funding and support from EU programs and international organizations for sustainability-oriented projects, cross-city collaborations to address and tackle common regional issues (i.e., unemployment among adult workforce operating in traditional sectors) and leveraging technological innovations, green and social business models to drive future sustainability efforts.

Derry benefited from the Learning City initiative as it has seen significant improvements in social cohesion, economic development, and educational accessibility. Although **Derry** has made great progress, it is still in the early stages of implementing some initiatives. Collaboration among various stakeholders has been key to the success of the initiatives. **Derry** focuses on educational inclusion, sustainability, and economic development and recommends to other cities to foster collaboration across all sectors, develop inclusive policies, and use local resources innovatively to create a sustainable and accessible learning environment.



The City of **Dublin** has benefitted from having joined the Learning City initiative to discover, build on and develop community-based learning on exchange and collaboration amongst stakeholders so as to reach for social cohesion, inclusion and attention to social, economic and environmental challenges with care, respect and dignity. **Dublin** recommends other cities to get acquainted with the story of **Dublin** Learning City and to take good messages upon the benefits of becoming an UNESCO member Learning City which claims good goals and the partnerships from local to global. This is a convincing form of getting municipal leaders and elected members of city councils to introduce learning city-focused planning and developments be based on realities and public needs.

Girona has benefited from becoming a Learning City in terms of achieving local cohesion within local institutions and authorities. With the creation of the Mesa Técnica in the Ajuntament de **Girona**, being a Learning City has promoted cohesion

and a sense of unity in the local institutions. Apart from that, society from **Girona** has benefited since there are a wide variety of services publicly available and accessible for members of community to make the city develop on sustained focuses of smart, creative and inclusive futures.

Glasgow has made impressive strides toward becoming a learning city where sustainability, social equity, and lifelong learning intersect. The Learning City framework has enabled **Glasgow** to involve citizens in shaping the city's future, from energy solutions to sustainable transport. Initiatives like the GALLANT project and the Active Travel Strategy exemplify how education can be a powerful driver for environmental change. The city's focus should remain on fostering partnerships between local institutions and its citizens to further drive sustainable economic growth and urban regeneration. Other cities can learn from **Glasgow's** holistic approach by promoting collaboration, community involvement, and innovation in both education and sustainability.

Groningen seems to have the two essential elements at their disposal: the City's strategy to become a knowledge centre in the Netherlands (and Europe) which means that learning in all forms is omnipresent and to support sustainability issues and integrate them into policies. The city already supports and finances a number of activities and initiatives that provide practical help or practical training to citizens in areas related to sustainability.

Liège received the member status of Learning City way more recently (2020 vs 2024). Hence, new know-how and expertise by **Liège** is still in the making. **Liège** has a more established focus on integrating sustainability into existing cultural and educational institutions and its initiatives often emphasize enhancing green spaces and technological innovation.

The City of **Ljubljana** has so far benefited from the Learning City initiative by becoming stronger and more capable of continuing several SDGs focused actions and programmes with concerns of raising participation in LLL based on stakeholder collaboration to balance in between social and economic challenges with great concern on green dimensions of change for smart, creative and learning communities of **Ljubljana**. the City of **Ljubljana**, it has integrated a number of target groups of lifelong learning with strong attention to adult learners and, therefore, consultations and partnership with Slovenian Institute for AdultEd. (ACS/SIAE) and with the University of the Third Age provide a learner centred focus on how to improve ESD-based activities for adults and their communities with intergenerational approach.

The City's educational landscape benefits greatly from the active commitment and participation of the University of **Pécs** both in lifelong learning initiatives and community actions through promote effective knowledge transfer and skills development. Another important factor of the development of the learning city concept is the civic society represented and coordinated by the House of Civic Communities. The City of **Pécs** and the civic society lead a structured dialogue which makes it possible to work closely with the citizens through community activities by NGOs, including green topics. The involvement of **Pécs** into the 100 Net Zero Cities initiative and trying to be a Green City provides favourable conditions for green and sustainability initiatives. However, the social issues, including the social inclusion and well-being are very important topics for the Learning City of **Pécs**.

Trnava has made significant strides in aligning its educational policies with the goals of sustainable development. Through programs focused on inclusion, digital literacy, and green skills, the city has fostered a learning environment that equips its citizens for modern challenges. Collaboration between public, private,

5. REFERENCES

and nonprofit sectors has been key to promoting lifelong learning. A prime example of this is Učiaca sa **Trnava**, where the nonprofit organization Lifestarter united various education actors to create a Learning City model. This model can be proven effective even during political leadership changes, as the civil sector ensures continuity.



There is an interesting governance mechanism established in **Viladecans** for strategic planning that involved the citizens and their inputs and then they were taken up by the Steering group. Involving the citizens through participatory processes has substantial educational potential. The town also stresses well-being and joy of their citizens. The Jury deciding on the Green Leaf Award commended the city's approach of infusing positivity and joy into their efforts. By fostering an atmosphere of enthusiasm, the city aims to engage and inspire others to join the green transformation.

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Project LEAP II – Local Adult Education Policy /
2023-1-SK01-KA220-ADU-000160870.

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Based on contributions from all partners

ISBN 978-80-99976-14-7, www.leap2local.eu

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or European Commission. Neither the European Union nor the granting authority can be held responsible for them.



Co-funded by
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