

### **DECEMBER 30, 2025**

Thematic Network(s): Nature-Based Solutions
Topic keywords: *Energy communities; community gardens, local energy generation, net zero strategies.* 



# ROME (Italy) – CALGARY (Canada)

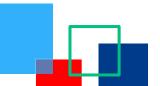
**IURC - CASE STUDY** 

Cities lead the way in change and innovation, piloting new approaches and pursuing inclusion and sustainability goals. Energy communities allow citizens to collaboratively generate, share, and manage local energy, which increases security, lowers costs, and supports sustainability. Local governments play an essential role in diversifying energy systems and empowering local action for energy efficiency, cost savings, poverty reduction and access to local food. Two cities exchanged knowledge to further maximize these benefits and apply lessons to advance new initiatives.

# **EXECUTIVE SUMMARY**

The cities of Rome and Calgary, like many modern cities, are confronted by the challenges of food and energy equity, fostering social inclusion, and adapting public infrastructures and programs to growing population needs and climate change. Despite their vastly different contexts, Rome and Calgary discovered common ground in their efforts to foster community through initiatives such as community gardens, food policies, energy communities, energy-efficient housing, and nature-based solutions. Through a series of technical calls and two exchange visits, their two-year cooperation under the International Urban and Regional Cooperation (IURC) North America programme highlighted innovative practices and inspired both cities to conceive new collaborative projects and incorporate learnings in the next iteration of their plans and programs.

Rome is undergoing major renewal through its Investment Plan Projects, funded by the city's €6B budget, EU post-COVID recovery funds, and extraordinary funding for the 2025 Jubilee. It's Climate Plan and The Food Policy Plan are two principal policy drivers of initiatives to create a resilient and inclusive city. Calgary is growing rapidly, aiming to balance urban expansion with biodiversity goals and actively involving Indigenous people in doing so. The Calgary Climate Strategy – Pathways to 2050 serves as the foundational framework for guiding city departments in their climate-focused efforts. This strategy is designed to steer improvements in several key areas: city building and development, buildings and homes, energy, mobility, waste and consumption, water, nature and ecology, and people.



This peer learning led to the exploration of Energy Communities, which provide affordable energy options for underserved groups to promote energy equity, diversify the energy grid, and support improved food access by powering community gardens with renewable energy, while also enhancing social engagement and inclusion. The exchanges also led to an innovative project proposal by Calgary inspired by projects observed in Rome and to a collaborative proposal by Rome under the Horizon Europe programme.

# CHALLENGES AND SOLUTIONS

Cities account for more than 70% of global CO2 emissions<sup>1</sup>; their vision and actions will shape how we adapt to a changing climate. As part of the Horizon Europe programme, the EU has launched a Mission "100 Climate-Neutral and Smart Cities by 2030". Rome was selected in 2022 to contribute to the goals of this mission and act as an experimentation and innovation hub.

In 2025, the EU launched the Affordable Energy Action Plan, focusing on lowering energy costs, attracting investment, crisis preparedness, and completing the energy union. It emphasizes the role of energy communities—local groups that invest collectively in clean energy—to accelerate energy renovations. The pilot phase showed energy communities are effective but need better outreach and wider peer networks.

The <u>Citizen Energy Advisory Hub</u>, was created to help citizen collectives overcome barriers, especially for vulnerable groups, by offering information, expertise, and financial aid. Addressing these challenges is crucial for an inclusive and sustainable energy transition in Europe.

Calgary is a dynamic city that boasts robust and comprehensive policy frameworks guiding its work and engagement with communities, businesses, and Indigenous peoples. In 2022, the city adopted an ambitious Climate Strategy - Pathway to 2025, a comprehensive plan with two main goals: achieving net-zero GHG emissions by 2050 and enhancing the city's climate resilience. In addition, other initiatives have been launched to address strategic challenges in the city, such as the Food Resilience Strategy that supports Calgary's commitment to building a sustainable and resilient community by addressing food security and local supply chains.

Both cities have robust strategies to guide their work and stimulate innovation. For example, the Garbatella Neighborhood in Rome is an active Renewable Energy Community (REC), a citizen-led initiative coordinated by Borough 8, where the first pilot project was successfully implemented at a local public school with a direct investment from the City. The financial feasibility is based on incentives from the generation of renewable energy by the REC balanced against consumption from the grid. Under this scheme, any stakeholder can be part of a REC, ranging from individual citizens to businesses or public entities such as schools. Energy savings of €3,000 in the first year were reallocated to other needs. Garbatella's mayor highlighted that increased social awareness and community involvement were even more valuable than financial gains. This model will be replicated through a public-private collaboration agreement to expand its implementation.

<sup>&</sup>lt;sup>1</sup> https://netzerocities.eu/





Figure 1. Parc Ort 9 Delegates from *Europe, the US and Canada*, visiting Parco Ort9 during a IURC NA Thematic Networking Event in Rome on the 17th of October 2025.

<u>Parco Ort9</u> is an urban community garden managed by the citizen association "Vivere in". Ort9 Park is situated on municipal land that is maintained free of charge under an agreement. This public park (12,560 square meters) with 107 plots of urban vegetable garden, was created thanks to the European project <u>"Sidig-Med"</u>, and boasts an automated irrigation system through drip lines, shared mechanical and manual tools, public toilet, barbecue, and outdoor or indoor socialization areas. The project actively involves the local community in setting and pursuing its own defined targets, such as fostering sustainable urbanisation and enhancing the resilience of the community. Additionally, the initiative places a strong emphasis on encouraging intergenerational and intercultural dialogue and collaboration, ensuring that perspectives and experiences from all age groups contribute to project development and outcomes. The network of urban community gardens of the city of Rome, ORTI IN COMUNE, through the European project <u>RU:RBAN</u> 2nd wave, has drawn up a proposal for a new regulation that Roma Capitale is now examining through various deliberative processes<sup>2.</sup>

Calgary is working to address energy equity issues. To do so, they have developed an Energy Equity Strategy that aims to further engage communities and also co-create a program to address energy inequities. They have successfully engaged Indigenous communities in 5 themed summits over 3 years (Water, Land, and Climate) by respecting the value of traditional knowledge in their processes and offering compensation for their participation (e.g., childcare, transportation, traditional foods, compensation for time, etc.).

<sup>&</sup>lt;sup>2</sup> https://gardeniser.eu/en/resources/romes-urban-community-gardens-regulation-proposal

# **RESULTS AND IMPACT**

The Calgary delegation was particularly impressed by the potential benefits of the REC model and expressed interest in replicating the energy communities model in their city, through a pilot project "Empowering local energy solutions" in cooperation with Rome and Anci Lazio. They identified the Ramsey site and several local partner organisations to implement the Ramsey Solar Project and Greenhouse: Ramsey Community Association; Calgary School Board; Gardeners of Ramsey; Highfield Urban Garden; City of Calgary, and utility companies. The project could yield benefits such as: reduced operating cost for the community association; local food production; active outdoor participation; recreation opportunities; food quality production; indigenous participation; local job creation; greenhouse gas reduction; energy independence, and; reduced impact on the grid.

#### Types of energy communities

- Renewable energy cooperatives
- Community solar projects
- Microgrids
- Virtual power plants

#### Calgary will assess which approach will suit their context:

- 1. what type of additional energy generation (e.g. solar panels, wind turbines, etc.;
- 2. what type of storage (e.g. batteries or thermal storage);
- 3. What distribution model (local grid or peer-to-peer trading);
- 4. what management tools (smart meters or energy management systems).

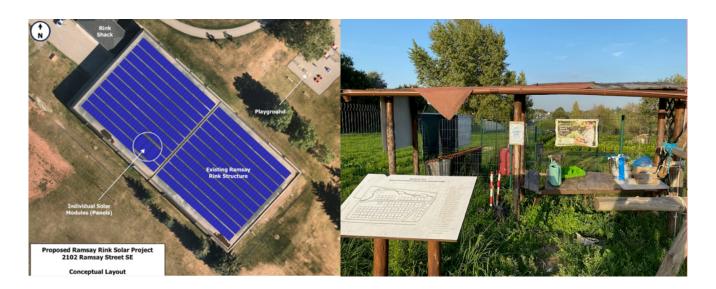


Figure 2. Calgary's Ramsey Solar Project and Greenhouse, courtesy of the City of Calgary.



Calgary envisions the adoption of the REC model to integrate a role for indigenous people and migrants and this will serve as an example for Rome in their work to develop programs to integrate immigrants and vulnerable people currently under the responsibility of Anci Lazio, in agreement with the City of Rome. Rome was also particularly inspired by the Indigenous outreach experience in Calgary and how traditional knowledge is used in creating plans for the future. They developed a new project proposal under the Horizon Europe programme with international partners incorporating some of these concepts.

#### **KEY FIGURES**

Rome €3,000 (≅\$ 4,800 CAD)

Garbatella school energy savings in the first year

Calgary ≅€402,000 (\$653,000)

**Cost of the Ramsey Rink Solar Project** 

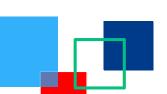
# **LESSONS LEARNED**

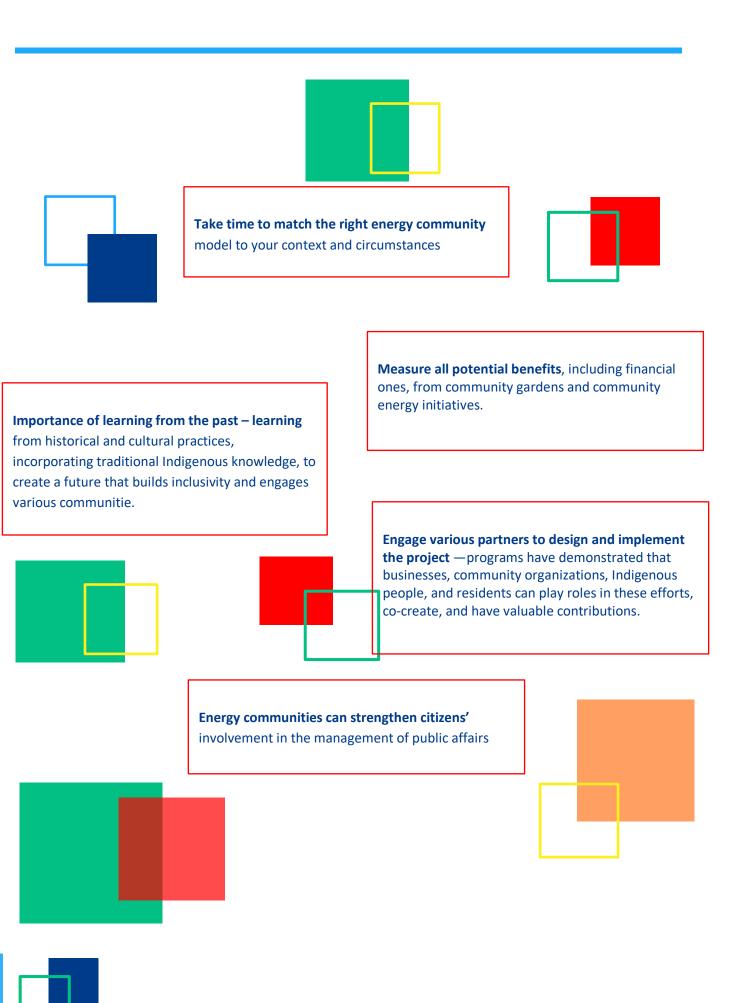
Cities play a determinant role in shaping how we live, work and recreate. Every ambitious city wants a way forward that is inclusive, thriving, resilient and sustainable. How they embrace new ideas and learn from their peers can only strengthen their ability to innovate and adapt concepts to respond to challenges and new circumstances.

Here are some lessons that can be followed in designing an energy community project:

#### **Lessons from Calgary on Indigenous involvement**

- We are all learning what reconciliation means and what systems need to change
- Solutions, supports and resources must be culturally appropriate and attainable
- Ethical space western vs indigenous views
- Do not be extractive (only take and not give anything back)
- Treaties are important





# THE INTERNATIONAL URBAN AND REGIONAL COOPERATION PROGRAMME IN NORTH AMERICA

The International Urban and Regional Cooperation program in North America (IURC NA), funded by the European Union, partners European cities with Canadian and USA cities to facilitate knowledge exchange through online tools, face-to-face interactions, study visits, participation in thematic and networking events, and capacity-building initiatives. Its activities support the achievement of policy objectives as well as major international agreements on urban development and climate change, such as the EU Urban Agenda, the UN Sustainable Development Goals, and the Paris Agreement. The program is part of a long-term strategy by the European Union to foster sustainable urban development in cooperation with the public and private sectors, researchers, innovators, community groups, and citizens. IURC NA is financed under the EU Foreign Policy Instruments and benefits from the strategic support of the Directorate-General for Regional and Urban Policy of the European Commission.

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