LIFE-BECKON EU Launch Event

Supporting mechanisms for local authorities to deploy energy communities

26 April 2023

LIFE-BECKON supporting mechanism to deploy energy community

Federico Noris - R2M Solution

Co-funded by the European Union

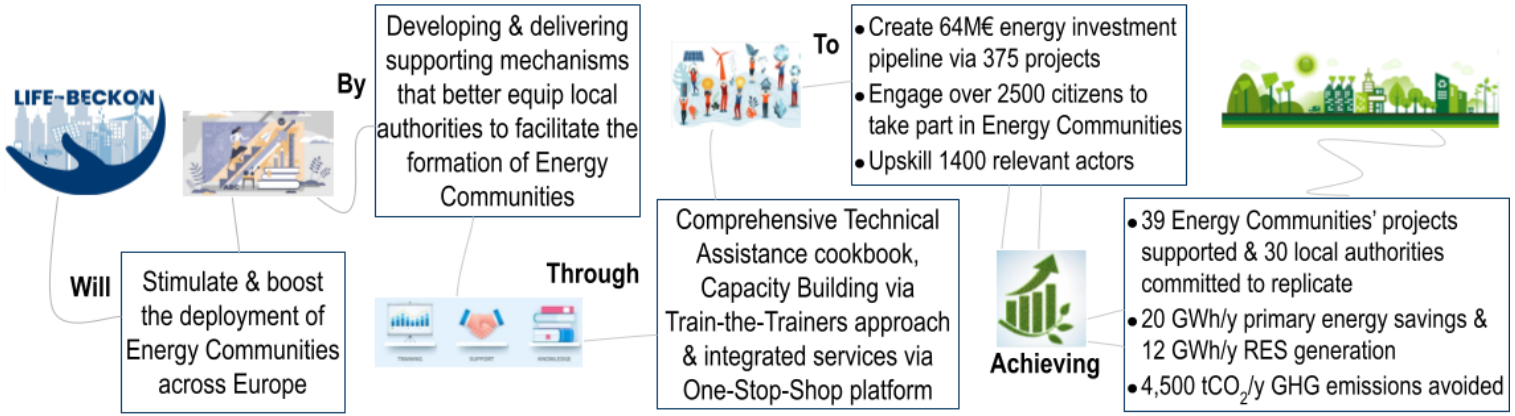
BECKON: Quick Facts

Started 11/2022 - Finish 10/2023 - Duration 3 years

The team

Overarching Goal

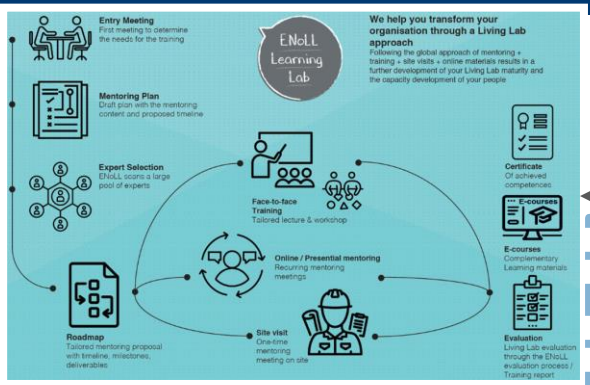
- Boost the **deployment of Energy Communities by providing public authorities** with
  a. **Technical Assistance cookbook** to equip **Technical Assistance Offices**
  b. **Capacity Building** via **Train-the-Trainer**
  c. Integrated services via **One-Stop-Shop (OSS)** platform
- Validate in **3 supramunicipal areas** in diverse EU regions



- **Replication via an extensive network of municipalities and country champions**

- Launch of 25 ECs in demonstration areas
- Call for replication for delivery TA to 15 ECs
- Engage with >30 authorities to replicate support mechanisms

Concepts



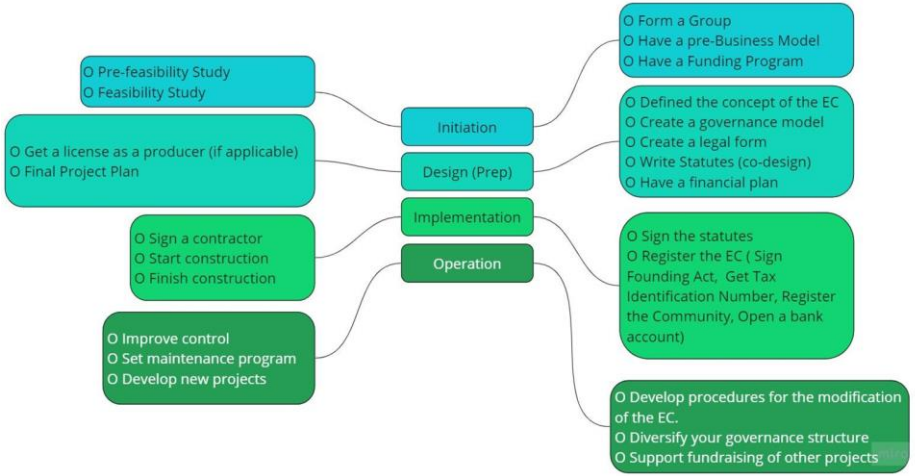
Steps	Potential applicants	Associated TA services
1st step – Initiation: there is an intention to setup an Energy Community but little is developed/identified. Need: Conceptual Design	• citizens & consumers associations • public authorities, LAGs • energy cooperatives • energy utilities and ESCO	Assessment of local renewable potential Assessment of local energy demand to identify: • which users to involve • assets controllable via demand side management Identification of key local actors to setup the energy communities Guidelines for development of organisational process and institutional structure
2nd step – Technical design: preliminary energy demand profiles and production opportunities identified with economic evaluations. Specific support before deployment starts. Need: Pre-implementation study to deploy the Energy Communities	• citizens & consumers associations • public authorities, LAGs • energy cooperatives • energy utilities and ESCOs • power plant, industries and facilities with power generating infrastructure	Assessment of existing energy infrastructure and assets to involve in the Energy Community, possibly after adaptation/improvement Pre-feasibility study and definition of hardware installation needed and sizing of equipment Cost-benefit analysis based on current energy supply contracts and present/future opportunities Assessment of financial position and efficiency of potential Energy Community projects Feasibility study on a specific aspect/installation Economic and financial modelling to enable financing facilitating project deployment Business plan development and guidelines

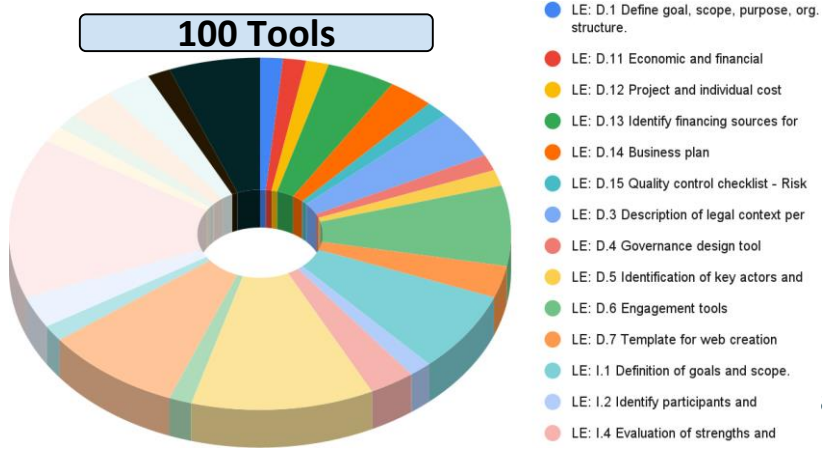
Technical Assistance Cookbook

Technical Assistance Office

TA Categories

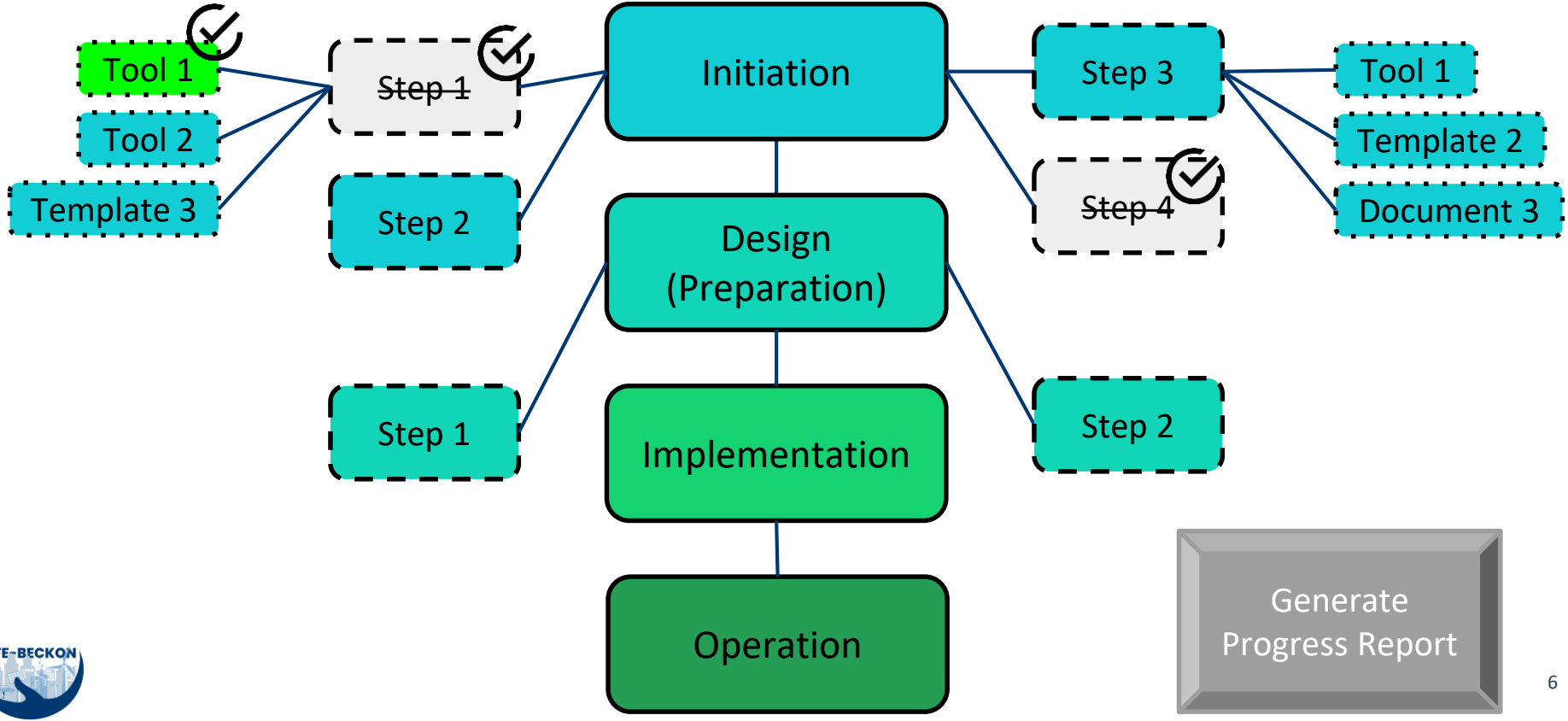
- Technical support
- Financial and Operational support
- Participatory process and user engagement
- Regulatory support
- Legal support
- Quality Control, Monitoring & Evaluation Support





Technical Assistance Cookbook

From checklist into standardised process to progress report



Capacity Building & Training

Needs Assessment

Survey

102 responses

Bulgarian ■ Danish ■ Spanish ■ English

Interviews

14 interviewees

Avila, Spain ■ Sofia, Bulgaria ■ Copenhagen, Denmark

Overall

- Set up of Energy Communities
- Governance & Business Models
- Management & Admin
- Stakeholder Engagement
- Assessment & Monitoring
- Technical topics
- Legal & Regulatory topics
- Best practices

Most to least quoted capacity building theme overall

Most to least prominent capacity building theme per demo

Avila, Spain

Sofia, Bulgaria

Copenhagen, Denmark

Beyond the demos

Capacity Building & Training

Videos

- Definition and benefits of Energy Communities
- Governance models
- Public aids for Energy Communities
- Regulation highlights
- Technical issues in setting up Energy Communities

- Stakeholder engagement, citizens involvement and communication strategies
- Follow up, schedule and monitoring
- Case studies and best practices

Workshops in the 3 demos

- Scoping needs of the municipalities and the citizens
- Open innovation tools for co-creating citizen-led initiatives
- 10 sustainable energy projects

Open Debate

- Promotion and aggregation of small sustainable projects to combine them with wider Energy Communities produced by LIFE-BECKON and beyond via EU initiatives time

Interactive webinars

- Set up of Energy Communities
- Financing schemes, management, governance and business models
- Self-assessment and tools for monitoring their impact over time.

Scale up Challenge

- Promotion and replication of the Training Programme in other European countries

One-Stop-Shop

ENERGY COMMUNITIES REPOSITORY
#EUenergycommunities

RESCOOP.EU

THE RURAL ENERGY COMMUNITY ADVISORY HUB

Energy Community Platform

Structuring the tools & services from the cookbook into knowledge modules for different stages and aspects

- Forum
- E-learning platform
- Training modules

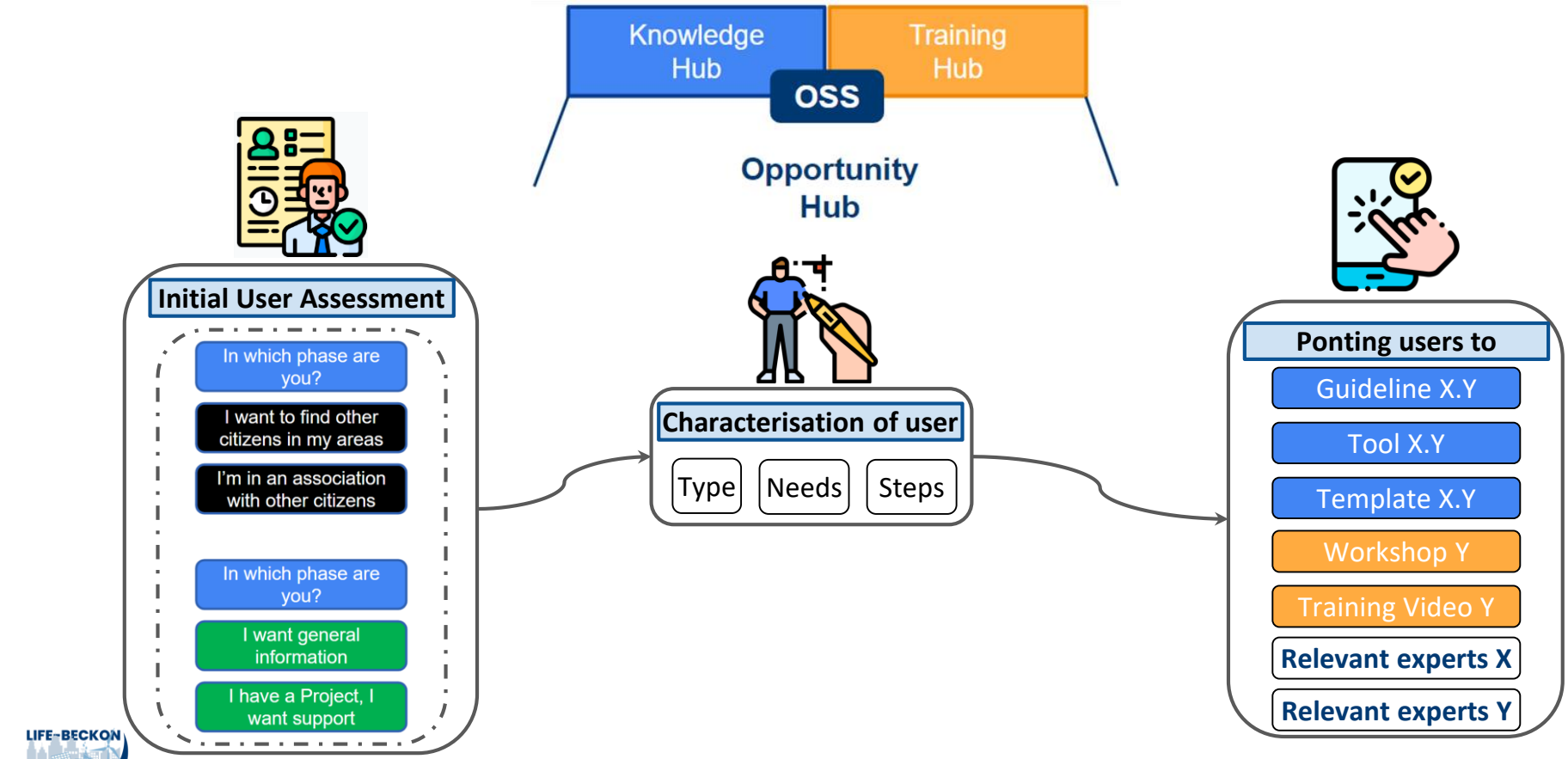
Marketplace with:

- Offer of service and expertise
- Seekers of support

Matchmaking to book meeting between demand and offer

LIFE-BECKON

OSS - Guiding the user



Demonstration Areas

Ávila, ES

- **Create a Technical Assistance Office** within the Energy Agency; launch 10 projects in 3 municipalities
- **Deliver Capacity Building** following the Train the Trainer approach; target to reach > 200 stakeholders
- Adapt and promote the **One-Stop-Shop** platform. Potential projects will be posted in the Opportunity hub; target to generate a pipeline of 25 potential projects

Copenhagen, DK

- **Empower the Climate Task Force** with the elements from WP1. 4 local neighborhoods will be demonstration areas for deep dive Energy Community projects.
- **Deliver Capacity Building** in Greater Copenhagen Metropolitan Area; target to reach > 150 stakeholders.
- Adapt and promote the **One-Stop-Shop** platform. Potential projects will be posted in the Opportunity hub; target to generate a pipeline of 25 potential projects

Sofia, BG

- **Create a Technical Assistance Office** building on similar initiatives such as the Energy Poverty Office. 1 pilot will be developed to serve as a model for replication. Calls to selects 10 projects to deliver the TA.
- **Deliver Capacity Building** in Greater Sofia Area; target to reach > 150 stakeholders.
- Adapt and promote the **One-Stop-Shop** platform. Potential projects will be posted in the Opportunity hub; target to generate a pipeline of 25 potential projects

Replication

To whom:

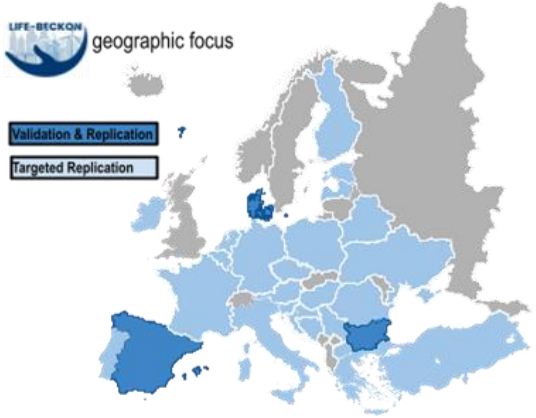
- Municipalities
- Public authorities
- Energy agencies
- Local associations

Massive-replication via multipliers
European, national & regional ass.

Replication via direct contact & LoS
1896 municipalities members of CA

Validation in 3 supramunicipal areas
Copenhagen-DK, Avila-ES, Sofia-BG

Comprehensive Support Mechanism
Technical Assistance Cookbook, Capacity Building, One-Stop-Shop



Sharing of best practices and knowledge

Replication via:

- 30+ replicators municipalities supported through capacity building
- Dedicated **call for replicator** to select 15 projects to receive light technical assistance underpinned by the Technical Assistance cookbook and via the OSS platform
- Adaptation of the OSS to local contexts and needs

Stay in touch!

Follow us:

- LinkedIn
- Twitter
- Website
- Brochure
- Newsletter

- Sessions at the Climate Alliance International Conference 2023

Contact:

- Federico Noris; federico.noris@r2msolution

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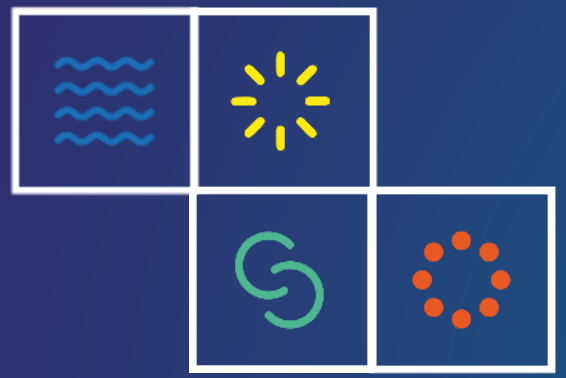
European Commission



ENERGY COMMUNITIES REPOSITORY

#EUenergycommunities

TWO INITIATIVES TO SUPPORT ENERGY COMMUNITIES:

How is the Repository supporting energy communities?

Policy analysis

Mapping & impact assessment

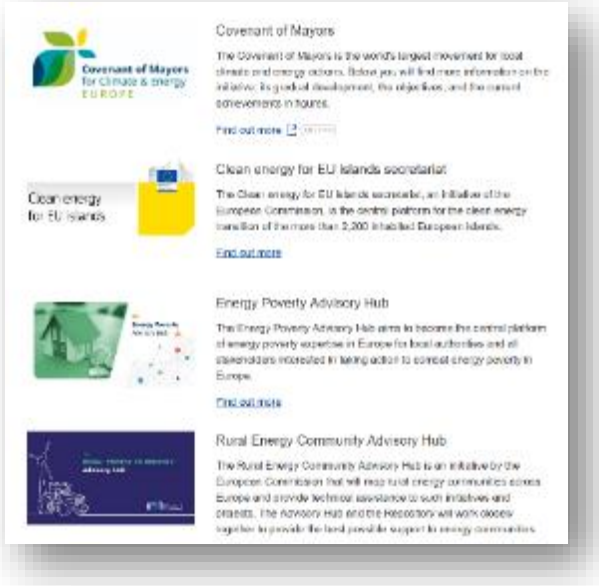
Technical assistance

Best practices & resources

- Identify and share best practices
- Share existing resources and capacity-building materials
- Develop new guidance materials
- Policy analysis database

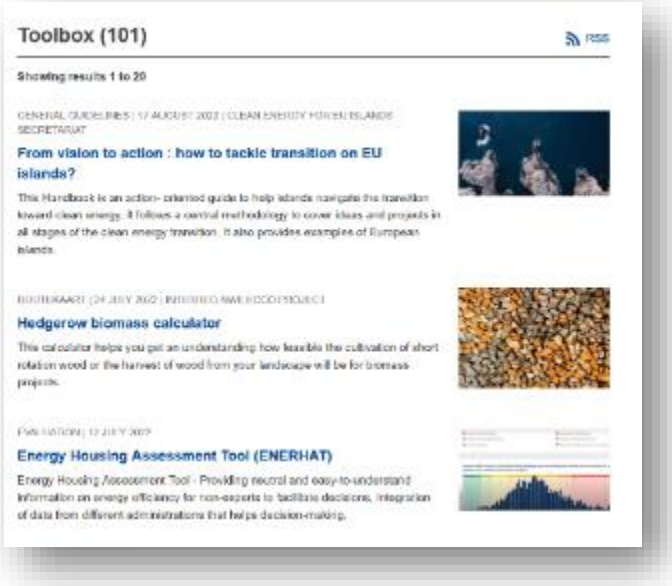
Resources

EU projects & initiatives



One-Stop-Shops

Toolbox

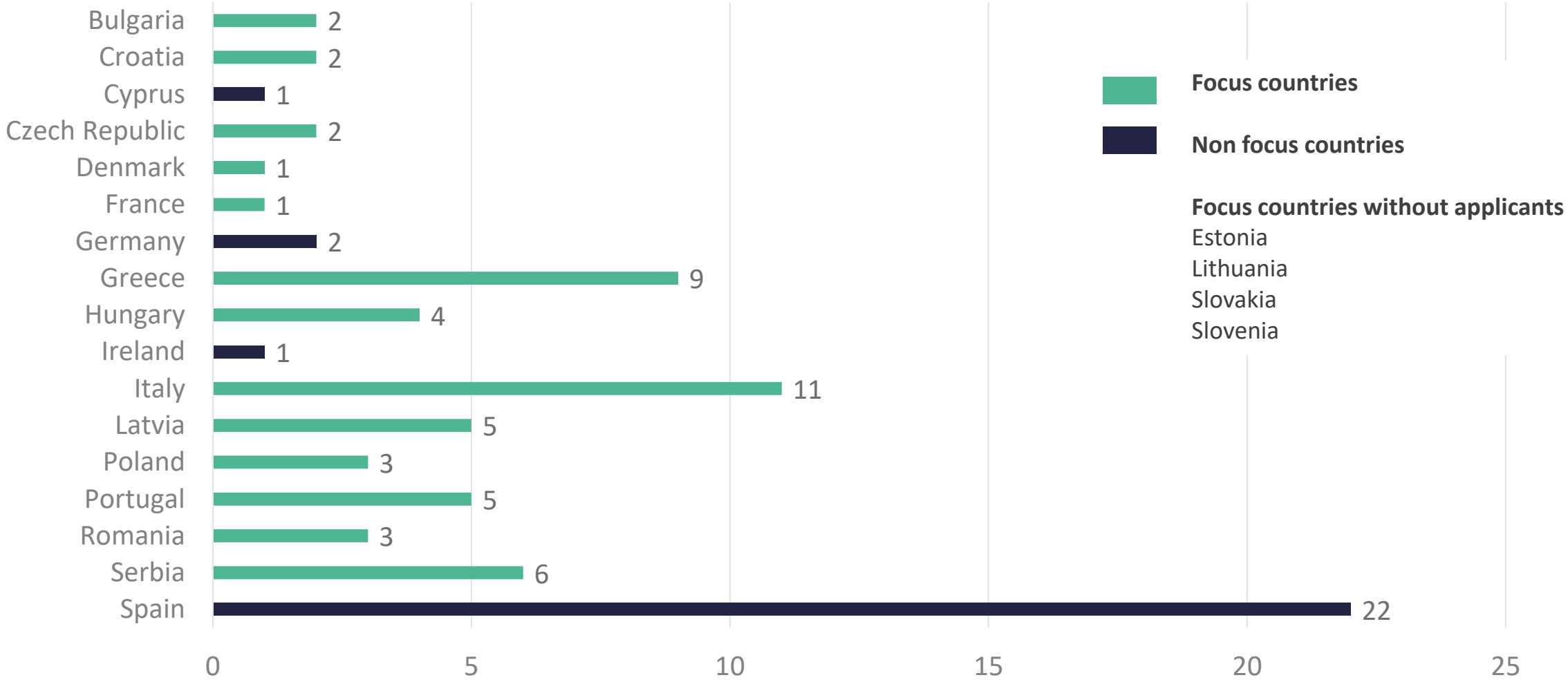


Technical assistance

- 25 communities are receiving **direct technical support**
- 45 communities are receiving support via **online twinning & peer learning**
- 80 communities will receive support via **national capacity building workshops**
- 6 **EU-wide capacity building webinars**

Photo: Carlos Muza (unsplash)

TA Applications - Geographic distribution



Municipal-led TA applicants

- Czech Republic: PV and heat pump project
- Greece: hydro project
- Portugal: Climate Action Expertise Centre leading to creating of Energy Community
- Germany: help selecting sites for solar
- Cyprus: first energy community

Photo: Carlos Muza (unsplash)

TOP 5 priorities – TA applicants

- Set up of legal structure and related administration
- Governance of the energy community and related administration
- Developing a community investment campaign
- Developing an initial financing concept, a business plan
- Finding inspiring examples of local / national best practices

Repository Webinars

June: Expanding city-to-citizen collaboration in energy communities

July: Taking your first steps as an energy community

Sept: Legislative frameworks for energy communities in the EU

Sept/Oct: How to set up a community energy one-stop-shop

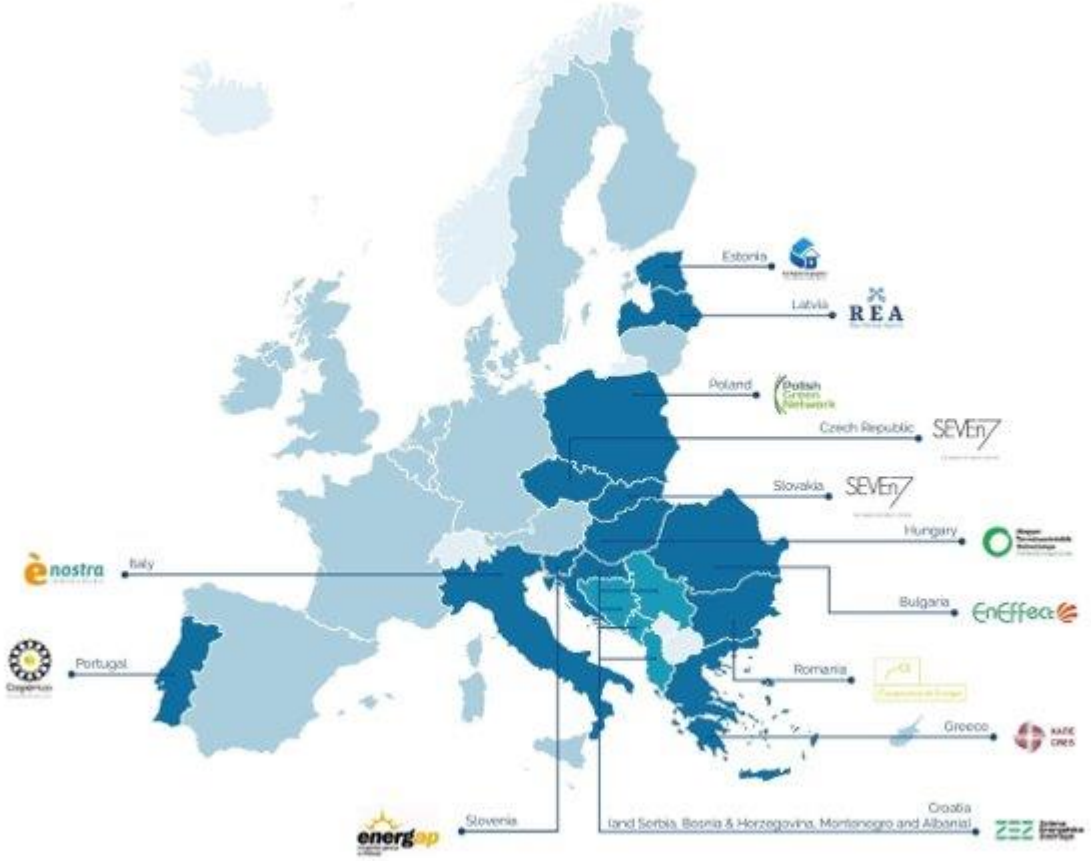
Oct: Build a business case for your energy community

Nov: How to organise a community investment campaign

European Commission

Capacity Building Workshops

- Bulgaria
- Croatia
- Czech Republic
- Greece
- Hungary
- Italy
- Latvia
- Lithuania
- Poland
- Portugal
- Romania
- Serbia
- Slovenia
- Slovakia

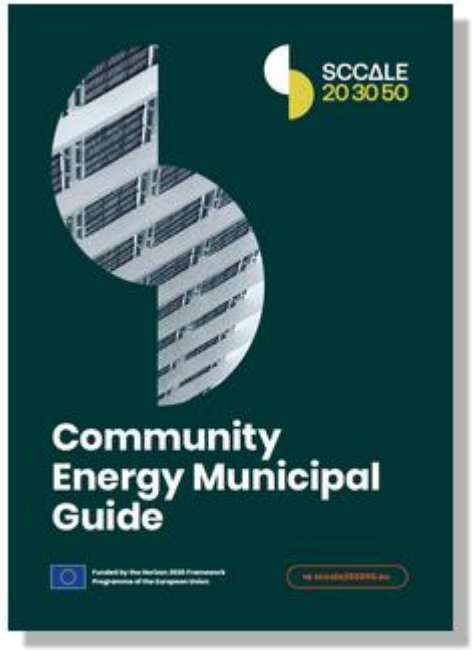


Useful resources for municipalities

Toolbox:
SCCALE 20-30-50 municipal guide
Municipal procurement guide
LIFE LOOP tools

Webinar: June City and Citizen collaboration

Mailing list: info@ec-repository.eu



European Commission

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Supporting mechanisms for local authorities to deploy energy communities

26 April 2023

Energy community framework, challenges & opportunities in SOFIA, BULGARIA

Nadya Nikolova-Deme – SEA SOFENA

Co-funded by the European Union

Energy Community Framework

Bulgaria's national energy policy
was based on large and expensive energy projects, using nuclear and coal energy, while downplaying the potential of sustainable and competitive RES.

While business and industry directly invest in photovoltaic and other RE installations, projects owned by groups of citizens or energy communities are rare in Bulgaria.

There is a lack of a clear legal definition and specific legal provisions regarding prosumers and energy communities both at national and municipal levels in Bulgaria.

Energy Community Framework

Difficulties to the Energy Communities Development in Bulgaria:

- Regulatory obstacles;
- Administrative and bureaucratic obstacles;
- Legal problems - form of association and organization;
- Tax policy;
- Low awareness of households and citizens;
- Access to finance;
- Historical encumbrance and worldview.

Energy Community Framework

Present state:

Steps to shorten the administrative procedures took place in 2022:

- Amendments were adopted in the **Act on RES** easing end customers in building PV installations for electric energy production from RE on building roofs and facades when used for own consumption.
- Further amendments to the **Territorial Planning Act** were adopted for optimizing the terms for spatial planning and investment on RES design and construction for own consumption.
- There were also changes in the **Act on Excise Duties and Tax Warehouses;**

In 2023**:**

- New changes in the **Act on RES** approved by the Council of Ministers:
  - REC definition in line with the EU one;
  - Easing the joining procedures for producers of electrical energy from RES with up to 1 MW installed capacity.

Financing for RES Installations

Under the National Recovery and Resilience Plan the following procedures are opened at present:

- "Construction of new RES for own consumption (up to 1 MW) in combination with local facilities for energy storage in SMEs“ of 200 million BGN – 50% grant, max 1 million BGN per project
- “Support for renewable energy for the households” of 140 million BGN:
  - Purchase of solar installations for domestic hot water supply - 100% grant up to 1960 BGN or
  - Purchase of photovoltaic systems for the home (up to 10 kWp), including electrical energy storage systems – 70 % grant, max 15000 BGN.

Good Practice Example – “Solar Cities”

Under the “Solar Cities project “ aiming at unlocking the Solar Potential of Burgas and Sofia city financed by the European Climate Initiative (EUKI) a digital platform was developed giving information:

- how many PVs can be installed and on which building,
- how much energy they can potentially generate,
- how high is the required investment, and
- how long will it take for the return of the investment.

https://solarcities.bg/

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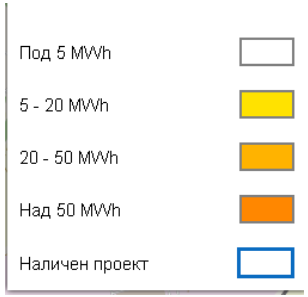
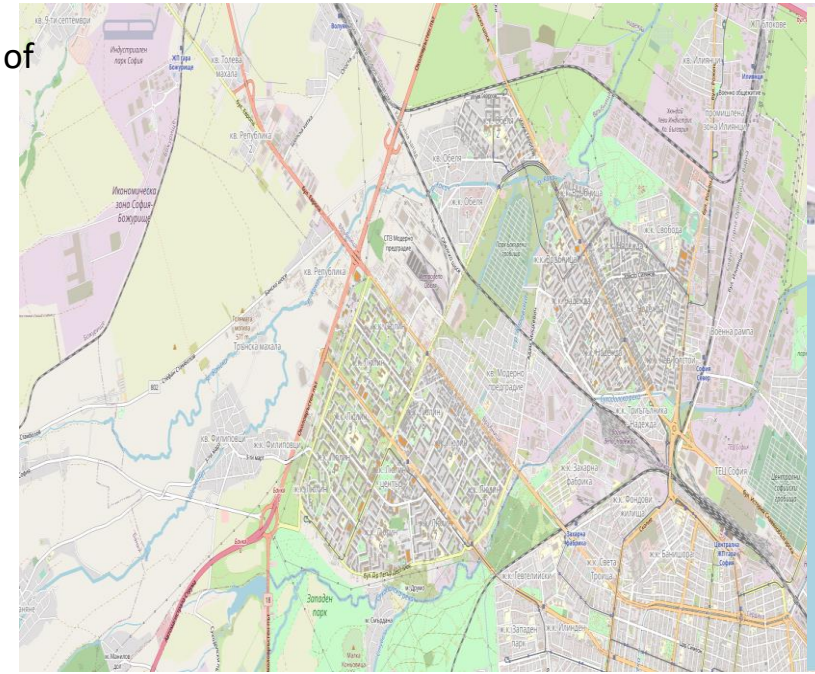
Good Practice Example – “Solar Cities”

For this purpose, the territory of the cities was photographed, detailed analyzes of the roof spaces of the buildings was prepared using specialized software to identify the optimal number of PV panels that can be placed.

Annual production of electricity





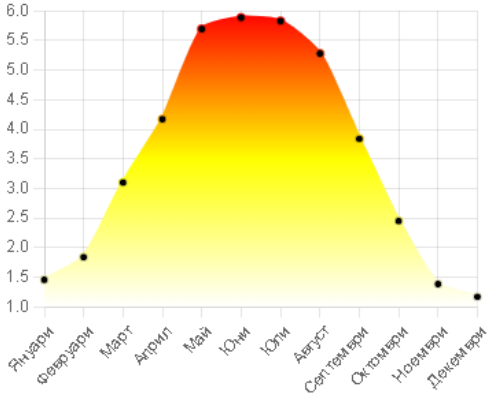
https://sofia.solarcities.bg/

https://burgas.solarcities.bg/

Good Practice Example – “Solar Cities”

For the roofs circled in blue on the map in the platform, individual analyzes have been prepared according to their specifics, and the results are available in the reports attached. A ready made project is available for download.

Annual production of electricity 42 MWh



https://burgas.solarcities.bg/

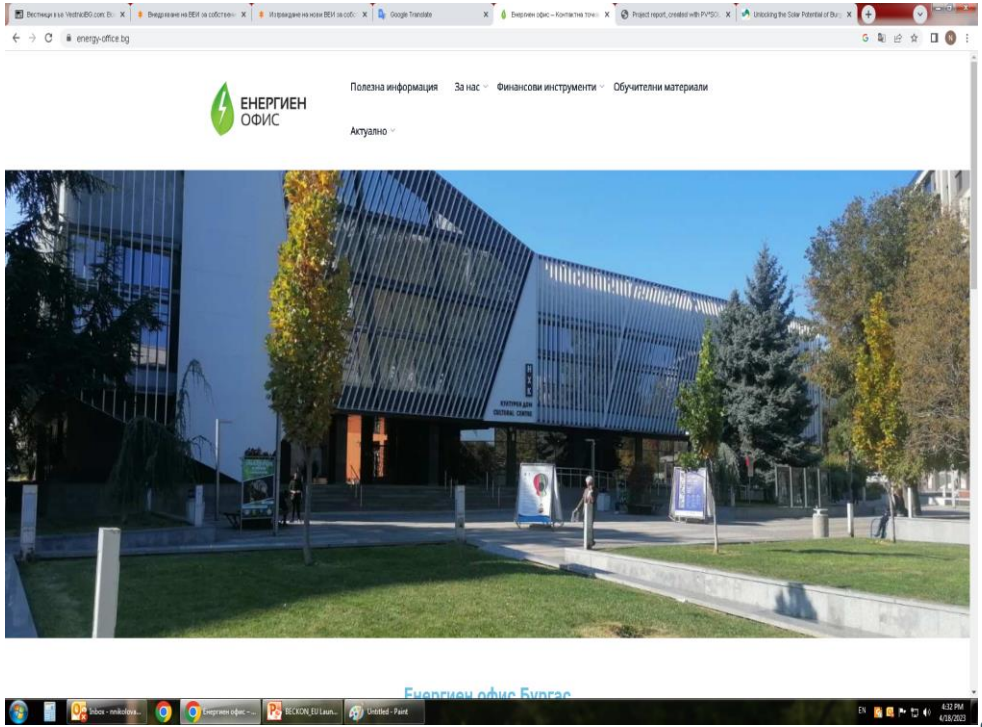
Good Practice Example – “Solar Cities”

Dedicated units in Burgas and Sofia town administrations to provide administrative support to potential investors are established.

Energy Office Burgas

A series of events and trainings targets representatives of local and state administrations, of SMEs, of homeowner associations, public building managers, and residents of multi-family apartment buildings.

https://energy-office.bg/



SOFENA in LIFE-BECKON Project

Demonstration at Sofia-BG area :

- Create Technical Assistance Office,
- Adapt Cook Book to Sofia needs,
- Deliver Capacity building to 150+ stakeholders,
- Engage and foster match making on one-stop platform

Outcomes:

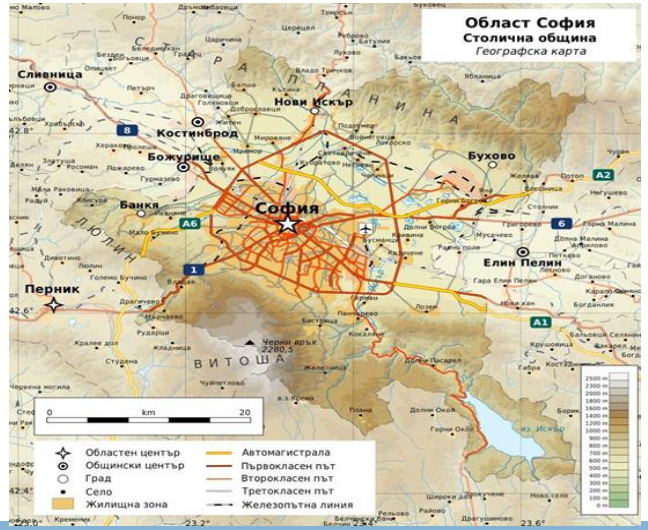
Generate pipeline of 10+ projects, support creation of Solar garden, etc.

Sofia
Technical Assistance Office

TAO Sofia will be build on and further developed using the Sofia Energy Poverty Office at the premises of Sofia Energy Agency SOFENA created under POWERPOOR project.

Business Model of the Sofia TAO - Facilitation model

TAO - Sofia will provide support to potential Energy Communities across the municipalities of the Greater Sofia Metropolitan Area.

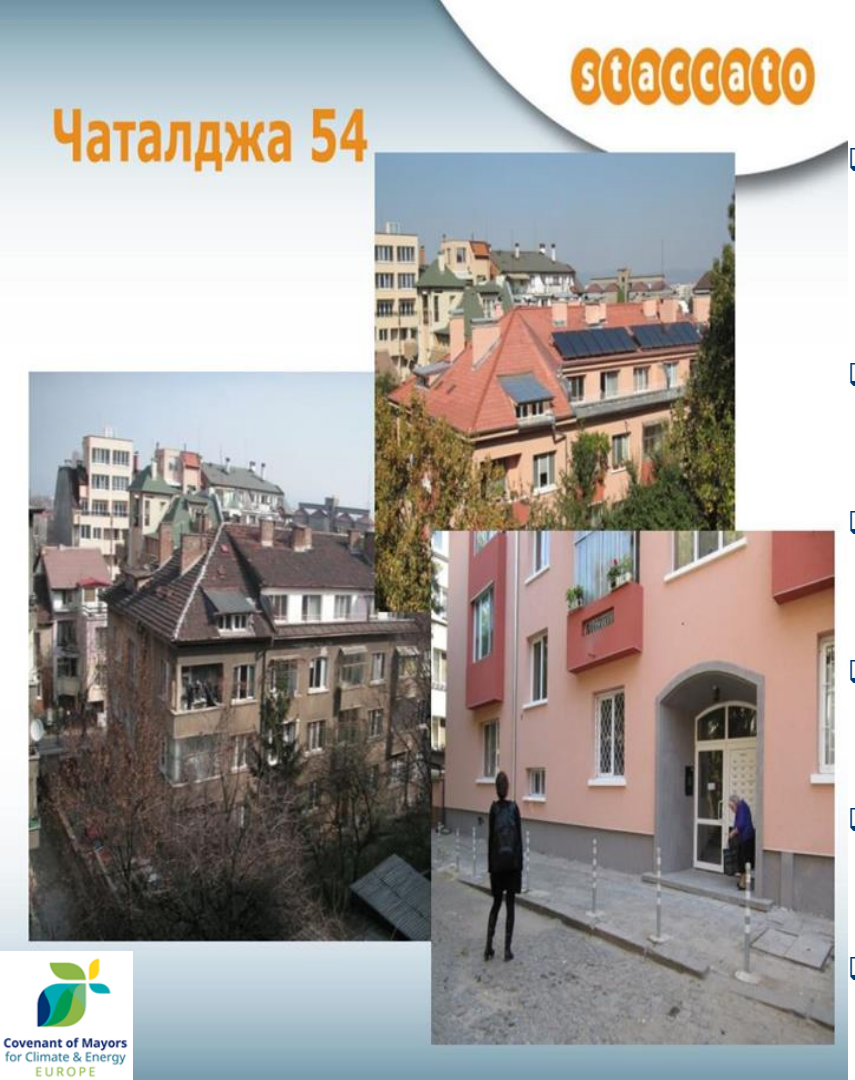


Free of charge advice

TAO

Interested parties

TAO Sofia Integrated Services



- Proactive engagement of participants in EC through targeted communication and marketing tools to reach out to the right groups
- Offer capacity building for municipalities and other interested stakeholders.
- Provide advice on the legal form of registration and statute of the energy community.
- Propose tailor-made plans and guidance to achieve the goal
- Info on affordable financing means, ESCO, crowdfunding, etc.
- Matchmaking with technology providers and investors

TAO Sofia Resources

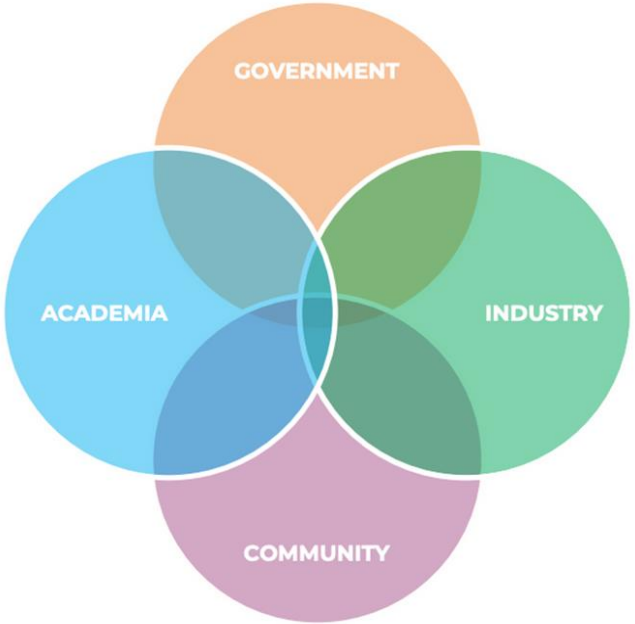
- One Stop Shop platform
- List of technology providers and investors
- Data base of relevant documents and templates
- List of trainers and training materials

Covenant of Mayors for Climate & Energy EUROPE

TAO Sofia Activities

- **'Train-the-Trainers'** approach will be used. Trainings and dissemination events will be organized;
- **Capacity Building Programme** (based on Open Innovation, Living Labs, citizen-centred, co-creation and co-design methodologies) conducted.

They all will be targeted to public authorities at local, regional and national levels, policymakers, energy agencies, associations, as well as consulting professionals or energy companies, etc.



Sofia Demo and Validation

SOFENA will follow 5-step validation methodology:

- Selection of 25 potential projects on the territory of Bulgaria through online call and application procedure

- Identification of 10 potential Energy Communities to undergo the trial and validation phase that will receive free consultancy to prepare EC project.

- One potential project will be fully supported to implement an energy community - Solar garden - as a demo-site.

Sofia Demo and Validation

The results of LIFE-Beckon project will help:

- to replicate the model of the TAO in the cities and municipalities of Bulgaria and open new ones.
- to build the capacity of public authorities to support EC initiatives in making informed decisions fitting best with the local characteristics, thus fostering the uptake of ECs.
- SOFENA as a Covenant of Mayors supporter will encourage public authorities and citizen associations at local, municipal and regional level to replicate the developed solutions, creating support structures that can guide communities in setting up their initiatives in the field of sustainable energy.

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Energy community framework, challenges & opportunities in Copenhagen – Denmark

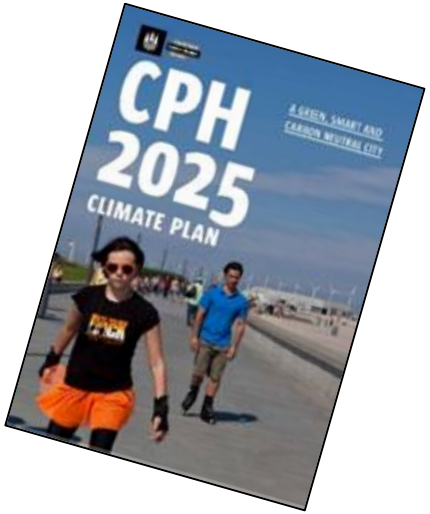
Erik Hagelskjær, City of Copenhagen

Co-funded by the European Union

The climate strategy in Copenhagen

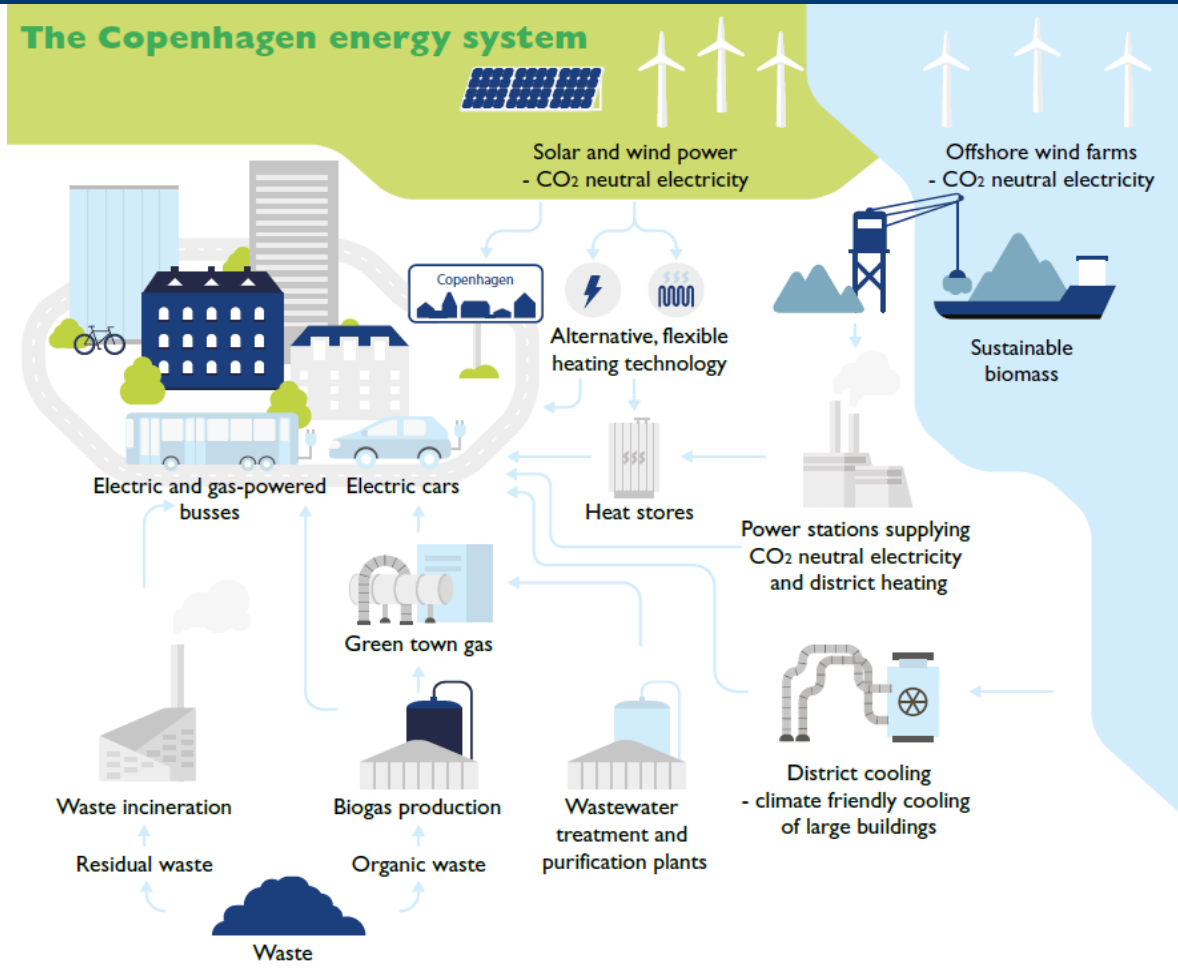
The CPH2025 climate plan adopted in 2012 targets carbon neutrality through four pillars:

- Energy consumption
- Energy production
- Mobility
- City administration initiatives



Transformation of the energy system

- Establish wind turbines and PV
- Work with flexible energy technologies
- Energy production focus
- Emerging consumption focus



Utility companies and solidarity

- Electricity distribution companies are in principle user-owned cooperatives
- They function as corporate organizations, struggling to protect market shares
- Should we enable the most well performing elements of the collective to withdraw and organize themselves in local energy communities as islands with favorable conditions?

Transitions in energy and taxes

- Electricity used to be oil based and was taxed up through the 70'ies and 80'ies to decrease oil dependence
- Transition to coal based regime in 90'ies did not change taxation
- Transition to RE based electricity does not change taxation
- Electricity is still an important source of tax revenue

Regulatory challenges

- Define place of consumption by the electricity customer's proximity and not delimited by buildings (and/or cadastral divisions),
- Allow housing organizations (public, cooperative and owners' associations) to be electricity customers and thus have access to a meter number (tax issue)
- Establish electricity customers' right to establish internal electricity connections (including between their own production and consumption facilities)
- Specify that tariff models must be established corresponding to the different types of electricity customers and for the sharing of electricity via the collective distribution network within local energy communities with, for example, 'local collective tariffing’.

Energy communities in Copenhagen

- Provide opportunity for citizens to participate in the green transition
- Promote collective action to support sustainability ‘handlefællesskaber’
- Support properties to become active prosumers in a green energy system
- The city is not a collection of isolated islands
- Green transition of properties integrated with building renovation and urban renewal
- Acceleration of implementation of PV roof top solutions

PV roadmap

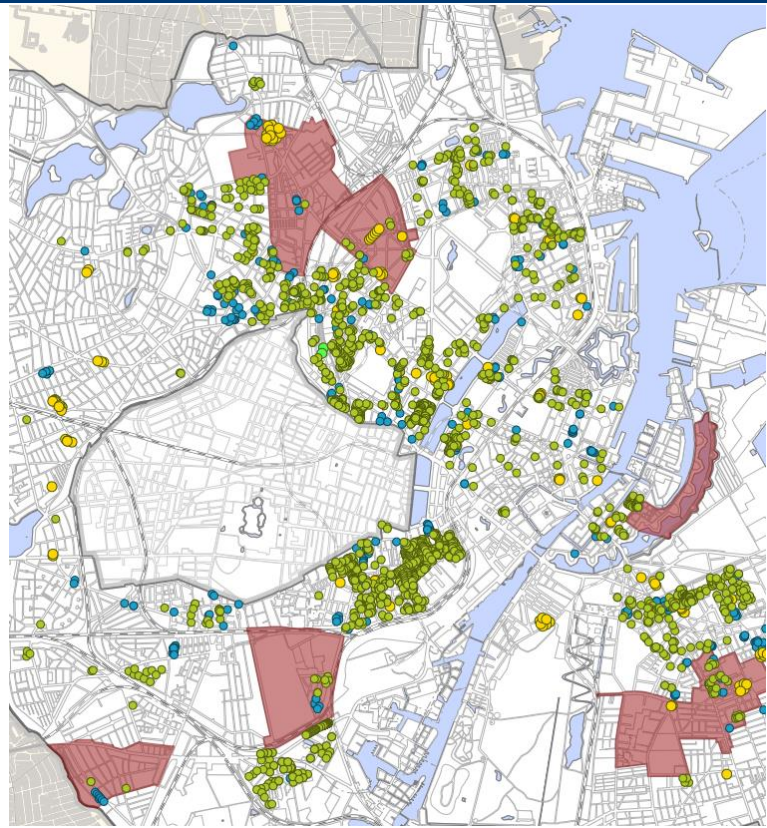
- 3% of electricity in CPH is PV by 2025
- Grants for feasability consultancy

Mapping PV potential

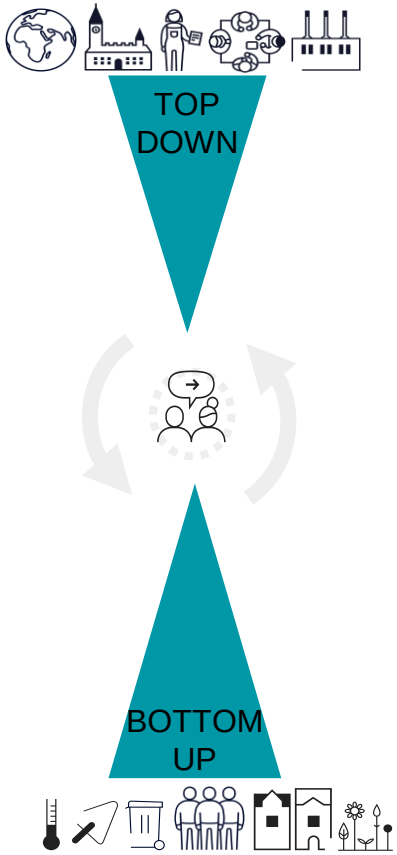
	Samlet tagareal			Tag m. tagpap og lille hældning	
	MWh	Antal bygn.	m2 tagareal	MWh	m2
Aktie- anpart eller andet	43.943	323	908.492	15.228	319.067
Alment boligselskab	8.210	107	176.144	3.469	59.216
Andet, bl.a. andels- og ejerboliger	26.449	251	639.892	10.231	244.348
Forening, legat eller selvejende	6.558	59	141.180	2.360	51.258
Københavns Kommune	11.202	102	237.530	3.797	72.047
Privat	4.389	59	106.310	302	6.489
Privatpersoner og interessentselskaber	4.348	32	84.811	1.904	38.717
I alt	105.099	933	2.294.359	37.291	791.142

Building renewal with PV

Building renovation grants
PV demonstration projects
Batteries
Charging systems
Sector coupling



A place-based approach



City governance

City carbon neutrality commitment

Cross-sectoral cooperation

Tools

Facilitate & engage

Screening data

Expert knowledge

Public grants

Place-based local climate facilitators

Potentials

Energy efficiency

Building refurbishment

Solar power

Energy flexibility

Climate/energy communities

Recycling

Biodiversity and greening

Other

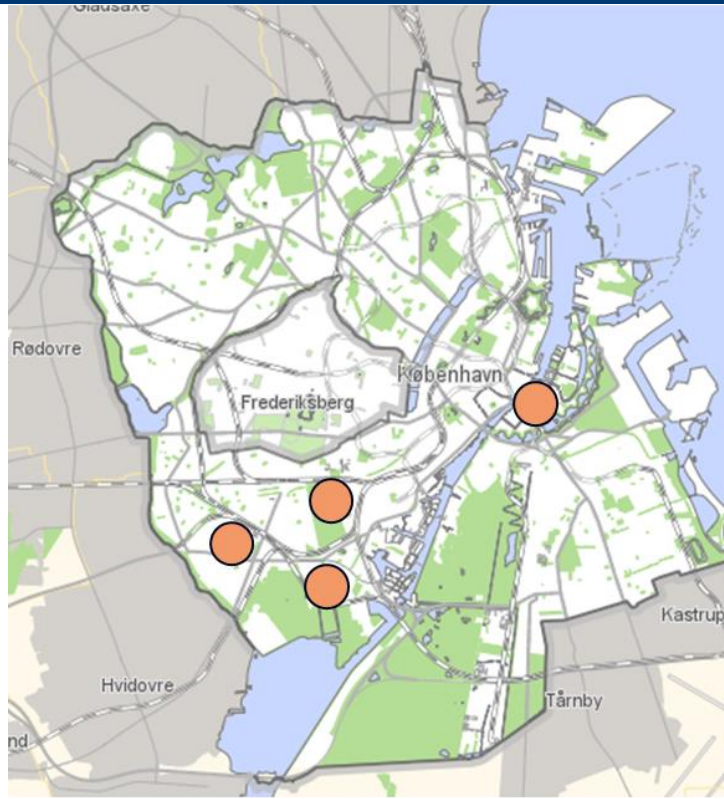
Local governance

Citizen action plans for energy communities

Citizen and local actors' potentials and interests

Emerging energy communities

- Dialogue and support
- Clarification of legislation
- Sharing experiences



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LIFE-BECKON EU Launch Event

Supporting mechanisms for local authorities to deploy energy communities

26 April 2023

Energy community framework, challenges & opportunities in Ávila, Spain

Mauro, Ostinelli - R2M

Co-funded by the European Union

Navigating Spain's Legal and Regulatory Framework

Legal and regulatory uncertainty

- Absence of specific legal figure of the Energy Community
- Lack of a register of energy communities

Lack of standardization

- Difference between collective self-consumption and energy community

Complex administrative procedures

- Administrative obstacles in photovoltaic installations

Inadequate support from competent authorities

- Lack of technical assistance

Limited access to financing

- Challenges in accessing financing from traditional sources

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DIPUTACIÓN DE ÁVILA

Deploying Energy Communities in Ávila, Spain

Province of Ávila

160,000

248

A quick overlook

17.5 % (Spain)

36.3%

5.9%

90%

Deploying Energy Communities in Ávila, Spain

Promote renewable energy & increase energy efficiency

NEED

Use Cases / Business Models

- Mediana de Voltoya

- El Barco de Ávila

- Sotillo de la Adrada

Power to the People: LIFE-BECKON's opportunity

APEA
Agencia Provincial de la Energía de Ávila

Transition Office

- ★ Legal
- ★ Financial
- ★ Technical

Information for EC

LIFE-BECKON

DIPUTACIÓN DE ÁVILA

Conferences

- ★ Raise awareness
- ★ Advice
- ★ Promote in 3 levels

Power to the People: LIFE-BECKON's opportunity

13th of February

Presentation LIFE BECKON

Diffusion of ECs as opportunities for municipalities

> 80 municipalities

LIFE-BECKON DIPUTACIÓN DE ÁVILA

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Housekeeping

Please **rename yourself** with your name and organization

Switch off your microphone/camera during presentation

Do you have questions for the speakers? Please use the **chat box**

Please note that this webinar is being **recorded** and made available on the **CoM library**

We will give you the floor during the **Q&A session**

Agenda

LIFE-BECKON OVERVIEW AND PRESENTATION	
11:00	**Introduction** | Covenant of Mayors – Europe Office, Andrea Carosi **LIFE-BECKON supporting mechanism to deploy energy communities** | R2M Solution, Federico Noris
EU POLICY UPDATES AND SUPPORT AVAILABLE FOR LOCAL AUTHORITIES	
11:15	**Framework for the Energy Communities in EU legislation** | DG ENER, Achille Hannoset
	Available support for local authorities | Energy Communities Repository, Anna Francis
NATIONAL FRAMEWORKS - CHALLENGES & OPPORTUNITIES AT LOCAL LEVEL	
11:35	**Bulgaria** | Sofia Energy Agency, Nadya Nikolova **Denmark** | City of Copenhagen, Erik Hagelskjær Lauridsen **Spain** | Diputación de Ávila / R2M Solution, Mauro Ostinelli
DISCUSSION	
12:05	**Q&A session**
12:25	**Wrap up and conclusion** | Covenant of Mayors – Europe Office, Andrea Carosi

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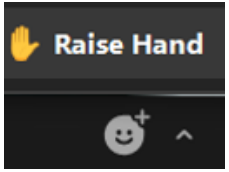
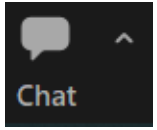
Covenant of Mayors for Climate & Energy EUROPE

Any questions?



Raise your hands to ask for the floor



Or write your questions in the chat box

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Covenant of Mayors
for Climate & Energy
EUROPE

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Supporting mechanisms for local authorities to deploy energy communities

Many thanks for your kind attention!

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https://eu-mayors.ec.europa.eu/en/home

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