



POWERPOOR

Empowering Energy Poor Citizens through Energy Cooperative Initiatives









MODULE 3 - Support energy poverty alleviation actions

ECN/COOPERNICO/GOIENER






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Module – Structure and content

-  Module goals
-  Module content
 -  PART I – Collective Innovative Actions for Energy Poverty – An Introduction
 -  PART II – Crowdfunding & Innovative Finance
 -  PART III – Collective Energy Initiatives
-  Module summary
 -  Key takeaways
 -  Further reading

Module 2 – Goals

-  Introduce the concept of Collective Innovative Actions for Energy Poverty
-  Explain what crowdfunding is and how to use it
-  Introduce the concept of Collective Energy Initiatives and equip participants with the necessary skills to create their own initiatives

PART I: Collective Innovative Actions for Energy Poverty – An Introduction

What are Collective Innovative Actions for Energy Poverty?

What can they do to alleviate energy poverty?

PART I: Collective Innovative Actions for Energy Poverty

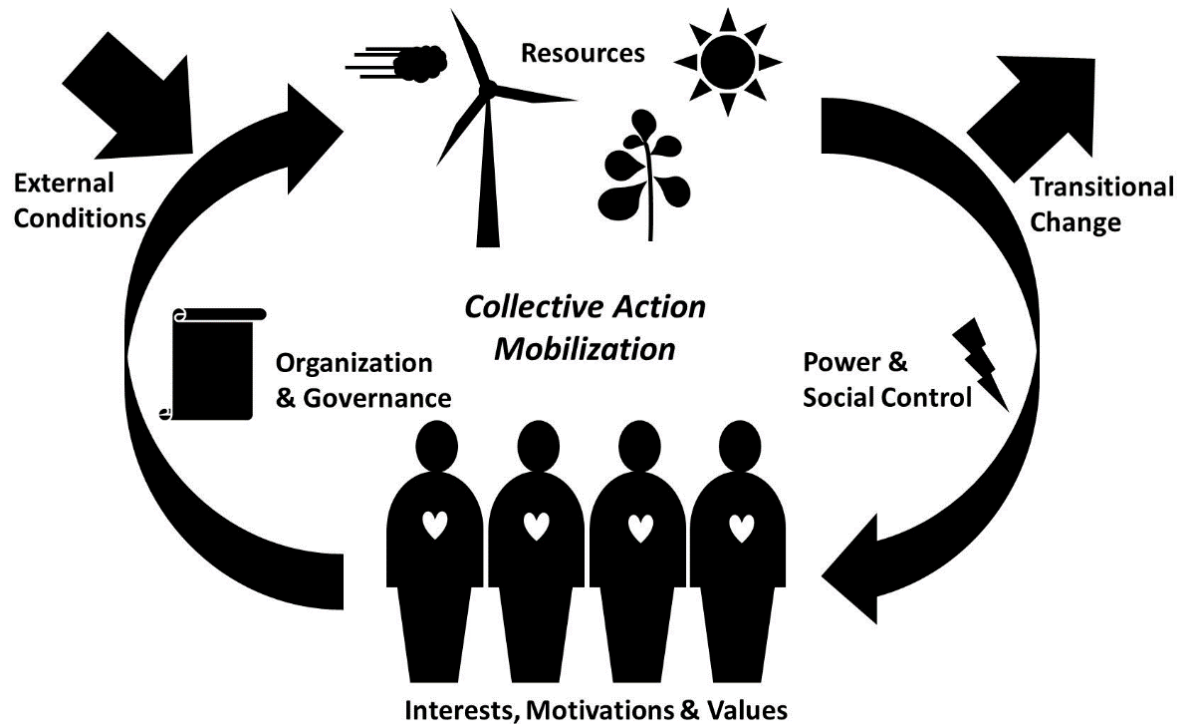
What are they?

What is a Collective Innovative Action?

PART I: Collective Innovative Actions for Energy Poverty

What are they?

Collective Innovative Actions such as energy communities or crowdfunding initiatives are based on a simple yet powerful idea:



There is strength in numbers!



PART I: Collective Innovative Actions for Energy Poverty

What are they?

How can you achieve an ambitious goal without having sufficient resources to do it on your own?

Normally, you might ask your friends and family to help you by either donating some money or giving you a small loan.



When you expand that idea to an entire neighborhood or region and build an organization around it, it becomes a community.



PART I: Collective Innovative Actions for Energy Poverty

What are they?

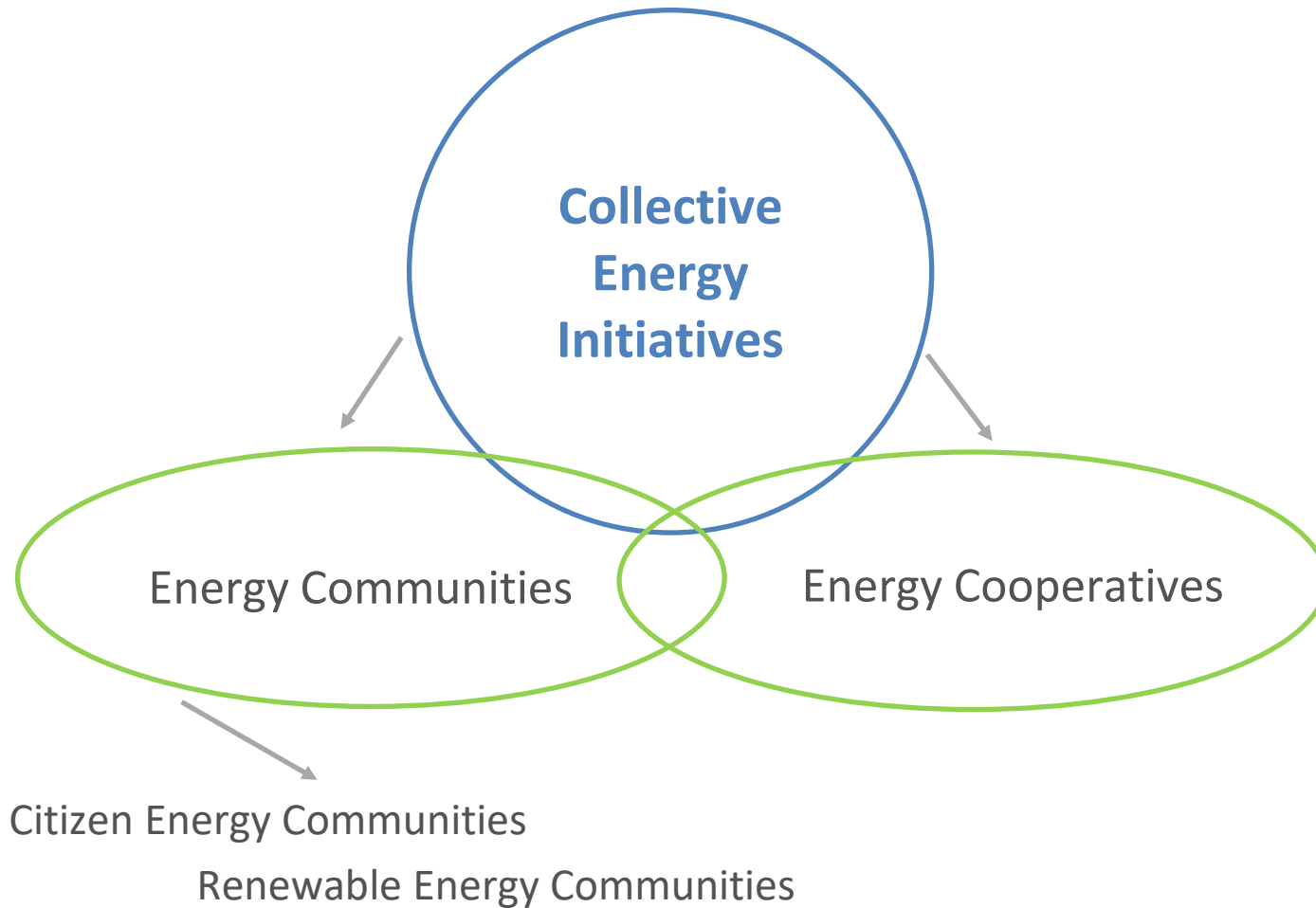
Collective Energy Initiatives

Collective Energy Initiatives, as the name indicates, are initiatives to bring citizens together and develop joint strategies to:

- gain **access** to affordable energy,
- **tackle a certain issue** such as energy poverty,
- **empower** citizens in the energy market,
- find a **new electricity source**, for instance, by switching from traditional retailers to renewable energy ones and/or to self-generation.

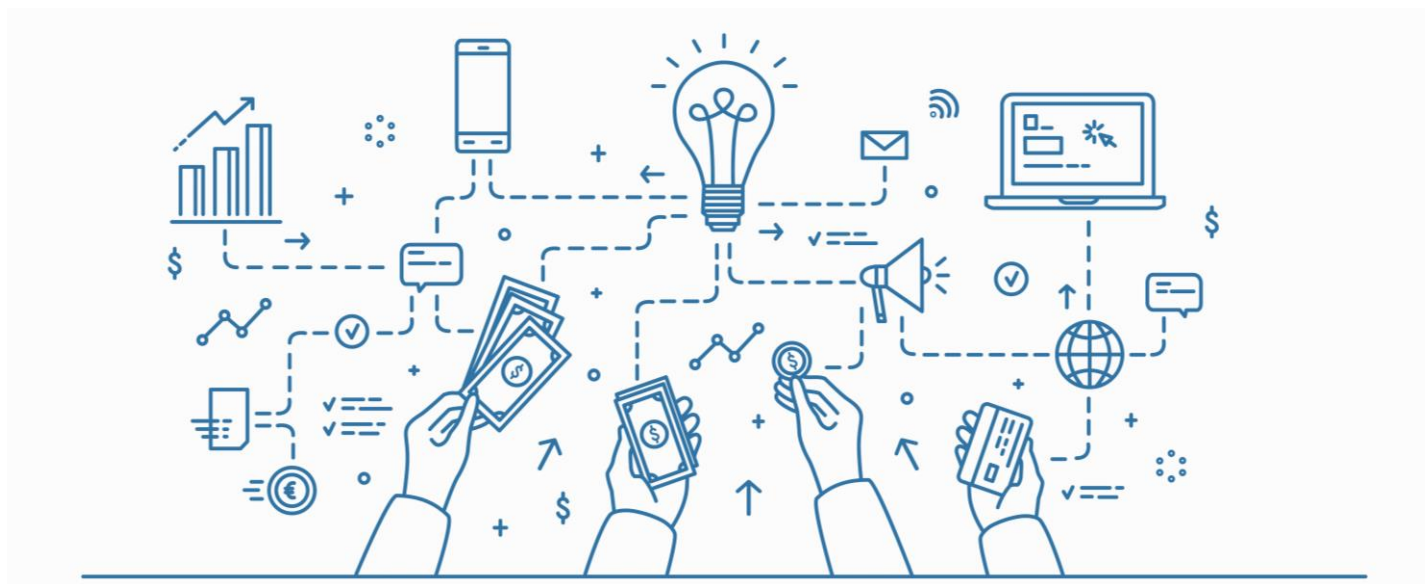
PART I: Collective Innovative Actions for Energy Poverty

What are they?



PART I: Collective Innovative Actions for Energy Poverty

What are they?



Community finance

Community finance, or crowdfunding, is the natural extension of cooperative finance initiatives to even **larger communities**, typically via the Internet. It draws support from people across entire countries in order to make **specific projects** feasible and create change at the local level, raise awareness of social challenges or inspire communities to engage with local initiatives.

PART I: Collective Innovative Actions for Energy Poverty

What can they do to tackle energy poverty?

What can Collective Innovative Actions do to tackle energy poverty?

PART I: Collective Innovative Actions for Energy Poverty

What can they do to tackle energy poverty?



The **collective approach** fostered by energy communities and/or crowdfunding initiatives is **particularly appropriate** to address the enormous challenges faced by energy poor citizens who wish to:

- take action to **reduce their energy consumption** or
- **improve the energy efficiency** of their households.

PART I: Collective Innovative Actions for Energy Poverty

What can they do to tackle energy poverty?

1

Community actions allow building/household owners to pay the **large upfront costs** of investments in Renewable Energy Sources (RES) or Energy Efficiency (EE), which traditional financial institutions may not be interested in funding or able to finance.

- When it comes to renewable energy generation, energy communities can support installation services by raising the initial capital required to make a large investment in generation capacity.
- In the case of EE investments, external funding and motivational support can allow property owners to overcome the energy efficiency gap.

PART I: Collective Innovative Actions for Energy Poverty

What can They do for energy poverty?

2

Community-based RES installations allow **individuals who would not be able to purchase their own generation system**, or do not have a sunlit private roof or area, **to take part in the renewable energy transition.**

Likewise, energy-based communities allow individuals to easily invest in EE improvements, derive income from them, and participate in the energy transition. They also allow individuals already taking part in the energy transition to increase their participation levels under sustainable conditions.

PART I: Collective Innovative Actions for Energy Poverty

What can They do for energy poverty?

3

Community-based RES installations generally **lower installation costs and increase revenues** by utilizing economies-of-scale and optimal siting of generation capacities.

Similarly, large-scale EE investments can take advantage of bulk purchases and economies-of-scale to **improve the returns on such investments.**

PART I: Collective Innovative Actions for Energy Poverty

What can They do for energy poverty?

4

Collective innovative actions can also **support off-grid energy poor households**, such as those in rural areas that are not connected to the energy grid, and improve their access to energy by helping them pull together the resources and capital required for capital-intensive off-grid energy projects.

PART I: Collective Innovative Actions for Energy Poverty

What can They do for energy poverty?

5

At the same time, the community approach allows individuals to **combine their buying power to purchase energy** (not only generate it), obtaining better prices in the wholesale market.

PART I: Collective Innovative Actions for Energy Poverty

What can They do for energy poverty?

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At the same time, the community approach allows individuals to **combine their buying power to purchase energy** (not only generate it), obtaining better prices in the wholesale market.

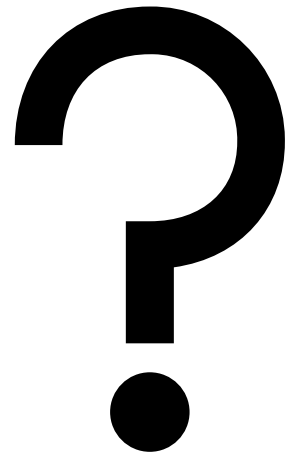
PART II: Crowdfunding & Innovative Finance

What is community finance?

How does it work?

Setting up a campaign

How can community finance help tackle energy poverty?



WHAT

Crowdfunding & Innovative Finance

What is it



Community Finance is the practice of funding a project or venture by raising small amounts of money from a large number of people, typically via the Internet.

Crowdfunding & Innovative Finance

Key elements



Open call to **raise funds** for a specific project

From **anyone with Internet access** (potentially)

Through an **Internet-based** mechanism (specialised website)

Foreseeing **tangible or intangible benefits** in exchange for each economic contribution

Crowdfunding & Innovative Finance

Main actors



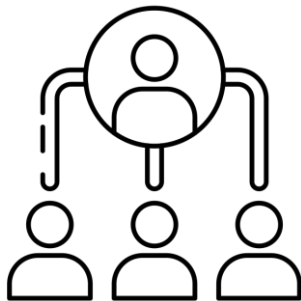
Promoter



Platform



Crowd



Crowdfunding & Innovative Finance

Terminology and different Models

Non-financial

Match-funding

Financial



Donation

Philanthropic donation or gift, no return expected

Up to 10.000 €



Reward

Contribution in exchange for a perk or a product pre-order

Up to: 30.000 €



Equity

Investment for an ownership share in the business

Avg: 350.000 €



Lending

Capital repayment most often with interest

500k - 2 million €



Crowdfunding & Innovative Finance

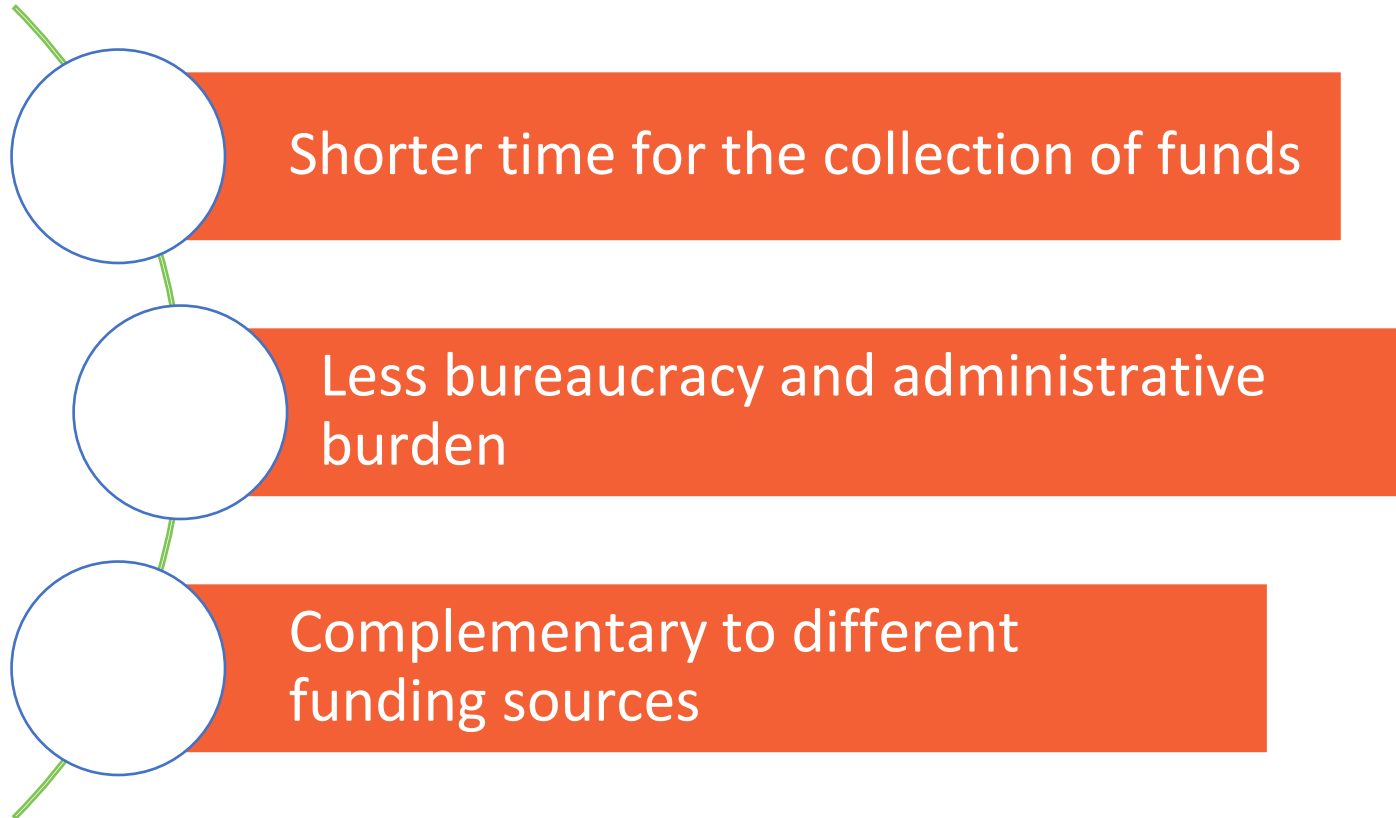
Terminology and models

	Form of contribution	Form of return	Motivation of funder
Donation Crowdfunding	Donation	Intangible benefits	Intrinsic and social motivation.
Reward Crowdfunding	Donation/ Pre-purchase	Rewards but also intangible benefits.	Combination of intrinsic and social motivation and desire for reward.
Crowdfunded Lending	Loan	Repayment of loan with interest. Some socially motivated lending is interest free.	Combination of intrinsic, social and financial motivation.
Equity Crowdfunding	Investment	Return on investment in time if the business does well. Rewards also offered sometimes. Intangible benefits another factor for many investors.	Combination of intrinsic, social and financial motivation.



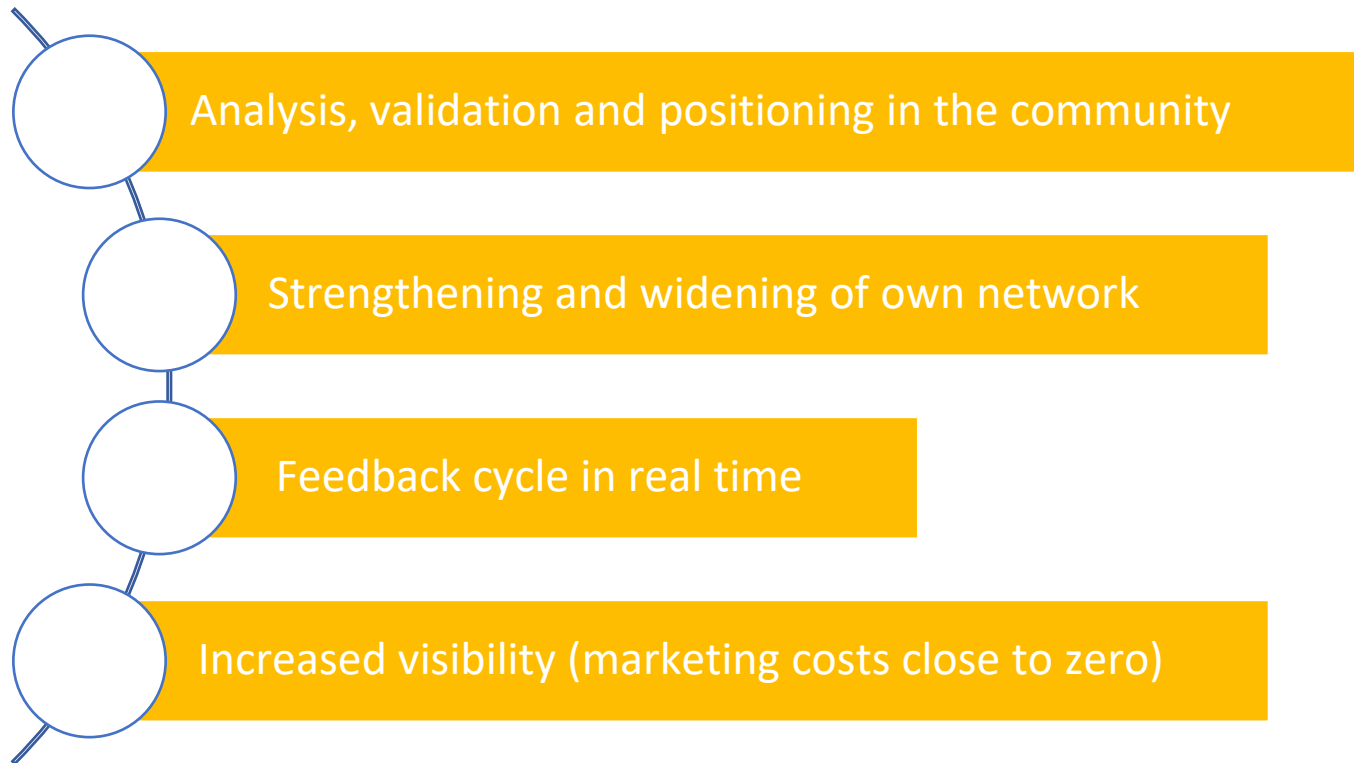
Crowdfunding & Innovative Finance

General benefits



Crowdfunding & Innovative Finance

Specific benefits

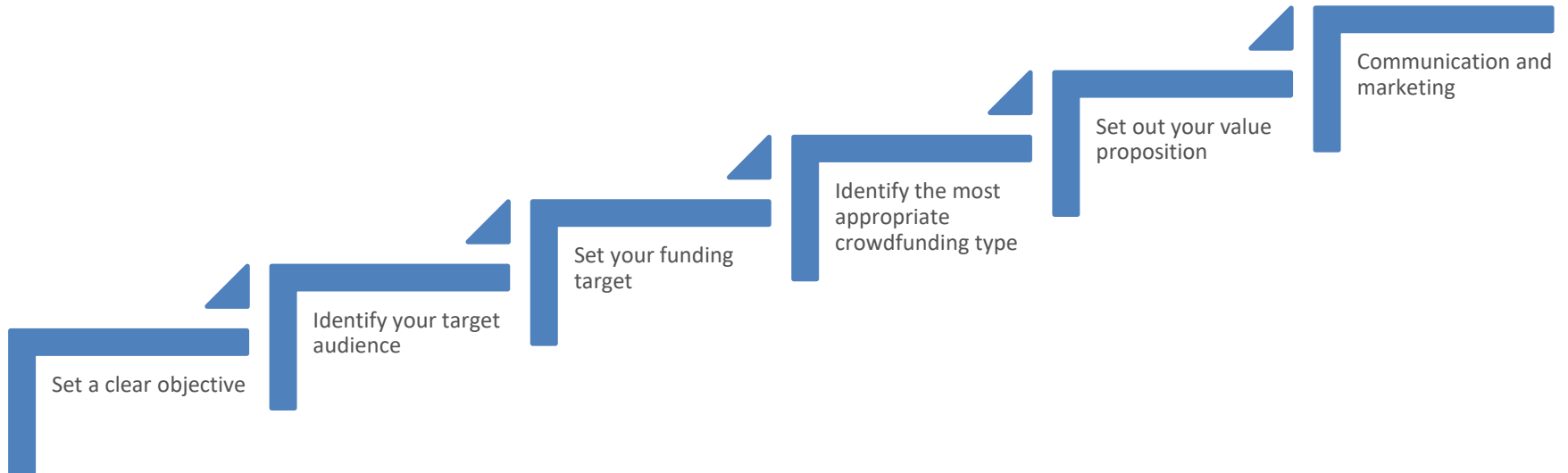




HOW

Crowdfunding & Innovative Finance

The crowdfunding process



Crowdfunding & Innovative Finance

Project idea outline



What is the objective of your project?



What is its target audience?



Why should the community support it?

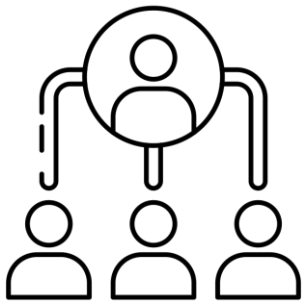


Exercise: answer each question with a concise and clear sentence.



Crowdfunding & Innovative Finance

Potential funders



CROWD

Own Network (friends, family, peers)

People reached through media coverage

Businesses as part of CSR activities

People reached through affiliated communities/networks

Our network

Conversion rate of 1-3%

Investors



Crowdfunding & Innovative Finance

Understand your target audience

Friends and
family

Peers

Organisations

- **Who** do you think will be supportive of your work and why? (friends, family, peers, people interested in the research area)
- **How big** are the audience groups?
- **How much money** can the different groups give? Which one should be the focus?
- How can you **reach** them?
- What is the **best style** of communication?
- **Why** would they be **interested** in your project?
- **Who** in your network can help you **reach** your audience?



Exercise: Identify at least two potential funders, as well as organizations and amplifiers relevant to your campaign

Crowdfunding & Innovative Finance

Identify your funding needs

**How much money do you need to
achieve your objective?**



Campaign production costs

rewards, videos, marketing, etc.



Service costs

Crowdfunding platform fees, transaction
fees

Crowdfunding & Innovative Finance

Campaign concept outline

Your objective

What do you need funds for?

Project type

Social cause? Tech? Consumer product?

Project stage

Pre-seed? Seed? Early Stage? Growth?

Type of capital

Equity? Debt? Donation? Commercial?

Funds needed

How much money do you need to achieve your objective?

Target audience

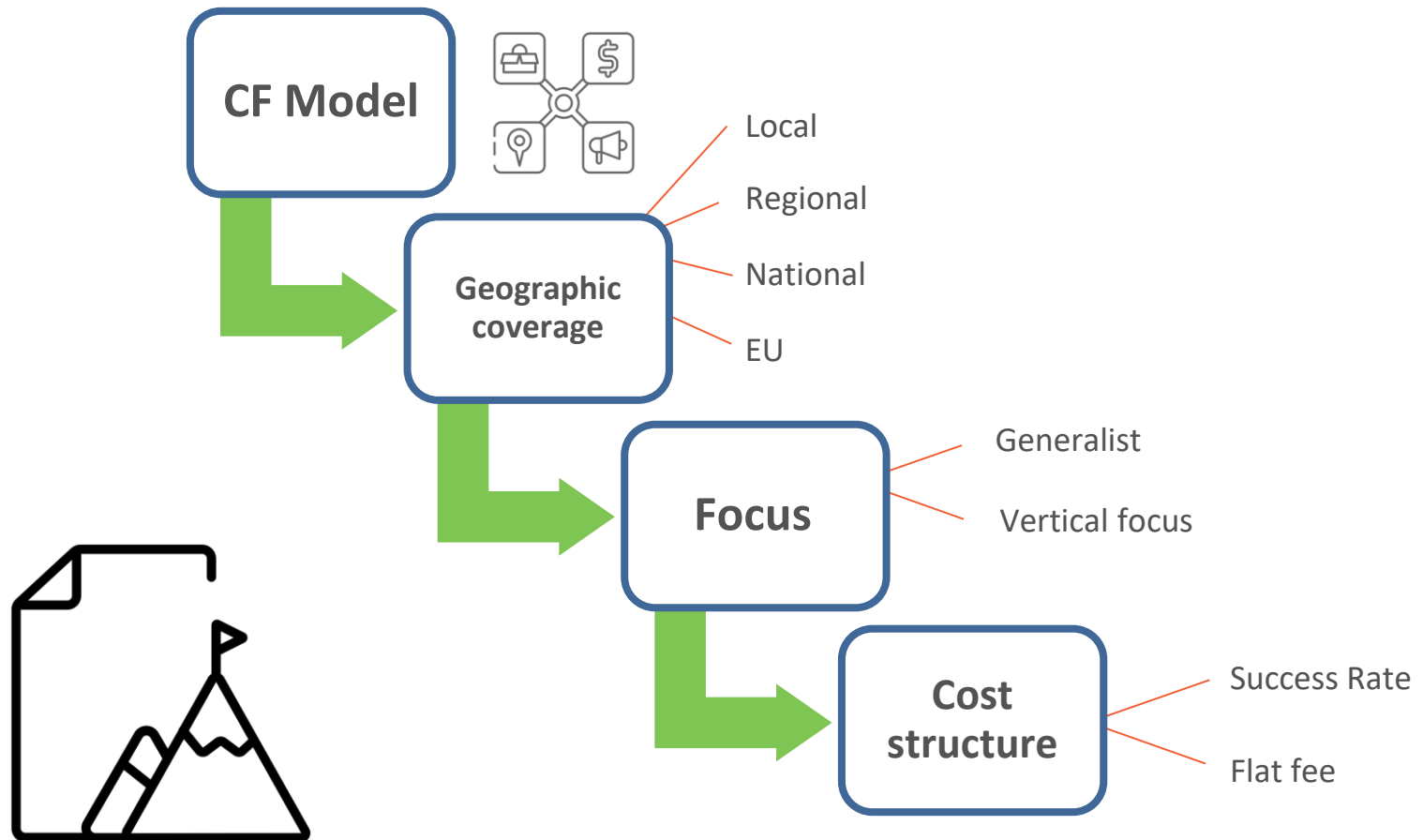
Who is the target audience of your campaign?

TYPE OF CROWDFUNDING



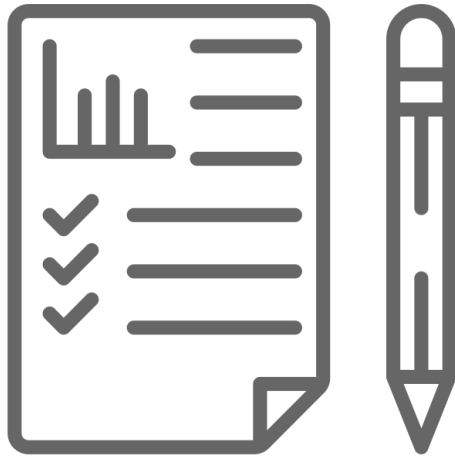
Crowdfunding & Innovative Finance






How to choose your crowdfunding platform



Crowdfunding & Innovative Finance

Due diligence of platforms



-  CF Model
-  Geography
-  Specialist vs generalist
-  Cost structure
-  Similar projects



Exercise: Identify the right platform for you + 1 similar project





Setting up a campaign



Crowdfunding & Innovative Finance

Organize your ideas

Telling a compelling story...

What?

Why?

How?

Who?

When?

Where?

Why do you need
their support?

What do you offer in
exchange?

Call to action



Use appropriate language and tone for
your audience



Crowdfunding & Innovative Finance

Present your ideas

... and create a compelling video



- Max. 3 min
- Entertaining or emotional
- Show your face
- Use copyright-free music
- If budget allows, seek help from a professional videomaker



Exercise: Draft your story in max. half a page

Crowdfunding & Innovative Finance

Organize your strategy

Select the right communication channels

Keep your target audience in mind

Family and friends

Peers

Amplifiers

Consider available communication channels

Email

LinkedIn

Facebook

Events

Forums/groups

Twitter

Which channel could you use to reach each audience group?

Crowdfunding & Innovative Finance

Tips to take into account

- **Do** use appropriate tone and language for each audience
- **Do** prepare your messages in advance
- **Do** prepare a communication plan
- **Do** keep your social media updated
- **Do** focus on channels where you already have a solid network
- **Do** organize a launch event
- **Don't** be afraid of **asking (for advice, contributions, input, etc)**

Crowdfunding & Innovative Finance

Focus on the typology of crowdfunding that you use

Set the right incentives

Donation

Reward

Equity

Lending

- Appel to intrinsic motivation & philanthropy
- Provide updates on the latest developments of projects
- Express gratitude to your donors

- Extrinsic + intrinsic motivation
- Offer a variety of rewards considering different income and interest levels
- Perks' perceived value
- Market rate

- Financial return
- Intrinsic motivations
- Valuation
- % offered
- Promise & deliver growth

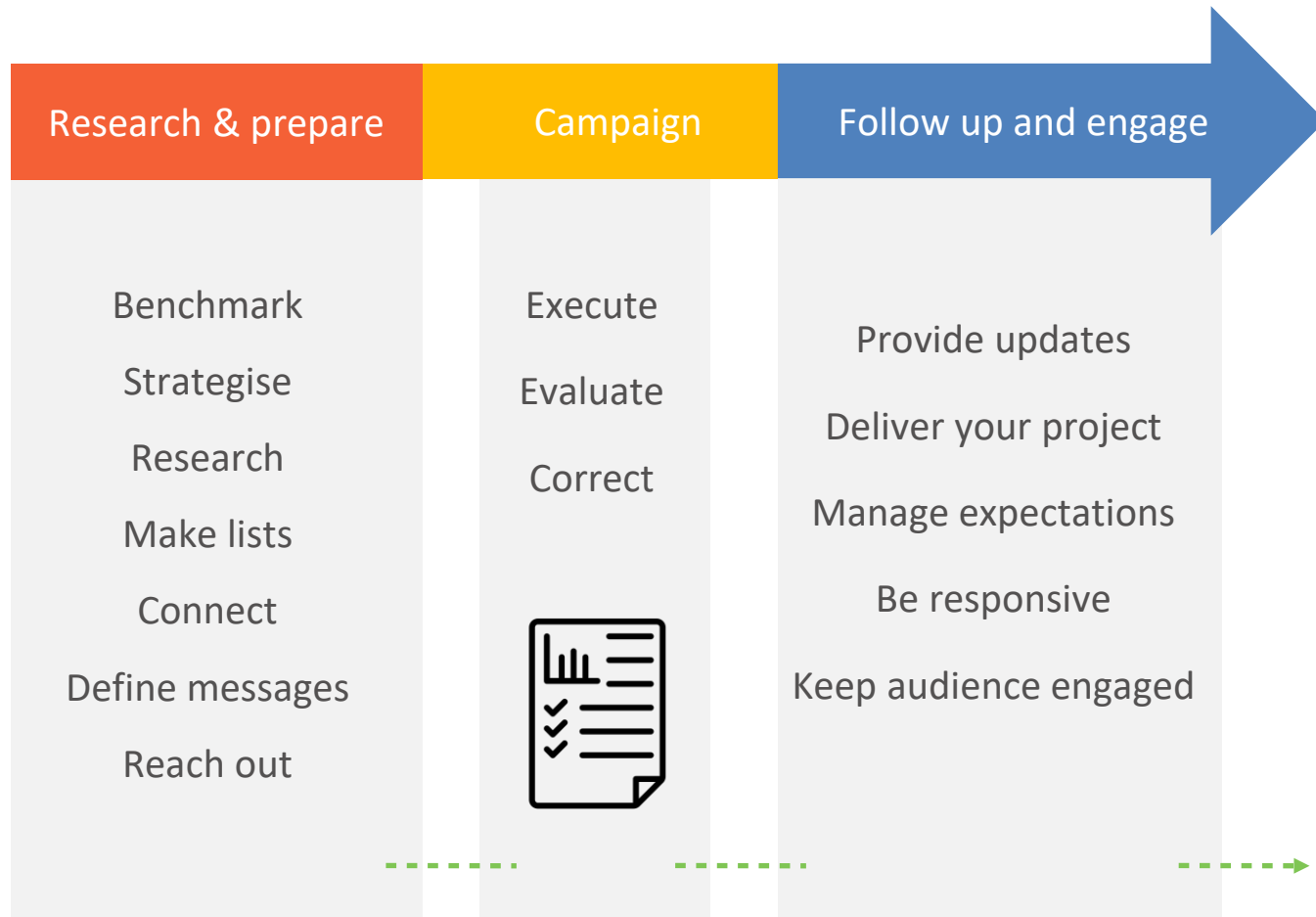
- Financial return
- Interest rate



Exercise: Identify the best incentives for your case

Crowdfunding & Innovative Finance

Start your campaign



How Collective Innovative Actions can tackle energy poverty

Case Study 1

CASE STUDY	CROWDLENDING MODEL FOR ENERGY COOPERATIVE RES PROJECTS	LOCATION
		PORTUGAL
DESCRIPTION	Charities, NGOs, schools and elderly care institutions sometimes struggle to pay their electricity bills. Members of Coopérnico wanted to provide them with more renewable energy from the Portuguese energy grid through a decentralized model.	
SOLUTION	Cooperative members lent their money so that the cooperative could promote and install RES generation capacity on the rooftop of the non-profit entities. The cooperative then sells the energy produced back to the grid or to the entity, which can be self-consuming the electricity produce, and is able to pay back the members' investment and share the economic benefits with the rooftop owners. After the members are paid, annually, their investment plus interest rates (between 10-15 years), Coopérnico donates the RES project to the rooftop owner so they can consume directly from the RES project for around 10-15 additional years for free.	
IMPACT	<p>So far, Coopérnico has 28 projects distributed across Portugal:</p> <ul style="list-style-type: none"> - The installed capacity power of the projects totals more than 1,9MWp - Only possible due to a citizens' investment of more than 1,79M - CO2 emissions reduction totals around 1820 tonCO2/year - 1087 families are supplied with renewable energy generated by the projects 	

Source: Coopérnico. <https://www.coopernico.org/en/projects>



How Collective Innovative Actions can tackle energy poverty

Case Study 1



Source: Coopérnico CRL https://youtu.be/j_fxGMJqENO

How Collective Innovative Actions can tackle energy poverty

Case Study 2

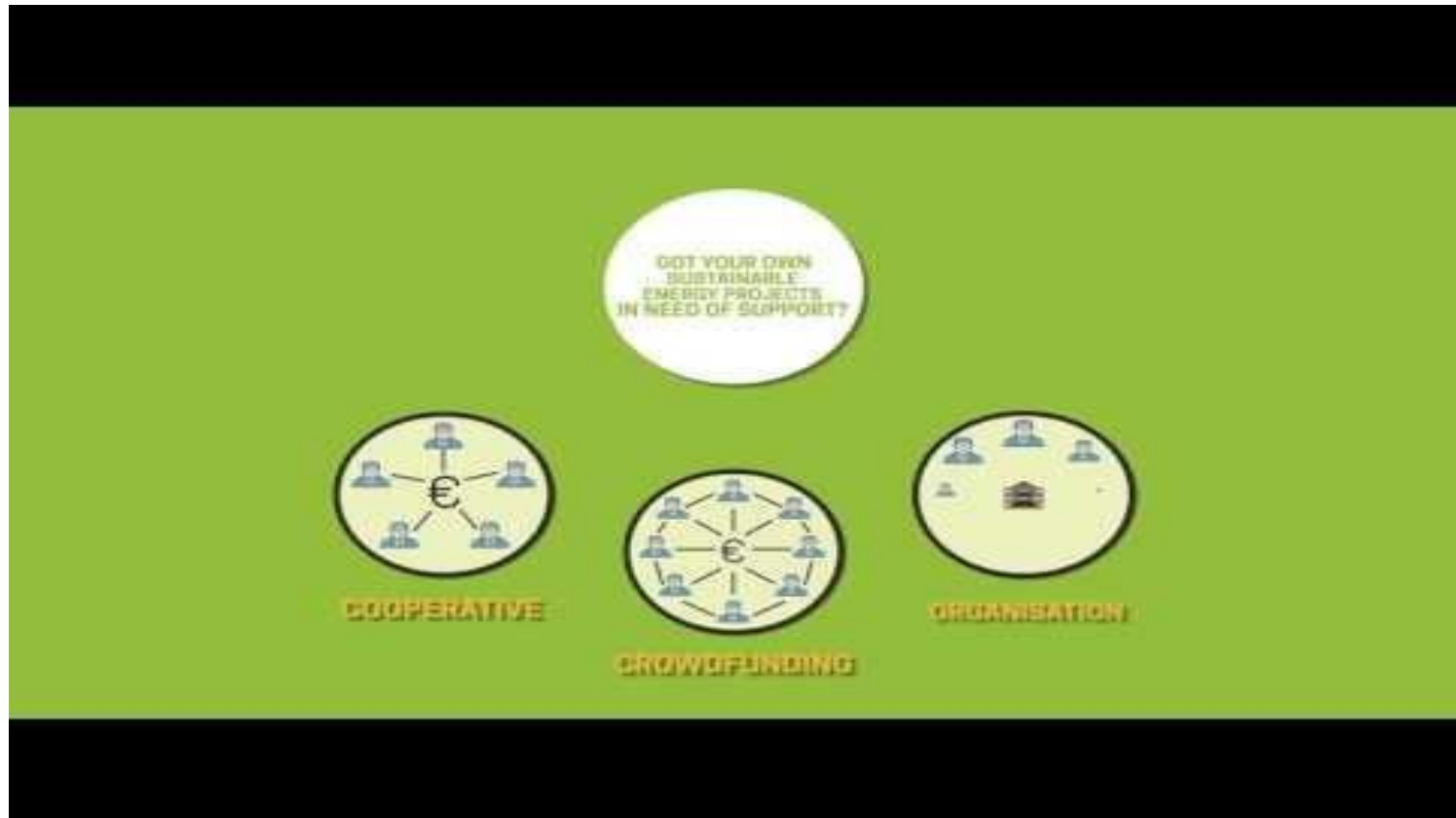
CASE STUDY	WORLD'S FIRST PORTAL FOR RES PROJECTS – Citizenergy.eu	LOCATION
		Global
DESCRIPTION	You have a sustainable energy project in need of support and don't know what to do? Do you want to invest in a sustainable energy project or learn more about them?	
SOLUTION	You can access the Citizenergy online portal to find a funding platform for your project or to upload your project and let the world know that you need support. You can also use it to learn about different sustainable energy projects or to invest in one if you wish to.	
IMPACT	<p>So far, Citizenergy has:</p> <ul style="list-style-type: none"> - 33 funding platforms registered - 73 projects funded - The projects are located in more than 20 countries around the world - Almost 42M€ of investment in sustainable energy projects - Almost 203 MWh of energy produced from sustainable energy projects 	

Source: Your Power in Citizenergy. <https://citizenergy.eu/>



How Collective Innovative Actions can tackle energy poverty

Case Study 2



Source: Your Power in Citizenergy. <https://citizenergy.eu/>

How Collective Innovative Actions can tackle energy poverty

Case Study 3

CASE STUDY	SOLARISATION OF GREECE: REWARD CROWDFUNDING CAMPAIGN FOR SOLAR PANELS	LOCATION
DESCRIPTION	GREECE <p>With energy poverty being one of the most dramatic symptoms of the debt crisis in Greece (6 out of 10 households were struggling to pay their energy bills), investing in the abundant sun, the country’s biggest asset, helped put money back in people’s pockets by reducing their energy bills, brought them back into the job market by teaching them new skills and giving them opportunities, while contributing to the renewable energy transition.</p>	
SOLUTION	<p>Greenpeace Greece launched a reward-based crowdfunding campaign to finance the installation of solar panels onto the houses of families who lived on the brink of energy poverty in the island of Rhodes.</p>	
IMPACT	<p>35.063€ raised from 1161 backers</p> <p>Lower energy bills for involved households with significant savings</p> <p>Reduced dependency on oil energy production and oil subsidies</p>	

Source: <https://www.indiegogo.com/projects/solarization-of-greece#/updates/all>



How Collective Innovative Actions can tackle energy poverty

Case Study 4

CASE STUDY	Crowdfunding campaign for the energy rehabilitation of a homeowner community	LOCATION
DESCRIPTION	<p>Project to replace community boilers and other energy efficiency measures in the centralized hot water production system of a community of homeowners in Barcelona. The project achieved significant savings in the energy consumption of the centralized DHW production system, as well as a fair distribution of the real consumption of each home.</p>	
SOLUTION	<p>Crowdfunding campaign for the realization of a series of energy efficiency proposals:</p> <ul style="list-style-type: none"> • Replacement of old atmospheric gas boilers with new, more efficient watertight boilers • Replacement of the old circulation pumps • New monitoring and control system • Installation of individual ACS meters in each house 	
IMPACT	<p>49,600€ raised from 56 backers</p> <p>Lower energy consumption for involved households with significant savings on the energy bill</p> <p>CO2 emissions reduced by 16 tons/year</p>	

Source: <https://www.ecrowdinvest.com/detalles/comunidad-propietarios-barcelona#description>



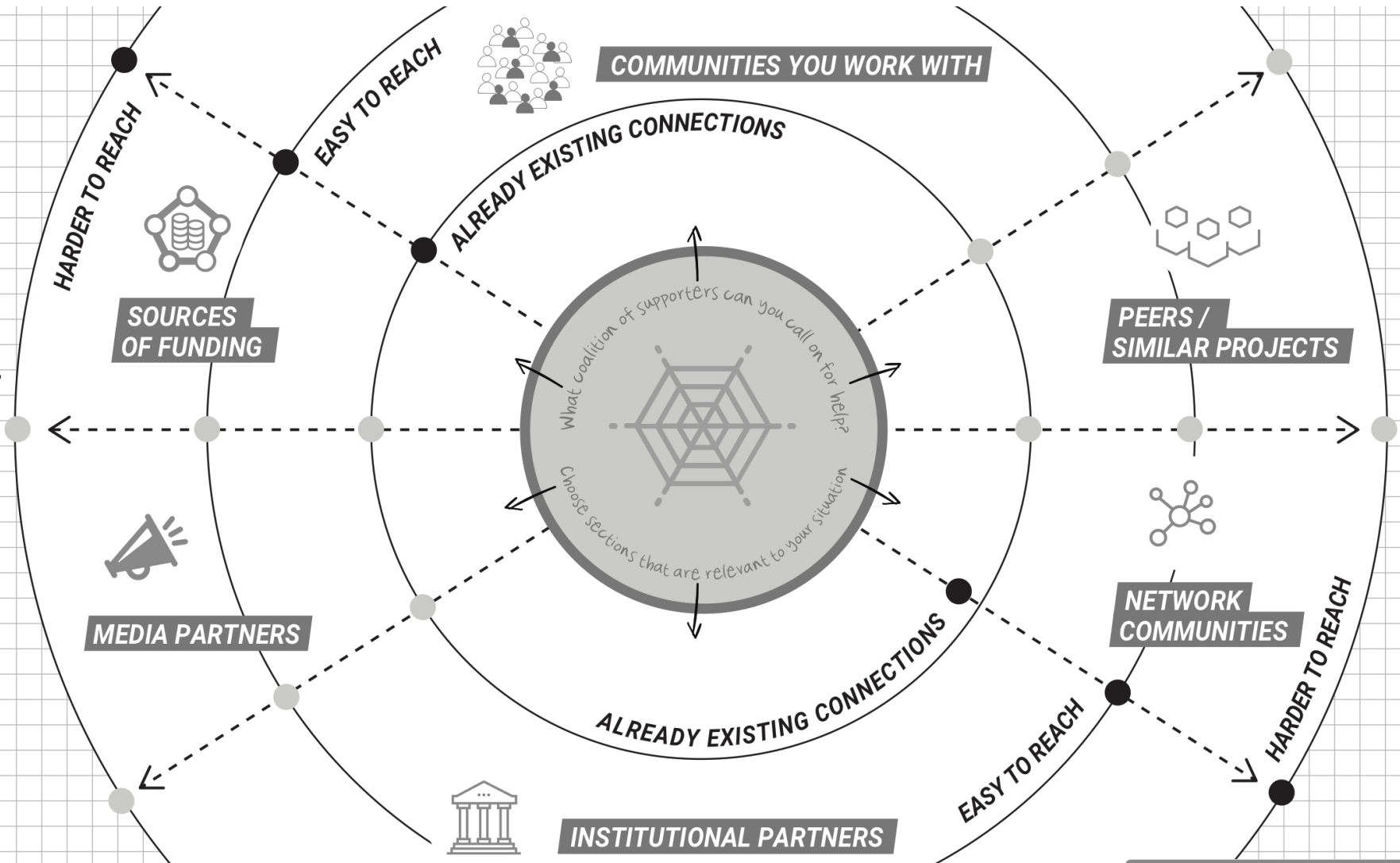


EXERCISE



Crowdfunding & Innovative Finance

Exercise 1: Identify your community network



Crowdfunding & Innovative Finance

Exercise 2: Develop a campaign pitch



Exercise: Based on what you have developed so far, write your crowdfunding pitch, including:

- Who is your target audience? What are you planning to achieve and why?
- Where, when, how (if relevant)?
- How much funding you're looking for?
- Why should people care?
- What are you offering in exchange?
- Call to action



PART III: Collective Energy Initiatives – An Introduction

Definition

Differences

Energy cooperatives

How can they help fight energy poverty?

How to start

Collective Energy Initiatives

Definition

An energy community can be...

- A way of organising **collective citizen actions** to influence the energy system
- Entities that exercise **energy-related activities** (generation, distribution, supply, aggregation, consumption, sharing, storage of energy, provision of energy-related services, etc.)
- Non-commercial **market actors**
- Collective switching campaigns, collective investments in solar panels, the ownership of an energy supply company, a distribution network, etc.

Collective Energy Initiatives

Definition

Energy communities are based on...

- Open and voluntary governance
- Ownership and control by citizens, local authorities and small businesses
- Social, environmental or local economic benefits rather than profit-making

Collective Energy Initiatives Differences

ENERGY COMMUNITIES

Two new definitions at the EU level

Renewable Energy Community (REC)

Citizen Energy Community (CEC)

All forms of renewable energy



Technology-neutral (only electricity)

Proximity of RE projects



No geographic limits

Individuals, local authorities and
micro/small/medium enterprises



Any participant

Autonomous from individual members
and traditional market actors



Undefined degree of autonomy

Effective control by individuals, local
authorities and micro/small enterprises



Effective control includes medium-sized
enterprises



Collective Energy Initiatives

Differences

Energy Communities can have different legal forms:

Foundations

Partnerships

Limited liability
companies

Energy cooperatives

Associations

Trusts

Non-profit
organisations



Collective Energy Initiatives

Energy cooperatives

ENERGY COOPERATIVES

A type of social and economic enterprise

A legal form that enables citizens to collectively own and manage energy-related projects and services

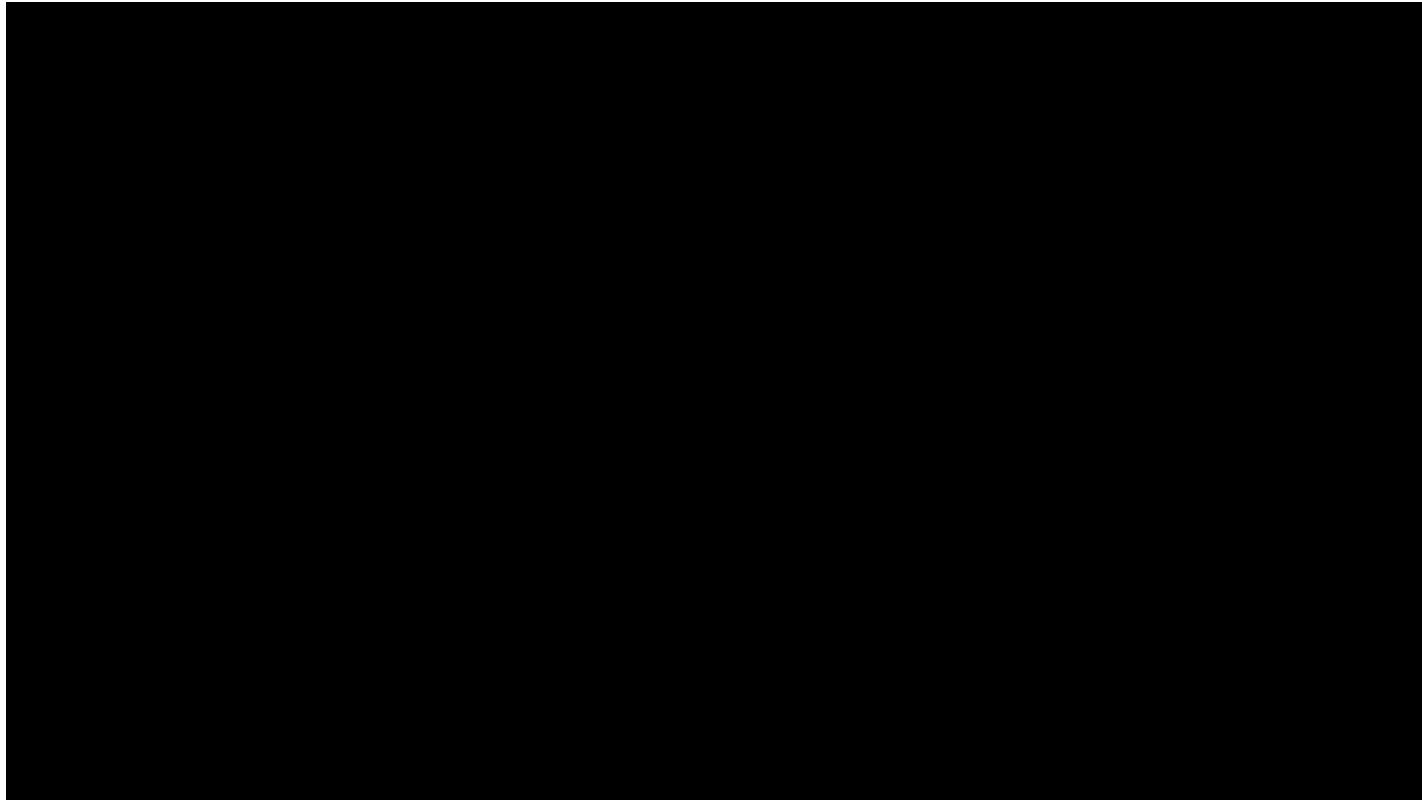
- Democratic governance (1 member – 1 vote)
- Citizens can consume and share energy from renewable sources
- People can invest by buying shares or financing projects
- Surpluses are reinvested to support its members and/or the community

Collective Energy Initiatives

Energy cooperatives



Collective energy initiatives - **video (1/2)** (a “refreshing” video about REScoops)



Source: REScoop The energy transition to energy democracy: <https://www.youtube.com/watch?v=ZTmeNmWEupg>

Collective Energy Initiatives

How can they help fight energy poverty?

Accessibility

- **Economy**
 - Fair prices
- **Governance**
 - Fair decisions

Sustainability

- **Social**
 - Integration and cohesion
- **Environmental benefits**
 - Less health risks

Solidarity

- **Fair conditions**
 - Well-being rather than profit
- **Support**
 - Knowledge sharing

Local economy

- **From citizens, for citizens**
 - Benefits remain local
- **Financial autonomy**
 - Less external dependence

Collective Energy Initiatives

How can they help fight energy poverty?

For example:

- **Sharing locally produced energy with vulnerable consumers**
 - More accessible energy prices
- **Collective purchase or ownership of goods and services**
 - Support for making investments with large upfront costs
 - Opportunity to participate in collective energy generation with no or low investments
- **Reinvesting in the community**
 - Round-up or similar mechanisms in energy bills to support vulnerable consumers
 - Accessible loans for investments within the community (e.g. microcredit)
- ...and much more!

Collective Energy Initiatives

How can they help fight energy poverty?

CASE STUDY 1

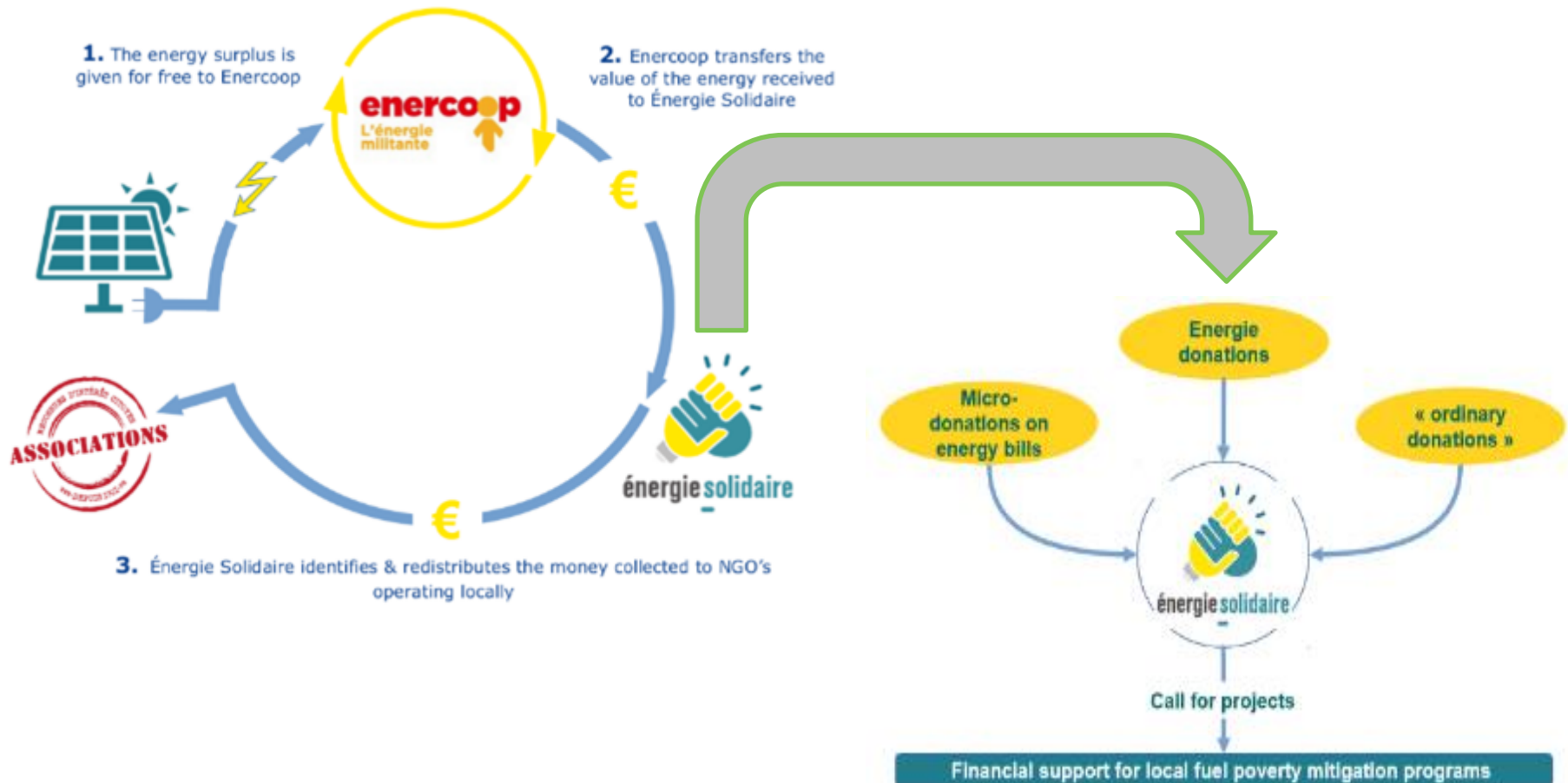
CASE STUDY	ENERGY SOLIDAIRE LES AMIS D'ENERCOORP	LOCATION
		France
PROBLEM DESCRIPTION	12M citizens in France suffer from energy poverty.	
SOLUTION	A non-profit association created a solidarity fund that raises money through micro-donations from the energy bills of consumers who are members of an energy cooperative. The resources support local social initiatives tackling fuel poverty by donating renewable energy from energy producers.	
IMPACT	So far Enercoop has: <ul style="list-style-type: none"> - 2500 clients, each donating around 36€ per year. - 90 000 € are annually collected, of which 50% are directly given to 6 associations that help citizens renovate their houses. 	



Collective Energy Initiatives

How can they help fight energy poverty?

CASE STUDY 1



Collective Energy Initiatives

How to start

General guidelines to **CREATE AN ENERGY COMMUNITY**

1. **Get organized** → build up your group of people
2. **Define your goals** → which type of activity will be conducted?
3. **Choose your legal form** → energy cooperative?
4. **Look for support** → what kind of support, and from whom?
5. **Start your activity** → and tell the world about it!



Collective Energy Initiatives

How to start

General guidelines to **CREATE AN ENERGY COMMUNITY**

1. **Get organized** → build up your group

- Gather motivated people → technical skills and knowledge are important, but motivation is key!
- Identify key leaders, or welcome potential ones
- Consider existing groups around you, the community might already be there! (and learn from them)
- Keep your team engaged through regular communication and activities

Collective Energy Initiatives

How to start

General guidelines to **CREATE AN ENERGY COMMUNITY**

2. Define your goals → which type of activity will you conduct?

- Ask questions to yourselves (Who are you? What do you want to achieve? How are you going to do it?)
- Create your own narrative → Storytelling is key
- Define your main activities:
 - Energy efficiency and savings
 - Energy production
 - Energy management (sharing, storing, self-consumption...)
 - Energy supply, distribution, other services...
 - Education
 - Mobility
- Plan your process → Develop your strategy

Collective Energy Initiatives

How to start

General guidelines to **CREATE AN ENERGY COMMUNITY**

3. Choose your legal form → energy cooperative?

- Having one is not mandatory, but most probably it will be helpful
- **Choose the legal form that best fulfills your needs** → In POWERPOOR, we think that energy cooperatives are the most appropriate ones. Some of their advantages are:
 - Regional networks → Support and visibility
 - Already existing rules/structures → You do not have to start from scratch
 - Other cooperative initiatives → Can be a good inspiration, reference and support
 - Social and economic perspective → A solid legal form to reach your goals
- **Define your structure**
 - Internal rules
 - Who will be the decision-makers?
 - Who will be the investors?



Collective Energy Initiatives

How to start

General guidelines to **CREATE AN ENERGY COMMUNITY**

4. **Look for support** → what kind of support do you need and from whom?

Support from:		Support in/as:
Local and regional administrations	↔	Legal/fiscal procedures, legitimacy...
Other cooperatives	↔	General/operational support
Companies and professionals	↔	Service provision, technical support...
Associations and social movements	↔	A broad reach, social legitimacy

Create a network around you → Reach the wider community

Collective Energy Initiatives

How to start

General guidelines to **CREATE AN ENERGY COMMUNITY**

5. Start your activity → and tell the world about it!

- **Share your narrative** → Motivate others to join you or to engage in new projects
- Remember: maintaining an energy community is a **continuous process** which requires constant engagement!

Collective Energy Initiatives - **video (2/2)**

A motivational video

“The Power of Community Energy”



Source: *The Power of Community Energy!* <https://www.youtube.com/watch?v=ltvd8-haPjo>

Module Summary

Key Takeaways

References and Further Reading



Module Key Takeaways

- Citizen participation is the backbone of collective innovative actions
- Both Crowdfunding and Collective Energy Initiatives are powerful tools to improve energy-related conditions and accessibility
- They can be a good alternative to individual or traditional financing methods, and provide many benefits besides purely financial resources

References and further reading

- POWERPOOR Online Library: <http://powerpoor.eu/library>
- Energy Poverty Observatory: <https://www.energypoverty.eu>
- Successful Crowdfunding in 15 Steps by ECN:
https://www.youtube.com/playlist?list=PLKS4qNWWhGkZEqKKDIGtNIg26aWonGC_MK
- “Community Energy: A practical guide to reclaiming power” by Friends of the Earth Europe, REScoop and Energy Cities. October 2020. Available here: <https://www.rescoop.eu/toolbox/community-energy-a-practical-guide-to-reclaiming-power>

Thank you for your attention!

