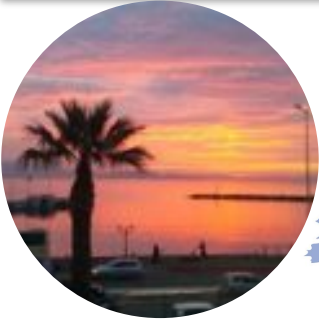


# Steer it up!

## Hands on event

How tools and key results from the European projects Renaissance and Compile can help communities drive the energy transition





## Pilot site Rafina



- Municipality of Rafina-Pikermi: 20.000 citizens in eastern suburbs of Athens.
- LES is predominantly supplied from the main grid.
- The municipality provides its available infrastructure for the COMPILER solutions integration and testing.
- Exploring different models for the cooperation of citizens and the municipality for the establishment of EnC.



# Main achievements

01

100 Smart meters were deployed (COMPILE + CoordiNET)

02

COMPILE tools integration

03

Two potential energy community models are being studied

04

A tool was developed to assess the available infrastructure for RES development and feasibility



# Citizen engagement and community development

## “Energy in citizen hands” workshop

Regulatory framework presentation.  
Potential benefits and obstacles.  
Funding mechanisms.

## Workshop on Energy Communities

Inform about the institutional framework for energy communities and the potential benefits to citizens

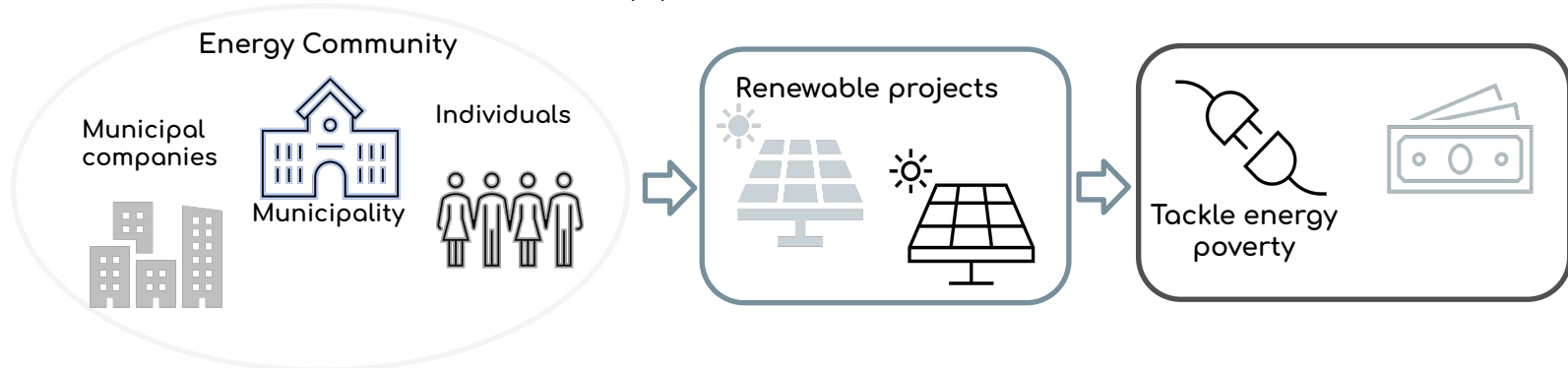
## 2<sup>nd</sup> COMPILE Workshop

Workshop with municipal stakeholders to discuss the potential benefits of an EnC in the municipality

# 1<sup>st</sup> model – Municipality driven EnC

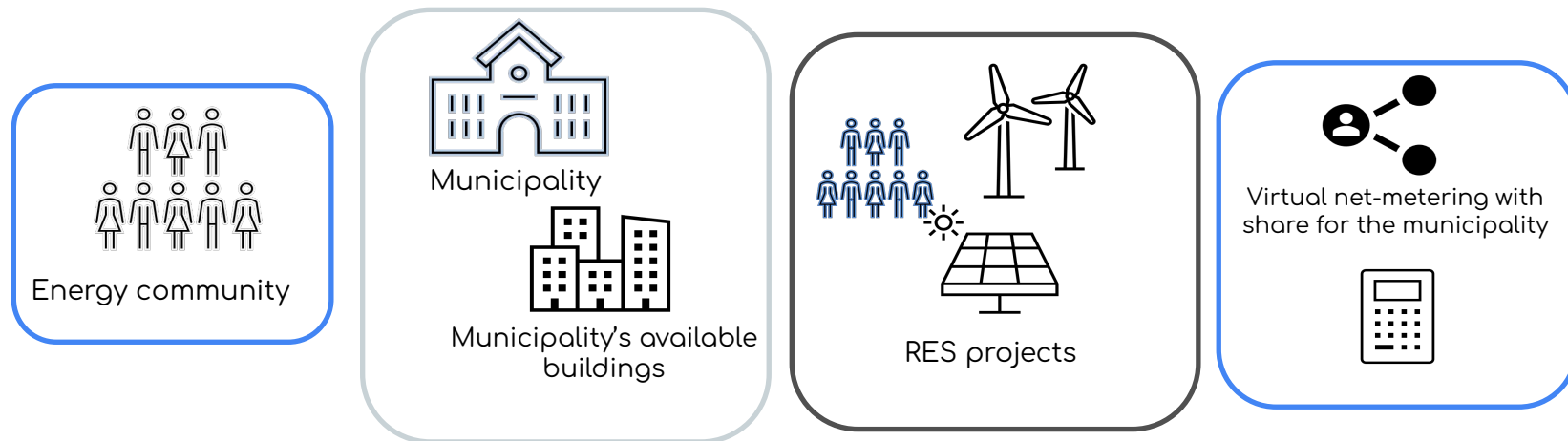
The municipality + municipal development companies + interested individuals will investigate the possibility of developing energy projects and applying virtual net metering to reduce municipal bills and tackle energy poverty

- Effective control remains within the municipality
- Citizens benefit from reduced bills
- Vulnerable households are supported



## 2<sup>nd</sup> model – Citizen driven EnC

The municipality provides available infrastructure to citizen energy communities for the development of renewable projects and becomes a member of the EnC or get a share of the project as “rent”.



The **ROLE** of the municipality in this model is the **ENABLER**

Γεωγραφικό-Πόλεο			
Επιφάνεια (m <sup>2</sup> )	Latitude	Longitude	
1600	38° 0'56.93" N	24° 0'39.47" E	
Εγκατεστημένη Ισχύς (kWp)	Εκτίμηση Κόστους (€)	Ετήσιος Έτος (kWh)	
100	90.450	145000	
Εκτιμώμενο όφελος (20έτη)	Price/Wp		
	0,9		
Module	Max Power @ STC (W)	Ground Coverage Ratio	Area
SunTech STP340S	340	0,55	1,9
Max Capacity (kWp)			
154			
Priority	Weight(1-5)		
Capacity	10,0	5	
Disturbance	9	4	
Ease of deployment	9	3	
Cost	1	2	
Orientation	8	4	
Self-consumption Ratio	7	5	
SUMPRODUCT	182,0	23	
Weighted Mean	7,9		



# Public rooftop PVs-feasibility

01 Available buildings are assessed and prioritized

02 Pre-feasibility study calculates the economic indicators

<b>Project Name:</b>	<b>High School rooftop PV</b>	
<b>Location:</b>	Rafina	
<b>Type:</b>	Rooftop	
<b>Currency:</b>	EUR	
<b>Nominal capacity:</b>	100,00	kWp
<b>Required Area (approx) :</b>	1037	m <sup>2</sup>

Summary Financial Outputs	25yr	12 yr
Free Cash IRR Pre tax	14,5%	5,9%
Free Cash Post Tax IRR	8,7%	5,9%
Minimum DSCR	N/A	N/A
Cash Equity in	€ 91.800	€ 91.800
Cumulative Free Cash Pre Tax	€ 443.791	€ 10.673
Cash on Cash multiple	4,83	0,12

# Lessons learned

- Municipalities can play a significant role in fostering citizen involvement and EnCs development
- They can assume different roles in the process:
  - Initiators – Main actors forming EnCs and developing RES projects
  - Facilitators – Providing administrative and organizational support
  - Enablers – i.e. Enabling citizen involvement by providing available spaces for RES project development
- The coordination with different stakeholders within municipalities may be challenging.
- The participation of municipalities in EnC schemes has positive impact in economic, social and environmental aspects of a local community.





# Contact

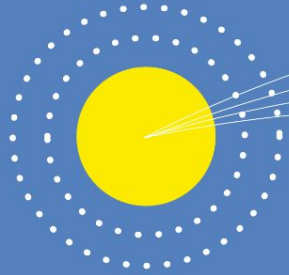


**Rafina  
Pikermi**  
Municipality

Alexandros Chronis  
a.chronis@outlook.com

PROJECT MANAGER





# Thank you!

