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Innovative Finance for Thermal Communities

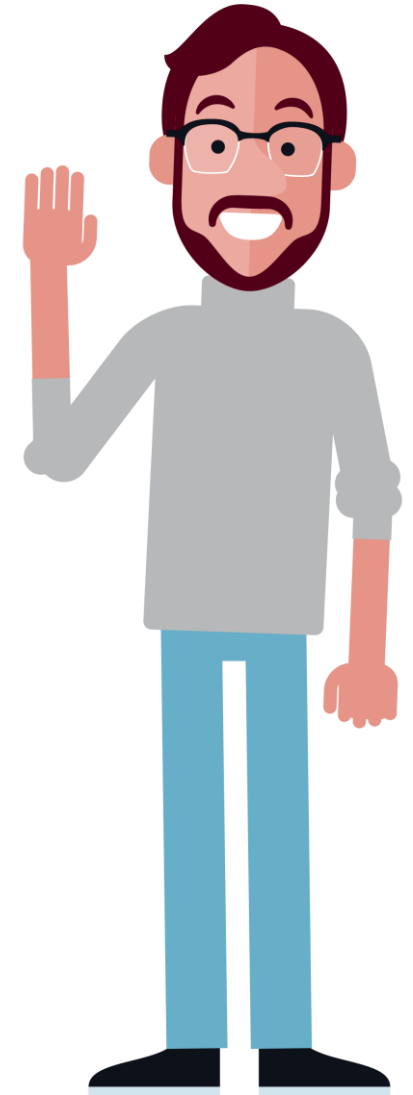
Community-led Heating and Cooling
(CH&C) by energy communities

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Overview

- Community-led Heating and Cooling
 - ✓ Energy Communities + Benefits
 - ✓ CH&C in EU legislation
 - ✓ Financing for energy communities
 - ✓ Examples
 - ✓ How to start?



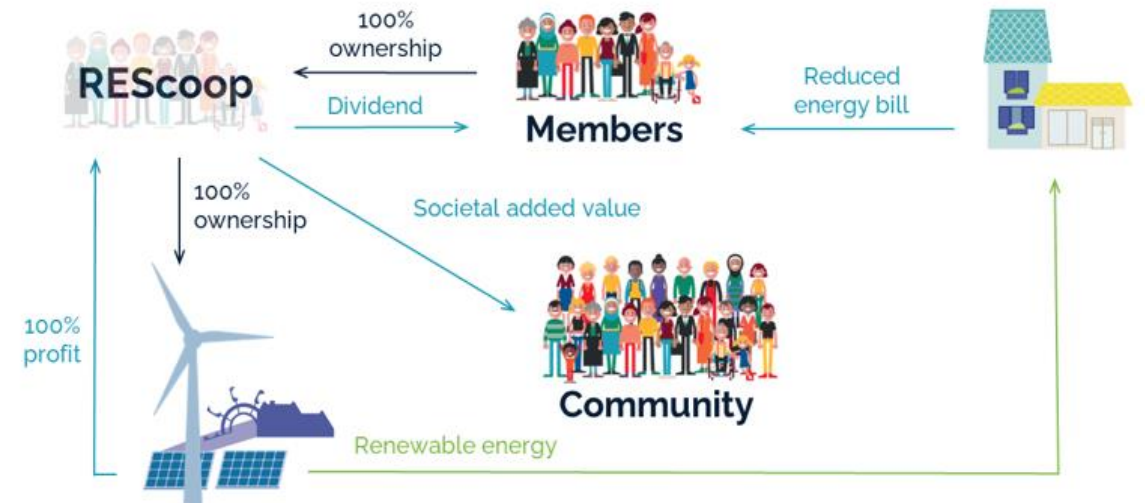
What is an « energy community »?»

REScoops are **energy cooperatives** - officially recognised in the EU's Clean Energy Package as 'citizen' and 'renewable' **energy communities** - a business model where **citizens jointly own and democratically control** an enterprise that works on renewable energy or energy efficiency projects.

Benefits of community energy ownership

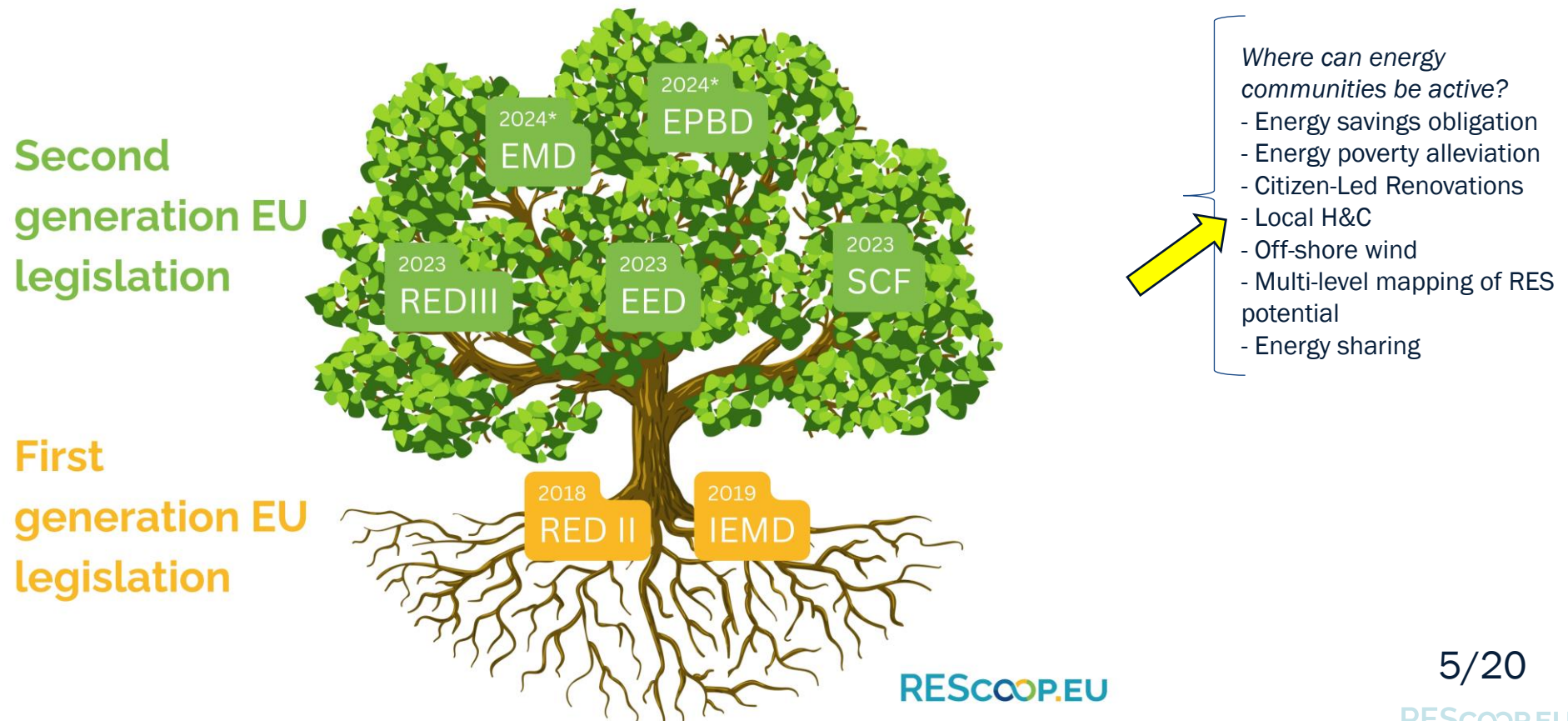
1. Revenues from local renewables meet local needs (e.g. supply, other services, education, renovations/EE, energy poverty)
2. Democratic community ownership, empowerment
3. Benefits for participants (energy bill savings, return on investment, social & environmental benefits etc)
4. Public acceptance
5. Alleviation of energy poverty
6. Promotion of uptake of clean energy

Business model for production and supply



EU Regulatory Framework for Energy Communities – 2nd Generation Laws

EU legislation for energy communities



Financing for Community-led H&C

- A strong business model is  :



Financing for Community-led H&C

Phases:

Initial

What: From idea to first energy plan

Est.cost: 10.000€

Subsidies (municipal/region)

Equity from other projects

by your energy community

Development

What: From first plan to financial close

Est.cost: 1-3M€

Loan (public or private)

Subsidies (municipal/national)

Realisation

What: Installation

Est.cost: 20-30M€

Loan (private with public guarantee)

Subsidy (national)

Citizen participation



Citizen-ownership with municipal cooperation (& potentially SMEs) / Co-ownership between citizens and public party

Financing for Community-led H&C

- Extension of ETS2 to the transport and heating & cooling sectors (2027/2028)
- In practise -> it will become more expensive to drive our cars and heat or cool our homes
- **Narrative opportunity:** the faster we decouple from fossil fuels, the cheaper and less painful to (vulnerable) households



Financing for Community-led H&C

- **The Social Climate Fund - 86 billion euros** (65 billion + 25% Member State co-financing)
- **Heating-cooling, housing, transport** (e.g., renovations, energy efficiency, **renewable heating and cooling projects**)
- **national Social Climate Plans due by June 2025**. Operational Plans by 2026, outlining reforms and investments **targeting vulnerable households and small enterprises**

Policy paper

[Homepage](#) > [Toolbox](#) > [REScoop.eu briefing on the Social Climate Fund](#)

REScoop.eu briefing on the Social Climate Fund

POSTED ON: 24/04/2024

<https://www.rescoop.eu/toolbox/rescoop-eu-briefing-on-social-climate-fund>

<https://www.rescoop.eu/toolbox/green-solidarity-guiding-principles-for-a-truly-just-social-climate-fund>

Financing for Community-led H&C

1. Effective, inclusive public participation

- Should have already started.
- Essential to utilize community actors (incl local advisory groups, social NGOs, **energy communities**) to explain to people why their heating & transport bills will go up
- Utilize existing fora (e.g., Multilevel Dialogues from the NECP process)

Green Solidarity

Guiding Principles for a Truly Just Social Climate Fund

POLICY BRIEF - SEPTEMBER 2024



Financing for Community-led H&C

- **Full exclusion of fossil fuel investments** (e.g., hybrid fossil boilers or gas infrastructure) / UNLIKE Recovery Facility
- Renewable, (electrified) heating and cooling solutions
- **Active mobility** (e.g., cycling), **public transport**, and e-mobility
- Expanding **social housing** & offering **deep housing renovations** (incl technical & financial support like One Stop Shops providing upfront grants)

Financing for Community-led H&C

Energy communities are eligible beneficiaries of the Social Climate Fund!

- **Raise awareness**, build capacity (e.g., offer One Stop Shop services)
- **Identify vulnerable households** (e.g., in partnership with a local Municipality)
- **Subsidise participation in local projects** (e.g., offering free shares in energy sharing projects)
 - Energia Bonita example

Community-led H&C Examples

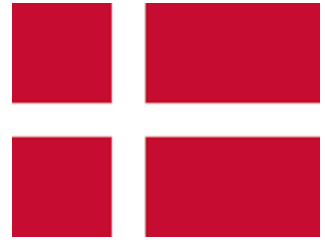


- Middenmeer district in Amsterdam
 - Residential area: 5,000 citizens, 7 schools, 2 churches, SMEs
 - District heating uses waste heat from data centre
- **Collaboration*** between **Energy community MeerEnergie** + Municipality + Infrastructure operator



* Avoid making citizen participation a box-ticking exercise. Listen to their needs and work together.

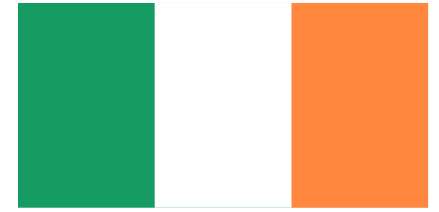
Community-led H&C Examples



- Waste heat from data centre is used in district heating grid, with a heat pump.
- Owned & controlled by all of its members -> 4,500
 - **Social economy:** Non-profit district heating utility (in line with EU definitions)
 - -10% heating bills for citizens
 - Owner of data centre is member in **Energy Community Avedøre** (1 vote/shareholder)
 - **Energy democracy:** Has become a platform for local energy ideas



Community-led H&C Examples



Knockatoora (County Tipperary, Ireland), Maura Ryan jokes with her grandson, who is intrigued by the heat pump outside their home. With the help of Ecovision, Maura and her husband Jim applied the external thermal coating and installed the heat pump: "until a few months ago," says Maura, "we still had a wood stove."



Community-led H&C Examples



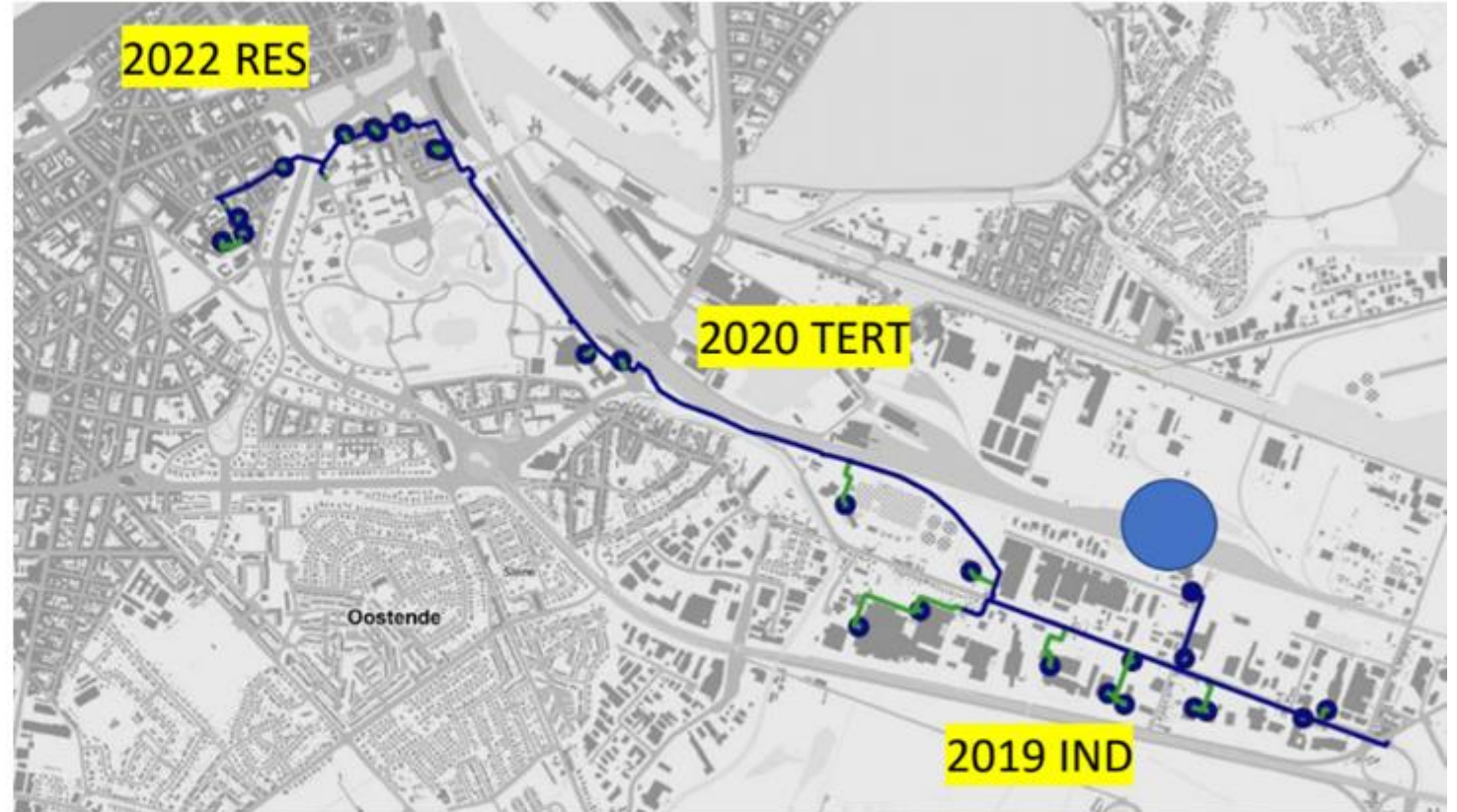
- Ostend: Coastal city in BE
 - 75,000 inhabitants
 - Chemical & waste industries
- Energy community: Beauvent cv
 - Founded in 2000, Ostend, Belgium
 - +8,000 members
 - Active in: sun, wind, district heating



Community-led H&C Examples



- Network length: 9 Km
- Delivered heat: 17 GWh
- Temperature: 90/60 C
- Connected: 500 citizens, 25 companies, 2 hospitals, largest air conditioning manufacturer.
- Timeframe: 7 years (3 years for admin & construction)



Community-led H&C Examples



- Citizen-owned geothermal installation + heat pumps.
- Sustainable boiler room with heat generators.
- Borehole energy storage field (94 holes) under football field.
- Distributes RES H&C to the Kliniek Sint-Josef (Pittem, BE).
New projects underway to include historic buildings.



How to start?

- <https://energycommunityplatform.eu/resources/guidelines-on-community-led-heating-and-cooling/>



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