

Andriana Stavrakaki (ICCS)

SocialWatt

Energy companies designing and implementing
schemes to alleviate energy poverty

28th of May 2020 – 1st Capacity Building Workshop



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CONNECTING OBLIGATED
PARTIES TO ADOPT INNOVATIVE
SCHEMES TOWARDS ENERGY
POVERTY ALLEVIATION

Part I

SocialWatt – In a Nutshell



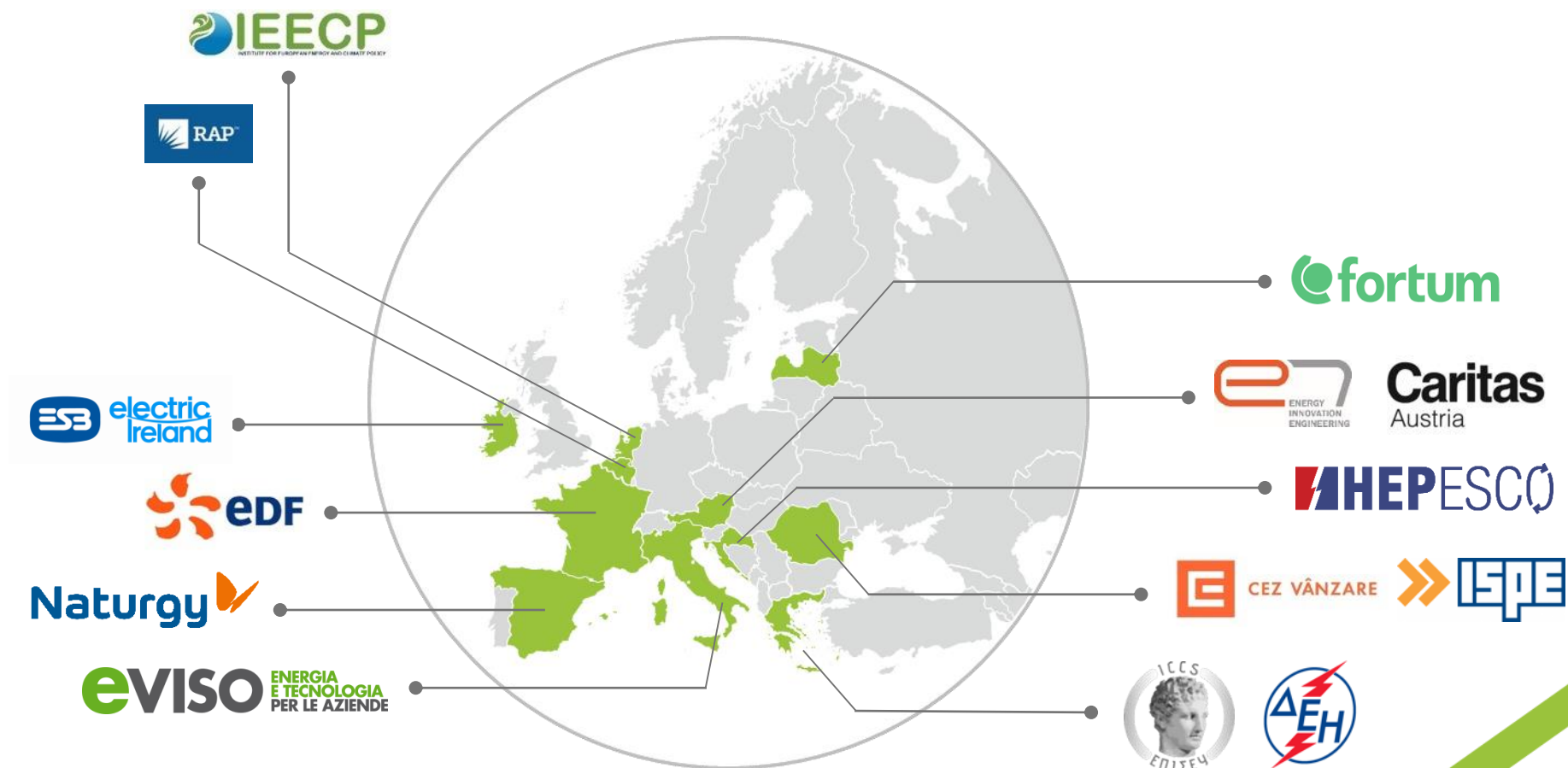
Project Summary (1/2)

Title	Connecting Obligated Parties to Adopt Innovative Schemes towards Energy Poverty Alleviation (Social Watt)
Funding	European Union's Horizon 2020 Research and Innovation Programme
Started	September 2019
Duration	36 Months
Coordinator	Institute of Communication and Computer Systems (ICCS)
Participants	14
Budget	1,998,297.50 €
Contract No	845905 — SocialWatt — H2020-LC-SC3-EE-2018



Project Summary (2/2)

Who we are?



Scope

SocialWatt will develop and provide **utilities** and **energy suppliers** with appropriate tools for effectively engaging with their customers and working together towards **alleviating energy poverty**.

SocialWatt will enable obligated parties under **Article 7** of the Energy Efficiency Directive across Europe to develop, adopt, test and spread **innovative energy poverty schemes**.



Objectives

Identify energy poor citizens

O1

- Specific Indicators and data per country
- 'SocialWatt Analyser' tool

Develop innovative scheme to alleviate energy poverty with an emphasis on RES/EE investments

O2

- Energy poverty schemes & actions identified
- 'SocialWatt Plan' tool
- Energy Poverty Action Plans

Build the capacity of utilities, energy suppliers and social services

O3

- Stakeholder Community
- Exchange knowledge & experience
- Means & methods for effectively financing and implementing energy poverty schemes

Implement the schemes selected and evaluate their effectiveness

O4

- Implementation of at least 2 schemes per participating utility, one of which needs to be innovative
- Monitoring energy poor citizens' participation
- 'SocialWatt Check' tool

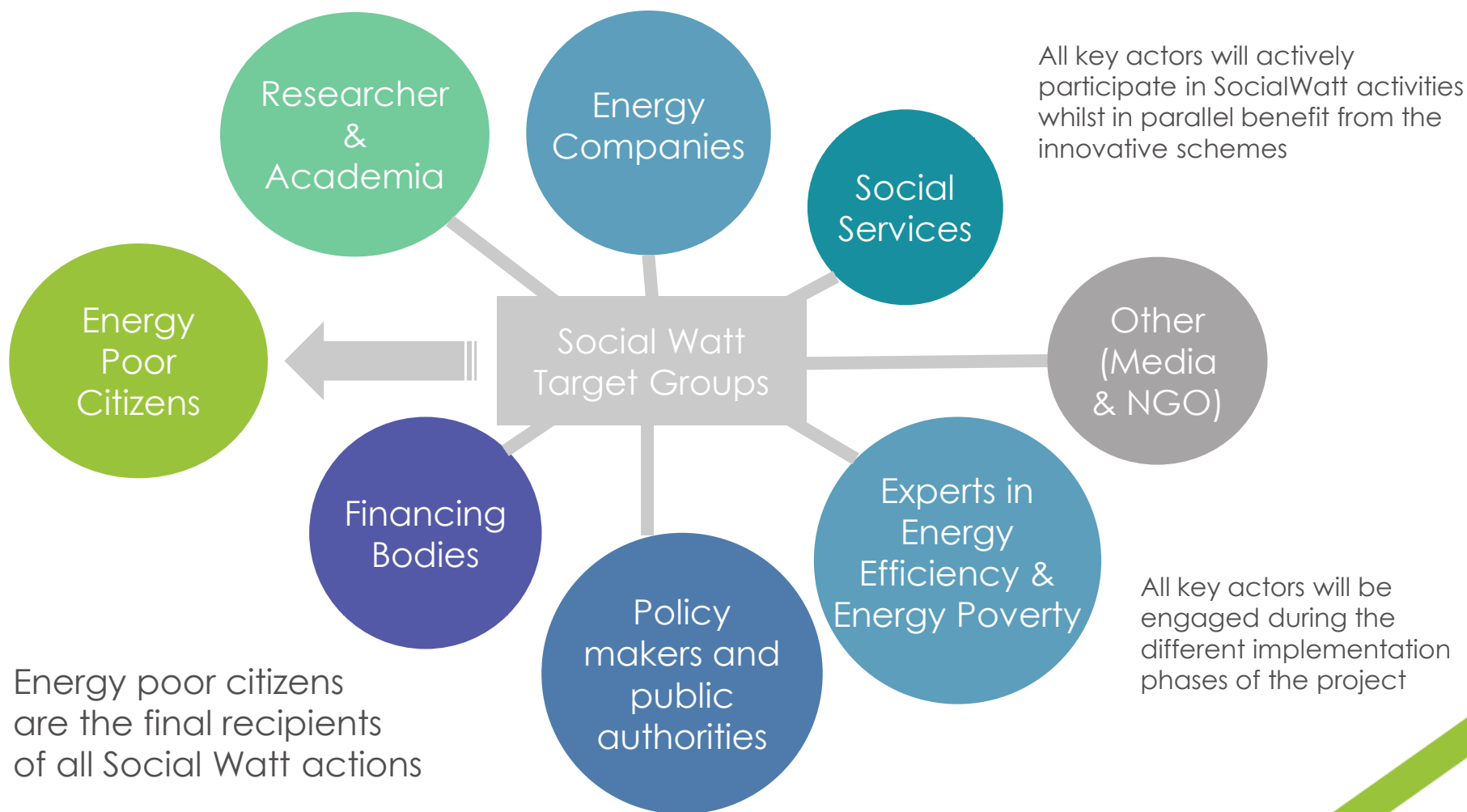
Replicate the project's outcomes and provide policy recommendations

O5

- Open call for utilities to express interest & exploit SocialWatt
- 12 energy companies across Europe selected to replicate the project results
- Policy recommendations to alleviate energy poverty



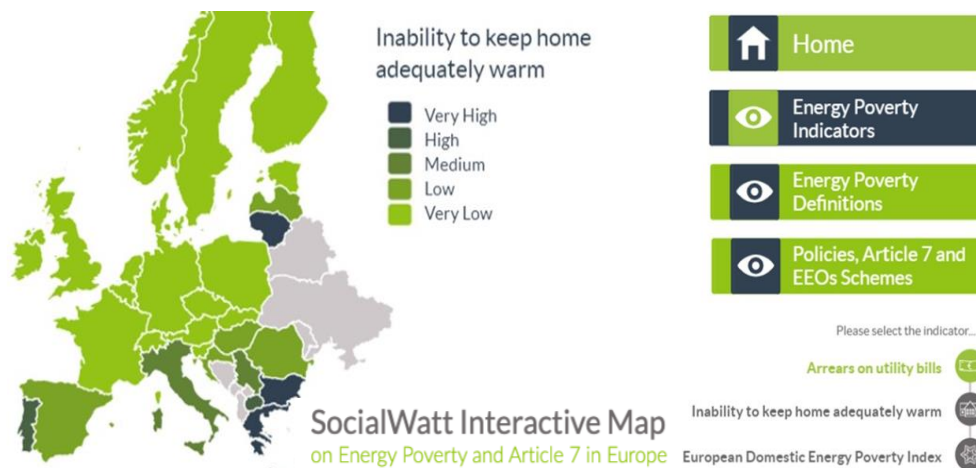
Target Groups



Status Quo on Energy Poverty

Report on the Status Quo of Energy Poverty and its Mitigation in the EU (www.socialwatt.eu)

- ▶ Energy Poverty definitions and indicators
- ▶ Causes, impacts, prevalence and levels of energy poverty in the 11 SocialWatt countries
- ▶ Good practice policies, actions and programmes to alleviate energy poverty



Innovative schemes identified

Brief on actions and schemes to consider for tackling energy poverty

- ▶ A total of 42 schemes were identified and analysed based on a number of criteria set
- ▶ Interesting conclusions, e.g.:
 - ▶ Income is frequently used as a proxy to energy poverty
 - ▶ Almost all schemes provide information and advice to households
 - ▶ Most schemes are funded by 1 entity, often a utility/public authority
 - ▶ Half of the schemes are not eligible under Article 7 of the EED
 - ▶ Innovation usually lies in the way schemes are designed, implemented and financed, e.g. the collaboration of different types of partners to carry out or finance the scheme



Challenges Identified

Early stage challenges to design and implement innovative schemes:

- ▶ How to finance support for energy poor households
- ▶ What measures are both fundable and provide a significant energy poverty alleviation impact
- ▶ How to define and target priority groups of energy poor households
- ▶ How to achieve take up and reach
- ▶ Bureaucracy

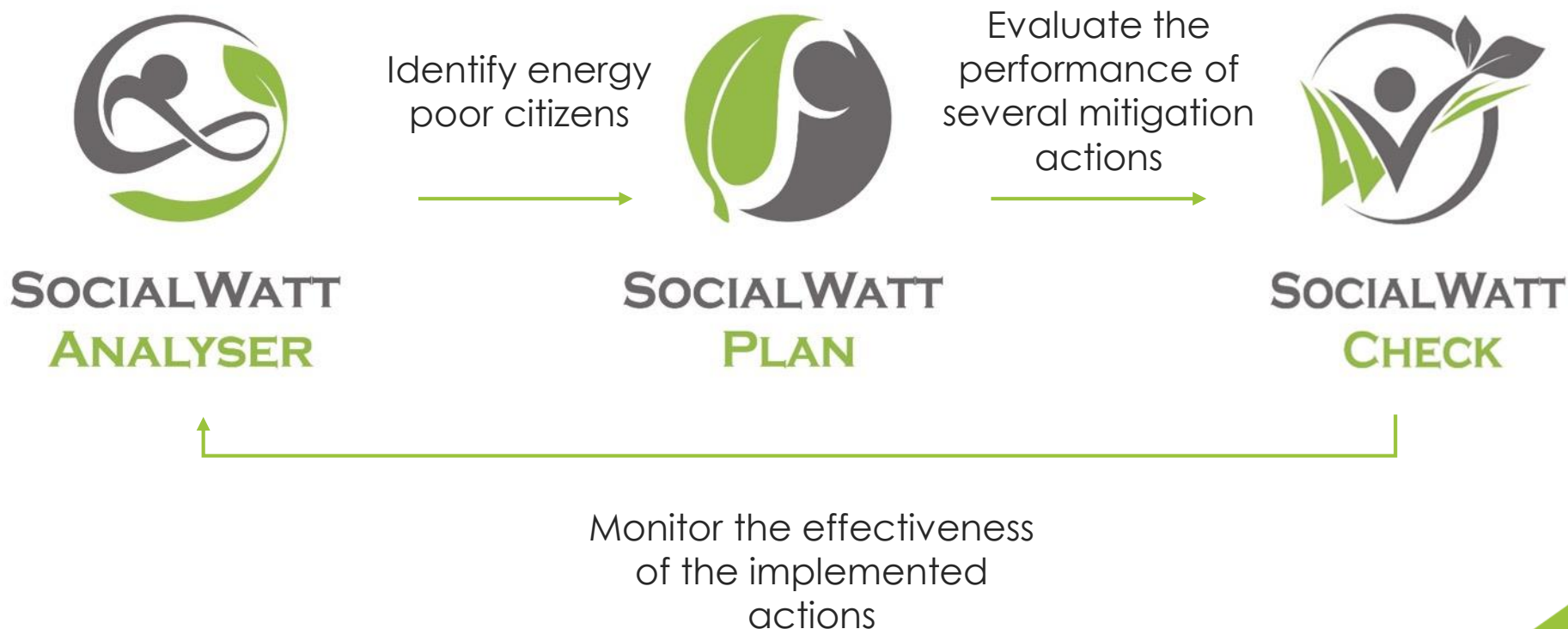


Part II

SocialWatt Decision Support Tools



Decision Support Tools



SocialWatt Analyser (1/2)

Welcome to Socialwatt Analyser

Please provide all the necessary information

Select Country :

France

Select Data Process Method :

Method 7

Select Energy Poverty Indicator:

10% Approach

10% Approach

Low Income High Cost (LIHC)

High Share of Energy Expenditure (2M)

Low Absolute Energy Expenditure (M/2)

SocialWatt Indicator

Energy Data:

Επιλογή αρχείου

Δεν επιλέχθηκε...ανένα αρχείο.

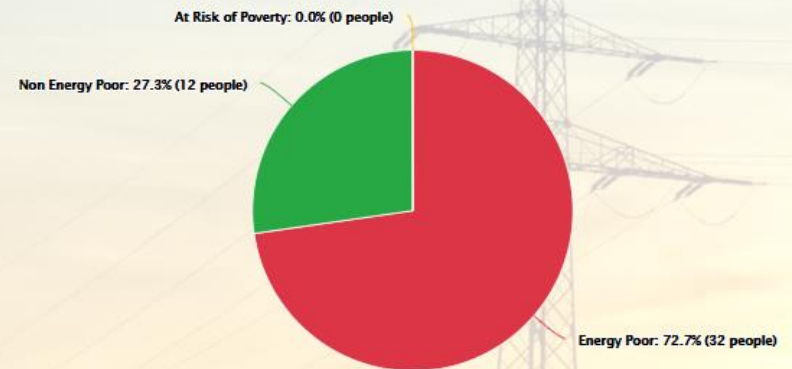
Incomes Data:

Επιλογή αρχείου

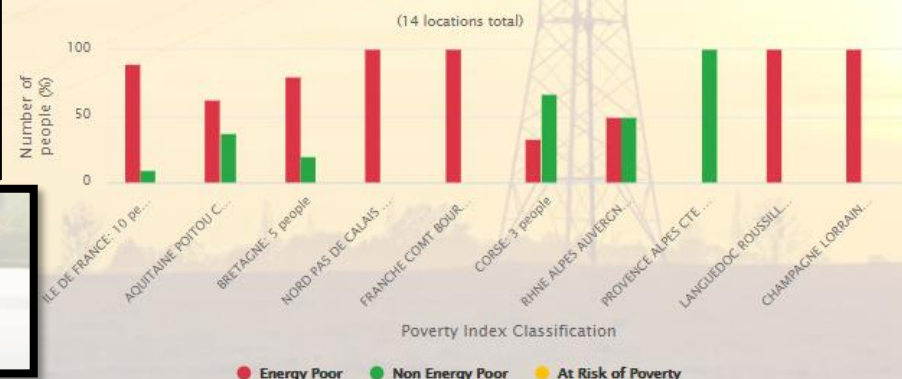
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SocialWatt Indicator Analysis:

Energy poverty allocation at national level in last 12 months. (Clients: 44)



Energy poverty allocation for the first 10 Municipalities in last 12 months based on the number of clients.



SocialWatt Analyser (2/2)

SocialWatt Energy Poverty Index:

- ▶ If the **actual energy consumption** (e.g. electricity, natural gas, etc.) of a household is lower than the theoretically required for maintaining thermal comfort (heating/cooling), the household is classified as energy poor. Otherwise, the ratio between **energy cost** and **income** (in a monthly or annual basis) is taken into consideration (10%, LHC, etc.).
- ▶ The novelty of the proposed index is **the integration of two dimensions for analysing energy poverty** (A. Income; B. Thermal comfort (energy needs)), compared to the income-based existing energy poverty definitions.

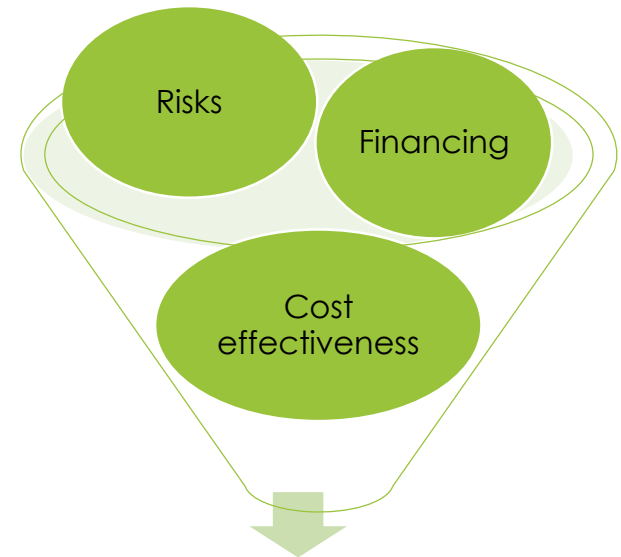
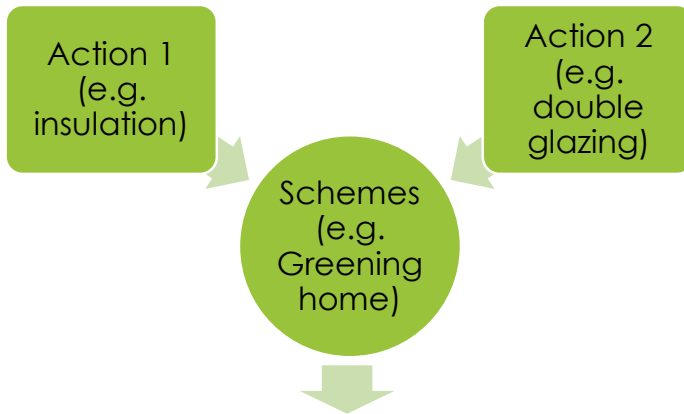


SocialWatt Plan (1/2)

- ▶ Different **energy poverty schemes** have been evaluated and incorporated in the SocialWatt Plan tool.
- ▶ The schemes comprise both low (behavioural) and high cost **actions**.
- ▶ The tool will provide utilities with **a set of optimal portfolios**, comprising different combinations of energy poverty schemes, along with a **budget allocation** for each scheme and expected number of customers to be involved.
- ▶ The optimisation is based on set **targets** and **constraints**. More specifically, the proposed portfolios will be evaluated against the objectives of minimising both investment cost and associated risks.



SocialWatt Plan (2/2)

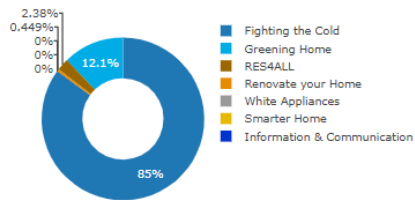


PORTFOLIO OPTIMISATION

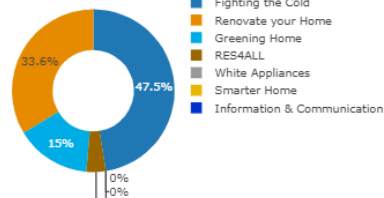
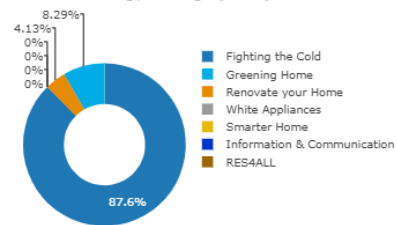
Configure your targets

Energy Saving Target Minimum (kWh)		Energy Poor Households Minimum (number)		Utility Annual Budget Maximum (million €)	
Share of Total Interventions (New Old) New buildings (%)		Old buildings (%)		Share of Total Interventions (Large Small) Large scale (%)	
Small scale (%)		Share of Energy Saving New buildings (%)		Old buildings (%)	
RES Electricity Production Minimum (kWh)		Maximum (kWh)		Run Solver	

Utility Cost (€)

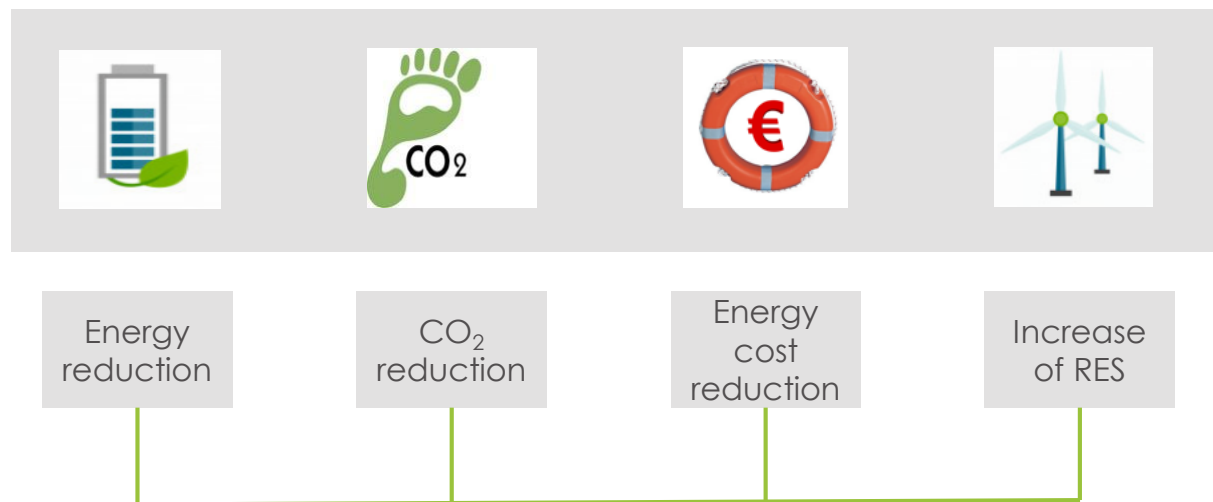


Energy Savings (kTOe)

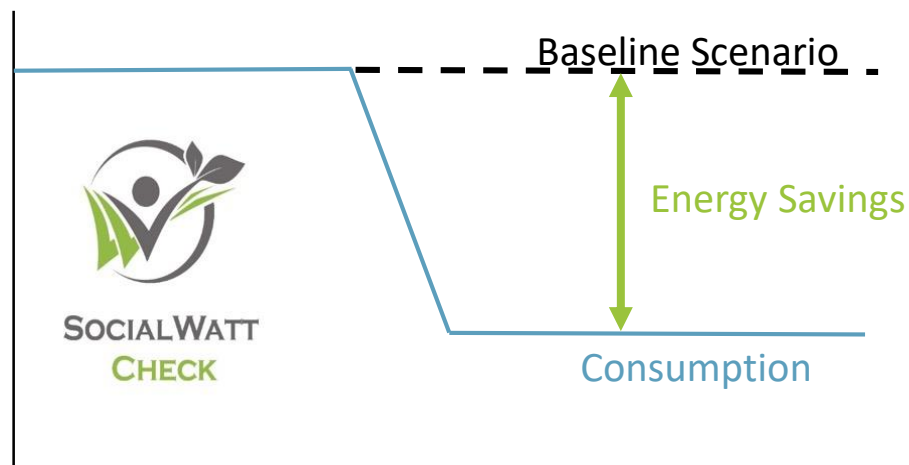


SocialWatt Check

Key monitoring indicators



The tool will enable utilities to track progress, identify in a timely manner risks/threats, exploit opportunities and meet targets



Contact

Project Coordinator:

Prof. John Psarras

Institute of Communication and
Computer Systems (ICCS)

Website:

<https://socialwatt.eu/>

Contact Email:

contact@socialwatt.eu

Follow us on Social Media:



@SocialwattH2020



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Andriana Stavarakaki

ICCS



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WWW.SOCIALWATT.EU