Tools and pilots increasing the penetration of bioenergy in community energy

4 tools - already over 1500 users!

A Knowledge Exchange Platform
A one-stop-shop lifting collaboration barriers across regions and sectors to share information and knowledge.

The BECoop (self) assessment tool
To assess the status and potential for community bioenergy with recommended technical and business actions.

The BECoop inventory of tools / toolkit
Online repository of over 70 open-source tools completing the support services required for community bioenergy project development.

A bioenergy RESCoop e-market environment connects supply chain stakeholders and supports them when developing/operating a community bioenergy project.

4 pilot areas

BECoop pilots were complementary, holding a high replication potential across the EU, as they touch upon the most prominent community bioenergy heating development scenarios.

In Karditsa, Greece, BECoop supported the expansion of the ESEK energy community model, adding the production of innovative zero waste pellets made from recycled coffee residues and city pruning. ESEK raises awareness of local communities, demonstrating through many actions how coffee residues can be converted to sustainable energy! The RESCoop even contributes to the energy upgrade of schools in the area, in cooperation with local authorities and citizens: boilers and pellet burners were installed, supplied with the famous zero waste pellets to warm it with renewable heating coming from local residues.

The Basque Country and Navarra have lots of forest biomass available that could be used for residential heating. BECoop partner GOIENER, a cooperative mostly active in hydro and solar, tested expanding its activities to bioenergy heating, involving local municipalities such as Zuia, where the use of local wood chips in the biomass boilers was tested (the local chips were produced by nearby forest management school of Murgia). Vitoria-Gasteiz was also supported by GOIENER in their effort to engage citizens in launching energy communities - 30 projects are in creation, not driven by the municipality but by citizens themselves! The small town of Aberasturi applied for a grant with GOIENER support: if received, a biomass boiler would be installed to provide heat to 60 houses.

In Poland, BECoop aimed at showing residents that local natural resources (biomass) can not only effectively, but also ecologically heat people’s homes. This is key as half of the households in the commune are heated directly or indirectly with coal. OBS, the Oborniki Śląskie municipality has numerous grasslands and forests indicating a large availability of biomass in the form of briquettes, wood chips, straw, wood. OBS promoted for 3 years the shift towards biomass fuels and bioenergy heating through local biomass supply chains. To do so, OBS made use of the project tools and studies providing reliable, objective information on an effective use of biomass for energy purposes, and building upon the transformative power that local authorities can have.

In Italy, BECoop pilot is located in the Valtellina district and Municipality of Tirano. FIPER and local stakeholders established a renewable energy community in Tirano, demonstrating how existing energy producers (district heating companies) can be connected to a bioenergy community through a shared production and consumption model, supporting local development and attracting new investments and innovation, representing a suitable option for the long-term energy sustainability goals of the region. In 2023, FIPER supports the Mortirolo / Valtellina valley and towns of Tovo Sant’Agata, Lvero and Mazzo to ensure sustainable forest management and a district heating plant providing heat and electricity to about 2100 people and nearby factories.

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