

# ASPRELA + SUSTENTÁVEL

Location: Porto, Portugal

Start date: May, 2024

Lead organisation: AdEPorto - Porto Energy Agency

Target groups: Low-income households

Energy transition focus: Solar energy & collective self-consumption

Scale: Neighbourhood-level



## Objective

Asprela + Sustentável is a community energy project that established Porto's first renewable energy community in a social housing neighbourhood. It aims to reduce energy poverty through a renewable energy community using solar energy and collective self-consumption scheme.

Solar panels were installed across residential buildings and a local school, enabling residents to share locally produced renewable electricity. The initiative directly addresses energy poverty by reducing electricity costs for vulnerable households while contributing to climate action.

## Why it matters for a Fair Energy Transition?

Asprela + Sustentável is specifically designed to address the needs of vulnerable households facing high energy costs and limited access to affordable energy. Beyond financial benefits, the project places strong emphasis on inclusion and participation. Residents were involved from the outset through door-to-door outreach, community meetings, and accessible communication using clear language and visual materials. This way residents not only benefit from the initiative but also actively shape it. As a result, the initiative combines social impact with empowerment, making vulnerable groups active participants in the energy transition rather than passive beneficiaries.

## Results and ambitions

### Quantitative

- ~180 households benefiting
- 135 MWh solar energy produced (first year)
- ~40% of electricity needs covered
- ~36% reduction in energy bills

### Qualitative

- Increased financial relief for families
- Stronger community cohesion
- Higher awareness of energy use
- Greater participation in the energy transition

## Business model

The initiative aims to maximize social impact rather than generate profit. The initial investments in solar infrastructure were fully funded by the Municipality of Porto, allowing households to participate with no upfront cost. During the first 5 years, energy sharing is provided free of charge, resulting in a significant reduction in energy bills. After this, operational costs are covered through a reduced social energy tariff, tailored to participating households. It is therefore designed to sustain its operations in the long term without the need for external subsidies, relying on sharing methodologies maximizing energy and economic benefits, while ensuring continued accessibility for vulnerable households.

## For more information

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# JUST ENERGY TRANSITION IN CRETE

Location: Crete, Grece  
 Start date: October, 2019  
 Lead organisation: Minoan Energy Community  
 Target groups: Low-income households  
 Energy transition focus: Renewable energy communities  
 Scale: Regional (island-wide)



## Objective

The initiative addresses the risk that the energy transition in Crete is dominated by large private investors, leaving citizens behind and increasing inequality. It brings together citizens, municipalities and local actors to jointly develop renewable energy projects and keep control over local energy resources. The community builds and operates solar parks, district heating systems and other clean energy solutions that directly benefit its members. By combining different renewable technologies and collective ownership, it reduces energy costs and strengthens local resilience. What makes it innovative is its strong citizen-led approach, ensuring that energy is produced, managed and shared locally rather than concentrated in a few hands.

## Why it matters for a Fair Energy Transition?

It tackles energy poverty by ensuring that vulnerable households can access affordable or free energy. It prioritises groups such as low-income families and households affected by natural disasters, addressing both economic vulnerability and energy insecurity. Benefits include free electricity for vulnerable households and significant reductions in heating and electricity costs. Households facing vulnerabilities can become members, participate in decisions, and have equal voting rights in the energy community. Outreach combines broad communication channels with targeted approaches such as direct phone calls and a dedicated helpdesk to support those most in need.

## Results and ambitions

### Quantitative

- 5 photovoltaic parks installed (4.4 MWp total capacity)
- ~70% reduction in electricity procurement costs
- 33 vulnerable households receiving free electricity

### Qualitative

- Strong citizen participation (one-member-one-vote governance)
- Local energy independence based on renewables
- Growing community engagement and awareness

## Business model

The initiative operates mainly through member participation in renewable energy projects. Members pay a contribution to join projects, which covers installation costs and generates a margin used to finance operation and maintenance over time. This allows the infrastructure to remain sustainable without relying on continuous income from energy sales. Additional funding comes from European and national projects, which currently support staffing and development activities. Support for vulnerable households is financed through a mix of community resources and contributions from public authorities.

## For more information

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## ETRE SCHOOLS

Location: France

Start date: October, 2017

Lead organisation: Réseau ETRE

Target groups: Youth not in education, employment, or training

Energy transition focus: Capacity building

Scale: National-level



### Objective

ETRE Schools addresses the exclusion of vulnerable young people from both the labour market and the ecological transition. It provides hands-on training programmes where participants learn practical skills through real projects and immersion with professionals. The initiative helps young people regain confidence, identify career paths, and access jobs in sectors such as energy, renovation, and mobility. What makes it innovative is its “learning by doing” approach combined with strong local partnerships. It connects social inclusion with concrete workforce needs for the green transition, turning untapped potential into skilled talent. Currently the programme counts with 33 schools accross France and is expanding

### Why it matters for a Fair Energy Transition?

The initiative ensures that vulnerable youth are not left behind in the transition by giving them free access to training in green jobs that are often inaccessible. It removes barriers such as cost, mobility, and social challenges by covering transport, meals, and providing tailored support. Young people actively shape the programme through feedback and governance roles, ensuring it reflects their realities. The initiative works closely with local actors, municipalities, social services and NGOs to reach those most excluded. By empowering youth as future workers in ecological sectors, it addresses both social inequality and the shortage of skilled labour needed for a fair transition.

### Results and ambitions

#### Quantitative

- 33 schools accross France
- 1 049 young people trained in 2024
- 92% achieved employment, training, or civic service within 6 months

#### Qualitative

- Increased self-confidence and motivation
- Clearer career orientation
- Adoption of more sustainable behaviours
- Acquisition of technical and ecological skills

### Business model

It operates as a non-profit model combining public funding, philanthropic contributions, and partnerships with local authorities and employers. Trainings are fully free for participants, with costs such as staff, materials, and coordination covered by these funds. Additional revenue comes from service activities and membership fees, with a strategy to increase this share over time to strengthen financial sustainability. While the model remains partly grant-dependent, diversification efforts aim to ensure long-term stability while keeping access free for vulnerable groups.

### For more information

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# LODZ REVITALISATION PROGRAMME

Location: Łódź, Poland

Start date: September, 2016

Lead organisation: Municipality of Łódź

Target groups: Low-income households, youth, elderly

Energy transition focus: Housing renovation

Scale: City-wide



## Objective

The Łódź Revitalisation Programme addresses poor housing conditions, urban decay and social exclusion in the city's central districts. It renovates buildings for energy efficiency, improves public spaces, and upgrades mobility while keeping a strong social focus. The initiative combines energy-efficient housing with social support and local services to improve daily life of the households. It works directly with residents to co-design solutions adapted to their needs. What makes it stand out is its integrated approach—linking climate action with social inclusion in a post-industrial city. It shows that improving energy performance and strengthening communities can go hand in hand..

## Why it matters for a Fair Energy Transition?

The initiative directly supports vulnerable groups who often live in poor-quality, energy-inefficient housing and face social exclusion. It reduces energy costs through renovation while ensuring rents remain affordable, preventing displacement. Residents are actively involved through consultations, door-to-door outreach, and local support services, making participation accessible to all. Tailored formats, such as local meetings, simple language, and childcare remove barriers to engagement. NGOs, social workers, and community animators play a key role in reaching and supporting residents. This inclusive approach ensures that better housing, lower bills, improved wellbeing are shared fairly and shaped by those most affected in Łódź.

## Results and ambitions

### Quantitative

- Over 220 buildings renovated
- More than 1,000 households benefited
- Around 20,000 people supported annually
- ~3,000–3,500 hours/year of advisory and support

### Qualitative

- Increased community ties and participation
- More trust in local authorities
- Improved wellbeing and living conditions for residents

## Business model

The programme is funded through a mix of municipal budgets, EU funds, national funding, and some private contributions. It operates as a public investment model, with the city coordinating large-scale renovation and social support activities. Major costs include building renovation, social services, and public space improvements. Financial benefits are passed on to residents through lower energy bills, affordable rents, and secure housing. While external funding remains important for investments, ongoing activities are increasingly supported by municipal resources and partnerships, with plans to develop blended financing for long-term sustainability.

## For more information

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# EMPOWERMED - Collective Advisory Assemblies

Location: Barcelona, Spain

Start date: September, 2014

Lead organisation: Engineering Without Borders

Target groups: Low-income households; women; migrants; elderly

Energy transition focus: Energy literacy

Scale: Metropolitan area



## Objective

EmpowerMed supports people who struggle to pay their bills, face debt, or live in unhealthy homes, aiming to alleviate energy poverty in the metropolitan area of Barcelona. It does this through Collective Advisory Assemblies, where affected people meet regularly in safe, informal spaces. Participants share experiences, support each other, and find practical solutions together. Rather than receiving top-down advice, they are recognised as experts of their own situation. The initiative removes barriers by being free, open to all, and accessible in different languages and formats. Its community-led approach builds trust, strengthens knowledge, and enables people to take action on their energy situation.

## Why it matters for a Fair Energy Transition?

EmpowerMed directly supports vulnerable groups who are often excluded from traditional energy services, such as women, migrants, and low-income households. It tackles key barriers like lack of trust, complex bureaucracy, and limited access to information. By creating inclusive and welcoming spaces, the initiative ensures that people can participate without formal requirements or stigma. Vulnerable groups are not just beneficiaries, they co-design and lead the assemblies. This participatory model strengthens dignity, and confidence. It also promotes gender equality, as women are highly represented and active. Through peer support and collective learning, the initiative delivers both social and energy-related benefits.

## Results and ambitions

### Quantitative

- 22 Collective Advisory Assemblies per year
- 480–500 people supported annually in Barcelona
- 10% of participants reports health improvements after their participation

### Qualitative

- Reduced energy bills and household debt
- Improved mental and physical health
- Stronger community engagement
- Increased energy knowledge

## Business model

EmpowerMed Collective Advisory Assemblies operates with a low-cost, community-based model. Its main costs are staff and small communication expenses, with no venue costs thanks to in-kind contributions. Annual expenditures are covered by public grants and the organisation's own funds. The initiative generates no direct revenue and is free for participants. It relies heavily on non-monetary contributions, including volunteer time, community spaces, and peer support. This keeps costs low and ensures accessibility. Financial sustainability depends on continued social support and project-based funding.

## For more information

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# RENO-SOLIDAIRE PACK

Location: Brussels, Belgium

Start date: January, 2022

Lead organisation: Community Land Trust Brussels

Target groups: Low-income households

Energy transition focus: Housing renovations

Scale: Neighbourhood-level



## Objective

Low-income homeowners are often excluded from energy renovation schemes due to financial and structural barriers. The initiative offers a combined financial and organisational solution to renovate existing homes and make them energy efficient. It transforms buildings into affordable housing through a circular approach, upgrading rather than rebuilding. In exchange for an important financial investment and strong support, the homeowners bring the land under their home into the community land trust, guaranteeing that the home stays affordable for low income households, even if the home is sold. What makes it innovative is the combination of social housing principles, energy renovation, and circular use of buildings.

## Why it matters for a Fair Energy Transition?

The initiative directly targets vulnerable homeowners who are often left out of climate policies and renovation support. It removes financial and practical barriers by covering renovation costs and providing personalised support. The model prevents “renovictions” by ensuring homes remain affordable over time and can only be transferred under social conditions. Vulnerable groups are fully involved through a participatory governance model where they take key decisions, ensuring that solutions reflect real needs and constraints. Outreach is based on proximity, using home visits, workshops, and collaboration with social partners such as NGOs. The initiative combines social inclusion, housing security, and energy efficiency.

## Results and ambitions

### Quantitative

- 2 pilot houses supported in 2024
- ~€50,000 investment per renovation
- Target: 10 households by 2027
- Target: 25 households from 2028 onwards

### Qualitative

- Improved housing comfort and energy efficiency
- Empowerment of vulnerable homeowners via participation and engagement
- Reduced energy bills and improved wellbeing

## Business model

The initiative currently relies mainly on public funding and grants to operate, such as regional support from the Brussels Capital Region and European funding through Interreg programmes. These funds cover staff costs, operational expenses, and investments in renovations. At this stage, there are no revenues from services, and the initiative is not financially viable without subsidies. However, CLTB aims to diversify funding by attracting impact investors and developing complementary financing mechanisms. In the long term, the ambition is to embed the model into public policy frameworks and scale it structurally.

## For more information

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# ASSERT

Location: Rome, Italy  
 Start date: October, 2024  
 Lead organisation: RETE ASSIST  
 Target groups: People with physical disabilities  
 Energy transition focus: Capacity building; energy poverty alleviation  
 Scale: City-wide



## Objective

ASSERT addresses a largely overlooked issue: people with physical disabilities face higher energy needs but often have lower incomes, making them especially vulnerable to energy poverty. The initiative trains municipal staff and local intermediaries to better support these households. Through mentorship, it helps design more inclusive local policies and practical support schemes. It combines training with real-life action, including tailored advice to households and small-scale solar installations. What makes it innovative is its focus on disability within energy poverty and its multi-actor approach linking cities, civil society, and energy communities. It turns knowledge into concrete local support while building long-term capacity.

## Why it matters for a Fair Energy Transition?

The initiative tackles specific barriers such as higher energy consumption needs, accessibility challenges, and lack of tailored support for its target group. By training municipalities and local organisations, it embeds inclusiveness into local governance. This ensures that fairness is not an add-on but built into policy design and implementation. The initiative delivers benefits through reduced energy bills, improved comfort, and better access to energy services. It actively involves vulnerable groups through interviews, focus groups, and accessible co-design processes (e.g. Braille materials, adapted formats). Intermediaries and social actors play a key role in outreach and support.

## Results and ambitions

### Quantitative

- 10 local actors trained
- 50 households supported annually
- 10 households equipped with plug-and-play PVs
- ~ 300 kWh/year produced with PVs installed

### Qualitative

- Better understanding of energy needs of people with disabilities
- Collaboration between municipalities and civil society

## Business model

It operates based on EU grants, which covers most operational and staffing costs. Additional philanthropic funding is used to finance tangible support such as solar panel installations. The initiative does not generate direct revenue. Instead, it creates social value by reducing energy costs for vulnerable households and improving policy design. Key costs include staff time, training development, accessibility adaptations (e.g. sign language, formats), and equipment. Long-term sustainability relies on building local capacity within municipalities and intermediaries so that actions can continue beyond the grant duration, even with limited funding.

## For more information

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# EMPOWERING OTTERBEEK

Location: Mechelen, Belgium

Start date: August, 2025

Lead organisation: Klimaan CVSO

Target groups: Low-income households

Energy transition focus: Renewable energy and storage

Scale: Neighbourhood-level



## Objective

Empowering Otterbeek addresses energy poverty in a social housing neighbourhood where residents already have access to solar panels but cannot fully benefit from them. Today, most of the energy produced is sent back to the grid, forcing households to continue buying expensive electricity. The initiative pilots smart plug-in batteries combined with an energy management system to store surplus solar energy for later use. This allows families to consume more of their own clean energy and reduce their bills. What makes the project innovative is its focus on maximising self-consumption in a simple and replicable way. It builds on an existing citizen-led solar project and turns passive consumers into active energy users

## Why it matters for a Fair Energy Transition?

The initiative directly targets vulnerable households facing energy poverty by removing financial barriers and ensuring immediate savings. Residents do not need to invest upfront, and they access electricity at a price below the social tariff. The project is designed around the real needs of tenants, identified through workshops and interviews held in the neighbourhood. Their feedback shapes the solution, and a resident sounding board is being created to ensure ongoing participation. Collaboration with the social housing provider and the city ensures trust and accessibility. By combining affordability, participation, and local partnerships, the initiative ensures that vulnerable groups are not only beneficiaries but active participants in the energy transition.

## Results and ambitions

### Quantitative

- 197 social housing households supplied with solar energy and with plans to receive batteries
- €15–€91 average annual savings per household (expected to increase with batteries)

### Qualitative

- Increased energy literacy
- Trust built via partnership with social housing company and city
- Empowerment of tenants as active energy user

## Business model

It is financed through a mix of citizen investment, bank loans, and targeted grants that support initial development and scale-up. Revenue is generated by selling self-consumed solar electricity to tenants at a reduced rate, set below the Belgian social tariff. Additional income comes from electricity fed into the grid. The introduction of batteries is expected to increase self-consumption and therefore strengthen revenue streams. Key costs include installation, maintenance, tenant support services, and system management. Grants currently cover upfront risks and operational complexity, especially during scaling. The long-term objective is to reach a fully self-sustaining model.

## For more information

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# CITIZEN SCHOOL FOR THE RIGHT TO ENERGY

Location: València, Spain

Start date: February, 2023

Lead organisation: València Sostenible

Target groups: Low-income households

Energy transition focus: Energy literacy and energy poverty alleviation

Scale: City-level



## Objective

The Citizen School for the Right to Energy addresses energy poverty by shifting from individual support to a collective, community-based approach. It combines expert advice and home visits with regular group sessions where participants learn together and share experiences. The initiative creates local spaces for dialogue, helping people understand their energy use and rights. Participants co-design the sessions, ensuring relevance to their real needs. By building trust and peer learning, it strengthens social ties and community resilience. The project reframes energy poverty as a shared challenge that requires collective solutions.

## Why it matters for a Fair Energy Transition?

The initiative focuses on people facing barriers such as low income, language challenges, or social isolation. It removes these barriers by offering free participation, local sessions, childcare, and accessible formats. Vulnerable groups are directly involved in shaping the content and activities. Trusted community leaders and NGOs help reach and engage participants. The project builds confidence, reduces energy-related stress, and improves understanding of energy rights. By strengthening collective capacity and social networks, it supports long-term inclusion and empowerment. It combines social justice, participation, and access to affordable energy.

## Results and ambitions

### Quantitative

- 100 households supported annually through advisory services
- 40 vulnerable households engaged in the school
- 13.5 hours of group training per participant

### Qualitative

- Improved understanding of energy bills and rights
- Stronger community ties
- Higher awareness of energy use
- Emergence of “energy ambassadors”

## Business model

The work is mainly funded through public sources, including municipal budgets, European projects, and regional grants. Additional support comes from occasional contributions such as donations. The main costs are staff time for facilitation and home visits, as well as materials like energy efficiency kits and group activities. Participation is free, ensuring accessibility. The model is evolving towards a train-the-trainer approach to reduce costs and enable replication. Future funding aims to diversify through partnerships with foundations, cooperative banks, etc. Integration into municipal services and links with energy community projects could support financial sustainability in the future.

## For more information

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# TERRITOIRES ZERO EXCLUSION ENERGETIQUE

Location: Tourcoing, France  
 Start date: January, 2024  
 Lead organisation: STOP Exclusion Énergétique  
 Target groups: Low-income households  
 Energy transition focus: Home renovations and energy poverty alleviation  
 Scale: City-level/National-wide



## Objective

The Territoires Zéro Exclusion Énergétique initiative tackles energy poverty by supporting low-income households in carrying out ambitious home renovations. Many families face major barriers such as lack of technical knowledge, upfront costs, and complex administrative procedures. The initiative addresses this by providing end-to-end support through “Ensemble Solidaires,” who combine social and technical expertise. They accompany households at every step, from identifying needs and designing renovation plans to securing funding and overseeing works. The approach is highly personalised and rooted in the local context, ensuring that solutions are adapted to each family’s situation.

## Why it matters for a Fair Energy Transition?

This initiative is vital for vulnerable groups, as it directly addresses energy poverty, a major barrier to equitable access to clean energy. The project empowers vulnerable households by involving them in the decision-making and renovation processes, ensuring that their specific needs are met. Through co-design and participation, it fosters inclusiveness and local governance, allowing families to actively engage in transforming their homes while reducing their energy costs. The initiative's collaboration with local authorities and grassroots organizations ensures that the solutions are tailored and sustainable for the long term.

## Results and ambitions

### Quantitative

- 87 households supported in energy-efficient renovations since 2024 in Tourcoing
- 127 740 € distributed to 20 families in Tourcoing to finance the renovation works

### Qualitative

- Acquired skills for the families that actively participate in the renovation
- Improvements in health, comfort and finances
- Higher awareness of energy use

## Business model

The initiative is primarily funded through white certificates (Certificats d’Économies d’Énergie) and philanthropic donations. The project receives substantial financial support from national programs and private contributions, allowing for the financing of energy renovations for vulnerable households. The initiative also generates revenue from training programs and workshops for local actors. Moving forward, the initiative seeks to diversify its funding by developing new public-private partnerships, ensuring sustainability through a hybrid model combining subsidies, local authority support, and philanthropic contributions.

## For more information

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