



Roadshow: Build your financial capacity

Exploring European programmes: Empowering Smart City projects with financial support

5th webinar, 16 May 2024

Paula Ferrando and Valentina Cabal.
Scalable Cities Secretariat
May 2024



Funded by
the European Union

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1. Introduction

By harnessing digital technology, data analytics, and connectivity, [cities](#) can optimize resource use, enhance energy efficiency, reduce emissions, and foster sustainable practices. Smart infrastructure, from energy-efficient buildings to efficient transportation networks, enables local administrations to meet their green goals.

A Smart City empowers local governments to utilize data-driven decision-making, engage citizens through co-creation processes, comprehend financial needs for implementing innovative financing models, nurture a collaborative stakeholders' ecosystem, and include vulnerable groups and deprived areas to align with EU sustainability goals. In this context, financial insights are indispensable within the local administration, playing a vital role in transforming cities into sustainable, green hubs of the future. It represents a wholehearted commitment to the journey towards a climate-neutral Europe by 2050.

Local administrations are crucial for the success of the [EU Taxonomy](#), and the [New Green Deal](#) due to their role in implementing green initiatives at the city and regional levels. They require financial skills to secure funds, manage budgets, attract investments, ensure compliance, foster innovation, and drive local economic growth in alignment with the [EU's sustainability objectives](#). Local governments are the bridge between [European sustainability policies](#) and tangible projects, making their financial expertise vital for translating these initiatives into actionable, green solutions that benefit both the community and the environment.

1.1. What is Scalable Cities

[Scalable Cities](#) is a community of communities. Since 2014, a total of 20 European projects have been funded in which lighthouse cities and fellow cities have committed to developing innovative projects to achieve climate neutrality. The key idea has been to develop innovative energy solutions and business models that can be scaled up and replicated across Europe and lead to measurable results. In this sense, public administrations have been invited to take an active part in the energy transition by taking a proactive role in both designing innovative services and addressing the local market.



Scalable Cities has a Secretariat that supports all these Smart Cities communities to collect and document all the knowledge and experiences developed, as well as to provide support through different services.



Some of the technical solutions developed by the cities that are part of Scalable Cities are the following:

- Computing and cognitive solutions, providing applications or services enabling behavioural changes for citizens.
- Data-Driven business models enable cities or operators to manage energy efficiency better.
- Deployment of charging infrastructure for electric vehicles.
- District heating.
- Electric/hybrid public vehicle purchases.
- Energy management (district/blocks/ buildings/Demand/response) using technologies such as AI, microgrid, blockchain or others.
- Energy storage.
- Frugal solutions: it is an approach that involves using ingenuity to innovate most simply and effectively possible using the least amount of resources.
- Industrial heat production.
- Infrastructure physical and digital.
- Mobility stations.
- New buildings.
- New public transport infrastructures.
- Park & ride facilities.
- Positive Energy Blocks or Positive Energy Districts.
- Private buildings retrofitting.
- Public buildings retrofitting.
- Public lighting.
- Renewable energy production.
- Renewable energy thermal production.
- Vehicle Sharing Platforms (carpooling, sharing).
- Bundling services, please specify which sectors are involved (bundling services means grouping a set of actions in a coherent and global business model. E.g. combining retrofitting with renewables and EV charging stations).
- Others.

1.2. What is the Roadshow: Build your financial capacity?

The [Roadshow is a service offered by the Scalable Cities Secretariat](#) to support cities in the field of financial design of projects such as business model, financial schemes and everything that unfolds from it. With this objective, a series of activities will be carried out through which basic and advanced



skills on finance will be acquired, to have resources with which to think and design economically sustainable and scalable urban projects to achieve climate neutrality.

This document covers to the content of the forth webinar: "Empowering local authorities to drive the energy efficiency market within the Smart City context" on 25 April 2024.

1.3. Agenda

Introduction

10:00 - 10:05 Introduction of Scalable Cities and Smart City project. Paula Ferrando GNE Finance.

Financial concepts explanation

10:05 – 10:35 Exploring European Programs and Identifying "the best fund for your project type." Valentina Cabal - EU Advisory Director, GNE Finance.

Real case examples

10:35 – 10:50 Smart City projects – How to design a successful proposal based on insights from past and current projects (SmartENCity, MakingCities, Neutralpath). Ruben Garcia – Cartif.

10:50 – 11:05 ELENA Project – Technical support for sustainable energy measures in public buildings, Basque Country. Álvaro Pérez de Laborda - EVE.

11:05 – 11:15 ERDF, creation of a Financial Instrument in Lithuania – The Case of Vilnius..

Q&A and open discussion.

11:15 – 11:30 Q&A and open discussion.

End of the webinar



2. Drawing a connection between the final webinar and the initial one.

2.1. Preliminary identification of potential funding sources

In the first webinar titled "Financial Language for Public Administration in the Smart City Context," a financial map was presented, where GNE Finance categorized different sources of funding based on their financial characteristics, such as whether they are non-redeemable, redeemable, or adaptable.

Non-Redeemable	- When referring to grants or donations, "non-redeemable" implies that the funds provided do not need to be repaid by the recipient.
Redeemable	- In the financial context, "redeemable" typically refers to financial instruments, such as bonds or loans, that have a contractual obligation for repayment by the borrowing entity.
Adaptable	- In the financial market, "adaptable" implies flexibility in the terms and conditions of financial instruments , allowing for adjustments based on specific circumstances or conditions.

The first webinar emphasized redeemable sources, as the goal was to understand how this type of repayable funding must be supported by a business model to ensure that the entities providing the capital get their money back, along with the associated costs.

This final webinar builds on that financial map by focusing on some of the non-redeemable and adaptable sources of European funding, such as European grants and European funds and programs.

NON-REDEEMABLE	REDEEMABLE			ADAPTABLE (Could be non-redeemable and/or redeemable)
<ul style="list-style-type: none"> - National, Regional & Municipal Grants /Subsidies. - Government Incentives. - European grants: <ul style="list-style-type: none"> - ESIF: Cohesion Policy Funds (ESF, ERDF), Innovation Fund, Horizon Europe, LIFE Programme. - RRF: NextGenEU. - Modernisation Fund (only 10 countries). - Donations. 	EQUITY: <ul style="list-style-type: none"> - Traditional Equity. - Impact Investments (Transition Energy funds). - Tax Equity Investment. 	DEBT: <ul style="list-style-type: none"> -Concessional debt (usually loans). - Non-concessional debt: <ul style="list-style-type: none"> - Loans - Capital Market Debt (Green Bonds) - Financial Leasing/Operational Renting - Instalment purchases 	ADAPTABLE: (Could be Equity and/ or Debt and/or guarantees) <ul style="list-style-type: none"> -Public-Private-Partnerships (PPP) - Some European Funds: EEEF, JT M, InvestEU. - EIB Group - Private Finance - Revolving Funds - Investment funds. - Mezzanine Finance 	- CROWDFUNDING. <ul style="list-style-type: none"> - SOME EUROPEAN FUNDS AND PROGRAMMES: <ul style="list-style-type: none"> - Next Generation EU (Recovery and Resilient Facility - Mechanism for Recovery and Resilience, REPower EU, New ELENA) - ESIF: Cohesion Policy Funds (Cohesion funds, Jessica Urban Development Funds, Just Transition Fund)



The key to these funds is to understand their scope and primary objectives, not just in economic terms, but also to ensure they align with the type of project you aim to implement and the stage at which it currently stands. This way, you can find funding that is better suited for starting a project and deploying in a **pilot phase**, such as development and innovation grants like Horizon Europe and LIFE. There are other grants or funding aimed at demonstrating a solution's market-readiness, like the Innovation Fund, and finally, there are funds designed to **scale a project or solution** because the technology is mature, companies are prepared, and there's a critical mass of demand—in other words, the market is ripe, like the InvestEU programme.

Understanding the **type of project** you want to implement is crucial for finding the appropriate European fund. **Being familiar** with these funds also requires an institutional journey, allowing the organization to develop the capabilities to navigate European terminology and procedures, as well as to understand and trust the funds available. Therefore, having an **office or department for european funds** is highly advisable (if not almost essential) for every local public administration. This matter is considered so important that it is addressed in point 9 of this document.



3. Key aspects for understanding European Funds.

3.1 Three different approaches to managing the Funds

EU funding programmes can be administered in three distinct ways, depending on the specific structure and requirements of the programme:

1. **Direct management:** Under this approach, the European Commission directly manages the EU funding. This includes overseeing all stages of programme implementation, from project selection to monitoring and evaluation. Programmes in this category are centrally controlled by the Commission, ensuring a uniform approach across all participating entities.
2. **Shared management:** This type of management involves a collaborative effort between the European Commission and national authorities. The Commission sets the framework and guidelines, while national bodies handle day-to-day operations. This approach allows for more tailored implementation, reflecting local needs and conditions while still adhering to EU-wide rules and standards.
3. **Indirect management:** Here, funding is managed by partner organisations or other entities, which can be located either inside or outside the EU. These organisations operate under specific agreements with the European Commission, and their compliance with EU rules is regularly monitored. This method provides flexibility and leverages the expertise of partner organisations in managing funds and projects.

More information:

- [European Commission - EU funding by management mode](#)

3.2 Types of funding available based on their nature

The European Union (EU) provides financial support for a variety of projects and programs, ensuring strict controls to maintain transparency and accountability. These controls are designed to make sure that funds are used effectively and in compliance with EU regulations. The [European Union classifies the types of funding on its official website](#) into grants, subsidies, financial instruments, loans, and prizes.

For a better understanding of the types of funding, from a financial perspective, the funds and programs offered by the European Commission can be classified into:

1. **Repayable finance:** Repayable finance refers to financial support provided with the expectation of repayment over time. This type of funding is generally offered through loans or other financial instruments. It is designed to support projects with a clear repayment



structure and can be used to fund business ventures, infrastructure projects, or other initiatives that generate revenue. [European Commission - Financial instruments: equity, guarantees, and loans](#)

2. **Funding to leverage private investments:** This funding type aims to encourage private sector participation in specific projects. By providing initial financial support, the European Commission seeks to attract additional private investment. This funding mechanism is often used to support strategic initiatives, stimulate economic growth, or promote innovation. [European Commission - Innovative financial instruments](#)
3. **Grant schemes:** (1) Grant schemes are non-repayable funds awarded to support specific projects, research, or initiatives. They are typically given to organizations, institutions, or individuals through competitive processes or based on set criteria. Grants are commonly used to fund research, education, environmental projects, and social initiatives. (2) In some cases, the EU awards prizes to winners of competitions, like those in the Horizon Europe research and innovation program. These prizes recognize achievements and encourage excellence in specific fields. (3) Subsidies, these are typically managed by national or regional authorities and are intended to support certain sectors, like agriculture, industry, or energy. Subsidies aim to lower costs or promote specific activities, contributing to the EU's broader policy objectives. [European Commission - Grants](#)
4. **Technical assistance facilities:** Technical assistance facilities provide funding and expertise to support the implementation of projects. This type of funding is designed to offer technical guidance, capacity building, and other forms of assistance to ensure the successful execution of projects and programmes. It is often used in conjunction with other types of funding to ensure projects meet their objectives.

Each of these funding forms serves distinct purposes, allowing the EU to address a wide range of goals, from supporting research and innovation to promoting economic stability and encouraging sector-specific growth.

3.3 Types of urban project that can be fund by the European Commission

The EU funds a diverse range of urban and smart city projects at various stages of development, from early research and pilot projects to scalable solutions ready for widespread adoption. The aim is to promote sustainable urban development, innovation, and efficient energy use, ultimately creating smarter and more sustainable cities. While there is no official classification by the European Commission, it is implied in the objectives and conditions set by the Commission when deploying different financing mechanisms. To provide clarity within the context of this webinar, three categories are established to help understand how to align "the best fund for your project type."

These project types can be categorized into three key stages: pilot, demonstration, and scalable.

1. **Pilot projects:** These projects focus on research and development, aiming to test new concepts and technologies. They often involve experimental setups in real-world urban settings to gauge feasibility, efficiency, and impact. The emphasis is on innovation and



exploration, providing an initial platform for ideas that could eventually become larger solutions.

2. **Demonstration projects:** At this stage, projects have matured to the point where they can demonstrate their viability and market readiness. These projects showcase the potential of a given technology, business model, or citizen engagement strategy. They serve as proofs of concept, helping stakeholders understand how a solution works in practice. EU funding for these projects helps to bridge the gap between pilot tests and market launch.
3. **Scalable projects:** Scalable projects are designed for broad implementation, indicating that the technology, market, and societal demand are all aligned. These projects are ready for large-scale deployment, with commercial entities involved in production and distribution. EU funding for these projects supports the growth and dissemination of proven solutions to address urban challenges, promoting sustainable development on a larger scale.

Inspiring information:

- [Innovating cities policy report for EU R&I sustainable urban development](#)

3.4 Connecting the different concepts

Linking the management approach with the European Fund or Program.

Management approach	Fund or programme
Direct	<p>See calls for proposals under direct management on the funding and tenders portal (SEDIA).</p> <ul style="list-style-type: none"> • Horizon Europe: The EU's research and innovation funding programme. • LIFE Programme: Supporting environmental and climate action projects. • Connecting Europe Facility (CEF): Funding infrastructure projects in transport, energy, and digital connectivity. • Innovation Fund: Support market solutions to decarbonise European industry and fostering competitiveness. • Digital Europe Programme (DIGITAL): The programme aims to bring digital technology to businesses, citizens, and public administrations to drive Europe's digital transformation.
Shared	<p>This approach allows for local implementation while adhering to EU-wide regulations. Explore the national single portals for shared management funds</p> <ul style="list-style-type: none"> • European Regional Development Fund (ERDF): Aims to strengthen economic and social cohesion by correcting regional imbalances. • Cohesion Fund: Supports projects in the fields of environment and trans-European networks to promote cohesion in the EU. This Fund is the main pillar of the EC • Just Transition Fund (JTF) – support for regions most affected by the transition towards climate neutrality



Indirect	<p>Under this management mode, the Commission delegates budget execution tasks to different types of implementing partners, for example:</p> <ul style="list-style-type: none"> • Third countries or the bodies they have designated • International organisations such as the United Nations (UN) family, the World bank, the International Monetary Fund (IMF) • EIB group: the European Investment Bank (EIB) and the European Investment Fund (EIF) • Member States bodies such as Erasmus+ national agencies, Member States' development agencies, National Promotional Banks
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Linking the type of available funding with the European Fund or Program.

Types of funding	Fund or programme
Repayable finance	<p>Loans are a form of financial support where funds are provided with the expectation of repayment over time. These funds and programmes use loans to finance a variety of projects, aiming to support economic growth, regional development, and sustainability. Here you can select your country to search for financial opportunities.</p> <p>Here is a list of some EU funds and programmes deployed in the form of loans:</p> <ul style="list-style-type: none"> • European Investment Bank (EIB): The EIB provides loans to support infrastructure projects, business development, and sustainable growth initiatives. • European Fund for Strategic Investments (EFSI): This fund offers loans to stimulate private investment in strategic projects across the EU. • European Regional Development Fund (ERDF): Offers loans to support regional development, infrastructure, and innovation projects.
Funding to leverage private investments	<p>Financial instruments encompass a range of funding mechanisms – loans, equity, guarantees, etc. These instruments are designed to support a variety of projects, often in collaboration with public and private institutions. Find the EU Financial instruments in your country.</p> <p><u>Financial instruments are designed to be a more efficient and sustainable alternative to traditional grants, allowing funds to be reused and potentially reaching a broader range of projects.</u></p> <p>Below is a list of some EU funds and programs implemented through financial instruments:</p> <ul style="list-style-type: none"> • European Regional Development Fund (ERDF): Offers financial instruments for regional development and innovation projects. • Cohesion Fund (CF): Provides financial instruments to support environmental and infrastructure projects in less developed regions. • EIB Group: funding under a partnership with the European Investment Bank. Also in charge of implementing 75% of the InvestEU programme.



<p>Grant schemes</p>	<p>Grant schemes are non-repayable funds generally awarded through competitive processes (1) Grants: Financial support provided by the European Commission to promote specific objectives, often intended to reduce costs in certain activities or sectors. (2) Subsidies: Financial assistance aimed at supporting specific activities or sectors by lowering costs.(3) Prizes: Monetary awards given to winners of specific competitions, usually within research or innovation programs.</p> <p>Below is a list of key EU funds and programs distributed through grants, subsidies, and prizes:</p> <ul style="list-style-type: none"> • Horizon Europe: The EU's primary research and innovation programme, supporting scientific research, development, and technology transfer through grants. • LIFE Programme: Grants supporting environmental and climate action projects. • European Regional Development Fund (ERDF): Provides grants for regional development, infrastructure, and economic growth. • European Cohesion Fund: Aims to reduce regional disparities within the EU, providing subsidies for environmental and infrastructure projects in less developed regions. • Horizon Europe Prizes: Awards given to winners of contests in the Horizon Europe research and innovation programme. • European Green Capital Award: A prize awarded to cities that demonstrate outstanding environmental performance. • European Green Leaf Award: A similar prize given to smaller cities for their commitment to sustainable practices.
<p>Technical assistance</p>	<p>Technical assistance provides funding, expertise, and guidance to support the implementation of projects and programmes.</p> <ul style="list-style-type: none"> • European Structural and Investment Funds (ESIF): Technical assistance helps with project implementation, monitoring, and capacity building for these funds. • EIB – ELENA Facility: The European Local Energy Assistance (ELENA) facility, managed by the European Investment Bank (EIB), provides technical assistance for energy efficiency and renewable energy projects. It targets buildings and innovative urban transport, helping to prepare and implement large-scale investments in these areas. • European City Facility (EUCF): The European City Facility (EUCF) offers technical and capacity-building support to municipalities, local authorities, and their groupings. It provides grants and technical assistance to help develop investment concepts for sustainable energy projects. • EEEF Technical Assistance Facility: The Technical Assistance (TA) Facility of the European Energy Efficiency Fund (EEEF) supports public beneficiaries across Europe in developing bankable sustainable energy investments. This assistance helps public authorities prepare projects that meet the necessary standards for successful implementation and financing

Aligning EU Funds and Programs with EU management approach, the type of fund, and the type of project you would like to develop



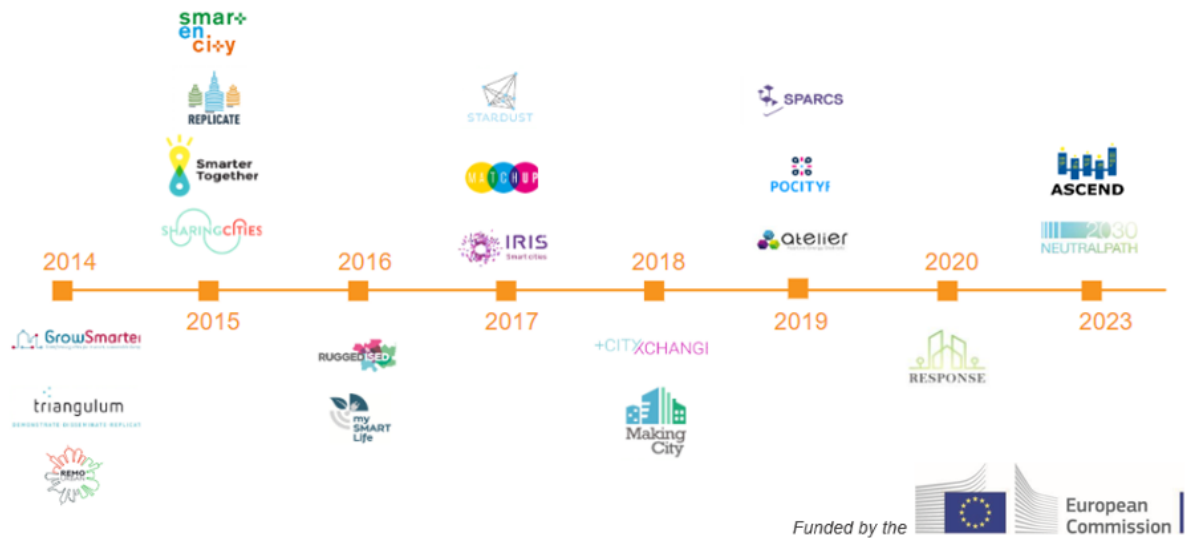
Roadshow: 5th webinar on 'Exploring European programmes: Empowering Smart City projects with financial support'

European Commission, Funds and programs for Smart City projects	Management			Types of funding				Type of project to be financed		
	Direct	Shared	Indirect	Repayable finance	F.to leverage private finance	Grants Schemes	Technical assistance	Pilot	Demonstration	Scalable
Horizon Europe (before Horizon 2020)	X					X		X		
LIFE Programme	X					X		X		
Connecting Europe Facility (CEF):	X					X		X	X	X
Innovation Fund	X					X			X	
Digital Europe Programme (DIGITAL)	X					X HE CEF		X	X	X
European Regional Development Fund (ERDF):		X		X loans	X FI	X			X	X
Cohesion Fund:		X			X FI	X			X	X
Just Transition Fund (JTF)		X								
EIB Group: European Investment Bank and European Investment Fund			X	X loans	X Partnership InvestEU					X
European Fund for Strategic Investments (EFSI)			X	X	X EIB Group Guarantees		X			X
EIB – ELENA Facility			X				X			X
European City Facility (EUCF)		X					X			X
EEEF Technical Assistance Facility			X EIB				X			X
European Urban Initiative (before UIA, Urban Innovation Action)	X					X		X		
Modernisation Fund (for 10 countries)			X	X						X
Just Transition Mechanism (NUTS3)			X	X loan						X



4. European funding framework for Smart City projects

Smart Cities and Communities Projects



Smart city projects in Europe are funded through various European Commission programs aimed at promoting urban development, sustainability, and technological innovation. [European Commission - Smart cities](#)

Here is a classification of the mentioned projects based on their funding source and brief explanations:

1. Horizon 2020:

- **GrowSmarter:** This project targets energy efficiency, integrated infrastructure, and sustainable mobility to support smarter cities.
- **Triangulum:** Aims to demonstrate, disseminate, and replicate solutions for sustainable mobility, energy, and ICT. It connects cities to promote smarter, sustainable practices.
- **Remorurban:** This project aims to develop an urban regeneration model to accelerate the deployment of innovative technologies for smart cities. It focuses on improving energy efficiency, sustainable transportation, and the quality of life for citizens.
- **SmartENCity:** This project works towards making European cities more sustainable through energy efficiency, clean transport, and sustainable urban development.
- **Replicate:** Renaissance of PLaces with Innovative Citizenship And TEchnologies – is a European research and development project that aims to deploy energy efficiency, mobility and ICT solutions in city districts.



- **SmarterTogether:** This initiative aims to make cities more efficient and liveable by implementing innovative technologies in urban environments.
- **SharingCities:** SharingCities seeks to share knowledge and experiences among cities to facilitate the replication and scaling of smart city solutions. It promotes urban sustainability and the well-being of inhabitants in participating cities.
- **Ruggedised:** This project focuses on creating sustainable and resilient urban areas through technology and innovation. It has a strong focus on energy, mobility, and ICT infrastructure.
- **MysmartLife:** Aims to create smart and sustainable cities by implementing innovative energy and ICT solutions.
- **Stardust:** This project works to develop and implement smart city technologies with a focus on renewable energy, smart mobility, and ICT.
- **MATCHUP:** Aims to accelerate the transformation of cities towards sustainable urban areas with innovative energy, mobility, and ICT solutions.
- **IRIS:** Aims to accelerate the adoption of smart, sustainable solutions in cities by deploying innovative technologies and processes.
- **+CityxChange:** The +CityxChange project envisions enabling the co-creation of positive cities, where energy, transport, and technology solutions are integrated to improve the quality of life. This project includes cities like Trondheim, Limerick, and more.
- **MAKINGCITY:** Focuses on creating smart and sustainable urban areas by integrating renewable energy and innovative technologies.
- **SPARCS:** Focuses on developing and demonstrating innovative smart city solutions, particularly in energy and ICT.
- **POCITYF:** This project focuses on developing smart, sustainable cities by integrating renewable energy sources and advanced technologies in heritage cities.
- **Atelier:** focuses on developing energy-positive communities, driving the transition to renewable energy and smart technologies. This project seeks to make participating cities self-sufficient and resilient through the adoption of innovative solutions.
- **RESPONSE:** The goal of RESPONSE is to create positive energy communities and resilient cities in Europe. The project seeks to promote cooperation between cities to develop sustainable and resilient energy solutions.

2. Horizon Europe:

- **Ascend:** The ASCEND project, which stands for Accelerate poSitive Clean ENergy Districts, aims to create Positive Clean Energy Districts (PCEDs) and establish them as a standard solution to mitigate climate change in European cities. The goal is to accelerate the transition towards climate neutrality by promoting clean energy and sustainability at the district level. This is part of the EU's commitment to its "Climate-Neutral and Smart Cities" mission.
- **Newtralpath:** Aims to develop smart city solutions with a focus on energy efficiency and sustainability. It involves initiatives focused on energy neutrality and sustainable pathways, aiming to create energy-efficient and sustainable urban environments through the adoption of innovative technologies and smart solutions.



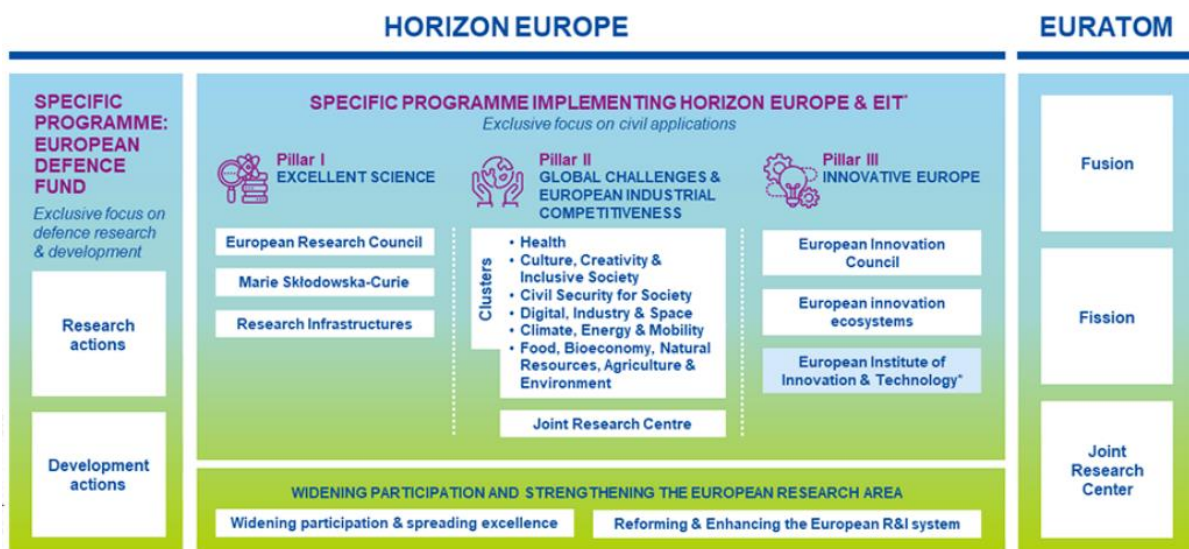
5 Horizon Europe

General Information

Horizon Europe (HorizonEU) stands as the EU's paramount **Research and Innovation programme**, boasting a budget of €95.5 billion for grants. Its principal aim is to address climate change, align with the UN's Sustainable Development Goals, and enhance the EU's competitiveness and growth. The programme fosters collaborative efforts, emphasizes the influence of research and innovation in the formation, support, and execution of EU policies, and confronts global challenges. It's instrumental in disseminating exceptional knowledge and technology.

As it can be seen in the following figure, the HorizonEU programme is divided in the following three pillars:

1. Excellent science with an allocated budget of €25 billion,
2. Global challenges and European industrial competitiveness with a total budget of €53.5 billion, and
3. **Innovative Europe with a €13.6 billion budget.** Apart from these pillars, a section to widening the participation and strengthening the European research area has been created with an allocated budget of €3.4 billion.



* The European Institute of Innovation & Technology (EIT) is not part of the Specific Programme

To maximize impact and encourage greater citizen engagement, the HorizonEU program for the 2021-2027 period has been subdivided into five specific missions under the "global challenges and European industrial competitiveness" pillar. These missions aim to provide concrete solutions to the European Commission's priorities through innovative forms of governance and collaboration. Their primary objective is to support Europe's transformation into a greener, healthier, more inclusive, and resilient continent. The five EU Missions are:

1. Adaptation to climate change.
2. Beating cancer.
3. Restore the oceans.
4. Achieve climate-neutral and smart cities.



5. Establish 100 living labs and lighthouses to lead the transition towards a sustainable future.

The EU Missions aim to mobilize and activate both public and private stakeholders to create a meaningful and lasting impact. They seek to engage citizens in the design, implementation, and monitoring of new solutions.

Each mission functions as a portfolio of actions, including research projects, policy measures, or legislative initiatives, with the aim of achieving measurable goals.

From the perspective of implementing social and affordable housing renovation projects, the missions on climate change adaptation and the creation of 100 climate-neutral cities and smart cities by 2030 are particularly relevant.

The adaptation mission focuses on supporting EU regions, cities, and local authorities in building resilience against climate change. It helps these entities understand climate risks, develop preparedness strategies, and test innovative solutions on the ground. This mission aligns with the goals of the Green Deal and EC's Adaptation policies.

The climate-neutral cities and smart cities mission addresses the significant challenges European cities face in mitigating climate change. Given that cities house approximately 75% of EU citizens, consume over 65% of the world's energy, and contribute more than 70% of global CO₂ emissions, this mission is crucial. It will support 100 cities in accelerating their green and digital transformations, serving as hubs for experimentation and innovation to guide other European cities toward carbon neutrality by 2050. This mission takes a cross-sectoral and demand-driven approach, aiming to create synergies between existing initiatives and meet the actual needs of citizens.

Actions under these missions will encompass various subjects, such as zero-emission mobility, creating clean energy districts, urban greening, and re-naturing. Additionally, these missions will involve Ukrainian cities in the climate-neutral and smart cities mission.

Opportunities for Smart City urban projects [Horizon Europe 2024](#)

The European Commission launches two new calls for projects under Horizon Europe's Work Programme for 2023-2024 [Cluster 5](#), focusing on **Climate Action, Energy, and Mobility**. These funding opportunities aim to support research and innovation in green, smart, and resilient transport and mobility projects. They offer €163.5 million to help advance smart city and urban transformation goals, contributing to a more sustainable and connected future.





Call reference	Subject areas or 'destinations'	No. of topics	Type of action	Budget available (€ million)	Deadline	How it fit for SCC and municipalities?
HORIZON -CL5-2024-D2-02	Cross-sectoral solutions for the climate transition	3: Batteries systems and lighting; Post Li-on technologies for mobility; stable lithium metal	HORIZON IA; HORIZON RIA	39	05.09.2024	Too technical and specific to materials for electric mobility
HORIZON -CL5-2024-D6-01	Safe, Resilient Transport and Smart Mobility services for passengers and goods	13: Zero emission road mobility; Policies and governance shaping the future transport; ...	HORIZON IA; HORIZON RIA; HORIZON CSA	124.5	05.09.2024	Since these calls for proposals are focused on mobility, they might be of interest for the development of smart city projects that address mobility, governance, and new policies.
TOTAL				163.5		

IA: Innovation Accion

RIA: Research and Innovation Action

CSA: Coordination and support Actions

How to apply

Horizon Europe funds various collaborative projects, typically involving at least three partners from different countries, and falls **into four categories**:

1. Research and innovation action (**RIA**) – advancing knowledge or exploring new technologies, products, processes, services, or solutions, with EU funding covering 100% of project costs.
2. Innovation action (**IA**) – developing plans or designs for new or improved products, processes, or services, including prototyping, demonstrating, piloting, large-scale product validation, and market replication, with EU funding covering 70% of project costs.



3. Coordination and support action (**CSA**) – enhancing cooperation among EU and associated countries to strengthen the research area, encompassing activities such as standardization, dissemination, awareness-raising, communication, and networking, with EU funding covering 100% of project costs.

4. Programme co-fund action (**COFUND**) – offering multi-annual co-funding for European partnerships that bring together public and private partners, with EU funding covering between 30% and 70% of project costs.

Prospective applicants must respond to specific calls for proposals available on the Funding & tender opportunities website.

The application process involves:

1. Identifying suitable funding opportunities and comprehending application conditions.
2. Crafting a robust proposal that meets the call's objectives.
3. Submitting the proposal for review, where it undergoes admissibility and eligibility checks.
4. Awaiting evaluation by an independent committee.
5. If the proposal is approved, to agree on signing a Grant Agreement, or contract with the grant authority (an agency within the European Commission).
6. To undertake the project according to the Grant Agreement terms and conditions.

Interested applicants can reach out the [National Contact points of the HorizonEU \(NCPs\)](#) that provide guidance, practical information and assistance on all aspects of participation of HorizonEU. In general, the **NCPs provide the following services:**

- Guidance choosing relevant HorizonEU topics and types of actions.
- Advice on administrative procedures and contractual issues.
- Training and assistance on proposal writing.
- Documentation.
- Assistance in partner search.



6. LIFE Programme

General description

The LIFE program is the European Union's funding instrument for environmental and climate action, established in 1992. Through this program, the EU has co-financed thousands of projects related to nature conservation, climate action, and environmental protection.

The primary goal of LIFE is to contribute to the European Union's transformation into a climate-neutral and resilient society. The LIFE Programme for the period 2021-2027 is structured into four sub-programmes: Nature and Biodiversity, Circular Economy and Quality of Life, Climate Change Mitigation and Adaptation, and Clean Energy Transition.

LIFE Programme supports public authorities, non-governmental organizations, and private actors, particularly small and medium-sized enterprises, in fostering a transition toward a sustainable, energy-efficient, renewable energy-based, climate-neutral, and resilient economy. This, in turn, contributes to sustainable development. In the following sections, the opportunities for promoters are listed according to LIFE's sub-programmes.

More information:

inea.ec.europa.eu - LIFE - European Commission

Subprograms

The LIFE program encompasses several main subprograms that cover different areas of interest:

- **LIFE Nature and Biodiversity:** Focused on the conservation of nature and biodiversity.
- **LIFE Climate Action:** Addresses climate change and promotes actions to mitigate it.
- **LIFE Circular Economy and Quality of Life:** Focused on the transition to a circular economy and improving quality of life.
- **LIFE Clean Energy Transition:** Encourages the adoption of clean energy sources.

Smart City project funding

LIFE can be a source of funding for Smart City projects that contribute to the EU's environmental and climate goals. Municipalities can finance Smart City projects through grants and aid from programs like LIFE, as well as through public-private partnerships and other financial instruments.

How to apply

To apply for funding from the LIFE program, organizations or entities must follow the procedures set by the European Commission. Applicants need to submit a detailed proposal explaining the project, its goals, and how it will contribute to the overall objectives of the LIFE program. The call for applications and specific details about the application process can be found on the program's official website. [LIFE Calls for proposals 2024.](#)

Prospective applicants must respond to specific LIFE calls for proposals available on the Funding and tender opportunities website.



The application process involves:

1. Identifying suitable funding opportunities and comprehending application conditions.
2. Crafting a robust proposal that meets the call's objectives.
3. Submitting the proposal for review, where it undergoes admissibility and eligibility checks.
4. Awaiting evaluation by an independent committee.



4. EIB – ELENA Facility

General description

While not a direct financing mechanism, the ELENA facility plays a crucial role in co-financing technical support to enhance energy efficiency and the utilization of renewable energy in urban areas. This assistance aims to facilitate the execution of energy-related projects that may not be financially viable independently but carry significant public benefits. The support spans three key areas: Energy efficiency, Sustainable residential initiatives, and Urban transport mobility, with a specific focus on social and affordable housing renovation within the Sustainable Residential category.

The ELENA facility typically extends support to projects with an investment size exceeding €30 million, which are expected to be implemented within a three-year timeframe, although exceptions can be made for residential buildings.

The facility encourages the aggregation of different projects to enhance attractiveness for contractors and financiers. ELENA provides grants to its beneficiaries, which can be allocated to various critical areas, including technical studies, energy audits, tendering procedure preparation, business planning, financial advisory, project bundling, legal counsel, and project management. These activities, often costly at the initial stages of project development, can pose challenges for non-profit organizations.

Opportunities for Smart City projects:

ELENA is accessible to a range of entities, including government organizations, regional, local, and municipal authorities, public corporations, financial institutions, private entities, social housing associations, and homeowner associations. It is important to emphasize that ELENA technical assistance projects are not intended to generate profits. ELENA offers specific support for the following types of projects:

- 1. Energy Efficiency:** Supports projects that improve energy efficiency and renewable energy use in both residential and non-residential buildings. This includes solar panels, public lighting, district heating, and smart grids.
- 2. Sustainable Residential Projects:** Assists private individuals and homeowner associations in implementing energy efficiency renovations and renewable energy projects for residential buildings, including social housing.
- 3. Urban Transport and Mobility:** Focuses on innovative transport and mobility projects in urban areas that save energy and reduce emissions. This encompasses a wide range of projects, from alternative fuels in urban mobility to energy-efficient urban transport systems.

How to apply

To commence the application process, interested parties must submit an initial proposal via email and complete the relevant application forms, ensuring their project aligns with the eligibility criteria. The European Commission grants final approval based on an assessment by the [ELENA team](#).

To initiate the application, it is advisable to follow these steps:



Roadshow: 5th webinar on 'Exploring European programmes: Empowering Smart City projects with financial support'

1. First verify that the project fits within the eligible framework. It is possible to submitting a pre-application form directly to elena@eib.org and receive confirmation of compliance with criteria.
2. Once the project is pre-selected, guidance for the subsequent application steps will be provided by the ELENA team. For projects involving energy renovation for housing, the "ELENA application form for energy and residential projects" should be used. It's essential to include a signed declaration from the applicant.
3. All required documents must be submitted to the ELENA support group. The European Commission makes the final decision to approve or reject the project, based on the evaluation conducted by the EIB.



8. Cohesion Policy Sectoral Financial Instrument (FI)

Introduction: Cohesion Policy in the 2021-2027

The funds earmarked for **EU Cohesion Policy in the 2021-2027** period, are allocated across five specific policy objectives (POs):

- **PO1:** Encourages a smarter Europe, fostering innovation, digitalization, economic transformation, and SME support.
- **PO2:** Aims for a greener, carbon-free Europe.
- **PO3:** Focuses on connecting Europe through enhanced transport and digital networks.
- **PO4:** Strives for a more social Europe, upholding the European Pillar of Social Rights, and improving employment, education, skills, social inclusion, and healthcare equality.
- **PO5:** Works towards bringing Europe closer to its citizens by promoting local initiatives and sustainable urban development.

The Cohesion Policy funds are structured into various funds, each with distinct priorities that align with the POs of the EU:

- **The European Regional Development Fund (ERDF)** focuses on all five policy objectives, with a strong emphasis on fostering a smarter (PO1) and greener Europe (PO2).
- **The European Social Fund Plus (ESF+)** is primarily dedicated to advancing a more social Europe (PO4).
- **The Cohesion Fund (CF)** supports efforts towards a greener (PO2) and more connected Europe (PO3).
- **The Just Transition Fund (JTF)** is aligned chiefly with PO2 under its specific regulatory objectives, aiding regions in the transition towards a green economy. This fund is being managed under the Just Transition Mechanism further explained in the section 3.2.2 of this document.
- **Interreg programmes** enhance regional cooperation and development, with the additional goals of improving governance and security within Europe.
- **The European Agricultural Fund for Rural Development (EAFRD)** contributes to rural development programmes, emphasizing sustainable resource management and climate action.

The available Cohesion Policy funds can be allocated as direct grants or channelled into the creation of financial instruments (FIs).

General description

Cohesion Policy funds offer a flexible approach to allocating resources, enabling Member States to establish a variety of sectoral Financial Instruments (FI). These instruments serve as alternatives to traditional grants and are particularly valuable when investments have the potential to generate financial returns or cost savings that can be used to repay the initial investments. Financial instruments can be settled in the form of diverse financing options, from equity investments to senior loans, and can be effectively blended with grant funding.

Traditionally, grants have been the primary support for energy efficiency enhancements in buildings, while the uptake of Cohesion funds for FIs has been minimal. However, there are notable examples



of successful FIs use, such as the initiatives to [finance energy renovations of multi-family buildings in Lithuania](#).

The EC endorses FIs as a cost-effective use of EU funds, particularly for building renovations. FIs not only leverage private capital but also promote sustainability and enhance the quality of projects.

More information:

- ec.europa.eu - [Financial Instruments in Cohesion Policy](#)
- eib.org - [Regional development & cohesion](#)

Opportunities for Smart City projects

Sectoral financial instruments from Cohesion Policy offer multiple opportunities to finance Smart City projects in Europe. These instruments are designed to complement traditional grant-based support and offer more efficient and sustainable alternatives to finance urban and regional development projects.

The **European Regional Development Fund (ERDF)** and the **Cohesion Fund** provide support through investments in infrastructure, regional and urban development, among other things. The **European Investment Bank (EIB)** also plays a key role by offering a wide range of financial instruments for municipalities and regional governments, tailored to the size of the project and the financing needs.

These opportunities can help fund Smart City projects focused on improving energy efficiency, implementing innovative technological solutions, and promoting sustainable urban development. Those interested in applying for funding can find detailed information about the various financial instruments available and the application requirements on the official European Commission websites

In addition, the European Commission supports Smart City strategies through various policies and programs that encourage innovation and collaboration among cities and regions, such as the **INTERREG program**. These financial instruments offer a more efficient and sustainable alternative to complement traditional grant-based support.

Inspiring information for Smart City projects:

- esifa.eu - [Cohesion Policy 2021-2027: Practical Toolbox for Successful National Implementation](#)

Advantages and drawbacks

Advantages	Drawbacks
FIs enable the efficient allocation of public funds while drawing in private investment.	Setting up FIs can be time-consuming.
FIs offer sustainability by allowing funds to be reused, encouraging the financial sector to invest in key areas.	There might be less leverage and higher costs than anticipated.
FIs can lead to higher project quality due to the repayment requirement and necessitate careful project selection for commercial viability.	Public entities may lack expertise in commercial practices required for FIs.
FIs can bridge financial gaps, speeding up project initiation by providing comprehensive rather than partial funding.	Cohesion fund regulations regarding FIs can be complex
	Monitoring and reporting for FIs can be burdensome and expensive.



How to apply

The Cohesion Policy Sectoral FIs operate under a shared management framework in which the European Commission collaborates with Member States and implementing partners (like the EIB) to determine resource allocation. [Managing Authorities](#) bear the responsibility of choosing to utilize Cohesion Policy funds for the implementation of financial instruments, once their potential has been identified. The design of these FIs and the selection of appropriate financial products should be finalized during the early stages of implementation.

Financial instruments are suitable for those financially viable projects that are expected to generate enough income or savings to payback the support received. They are designed to address identified market failures, where traditional banks are reluctant to lend or the private sector is hesitant to invest.

The [fi-compass](#) serves as a dedicated online resource for anyone interested in EU shared management financial instruments. It provides advisory services to Managing Authorities, offered by the European Commission in partnership with the European Investment Bank (EIB). Within this portal, specific data concerning the initiatives of each [Member State](#) can be found.



9. Having a European department in every local authority

A department dedicated to managing European funds enhances the ability of local public administrations to access, manage, and utilize EU resources effectively, contributing to local development, innovation, and compliance with European standards.

Having a department dedicated to managing European funds in every local public administration is crucial for several reasons:

1. **Efficient access to EU Funds:** These departments specialize in identifying, applying for, and managing European Union funds. This expertise allows local administrations to maximize their chances of securing EU grants and funding, which can be used for local development projects.
2. **Compliance and regulation:** European funds often come with strict regulations and requirements. A specialized department ensures that the local administration stays compliant with EU rules, reducing the risk of penalties or the need to return funds.
3. **Resource optimization:** With dedicated professionals managing the funds, local administrations can optimize the use of resources, ensuring that they are used efficiently to benefit the community. Proper management can lead to more successful projects and better outcomes for local citizens.
4. **Project management and accountability:** A dedicated department provides a clear structure for project management, from application to execution and reporting. This setup ensures accountability and transparency in the use of European funds.
5. **Inspiration from other cities:** The European Commission's focus on cross-border collaboration means cities and organizations can draw inspiration from successful projects in other regions. This not only fosters innovation but also helps address common challenges collectively.
6. **Networking and collaboration:** The European Commission encourages collaboration and networking among stakeholders. This includes sharing knowledge, best practices, and innovative ideas across different regions. Platforms like Joinup facilitate this exchange of information, promoting a culture of cooperation and mutual learning.

