ITN Cities 4 Co-Housing

Investment Plan Nikšić, Crna Gora

URBACT

Co-funded by the European Union

Interreg

Rationale

This investment is driven by the urgent need to simultaneously address energy inefficiency, social vulnerability, and declining social cohesion in four multi-apartment residential buildings located in the Stara Varoš neighborhood of Nikšić. The area is characterized by an aging population, a high number of single-parent households (predominantly single mothers), low household incomes, and deteriorating building infrastructure. At the same time, residents face rising energy costs, limited access to social services, and weak mechanisms for collective decision-making and resource management.

The proposed investment responds to these interconnected challenges through an integrated approach that links energy transition with social innovation. The installation of rooftop solar photovoltaic panels is not treated as a stand-alone technical upgrade, but as a strategic tool to generate long-term, predictable financial resources for the community. By improving energy efficiency and producing renewable energy locally, the investment reduces energy-related expenditures, lowers CO_2 emissions, and creates a stable annual income estimated at approximately EUR 12,000. This income is channelled into a jointly managed community fund dedicated to addressing local social needs.

This specific approach has been chosen because it maximizes the impact of a relatively modest infrastructure investment (approximately EUR 85,000) by delivering multiple policy objectives simultaneously. Instead of relying on short-term subsidies or external funding for social services, the project establishes a self-sustaining financial mechanism that reinvests energy revenues into childcare services, home-based support for elderly residents, and women-led social entrepreneurship initiatives. In this way, vulnerable groups—particularly single mothers and older women — are empowered as service providers and active economic actors, rather than passive beneficiaries.

The investment is aligned with national and municipal policy priorities, including Montenegro's National Housing Strategy, energy efficiency and renewable energy targets, and the Municipality of Nikšić's Strategic Plan for 2023 - 2028. It also reflects European policy objectives related to climate neutrality, just transition, social inclusion, and community-led development. By building on the CALICO transfer modules, the project applies tested governance, financing, and community engagement models, reducing implementation risks and ensuring institutional and social feasibility.

From a value-for-money perspective, the project demonstrates high efficiency and long-term impact. Initial public and donor investments leverage national Eco-Fund support and potential co-financing from the national energy provider, while the operational model ensures that benefits continue well beyond the project lifetime. The participatory governance structure enables residents to democratically decide on the allocation of funds, strengthening ownership, accountability, and social cohesion. Over time, the approach is scalable and replicable in other neighborhoods of Nikšić Municipality and across Montenegro, making it a strategic investment rather than a one-off intervention.

Our project is a combination of sustainability and improvement of collective life in four buildings. It triggers green transition, as the focus is on energy efficiency improvement through usage of roof solar panels. At the same time, it will be empowering single mothers and older women through creating funds from energy sales created by the above mentioned solar panels. These funds can be used for child care provided by these women, or other entrepreneurial activity in social entrepreneurship style. Digitalization should be implemented primarily using social media channels for closer cooperation and social bonding within the neighbors of these four buildings.

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1. IP Section: Needs Analysis & Policy Responses

1.1.The problem

The City of Nikšić is facing long-term demographic, economic and housing challenges that directly affect the quality of life, social resilience and sustainability of its urban communities. Between 2011 and 2023, the city lost approximately 11,500 inhabitants, primarily among the working-age population. This has resulted in accelerated population aging, a shrinking local labour force and increased pressure on social support systems. The unemployment rate stands at 18.4%, with women disproportionately affected, accounting for around 65% of the unemployed. At the same time, the number of single-parent households is increasing, with the divorce rate reaching 54%, further increasing the risk of poverty and social exclusion.

The most acute needs are concentrated among three vulnerable groups: elderly people, single mothers and unemployed women. Elderly residents in Nikšić strongly prefer to remain in their own homes rather than move to institutional care, which is limited in capacity, costly and often inaccessible. However, the existing system does not provide sufficient home-based care services, daily assistance or social support mechanisms that would enable dignified and independent aging. This gap between needs and available services represents a growing social risk, particularly in neighborhoods with a high share of older residents.

At the same time, single mothers and unemployed women face multiple, interlinked barriers to economic independence. These include limited employment opportunities, a lack of flexible work arrangements, insufficient access to affordable childcare services and weak support for entrepreneurship. Current social protection measures are largely short-term and compensatory in nature, offering limited pathways towards sustainable income generation, skills development and active participation in the local economy.

These social challenges are further exacerbated by the condition of the housing stock, particularly in older neighborhoods such as Stara Varoš. Most multi-apartment buildings in this area were constructed during the socialist period and today suffer from poor energy performance, inadequate insulation, deteriorated common areas and high energy costs. For low-income households, energy expenditure represents a significant share of household budgets, increasing the risk of energy poverty and financial insecurity.

In parallel, there is a pronounced lack of effective building-level governance and long-term financing mechanisms for maintenance and improvement. The absence of functional management structures, joint funds and participatory decision-making limits residents' ability to collectively invest in energy efficiency, renewable energy or social initiatives. This not only accelerates the physical degradation of buildings but also weakens social ties and trust among residents.

Despite national and European policy priorities related to energy transition, climate neutrality and digitalization, these processes remain largely inaccessible to vulnerable urban communities. Significant rooftop potential for renewable energy production remains unused, while no local models exist to convert this potential into stable, shared financial and social benefits. As a result, energy investments are often fragmented, and social policies remain dependent on unstable public budgets or short-term projects.

In this context, the core problem is not solely the lack of infrastructure, social services or funding, but the absence of an integrated and sustainable model that links energy efficiency, renewable energy production, social inclusion and participatory governance at community level. Without such a model, there is a high risk that negative demographic trends, social inequalities and housing deterioration will continue to deepen, particularly in neighborhoods like **Stara Varos** undermining both social cohesion and long-term urban sustainability.

Identified Needs / Problems	Investment Responses (Core + Specific Actions from Plan)	Expected Added Value and Impact
Aging population with strong preference for aging in place; limited, costly institutional care	Community funding from solar revenues for home-based care, peer support; needs assessment via focus groups (Module II Action 1); social enterprises for meal delivery/home services from apartments	Dignified aging in place; tailored affordable services; monitors assisted elderly numbers for sustained support
High unemployment among women/single mothers; lack of flexible jobs/childcare	Energy revenues finance childcare/social entrepreneurship; focus groups for needs/ventures (Module II Action 1); outline/promote women-led opportunities with training/mentoring (Module II Action 6)	Women's economic independence; labor participation; 4 ventures launched, 20 participants trained, 30% satisfaction gain
High energy costs/energy poverty in low-income homes; poor building performance	Rooftop solar PV + efficiency measures; roof insulation pre-PV (Module IV Action 2); feasibility study (Module IV Action 1); full PV installation (Module IV Action 3)	Reduced expenditures; energy security; €12,000 annual revenue; CO2 cuts; improved building ratings
Deteriorated housing stock; no long-term maintenance financing	Joint funds from energy revenues; management boards for 12 staircores + mutual funds (Module I Action 1)	Sustainable maintenance stream; full board coverage by Q1 2026
Absence of participatory governance; weak resident engagement	Building boards + citizen energy communities (4 total, Module I Action 2); small-scale activities (Module II Action 4); trainings on energy/efficiency (Module II Action 3)	Ownership/accountability/cohesion; 4 communities by Q4 2026; trained residents; 2-3 annual events
Fragmented social policies; short-term public funding dependency	Self-financing via renewables/social investment; advocacy documentary (Module II Action 2)	Long-term sustainability; 10,000 video views; reduced budget reliance
Underutilized rooftop potential for renewables	Community-owned solar generation; community solar system for social funding (Module III Action 5)	Shared economic/social/environmental benefits; kWp capacity, kWh production

Limited vulnerable access to energy transition/climate action	Community-led model per national/EU policies; energy communities (Module I Action 2)	Just transition/inclusion; emissions avoided
Weak integration of housing/ energy/social policies at neighborhood level	Integrated approach (efficiency/services/governance); all CALICO modules 1,2,4 adapted	Multiple objectives via coherent framework; scalable replication

1.2. Policy Response

The city faces significant housing policy challenges both at the national and municipal levels.

At the national level-Montenegro :

At the national level, there has been limited housing policy development since the 1990s, with insufficient laws and financial tools to support social and affordable housing initiatives. The informal construction of housing, along with the lack of maintenance of inherited socialist housing stock, exacerbates the problem. Many neighborhoods suffer from a lack of infrastructure, poor facades, and an imbalance between the number of cars and parking spaces.

The National Housing Strategy aims to address these challenges by prioritizing the increase of housing availability, supporting the development of both public and private rental sectors, and improving housing stock management and maintenance. The strategy also seeks to develop social housing for purchase or lease, renovate existing housing, improve quality, legalize informal settlements, and subsidize housing costs.

Montenegro (MNE) faces high housing needs for its low- and middle-income population, in addition to the lack of affordable and social housing stock in recent decades. In 1991, 77% of Montenegro's housing stock was privately owned. Recent advancements in social housing law (from approximately 2011 to 2020 and ongoing) have introduced government subsidies for mortgages, but challenges remain in meeting the housing needs of the most vulnerable groups.

Municipal level-Nikšić:

At the municipal level, the Strategic Plan of the Municipality of Nikšić for 2023–2028, alongside an annually adopted Local Social Housing Program, attempts to address the growing housing demand. The municipality is responsible for managing and distributing the available housing units, with 718 families currently receiving material support. However, the municipality faces challenges, including a smaller number of new housing units under construction compared to other regions in Montenegro and an increasing number of social housing cases. Vulnerable populations, such as pensioners, single mothers, disabled individuals, and single people, are particularly affected by these housing issues. Furthermore, approximately 17,000 inhabitants are living in apartments with significant housing quality problems. There is also a lack of infrastructure, lack of structure management and façade problems.100 Therefore, the project of transferring the innovative practices such as CALICO, that contains social and affordable housing is important. In Montenegro, elderly individuals predominantly prefer residing in their own apartments over utilizing nursing home services, yet they require support to maintain inde-

pendence. This challenge can be addressed by establishing social enterprises that provide meal preparation and home delivery, complemented by the employment of nurses. Funding for these services would derive from a communal fund created from energy production from above mentioned roof solar panels. Such models enable elderly individuals to remain proximate to their families while engaging in productive activities for peers and neighbors, earning compensation in return. Given the scarcity of communal workspaces within four buildings from our project, these enterprises operate from participants' apartments, equipped with necessary tools and leveraging digital marketing for outreach and delivery services. Household expenditure data underscores the potential economic benefits: on average, households allocate 17% of income to rent, rising to 22% for those with mortgages. Utilities—encompassing heating, cooling, electricity, water, and gas—consume an additional 9% of income. These figures illustrate the substantial financial burden of housing and utilities. Implementing the aforementioned energy efficiency investments would yield savings, thereby alleviating pressure on housing-related expenditures.

2. IP Section : Investment Proposal

2.1.Investment Proposal

Our project represents an innovative fusion of environmental sustainability and the enhancement of collective well-being across four residential buildings. It catalyzes the green transition by prioritizing substantial improvements in energy efficiency, achieved through the strategic installation of rooftop solar panels. These panels will generate clean, renewable energy, reducing reliance on fossil fuels and lowering carbon emissions while delivering long-term financial benefits.

Simultaneously, the initiative empowers vulnerable groups—specifically single mothers and older women—by channeling revenues from energy sales into a dedicated community fund. This fund, derived directly from the solar panels' output, will support essential childcare services provided by these women or fuel their entrepreneurial ventures in the realm of social entrepreneurship. By creating sustainable income streams, we foster economic independence, skill development, and social inclusion, transforming these individuals from beneficiaries into active contributors to their community's prosperity.

Drawing on the proven transferability potential of the Calico project—particularly Module 4—our focus sharpens on amplifying energy efficiency initiatives. Funds will be generated through solar energy production on the building rooftops, yielding an estimated annual return of approximately €12,000, as substantiated by our comprehensive feasibility study. This financial mechanism not only ensures project viability but also empowers residents to strengthen community ties, refer services and opportunities among themselves, and take ownership of their future. Ultimately, participants will evolve into true shareholders in their investments, driving decisions on their living environment, resource allocation, and collective progress with confidence and better motivation.

2.2. Adapted Practice

The CALICO project provides a modular framework for integrated social and affordable housing, combining governance, building renovation, financing and social innovation. Its modular structure allows cities to selectively adapt and transfer components that best respond to their local needs, institutional capacity and policy priorities. For the City of Nikšić, the CALICO approach is particularly relevant as it offers tested solutions for linking energy efficiency investments with social inclusion and community-led governance in multi-apartment buildings.

Overview of CALICO Modules

The CALICO framework is structured around four main modules:

- Module 1 – Governance and Community Management
  Focuses on participatory governance models, resident engagement, building-level management structures and collective decision-making mechanisms.
- Module 2 – Social Innovation and Inclusion
  Addresses social needs through community-based services, social entrepreneurship, support for vulnerable groups and the creation of social value within housing environments.

- Module 3 – Legal and Financial Frameworks
  Covers innovative financing mechanisms, public–private and community partnerships, legal arrangements for shared ownership and long-term financial sustainability.
- Module 4 – Building and Energy Efficiency
  Concentrates on physical interventions in housing stock, including energy efficiency measures, renewable energy integration and sustainable building management.

CALICO Modules Selected for Adaptation

Based on the needs analysis and local context in Nikšić, the investment plan priorities the adaptation of the following CALICO modules:

Module 4 – Building and Energy Efficiency (Primary focus)
This module is central to the investment plan, as it directly supports the installation of rooftop solar photovoltaic systems and complementary energy efficiency measures in four residential buildings. The module provides tested methodologies for assessing technical feasibility, implementing renewable energy solutions and linking physical investments to long-term sustainability goals. It is adapted to transform underused rooftop space into a source of renewable energy and stable community income.

Module 1 – Governance and Community Management
This module is adapted to establish and strengthen building management boards and citizen energy communities. It enables participatory decision-making, transparent management of energy revenues and collective responsibility for shared assets. Its adaptation is essential to ensure that the investment is community-owned, socially accepted and operationally sustainable.

Module 2 – Social Innovation and Inclusion
This module is selectively adapted to design community-based social services and social entrepreneurship initiatives financed through energy revenues. It supports the empowerment of single mothers, elderly women and other vulnerable groups by enabling them to provide childcare, home-based care and other social services within the neighborhood.

CALICO Modules Not Prioritized for Full Adaptation

Module 3 – Legal and Financial Frameworks (Partially applied)
While relevant, this module is not fully transferred, as Montenegro already has established national frameworks for energy efficiency funding (e.g., Eco-Fund Montenegro) and evolving legal provisions for citizen energy communities. Instead of creating entirely new financial or ownership models, the project builds on existing national instruments and adapts only those elements of the module that support co-financing, community funds and compliance with national energy legislation.

In addition, CALICO components related to large-scale affordable housing development or new construction are not prioritized, as the local challenge in Nikšić is not the lack of new housing units, but the rehabilitation, energy upgrading and social activation of the existing housing stock.

Rationale for Selective Adaptation

The selective adaptation of CALICO modules ensures a targeted, efficient and context-sensitive investment approach. By focusing on energy efficiency, community governance and social innovation, the project maximizes impact while remaining realistic in terms of institutional capacity, financial resources and implementation risks. This modular transfer also increases replicability, allowing the model to be easily scaled to other neighborhoods in Nikšić and to other Montenegrin cities facing similar challenges.

2.3.Stakeholders and Partners:

stakeholders(ULG and partners)	contribution	anticipated benefits	ways of engagement
Biznis network	know-how on energy efficiency	organization of events on residents education	workshops, regular meetings; external expertise
NGO Ozon	know-how on urban ecology and citizens participation	events on public awareness on urban ecology topics	workshops, regular meetings; external expertise
Architectural studio Foka & Bumbar	know-how on building and management	expertise on building management	external expertise, workshops, travels
SOS NGO	know how on gender issues	residents education	workshops, meetings
Local government Niksic	co-finance of the project	public awareness of shared management and cooperative housing that can be shared in other local communities in the city and the country	workshops, meetings

2.4. Integrative approach and participative practice

The Cities4Co-Housing project in Nikšić is designed around an integrative and participatory investment model that aligns energy efficiency, social inclusion, and community governance. Rather than treating energy interventions, social support, or building management as isolated components, the project intentionally links these dimensions to maximize social, environmental, and economic impact. This integrative perspective ensures that physical interventions, social initiatives, and governance structures reinforce one another and collectively address the multidimensional challenges identified in Section 1.1.

The participatory aspect is central to the project's logic. Residents are not passive beneficiaries but are positioned as active stakeholders whose priorities and decisions shape the allocation of resources generated through the investment. By embedding participation into the planning and governance of the project, the approach fosters ownership, transparency, and social cohesion. It also enables the community to co-create solutions that are sensitive to local needs, preferences, and capacities, ensuring that investments in energy efficiency translate into meaningful social and economic outcomes.

The rationale for this integrated and participatory approach is threefold:

1. Efficiency and Resource Optimization: Linking energy production, building rehabilitation, and social services allows a single investment to achieve multiple policy objectives. Rooftop solar panels, for example, not only reduce energy costs but also generate revenues that can fund local social initiatives.
2. Strategic Alignment with Policy Priorities: The approach simultaneously advances municipal and national objectives, including energy transition, social inclusion, gender equality, and climate neutrality, while ensuring that the intervention is coherent and replicable across other neighborhoods.
3. Sustainability and Long-Term Impact: By integrating participatory governance with technical and social investments, the project builds self-sustaining mechanisms that remain effective beyond the immediate implementation period. Community engagement ensures that resources are used in ways that reflect local priorities, reducing dependency on external subsidies and enhancing resilience.

In summary, the integrative and participatory design transforms a technical energy efficiency investment into a strategic urban development tool. It demonstrates that energy, social, and governance dimensions can be mutually reinforcing, creating a holistic, community-centre model for sustainable housing and collective well-being.

3. IP Section : Actions

Module I. Governance

Action 1: Establish and operationalize management boards for all multi staircore residential blocks[1].

Description of the action: Verify and complete management board setup for remaining staircores; create mutual funds to manage solar energy revenue per staircore.

Responsible: Project team and the residents of four buildings.

Deadline: Q1 2026

Specific Challenge

Currently, 9 out of 12 staircores have management boards as of November 2025, hindering coordinated solar panel installation and revenue management. This delays energy projects and revenue sharing, critical for the building's investment plan.

Transfer of CALICO Module

CALICO modules on community energy governance provide proven frameworks for board establishment and fund management, enhancing efficiency in multi-unit buildings. Implementation ensures sustainable revenue from solar production.

Proposed Action:Verify and complete management board setup for remaining staircores; create mutual funds to manage solar energy revenue per staircore.

Implementation:

- Conduct audits to confirm management boards for all staircore, prioritizing the 3 pending ones.

- For each staircore, mutual funds legally registered for collecting and distributing solar panel-generated revenue will be formed.

- This advances financial self-sufficiency and supports broader energy transition goals.

Intended result: 100% staircores with active boards

Governance:Staircore-specific boards report to central building council.

Funding: 150 Eur, administrative costs, funded by the residents Local community Stara Varos.

Barriers/Risks: administrative delays in the Municipality of Niksic

Partners and Timeline

Partners:Municipality of Niksic, Secretariat for communal activities.

[1] Each 4-story residential block building has three independent staircores

Timeline:** Verification completed in Q1 2026.

Indicators

- Number of staircores with boards: Target 12/12.

- Mutual funds established: 12/12.

- Solar revenue collected: according to the feasibility study cca 12K Eur annually for 4 buildings.

Cross-Cutting Issues

Gender: Ensure diverse boards representation (min. 30% women). Digital: Use apps for communication among the management boards. Environmental: Solar funds directly support green energy.

Action name:	**Establish and operationalize management boards for all multi staircore residential blocks**	
Costs Breakdown	Comment	Estimated Costs (€)
Staff costs		
Office and administration / Indirect costs	50 euro for each of three staircores	150
Travel & accommodation		
External expertise and services		
Subcontracting		
Equipment and consumables		
Infrastructure and construction works		
Total Estimated Cost:		150

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Action 2. Create energy community in every of the four buildings in Stara Varos local community.

Description

Form citizen energy communities in every municipal building to produce and share renewable energy locally. Responsible: Management boards of four buildings.Action 2.

Specific Challenge

Montenegro's buildings rely heavily on imported energy, facing high costs and vulnerability to price volatility amid EU integration goals. This hampers energy security and decarbonization in urban areas like Niksic.

CALICO Module Relevance

CALICO modules on community-led energy transitions offer proven tools for decentralized systems, highly relevant for adapting EU best practices to local buildings. Implementation boosts efficiency through shared renewables like PV panels.

Proposed Action:Form citizen energy communities in every municipal building to produce and share renewable energy locally. Responsible: Management boards of four buildings.Action 2.

Budget: 300 Euro

Expected Outcomes: 4 communities formed, in all 4 buildings in the project.

Implementation Steps:

Organize residents legal energy communities under the new Energy Law, installing rooftop solar panels for self-consumption and surplus sales.

Governance: Form cooperatives led by management boards of the buildings; register under Law on Energy.

Barriers: Regulatory delays countered by legal pre-approvals; low awareness via public campaigns.

Partners and Timeline

Partners: Municipality (lead), OZON (advisory), local utilities, resident associations.

Timeline: Q4 2026:

Indicators

Number of registered communities [target: 4/4 buildings].

Cross-Cutting Issues

Gender: Prioritize women-led cooperatives for 30% membership. Digital: Use apps for energy monitoring. Environmental: Focus on renewables to cut emissions.

Action name:	**Create energy community (EC) in every of the four buildings in Stara Varos local community**	
Costs Breakdown	Comment	Estimated Costs (€)
Staff costs	5 hours to prepare the documents for the EC application	100
Office and administration / Indirect costs	4x50 Eur for each building for the EC application	200
Travel & accommodation		
External expertise and services		

Action name:	**Create energy community (EC) in every of the four buildings in Stara Varos local community**	
Subcontracting		
Equipment and consumables		
Infrastructure and construction works		
Total Estimated Cost:		300

Module II. Social

Action 1.Examine the needs of the elderly, single mothers, and women.

Action examines needs of elderly, single mothers, and women through focus groups.

Responsible: Project team and ULG group (SOS NGO) lead this, with a deadline in October 2026. Results from October 6, 2026, testing highlight interest in social entrepreneurship and better institutional cooperation.

Specific Challenge

Single mothers face high dissatisfaction with local and state institutions, except SOS Nikšić, in addressing their issues. Elderly and women express needs for educational, financial, and mentoring support amid limited proactive services and digital transformation.

CALICO Module Relevance

Transferring CALICO modules supports social entrepreneurship models and institutional cooperation tested effectively in focus groups. These modules prove relevant for fostering independent ventures and transparent governance in vulnerable group support.

Proposed Action: Action examines needs of elderly, single mothers, and women through focus groups.

Intended outcomes include launched ventures and improved cooperation.

Budget: 100 Eur

Testing Results

Focus groups on October 6, 2026, revealed strong interest in social entrepreneurship and cooperation models, but dissatisfaction with institutions except SOS Nikšić. Participants identified needs for support programs and called for proactive, digital-enhanced institutional work, making this action essential for targeted implementation.

Implementation Plan

Develop and launch tailored programs in social entrepreneurship, including education, financing, and mentoring for elderly, single mothers, and women. Build on focus group findings showing multiple motives for ventures and ideas for joint projects with institutions.

Partners

SOS NGO as lead; local institutions (municipalities), state agencies, and women's/elderly support groups for cooperation.

Timeline

Q2 2026: Needs refinement and Program design; Q4: Pilot launch and Full evaluation and scaling.

Indicators:

-Number of participants in programs (target: 20).

-Ventures launched (target: 4).

-Satisfaction surveys pre/post (target: +30% improvement).

Cross-Cutting Issues

Gender prioritized with privacy for violence victims via anonymous responses in our testing action from October 2025; digital transformation emphasized for institutional transparency; environmental aspects integrated through sustainable entrepreneurship models.

Action name:	**Examine the needs of the elderly, single mothers, and women**	
Costs Breakdown	Comment	Estimated Costs (€)
Staff costs		
Office and administration / Indirect costs	rental of the meeting room	40
Travel & accommodation		
External expertise and services		
Subcontracting		
Equipment and consumables	coffee and water for the participants	60
Infrastructure and construction works		
Total Estimated Cost:		100

Action 2. Delivering a comprehensive advocacy campaign that has as a goal to promote community pride and participation.

CALICO Module on community-led energy transitions (Sub-Module: Advocacy and Engagement).

Description: Produce and broadcast a short documentary showcasing URBACT project activities in Stara Varos.

Responsible: Project team and local TV network RTV NK.

Deadline: June 2026.

Specific Challenge

Limited awareness and uptake of energy efficiency measures in Niksic municipality, despite successful energy community initiatives and improved neighbor relations in Stara Varos; this hinders broader adoption across Montenegro.

Budget: 600 Eur

CALICO Transfer Relevance

CALICO modules on community engagement provide proven, efficient tools for advocacy that foster pride and participation, directly addressing low uptake by leveraging local success stories for scalable impact.

Proposed Action: Produce and broadcast a short documentary showcasing URBACT project activities in Stara Varos.

Partners

URBACT Local Group (ULG) members for participatory contributions; RTV NK for production and broadcast.

Timeline: April-May 2026: Planning and ULG filming sessions in June 2026: Premiere broadcast and campaign launch.

Implementation

Develop a short film or documentary highlighting ULG activities, community engagement, and energy efficiency benefits; broadcast via RTV NK (national reach) to inspire pride, participation, and wider adoption of measures among Niksic residents and Montenegrins.

Organize via project team coordination with RTV NK; fund through URBACT budget for communication, mitigate risks like delays by early ULG scheduling and backup local crews; use YouTube, Facebook, Instagram for amplification.

Indicators

-Video views/reach: 10,000+ via TV and social media.

-Engagement: 500+ interactions (likes/shares).

Cross-Cutting Issues

Gender equality monitored in participant selection (target 50% female); digital via social media distribution; environmental through promotion of efficiency measures.

Action name:	**Delivering a comprehensive advocacy campaign that has as a goal to promote community pride and participation**	
Costs Breakdown	Comment	Estimated Costs (€)
Staff costs	5 hours of project staff work	100
Office and administration / Indirect costs		
Travel & accommodation		
External expertise and services	contract with the local TV production	500
Subcontracting		
Equipment and consumables		
Infrastructure and construction works		
Total Estimated Cost:		600

Action 3. Organize trainings of residents on energy communities and efficiency

Description of the action :

This action aims to strengthen residents' knowledge and skills on energy communities, energy efficiency, circular economy, smart buildings, and digital tools through targeted training sessions. The trainings will empower residents to actively participate in local energy transition initiatives and energy communities.

Responsible: OZON; Local Municipality / Project Team

Deadline: April 2026 (with preparatory steps starting in early 2026)

Budget: 400 Eur

What is the specific challenge?

Residents often lack practical knowledge and awareness of energy communities, energy efficiency measures, and smart building solutions. This limits their ability to participate in or initiate collective energy projects, reduce energy consumption, and adopt circular economy practices. Without targeted training, the potential social and environmental benefits of local energy transition initiatives remain underexploited.

How can the transfer of the CALICO Module/Sub-Module help?

The CALICO modules on energy communities, smart buildings, circular economy, and digital communication provide tested methodologies, practical tools, and good practices that can be transferred to residents. Implementing these modules through training ensures an effective and structured knowledge transfer, enabling residents to understand both technical and governance aspects of energy communities and efficiency solutions.

Which action is proposed? The action will raise awareness, build local capacity, and encourage residents to engage in or develop energy community initiatives. Expected outputs include trained residents, increased participation in energy-related projects, and improved energy-efficient behaviors.

How to implement the action? The action will be implemented through the following steps:

The proposed action is to organize a series of interactive training sessions for residents at the OZON premises. The trainings will cover:

- ➔ Energy communities: principles, benefits, governance models
- ➔ Energy efficiency and circular economy practices
- ➔ Smart buildings and digital energy management tools
- ➔ Digital communication tools for community engagement

Funding will mainly cover trainers' fees, training materials, and organizational costs.

Potential barriers include low participation or limited digital literacy; these will be addressed through clear communication, inclusive formats, and practical, easy-to-understand content.

Which partners? OZON (lead organizer and host), Local municipality, Energy experts and trainers, Community organizations and resident associations

Which timeline?

January–February 2026: Preparation of content and trainers

March 2026: Promotion and registration of participants

March–April 2026: Delivery of training sessions at OZON premises

April 2026: Evaluation and reporting

Indicators? Number of training sessions organized, Number of residents trained (disaggregated by gender), Participant satisfaction rate, Increase in residents' knowledge (pre/post training feedback), Number of residents interested in or engaged in energy community initiatives

Cross cutting issues? Gender: Equal access ensured, with balanced representation encouraged, Digital: Use of digital tools and platforms explained and promoted, Environmental: Focus on sustainability, energy efficiency, and circular economy principles.

Action name:	**Organize trainings of residents on energy communities and efficiency**	
Costs Breakdown	Comment	Estimated Costs (€)
Staff costs	5 hours of work of the project team	100

Action name:	**Organize trainings of residents on energy communities and efficiency**	
Office and administration / Indirect costs	rental of the meeting room	100
Travel & accommodation		
External expertise and services	the trainer cost, Ecological movement Ozon	200
Subcontracting		
Equipment and consumables		
Infrastructure and construction works		
Total Estimated Cost:		400

Action 4. Organize Small-Scale Community Activities in Four Residential Buildings

This action aims to strengthen social cohesion among residents of four buildings by supporting seasonal community activities and establishing a simple framework for residents to propose and implement low-cost initiatives.

Responsible: Project team, management boards of the buildings.

What is the specific challenge? Residents of the four buildings have limited opportunities to interact and collaborate, resulting in weak social ties, low participation in shared spaces, and underused common areas such as gardens or courtyards. This lack of community engagement can negatively affect wellbeing, sense of belonging, and collective responsibility for shared environments, as well as the planned formation of energy communities within the buildings.

How can the transfer of the CALICO Module/Sub-Module help?

The CALICO Module on community engagement provides tested approaches for activating residents through low-threshold, inclusive activities. By transferring these methods, the project team and the Local community Stara Varoš can empower residents to co-create initiatives, improve social cohesion, and foster sustainable community-led action with minimal resources.

Which action is proposed? The action proposes the organization of small-scale, recurring community activities—such as seasonal garden events (spring planting days, summer gatherings, autumn harvest events)—combined with the creation of a simple framework that enables residents to propose, vote on, and implement low-cost community initiatives. The framework will include clear guidelines, small micro-budgets, and light-touch support from a community coordinator.

Expected outputs include at least 2–3 community events per year, an operational resident-led initiative framework, and increased resident participation. The intended outcome is improved social cohesion,

stronger resident networks, and greater shared ownership of communal spaces, such as the roofs for future installment of the solar panels.

Budget:400 Eur

How to implement the action? Implementation steps include:

- Appointing or assigning a community coordinator
- Mapping existing shared spaces and resident interests.
- Organizing initial seasonal garden events to mobilize residents.
- Developing a simple initiative framework (idea submission form, selection criteria, small grants up to a defined limit).
- Providing basic logistical and administrative support to resident-led initiatives.

Funding needs are low and mainly cover materials for events, small grants, and coordination time. Potential risks include low participation or unequal engagement; these will be mitigated through inclusive communication, multilingual materials, and flexible activity formats.

Which partners? Partners may include building management, resident associations, local NGOs, gardening or environmental groups, and municipal social services.

Which timeline? Q1/Q2 2026

Indicators?

- Number of community events organized.
- Number of resident-led initiatives proposed and implemented.
- Participation rates (diversity of age, gender, background).
- Resident satisfaction measured through short surveys.

Cross cutting issues?

Gender: Activities and decision-making processes are designed to ensure equal participation. Digital: Both digital and non-digital channels are used for communication and idea submission. Environmental: Focus on gardening, reuse of materials, and environmentally friendly practices.

Action name:	**Organize Small-Scale Community Activities in Four Residential Buildings**	
Costs Breakdown	Comment	Estimated Costs (€)
Staff costs	10 hours of work of the project team	200
Office and administration / Indirect costs		
Travel & accommodation		
External expertise and services		
Subcontracting		

Action name:	**Organize Small-Scale Community Activities in Four Residential Buildings**	
Equipment and consumables	refreshments for the participants	200
Infrastructure and construction works		
Total Estimated Cost:		400

Module III.Legal & Financial

Action 1. Assessing stakeholders' interest, capacity, and conditions for co-financing solar panel installations on selected buildings.

Responsible: Project team, Department for Local Finance and Entrepreneurship; Deadline: June 2025

What is the specific challenge?

There is limited insight into the willingness, expectations, and financial capacity of local self-government units and private businesses to participate in co-financing solar panel installations on the roofs of four buildings from the project. Without structured dialogue, potential partnerships and innovative financing models remain unexplored, slowing down the implementation of renewable energy projects.

How can the transfer of the CALICO Module/Sub-Module help?

CALICO modules on innovative financing, public-private cooperation, and stakeholder engagement provide tested methodologies for structuring dialogue between public authorities and businesses. They support the identification of shared interests, risk-sharing mechanisms, and co-financing models, helping local authorities move from unilateral planning to collaborative investment approaches that are more effective and sustainable.

Which action is proposed?

The proposed action is to organize and conduct a structured workshop in June 2025 involving representatives of local self-government, local businesses, NGO, energy experts, and municipal departments.

The intended result is a clearer understanding of stakeholder interest and feasible financing arrangements, leading to at least one concrete co-financing initiative for solar panel installation.

Budget: 500 Eur

How to implement the action?

- Identify and invite relevant stakeholders from local self-government and business sectors;

- Prepare background materials (presentations, feasibility study);
- Organize and moderate the workshop, ensuring interactive discussion.
- Document conclusions and follow-up actions.

Limited funding is required, mainly for organization, facilitation, and materials. Potential risks include low stakeholder engagement or mismatched expectations; these will be mitigated through early invitations, more relaxed environment for the meeting, clear communication of benefits, and transparent discussion of roles and risks.

Which partners?

Municipal energy and economic development departments

Representatives of local self-government units

Local businesses, business associations, NGO

Energy agencies or renewable energy experts

Which timeline?

June 2025: organization and delivery of the workshop

Indicators?

Number of participants attending the workshop

Diversity of stakeholders represented (public/private)

Cross cutting issues?

Environmental sustainability is central, as the action promotes renewable energy deployment and emission reduction. Digital tools may be used for registration, presentations, and follow-up communication. Gender equality will be considered by encouraging balanced representation of women and men among speakers and participants.

Link for the workshop: https://drive.google.com/drive/folders/1llt0SVDzt3jkze88NPq0-0feV4dp8sMC

Action name:	**Assessing stakeholders' interest, capacity, and conditions for co-financing solar panel installations on selected buildings**	
Costs Breakdown	Comment	Estimated Costs (€)
Staff costs	10 hours of work of the project team for preparation of the event	200
Office and administration / Indirect costs		

Action name:	**Assessing stakeholders' interest, capacity, and conditions for co-financing solar panel installations on selected buildings**	
Travel & accommodation		
External expertise and services		
Subcontracting		
Equipment and consumables	Consumables for the event	300
Infrastructure and construction works		
Total Estimated Cost:		500

Action 2. Project presentation to potential investor from EPCG at the conference in June 2025.

Preparation and delivery of a structured investment-focused presentation of the EPCG project to potential investors during an international conference in June 2025.

Responsible: Project Team Deadline: June 2025

What is the specific challenge?

Currently, awareness of the project among suitable investors is limited, and the project value proposition has not yet been formally pitched in an investment-oriented setting.

How can the transfer of the CALICO Module/Sub-Module help?

The CALICO Investment Readiness and Project Promotion module provides structured methodologies for presenting complex projects in a clear, credible and investor-oriented manner. The module supports the definition of value propositions, financial narratives, risk mitigation strategies and impact articulation, increasing the effectiveness and efficiency of investor engagement.

Which action is proposed?

The action consists of preparing and delivering a professional investment presentation of the project at a relevant conference in June 2025.

The intended result is increased investor awareness, concrete expressions of interest, and the initiation of investment discussions with potential investors from EPCG.

How to implement the action?

During the EPCG conference the project team will present the URBACT project in the Local community of Stara Varos on installation of roof solar panels. Limited funding is required for design support, conference participation and travel costs. Key risks include limited investor attendance or misalignment with investor

expectations; these will be mitigated by early conference analysis, tailoring the pitch to the audience, and preparing targeted follow-up communication.

Which partners?

EPCG internal technical and financial teams

NGO Ozon

Conference organiser

Which timeline: June 2025: conference presentation and investor meetings

Indicators?

Number of investors attending the presentation

Number of follow-up meetings requested

Expressions of interest received

Progression to formal investment discussions

Cross cutting issues?

Gender considerations will be reflected through inclusive language and, where relevant, gender-balanced project benefits. Digital aspects include the use of digital presentation tools and online follow-up materials. Environmental considerations will be integrated by highlighting EPCG's environmental impact, sustainability benefits and alignment with climate objectives.

Action name:	**Project presentation to potential investor from EPCG at the conference in June 2025**	
Costs Breakdown	Comment	Estimated Costs (€)
Staff costs	3 hours of work, 2 project team members x 60	120
Office and administration / Indirect costs		
Travel & accommodation		
External expertise and services		
Subcontracting		
Equipment and consumables		
Infrastructure and construction works		
Total Estimated Cost:		120

Action 3.Preparing an official request to the BoD of EPCG for donation of 50% of the solar panel installation costs (€46143.75**)**

Preparation and submission of an official request to the Board of Directors of EPCG for a donation covering 50% of the total solar panel installation costs (approximately €46143.75).

Responsible: Project Team

Deadline: Submission by (February 2026); Decision expected by (April 2026)

What is the specific challenge?

The planned solar panel installation represents a key investment for producing energy; however, the total investment cost exceeds the currently perceivable support from Eco-fund. Without external financial support, the project risks being delayed or reduced in scope, limiting its environmental and economic benefits for the residents of four buildings.

How can the transfer of the CALICO Module/Sub-Module help?

The CALICO module on sustainable energy transition provides tested approaches for mobilizing local stakeholders and public utilities to co-finance renewable energy projects. Applying this module supports structured cooperation with EPCG, improves financial feasibility, and accelerates implementation of clean energy solutions at the local level.

Which action is proposed?

The proposed action is to prepare and submit a formal, well-justified request to the Board of Directors of EPCG for a donation covering 50% of the solar panel installation costs (approximately EUR 42,500). The request will include a technical description of the investment, financial breakdown, expected environmental and social benefits for the residents, and alignment with national and corporate sustainability objectives. The intended result is securing co-financing that enables full implementation of the solar installation as planned.

How to implement the action?

Implementation includes: (1) preparing technical and financial documentation; (2) drafting the official request letter and supporting annexes; and (3) formal submission to EPCG's Board of Directors. Required funding is limited to solar panel installation costs only. Potential risks include rejection or delay of the request; these will be mitigated by early informal consultations with EPCG representatives and alignment with EPCG's strategic priorities, that we made during our workshop in September 2026

Which partners?

EPCG (Electric Power Company of Montenegro)

Technical consultants for solar installation (if required)

Which timeline?

- Preparation of documentation: Weeks 1–2
- Internal approval: Week 3
- Submission to EPCG BoD: Week 4

Expected decision: Within 1–2 months after submission

Indicators:

- Official request submitted to EPCG BoD
- Decision received from EPCG
- Amount of funding approved (target: EUR 42,500)
- Solar installation implemented as planned

Cross-cutting issues?

Environmental sustainability is the core objective through increased use of renewable energy and reduction of CO_2 emissions. Digital aspects are addressed through monitoring and reporting of energy production. Gender equality is considered by ensuring equal involvement and benefit for all users and staff associated with the facility.

Action name:	**Preparing an official request to the BoD of EPCG for donation of 50% of the solar panel installation costs**	
Costs Breakdown	Comment	Estimated Costs (€)
Staff costs	2 hours of work of the project team	40
Office and administration / Indirect costs		
Travel & accommodation		
External expertise and services		
Subcontracting		
Equipment and consumables		
Infrastructure and construction works		
Total Estimated Cost:		40

Action 4. Identification and documentation of funding sources for solar PV co-financing

Identification, assessment and documentation of European and local funding sources to cover the remaining 50% of solar panel installation costs.

Responsible: Project team/Municipality of Niksic/Local Department for Finance. Deadline: Q3 2026

What is the specific challenge?

The planned solar panel installation is only partially financed through secured funding, covering approximately 50% of the total investment costs. Without identifying complementary funding sources, the implementation of the full solar PV project is at risk. The municipality lacks a structured overview of available European and local Eco-funding mechanisms that could support renewable energy investments, particularly those aligned with climate neutrality and energy transition goals.

How can the transfer of the CALICO Module/Sub-Module help?

The CALICO modules provide structured approaches for sustainable energy investments, including guidance on financing mechanisms and blended funding models. Transferring these modules supports the municipality in systematically mapping funding opportunities, aligning project objectives with donor priorities, and increasing the likelihood of securing co-financing. This improves both the efficiency and bankability of renewable energy projects.

Which action is proposed?

The action consists of identifying, analyzing, and documenting potential funding sources that can finance the remaining 50% of the solar panel installation costs. This includes:

- Screening relevant European funding programmes, with a focus on:
- Danube Transnational Programme (including the Danube Platform for green transition),
- EU Cohesion Policy funds,
- LIFE Programme (clean energy transition),
- Horizon Europe (where applicable)
- Identifying national and local green investment schemes, and energy-efficiency subsidies.
- Assessing eligibility criteria, funding rates, application timelines, and co-financing requirements.
- Preparing a concise funding matrix and short guidance note to support future funding applications.

The intended result is a clear, actionable overview of financing options that enables timely applications and reduces financial risk for the solar PV project.

How to implement the action: Collect information from programme authorities, national contact points, and managing authorities.

Liaise with regional development agencies and environmental funds.

Analyse risks such as funding competition, administrative burden, and timing mismatches, and mitigate them through early preparation and prioritization of the most suitable instruments.

No major investment funding is required for this action; implementation relies mainly on staff time and technical expertise.

Which partners?

- National contact points for EU programs
- Local or national environmental protection funds
- Energy agencies or technical consultants (if needed)

Which timeline?

- Mapping of funding programs: Month 1
- Eligibility and feasibility analysis: Month 2
- Preparation of funding matrix and internal report: Month 3
- Final validation and integration into the Investment Plan: End of Q3 2026

Indicators?

- Number of identified and documented funding sources
- Availability of a completed funding matrix
- Number of funding opportunities suitable for immediate application
- Share of remaining investment costs potentially covered (percentage)

Cross-cutting issues?

Environmental: Action directly supports renewable energy deployment and emission reduction.

Digital: Use of digital platforms (e.g., EU portals, Danube platform) for funding research and documentation.

Gender: Equal access to project development and decision-making processes within the municipal team is ensured.

Action name:	**Identification and documentation of funding sources for solar PV co-financing**	
Costs Breakdown	Comment	Estimated Costs (€)
Staff costs	10 hours of the project team work	200
Office and administration / Indirect costs		
Travel & accommodation		
External expertise and services		
Subcontracting		
Equipment and consumables		
Infrastructure and construction works		
Total Estimated Cost:		200

Action 5. Establishing Community Solar Energy System for Social Funding

This action establishes a community solar energy system whose electricity production generates financial revenues dedicated to funding local social, cultural, and educational activities for the residents of four buildings in the project.

Responsible: Energy Communities of the four buildings

Deadline: December 2027

What is the specific challenge

Many community social activities (youth programs, cultural events, support for vulnerable groups) suffer from unstable or insufficient funding, relying heavily on public budgets or short-term grants. At the same time, public and community buildings have underused roof space that could produce renewable energy. The challenge is to create a sustainable, long-term funding mechanism that supports social cohesion while advancing local energy transition goals.

Budget: 400 Eur

How can the transfer of the CALICO Module/Sub-Module help?

The CALICO renewable energy and local financing modules provide tested models for linking clean energy production with community benefits. By transferring these modules, the city can implement a self-financing mechanism where energy savings and revenues are reinvested locally, ensuring efficiency, transparency, and long-term social impact.

Which action is proposed?

The action proposes installing solar photovoltaic panels on four buildings. Electricity produced will be:

Sold to the grid or local energy communities where regulations allow.

The financial surplus generated (energy savings and sales revenues) will be allocated to an Energy Community Social Fund. This fund will finance:

Social inclusion initiatives

Community-led projects proposed by residents

The intended result is a stable, recurring funding source for social activities, while reducing carbon emissions and increasing citizen engagement in the energy transition.

Implementation steps include:

- Identifying suitable buildings for solar installations
- Conducting technical and financial feasibility studies
- Installing and commissioning solar PV systems
- Establishing a governance model for managing revenues
- Defining transparent rules for allocating funds to social activities

Funding needed: Initial investment through public funds, EU programs, green loans, or public–community partnerships.

Risks & barriers: Regulatory constraints, upfront costs, and technical capacity. These will be mitigated through legal assessment, phased investments, and partnerships with experienced energy providers.

Which partners?

- Municipality and local authorities
- Energy cooperatives or solar installers
- Community and social organizations
- Schools, NGOs, and cultural associations
- Financial institutions or EU funding bodies

Which timeline?

2025: Feasibility studies and partner engagement

2026: Installation of solar panels and governance setup

2027: Full operation and first allocation of social funds

Indicators

- Installed solar capacity (kWp)
- Annual renewable energy produced (kWh)
- Annual financial surplus generated (€)
- Number and type of social activities funded
- CO_2 emissions avoided (tons/year)

Cross cutting issues?

Gender: Equal access to funded activities and inclusive participation in decision-making

Digital: Use of digital platforms to monitor energy production and fund allocation transparently

Environmental: Reduction of fossil energy use and promotion of climate awareness within the community

Action name:	**Establishing Community Solar Energy System for Social Funding**	
Costs Breakdown	Comment	Estimated Costs (€)
Staff costs	5 hours of work on preparation of documentation for the permits	100
Office and administration / Indirect costs	Administrative costs for the registration, 100 Euro per building	400
Travel & accommodation		
External expertise and services		
Subcontracting		
Equipment and consumables		
Infrastructure and construction works		
Total Estimated Cost:		500

Action 6.Outline and Promote Social Entrepreneurship Opportunities for Women in the Community

This action focuses on identifying, promoting, and supporting social entrepreneurship opportunities with a strong emphasis on women's participation and leadership in the local community.

Responsible: Management boards of four buildings; Deadline: December 2026

What is the specific challenge?

In the Local community Stara Varos, women often face limited access to employment, entrepreneurship opportunities, financing, skills development, and decision-making roles. Many existing economic activities do not sufficiently address social needs such as care services, social inclusion, environmental sustainability, or community wellbeing.

How can the transfer of the CALICO Module/Sub-Module help?

The CALICO module on social innovation and local investment provides practical tools to identify social needs, engage stakeholders, and design inclusive business models. It supports capacity-building, participatory approaches, and impact-oriented entrepreneurship. Transferring this module helps ensure that proposed social enterprises are viable, community-driven, and aligned with local development priorities, while explicitly integrating gender equality and social inclusion principles.

Which action is proposed?

The proposed action is based on the testing actions we organized in October 2025, when we mapped, outlined, and promoted potential social entrepreneurship opportunities, with a specific focus on women-led and women-benefiting initiatives.

The intended result is an increased number of women engaged in social entrepreneurship, stronger local social enterprises, and improved social and economic outcomes for the community.

How to implement the action?

Implementation will be coordinated by the energy communities and management boards of four buildings. A steering group will oversee the process.

Budget:3200 Eur. Funding may be required for facilitation, training, mentoring, and communication activities, potentially sourced from local budgets, national programs or EU funding. Key risks include low participation due to time constraints or lack of confidence; these will be addressed through flexible scheduling, childcare support during activities, and mentoring by experienced entrepreneurs.

Which partners?

Women’s associations, such as SOS NGO

Local business incubators and entrepreneurship hubs

Educational institutions and training providers

Financial institutions and micro-finance organizations

Social enterprises and cooperatives

Which timeline?

Months 1–3: Needs assessment and stakeholder engagement

Months 4–6: Co-creation workshops and idea development

Months 7–9: Training, mentoring, and preparation of project catalogue

Months 10–12: Promotion, pilot support, and evaluation

Indicators?

Number of women participating in workshops and trainings

Number of social entrepreneurship ideas identified and documented

Number of women-led social enterprise projects initiated or supported

Participant satisfaction and self-reported skills improvement

Social impact indicators linked to priority sectors (e.g. services provided, beneficiaries reached)

Cross cutting issues?

Gender equality is central to this action, with targeted outreach and support for women. Digital aspects are integrated through training on digital tools, online platforms, and e-services for social enterprises. Environmental sustainability is promoted by prioritizing green and circular economy initiatives and encouraging environmentally responsible business models.

Action name:	**Outline and Promote Social Entrepreneurship Opportunities for Women in the Community**	
Costs Breakdown	Comment	Estimated Costs (€)
Staff costs	10 hours of the project team work	200
Office and administration / Indirect costs		
Travel & accommodation		
External expertise and services	facilitation, training, mentoring, and communication activities	3000
Subcontracting		
Equipment and consumables		
Infrastructure and construction works		
Total Estimated Cost:		3200

Module IV.Building

Action 1.Development of a feasibility study on solar panels on the roofs of four buildings

This action consists of carrying out a technical, financial, and regulatory feasibility study to assess the installation of photovoltaic solar panels on the roofs of four selected buildings.

Responsible: Project team/External consultant

Deadline: 30/11/2025

What is the specific challenge?

The Local community Stara Varos aims to increase the share of renewable energy in its public building stock and reduce energy costs and CO_2 emissions. However, there is currently no detailed assessment of the technical suitability, economic viability, and regulatory constraints for installing solar panels on the roofs of the four selected buildings. Without a feasibility study, informed investment decisions and prioritization of buildings cannot be made, creating a barrier to the implementation of solar energy projects.

● How can the transfer of the CALICO Module/Sub-Module help?

The CALICO module on renewable energy and sustainable investment planning provides a structured methodology for assessing renewable energy projects, including technical analysis, cost-benefit evaluation, risk assessment, and stakeholder involvement. Transferring this module helps ensure a harmonized, evidence-based, and efficient approach to feasibility analysis, reducing uncertainty and supporting sound investment decisions.

Which action is proposed?

The proposed action is to develop a comprehensive feasibility study for installing photovoltaic solar panels on the roofs of four buildings.

Budget: 2000 Eur

The study will include:

Technical assessment of roof conditions, orientation, load-bearing capacity, and solar potential

Analysis of energy production potential and self-consumption scenarios

Financial analysis (investment costs, payback period, funding opportunities)

Review of legal, regulatory, and permitting requirements

Environmental impact

The intended result is a clear decision-making tool identifying which buildings are suitable for solar panel installation and under which conditions, forming the basis for future investment and implementation.

How to implement the action?

Implementation steps include:

- Selection of the four buildings
- Collection of technical data (plans, energy consumption, roof characteristics)
- Procurement of external expertise (energy consultants or engineers)
- Preparation of the feasibility study

The installation of a photovoltaic system reduces dependence on fossil fuels and generates sustainable income from solar energy in the amount of the aforementioned 12,000 euros per year, according to the feasibility study conducted by an electrical engineer Mr. Bulajic.[2]

Funding were required for external consultancy services and technical assessments.

Potential risks include insufficient roof suitability or regulatory constraints; these will be mitigated through early technical inspections and consultation with planning and permitting authorities.

Which partners?

- Municipal technical and energy departments
- External energy consultants or engineering firms
- Building owners or facility managers
- Local or regional energy agencies

Which timeline?

Month 1: Building selection and data collection

Months 2–3: Technical and financial analysis

Month 4: The finalization and validation of the feasibility study

Indicators?

- Number of buildings assessed (target: 4)
- Completion of a validated feasibility study
- Identification of viable solar installations (yes/no per building)
- Estimated potential installed capacity (kWp)

Cross cutting issues?

Environmental: Promotion of renewable energy and reduction of greenhouse gas emissions

Digital: Use of digital tools and software for energy modeling and analysis

Gender: Equal opportunities ensured in procurement and stakeholder involvement processes

Action name:	**Development of a feasibility study on solar panels on the roofs of four buildings**	
Costs Breakdown	Comment	Estimated Costs (€)
Staff costs		
Office and administration / Indirect costs		
Travel & accommodation		

[2] The link for the feasibility study: https://drive.google.com/drive/folders/1ZIWO-0jMOTd_KwErX3kshtXb0lGY8dV

Action name:	**Development of a feasibility study on solar panels on the roofs of four buildings**	
External expertise and services	development of the feasibility study	2000
Subcontracting		
Equipment and consumables		
Infrastructure and construction works		
Total Estimated Cost:		2000

Action 2. Insulation of the Roofs (Pre-condition for Solar PV Installation)

Improving the thermal performance of the building roof to reduce heat losses and prepare the structure for the efficient installation of solar photovoltaic panels.

Responsible: Management boards of four buildings]; Deadline: [31/12/2026] (prior to PV installation)

What is the specific challenge?

The current roof has insufficient thermal insulation, leading to significant heat losses, higher energy consumption for heating/cooling, and reduced overall building energy performance. Installing solar panels without first addressing roof insulation would limit the effectiveness of renewable energy production and could require rework or additional costs later.

How can the transfer of the CALICO Module/Sub-Module help?

The CALICO module on energy efficiency and integrated renovation supports a holistic approach, ensuring that demand-reduction measures (such as insulation) are implemented before renewable energy supply solutions. This sequencing maximizes energy savings, improves cost-effectiveness, and aligns with best practices promoted by the CALICO methodology.

Which action is proposed?

The proposed action is the insulation of the building roof using appropriate, high-performance and sustainable insulation materials before the installation of solar PV panels. This includes a technical assessment of the existing roof, selection of insulation solutions compliant with regulations, and execution of insulation works. The intended result is a significant reduction in heat losses, improved indoor comfort, and an optimized base for renewable energy integration.

How to implement the action?

Implementation will include:

- Technical audit of the existing roof and structural capacity;
- Design and specification of insulation materials and thickness;

- Procurement and contracting of qualified installers;
- Execution of insulation works and quality control.

Budget: 30000 Eur, funding available from the Local government of Municipality of Niksic (70%), national energy efficiency grants, or EU support schemes. Potential barriers include budget constraints and temporary disruption of building use; these will be mitigated through careful planning, phased works, and stakeholder communication.

Which partners?

- Municipal technical services;
- Energy consultants or engineers;
- Construction and insulation companies;
- Funding bodies or energy agencies.

Which timeline?

- Energy audit and design: Month 1
- Procurement and contracting: Month 2
- Insulation works: Months 3–4
- Final inspection and approval: End of Month 4

This action must be fully completed before the start of solar PV installation.

Indicators?

- Roof insulation thickness and thermal resistance achieved (U-value);
- Reduction in estimated heat losses (percentage);
- Improvement in building energy performance rating;
- Completion of insulation works before PV installation.

Cross-cutting issues?

Environmental: Use of low-impact, recyclable or bio-based insulation materials where possible.

Digital: Use of digital tools for energy modeling and monitoring performance improvements.

Gender & Social: Improved indoor comfort benefits all users equally, with attention to health and comfort of vulnerable groups.

Action name:	**Insulation of the Roofs (Pre-condition for Solar PV Installation)**	
Costs Breakdown	Comment	Estimated Costs (€)
Staff costs	25 hours of project team work	500
Office and administration / Indirect costs		
Travel & accommodation		
External expertise and services	Technical audit of the existing roof and structural capacity; Design and specification of insulation materials and thickness;	3000

Action name:	**Insulation of the Roofs (Pre-condition for Solar PV Installation)**	
Subcontracting	Procurement and contracting of qualified installers	2000
Equipment and consumables		
Infrastructure and construction works	Execution of insulation works and quality control	44000
Total Estimated Cost:		49500

Action 3. Installation of solar panels based on the feasibility study

Installation of grid-connected solar photovoltaic (PV) systems in accordance with the technical, financial, and environmental guidelines defined in the improved feasibility study.

Responsible: Municipal Energy Department / Project Management Unit

Deadline: Q4 2027

● What is the specific challenge?

Public buildings and selected sites identified in the feasibility study have significant solar potential that remains unused. Without concrete implementation, the technical and economic benefits identified in the improved feasibility study cannot be realized, limiting progress toward established energy community climate and energy targets.

● How can the transfer of the CALICO Module/Sub-Module help?

The CALICO Renewable Energy module provides structured guidance on planning, procurement, and deployment of solar PV systems in urban contexts. It supports cities in translating feasibility studies into bankable and implementable actions by offering best practices on governance, technical specifications, stakeholder engagement, and monitoring. Applying this module ensures an efficient, transparent, and replicable implementation process.

Which action is proposed?

The proposed action consists of the installation and commissioning of solar PV systems on selected municipal buildings and/or designated sites, strictly following the technical specifications, system sizing, grid-connection requirements, and financial assumptions defined in the improved feasibility study.

The action includes:

- Final validation of installation sites and system designs;
- Procurement of solar PV equipment and installation services;
- Installation, grid connection, testing, and commissioning of the systems;

- Training of municipal officers for basic operation and maintenance;
- Establishment of monitoring and reporting mechanisms

Intended result: Operational solar PV installations delivering clean electricity.

Desired outcome: Increased share of renewable energy in the local energy mix.

Expected outputs: Installed PV capacity (kWp), annual renewable electricity generation (kWh), and documented operational procedures.

How to implement the action?

Implementation will be coordinated by the municipal project management unit in cooperation with technical experts. Key steps include:

- Approval of final technical designs and budget;
- Launch of public procurement procedures for equipment and contractors;
- On-site installation and supervision;
- Grid connection and commissioning;
- Monitoring setup and performance verification

Budget: 85000 Eur. Funding: 50% from Eco-fund Montenegro. 50% other donations, e.g. from EPCG or EU funded projects.

Risks and barriers: Procurement delays, grid connection constraints, or budget overruns.

Mitigation measures: Early coordination with utilities, clear tender documents, contingency planning in the budget.

Which partners?

- Municipal Energy and Infrastructure Departments
- EPCG/Solar gradnja doo
- Solar PV installers and engineering firms
- Financial institutions or funding agencies
- CALICO project partners (technical support)

Which timeline?

- Q4 2026: Final design validation and permitting
- Q1 2027: Procurement and contracting
- Q2-Q3 2027: Installation and grid connection
- Q4 2027: Commissioning and operational handover

Indicators?

- Installed solar PV capacity (kWp)
- Annual renewable electricity produced (kWh/year)
- Reduction in CO_2 emissions (tCO_2/year)
- Reduction in electricity expenditure for municipal buildings (percentage)
- Number of staff trained

Cross cutting issues?

Gender: Equal opportunities ensured in procurement and training activities.

Digital: Use of digital monitoring systems for real-time performance tracking

Environmental: Contribution to emission reduction, minimal environmental impact ensured through compliance with environmental standards and recycling of PV components at end of life.

Action name:	**Installation of solar panels based on the feasibility study**	
Costs Breakdown	Comment	Estimated Costs (€)
Staff costs		
Office and administration / Indirect costs		
Travel & accommodation		
External expertise and services		
Subcontracting		
Equipment and consumables		
Infrastructure and construction works	According to the feasibility study total price for the purchase, delivery, execution and commissioning of the system per kW for this system is 1250 €/kW for each building (total 4). VAT (7 %) was included.	92287.5
Total Estimated Cost:		92287.5

Action 4: Analysis and Inclusion of Four Key Buildings in Project Nikšić – European Capital of Culture 2030

This action analyses and defines ways to include four selected buildings in cultural, social and creative processes linked to Nikšić's European Capital of Culture ECoC 2030 project.

Responsible: Municipality of Nikšić (Department for Culture and Urban Development)

Deadline: December 2026

What is the specific challenge?

Nikšić has several underused or unused public buildings, such as those from the Local community Stara varos, with cultural and historical value. Despite their potential, these buildings are not yet systematically integrated into the planning and implementation of the ECoC 2030 programme. The lack of clear functional concepts, governance models, and feasibility assessments creates a risk that these assets will remain excluded from ECoC-related investments and activities, reducing the long-term cultural, social and economic impact of the ECoC title.

How can the transfer of the CALICO Module/Sub-Module help?

CALICO modules on adaptive reuse of cultural infrastructure and participatory governance provide practical methodologies for assessing buildings, defining new cultural functions, and involving stakeholders in co-creation processes. The transfer supports evidence-based decision-making, helps align cultural programming with spatial planning, and increases efficiency by testing feasible, inclusive and sustainable reuse models before large-scale investments are made.

Which action is proposed?

The action proposes a structured analysis and planning process for four selected buildings to determine how they can be integrated into ECoC 2030 cultural, creative and community-oriented processes. The action includes:

- Selection and profiling of four buildings (ownership, condition, heritage value, location).
- Analysis of potential cultural, creative, educational and social uses aligned with ECoC 2030 priorities.
- Stakeholder consultations with cultural operators, civil society, youth, creative industries and citizens
- Definition of preliminary functional concepts and governance models for each building.
- Identification of short-term (ECoC 2030) and long-term (post-2030) uses.

The intended result is a clear, realistic roadmap for including these buildings in the ECoC program, supported by local stakeholders and ready for further investment planning.

How to implement the action?

Implementation will be coordinated by the Municipality of Nikšić in cooperation with the ECoC 2030 team. A small working group will be established, including urban planners, cultural managers and heritage experts. Activities will include desk research, site visits, workshops and public consultations.

Funding needs are moderate and mainly cover expert support, facilitation, and communication activities. Potential barriers include unclear property relations, limited financial resources, and differing stakeholder expectations. These risks will be mitigated through early legal checks, transparent communication, and phased planning that allows flexible implementation.

Which partners?

Municipality of Nikšić (culture, urban planning, property management)

- Management boards of four buildings
- Nikšić ECoC 2030 coordination team
- Local cultural institutions and NGOs
- Creative sector representatives
- Educational institutions
- Heritage protection authorities
- Citizens and informal community groups

Which timeline?

Q2 2026: Selection of buildings and initial data collection

Q3 2026: Stakeholder mapping and consultations

Q4 2026: Development of functional and governance concepts

Q1 2027: Final analysis report and integration into ECoC 2030 planning documents

Budget: 200 Euro

Indicators?

- Number of buildings analysed (target: 4)
- Number of stakeholders involved in consultations
- Existence of functional and governance concepts for each building
- Level of integration of buildings into ECoC 2030 program documents

Cross cutting issues?

Gender equality is addressed by ensuring balanced participation in consultations and inclusive programming concepts. Digital aspects are considered through potential hybrid and digital cultural uses of the buildings. Environmental sustainability is integrated by prioritizing adaptive reuse, energy efficiency principles, and reduced environmental impact compared to new construction.

Action name:	**Analysis and Inclusion of Four Key Buildings in Project Nikšić – European Capital of Culture 2030**	
Costs Breakdown	Comment	Estimated Costs (€)
Staff costs	10 hours of project team work	200
Office and administration / Indirect costs		
Travel & accommodation		
External expertise and services		
Subcontracting		
Equipment and consumables		
Infrastructure and construction works		
Total Estimated Cost:		200

Action 5: Conduct a preliminary study on evaluation of an environmental impact of solar roof panels

This action defines creation of the preliminary study of an environmental impact of solar roof panels of four buildings in the Local community Stara Varoš.

Responsible: ULG members-Environmental Movement Ozon Niksic

Deadline: June 2026

What is the specific challenge?

Residents of four buildings in the Local community Stara Varoš during our meetings and testing actions have expressed concern regarding environmental impact of the solar roofs that are planned for installation, as previously mentioned and defined in the conducted feasibility study.

How can the transfer of the CALICO Module/Sub-Module help?

CALICO modules on environmental impact and energy efficiency can be used to transfer the knowledge in conducting the preliminary study.

Which action is proposed?

The action proposes a structured analysis of environmental impact of the solar roof panels that are planned for installation on four buildings, previously defined in the investment plan.

The intended result is a clear preliminary study that will evaluate potential negative impacts of the installation, and clear communication of these impacts to the residents of four buildings in the Local community Stara Varoš.

How to implement the action?

Implementation will be coordinated by the member of ULG group, Environmental movement Ozon, Niksic, which has local and regional experience in conducting these types of preliminary studies.

Which partners?

- Environmental Movement Ozon Niksic
- Residents of four buildings and informal community groups
- Local community Stara Varoš

Which timeline?

Q2 2026

Indicators?

- Quality of the study

Cross cutting issues?

Gender equality is addressed by ensuring balanced participation in consultations and inclusive programming concepts. Digital aspects are considered through potential digital tools in communication with the residents of the buildings. Environmental sustainability is integrated by prioritizing adaptive reuse, energy efficiency principles, and reduced environmental impact, that will be defined in the above mentioned preliminary study.

Budget: 2000 Eur, provided from the project budget.

Action name:	**Conduct a preliminary study on evaluation of an environmental impact of solar roof panels**	
Costs Breakdown	Comment	Estimated Costs (€)

Action name:	**Conduct a preliminary study on evaluation of an environmental impact of solar roof panels**	
Staff costs		
Office and administration / Indirect costs		
Travel & accommodation		
External expertise and services	Conduct a preliminary study on evaluation of an environmental impact of solar roof panels	2000
Subcontracting		
Equipment and consumables		
Infrastructure and construction works		
Total Estimated Cost:		2000

TOTAL BUDGET

Actions total budget	Estimated Costs (€)
Establish and operationalize management boards for all multi staircore residential blocks	150
Create energy community in every of the four buildings in Stara Varos local community	300
Examine the needs of the elderly, single mothers, and women	100
Delivering a comprehensive advocacy campaign that has as a goal to promote community pride and participation	600
Organize trainings of residents on energy communities and efficiency	400
Organize Small-Scale Community Activities in Four Residential Buildings	400
Assessing stakeholders' interest, capacity, and conditions for co-financing solar panel installations on selected buildings	500
Project presentation to potential investor from EPCG at the conference in June 2025	120
Preparing an official request to the BoD of EPCG for donation of 50% of the solar panel installation costs	40
Identification and documentation of funding sources for solar PV co-financing	200
Establishing Community Solar Energy System for Social Funding	500
Outline and Promote Social Entrepreneurship Opportunities for Women in the Community	3200
Development of a feasibility study on solar panels on the roofs of four buildings	2000
Insulation of the Roofs (Pre-condition for Solar PV Installation)	49500
Installation of solar panels based on the feasibility study	92287.5
Analysis and Inclusion of Four Key Buildings in Project Nikšić – European Capital of Culture 2030	200
Conduct a preliminary study on evaluation of an environmental impact of solar roof panels	2000
Total estimated budget (€)	152347.5

4. IP Section: Monitoring

Cross Cutting Issues

The project integrates sustainability objectives with the enhancement of collective living conditions across four residential buildings. It promotes the green transition by prioritizing improvements in energy efficiency, primarily through the installation and utilization of rooftop solar panels. Concurrently, the project advances social inclusion by empowering single mothers and older women through the creation of community-based funds generated from the sale of surplus energy produced by the solar installations. These funds may be allocated to support childcare services provided by these women or to foster other forms of social entrepreneurship. Additionally, digitalization will be pursued through the strategic use of social media platforms to facilitate closer cooperation, strengthen social cohesion, and enhance communication among residents of the four buildings.

Indicators

Each action will have a different indicator to be measured, as provided above in each action, and in the summary table below.

Indicator Matrix – Integrated Plan (IP) Actions

Module I. Governance

Action	Indicator	Target	Timeline	Responsible
Management boards	Entrances with active boards	12/12	Q1 2026	Project team / Residents
	Mutual funds established	12/12	Q1 2026	Management boards
	Solar revenue collected	€12,000/year	From operation	Management boards
Energy communities	Registered energy communities	4 buildings	Q4 2026	Management boards

Module II. Social

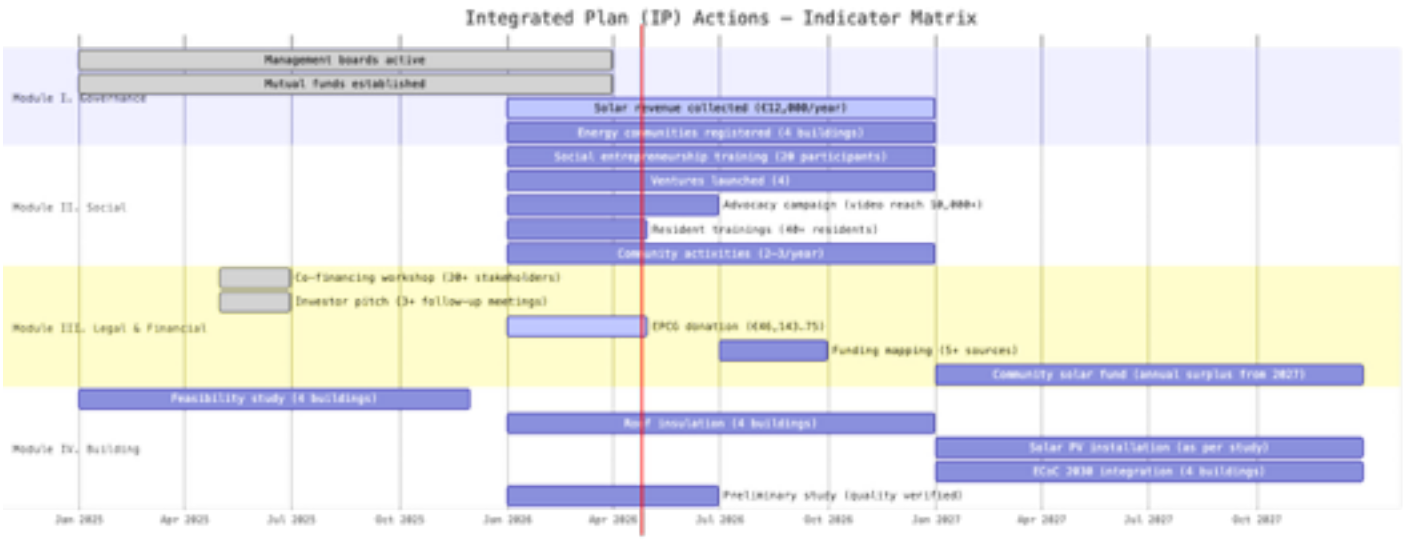
Action	Indicator	Target	Timeline	Responsible
Social entrepreneurship	Participants trained	20	2026	SOS NGO / Project team
	Ventures launched	4	2026	SOS NGO
Advocacy campaign	Video reach	10,000+	June 2026	Project team / RTV NK
Resident trainings	Residents trained	40+	April 2026	OZON / Municipality
Community activities	Community events	2–3/year	2026	Management boards

Module III. Legal & Financial

Action	Indicator	Target	Timeline	Responsible
Co-financing workshop	Stakeholders participating	20+	June 2025	Municipality
Investor pitch	Follow-up meetings	3+	June 2025	Project team
EPCG donation	Funding secured	€46143.75	April 2026	Project team
Funding mapping	Funding sources identified	5+	Q3 2026	Municipality
Community solar fund	Annual surplus generated	€	From 2027	Energy communities

Module IV. Building

Action	Indicator	Target	Timeline	Responsible
Feasibility study	Buildings assessed	4	Nov 2025	Project team
Roof insulation	Insulation completed	4 buildings	Dec 2026	Management boards
Solar PV installation	Installed PV capacity	As per study	Q4 2027	Municipality
ECoC 2030 integration	Buildings included	4	2027	Municipality
Preliminary study	Quality of the study	As per study	June 2026	Env.mov.Ozon



Partner Roles Summary

Partner	Responsibilities
Project team	Governance setup, trainings, EPCG donation, feasibility, investor relations
Management boards	Local boards activation, funds, solar revenue, events
Municipality	Co-financing, solar PV, ECoC integration, funding mapping, resident train
SOS NGO	Social entrepreneurship, venture support
RTV NK	Media campaign (advocacy video)
ECoC / Env.mov.Ozon	Environmental assessment and study quality
Energy communities	Community fund management (from 2027)

5. Evaluation

The evaluation of the Integrated Plan (IP) will follow URBACT principles, with a clear distinction between result indicators (changes achieved for residents and buildings) and output indicators (activities delivered and participation numbers). For each module, the indicator matrix defines SMART targets, timelines and responsible actors, which form the core of the monitoring and evaluation framework. Baselines will be established in 2026, and progress will be reviewed bi-monthly by the project team and key stakeholders, including management boards, the municipality and NGOs.

Evaluation questions
Across the four modules, evaluation will address three guiding questions, in line with URBACT standards of results-oriented local action planning.

Governance

To what extent have entrances established and maintained active management boards and mutual funds by Q1 2026 (12/12 target)?

How effectively do newly formed energy communities and solar revenue management structures function by end 2026 (4 registered communities, 12,000 €/year solar revenue)?

Social

To what extent have social entrepreneurship, advocacy and resident training activities increased awareness, skills and engagement (20 trained participants, 4 ventures, 10,000+ video reach, 40+ residents trained)?

Have community activities (2–3 events/year) strengthened social cohesion and participation in decision-making around building upgrades and energy communities?

Legal & Financial and Building

Have the project and municipality successfully mobilised diverse co-financing and partnerships (20+ stakeholders in workshop, 3+ investor follow-ups, 42,500 € EPCG donation, 5+ funding sources identified, operational community solar fund from 2027)?

Have technical measures been implemented as planned (4 buildings in feasibility study, 4 insulated roofs, PV installed as per study by 2027, 4 buildings integrated into the ECoC 2030 framework) and do they contribute to long-term environmental and economic benefits for residents?

Indicators, baselines and targets

The existing indicator matrix serves as the IP's performance framework and will be complemented by qualitative information in line with URBACT guidance on combining quantitative and qualitative evidence.

Governance module

Outputs: number of entrances with active management boards (target 12/12), mutual funds established (12/12), registered energy communities (4).

Results: level of resident participation in boards, transparency and regularity of meetings, and satisfaction with management of solar revenues (target 12,000 €/year).

Social module

Outputs: participants trained in social entrepreneurship (20), local ventures launched (4), advocacy campaign video reach (10,000+), residents trained (40+), annual community events (2–3).

Results: increased skills and confidence of residents to initiate projects, strengthened local networks, and higher awareness of energy efficiency and community solar opportunities.

Legal & Financial module

Outputs: stakeholders engaged in co-financing workshop (20+), investor pitch follow-up meetings (3+), EPCG donation secured (42,500 €), funding sources mapped (5+).

Results: availability of a diversified financing mix, reduced financial risk for residents, and establishment of a community solar fund generating annual surplus from 2027 onward.

Building module

Outputs: buildings covered by feasibility study (4), roofs insulated (4 buildings), PV capacity installed as per study, number of buildings integrated into ECoC 2030 (4).

Results: improved energy performance of buildings, lower energy costs for residents, and enhanced visibility of the neighborhood within the ECoC 2030 programme.

Data collection and responsibilities

Data collection will follow simple but robust procedures aligned with URBACT recommendations on monitoring systems and local stakeholder involvement.

Management boards and energy communities will keep attendance lists, meeting minutes and annual financial reports on mutual funds, solar revenues and the community solar fund (from 2027).

The project team, SOS NGO, OZON and the municipality will register participants in trainings, social entrepreneurship activities and public events, and will gather short feedback forms or interviews to capture perceived benefits.

The municipality will compile technical documentation (feasibility studies, insulation and PV works, ECoC 2030 documentation) and financial data related to workshops, investor pitches and donations, enabling verification of all output indicators.

Progress against targets will be reviewed at least every two months, with a mid-term review in 2026 and a final review in 2027 focused on results and lessons learned.