



Energy Behaviour Change driven by plug-and-play-and-forget ICT and Business Models focusing on complementary currency for Energy Efficiency for the Wider Population



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### **Project Presentation**

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# About BENEFFICE



Project Grant Agreement No. 768774

Budget: 2.7 M Euro

Grant: 2 M Euro

Start: 1 Nov 2017 (M1)

End: 31 Oct 2020 (M36)

7 Partners, 6 Countries



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# BENEFIT VISION



**Barriers** that restrict long-term engagement of EE behaviour:

- **Free riding:** those who benefit from consumption of goods do not take full cost and consume excessively
- **Rebound effect:** “Buy a more fuel efficient car, drive more”
- **Fear of added costs** and **loss of competitiveness**

→ **BENEFIT** to address those barriers

# The Project - Core Objectives

- **Incentivise long-term energy consumption savings**
  - **Change energy behavior**
  - **Determine optimal energy use behaviour to reduce wastage of energy**
  - **Increase the use of renewable resources**
- **Adopt a rewards approach based on an alternative monetary currency (CO2)**
- **Create business models that stimulate the supply/demand for CO2 credits**
- **Develop a novel ecosystem**



# BENEFFICE Ecosystem



## Backend

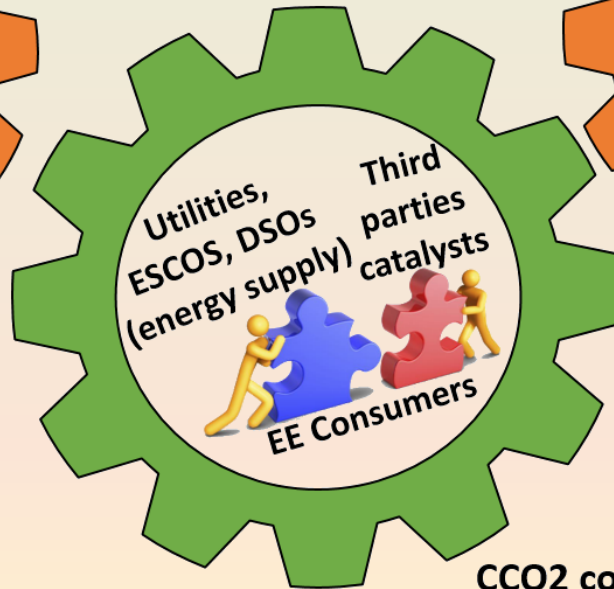
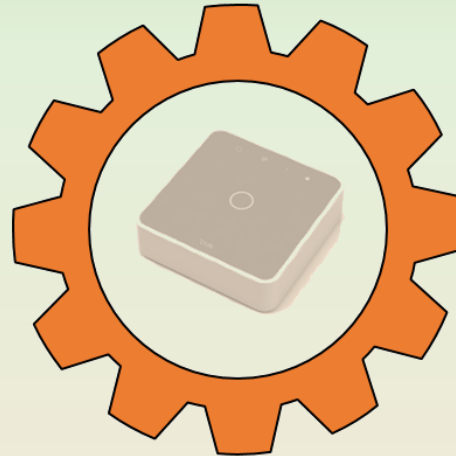
- Energy disaggregation
- Green Energy Scheduling
- Recommendation engine
- Behaviour models

## Hardware

- Smart meters
- Gateway
- "Plug-play-and-forget" devices

## Software

- Mobile Application
- Credit monitoring



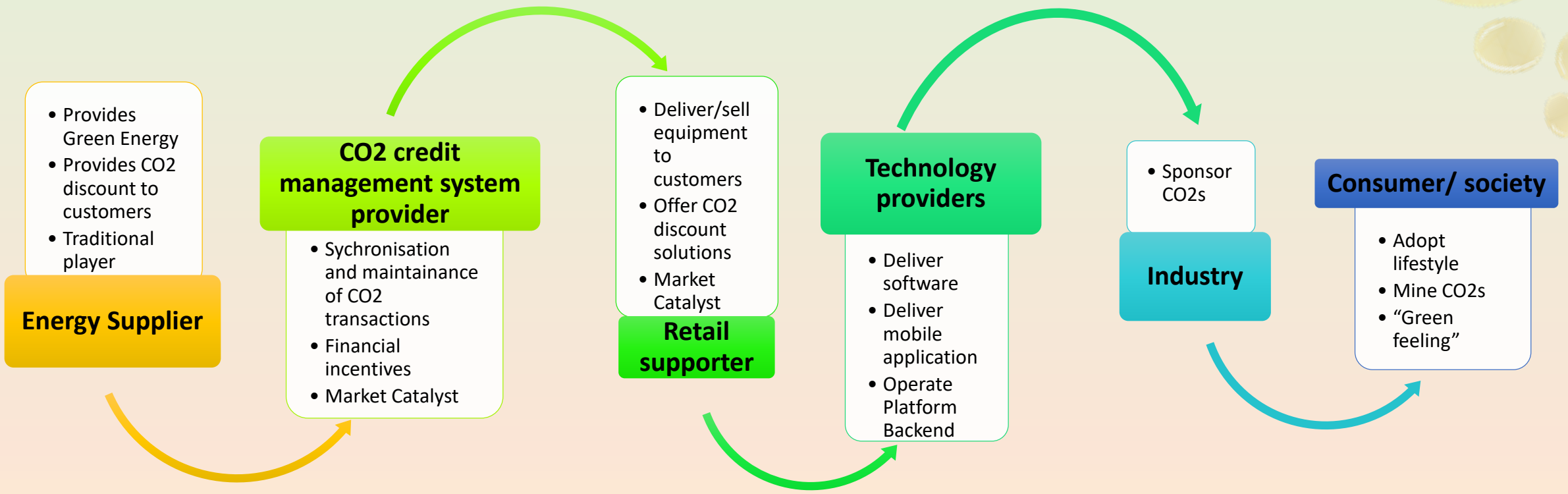
## New Business models

- Win-win proposals for new players in Energy Efficiency

## CCO2 coin

- Monetary rewards based incentives for long-term energy efficient behaviours

# New Collaborative Business Models are needed



# Use cases

Selected to cover **different consumer conditions** geographic and demographic:

- 3 different climatic areas
  - Humid oceanic in **France**
  - Mediterranean climate in **Greece**
  - Humid continental in **Austria**
- 3 ways to reach wider consumers:
  - Traditional access to **customers of Utilities** (Verbund, Austria)
  - Accessing customers of **large scale retailer** (KAFKAS, Greece)
  - Access to **worldwide customers** of CO2 coin operator (Compte CO2, France)
- Urban and Rural
- New / old buildings



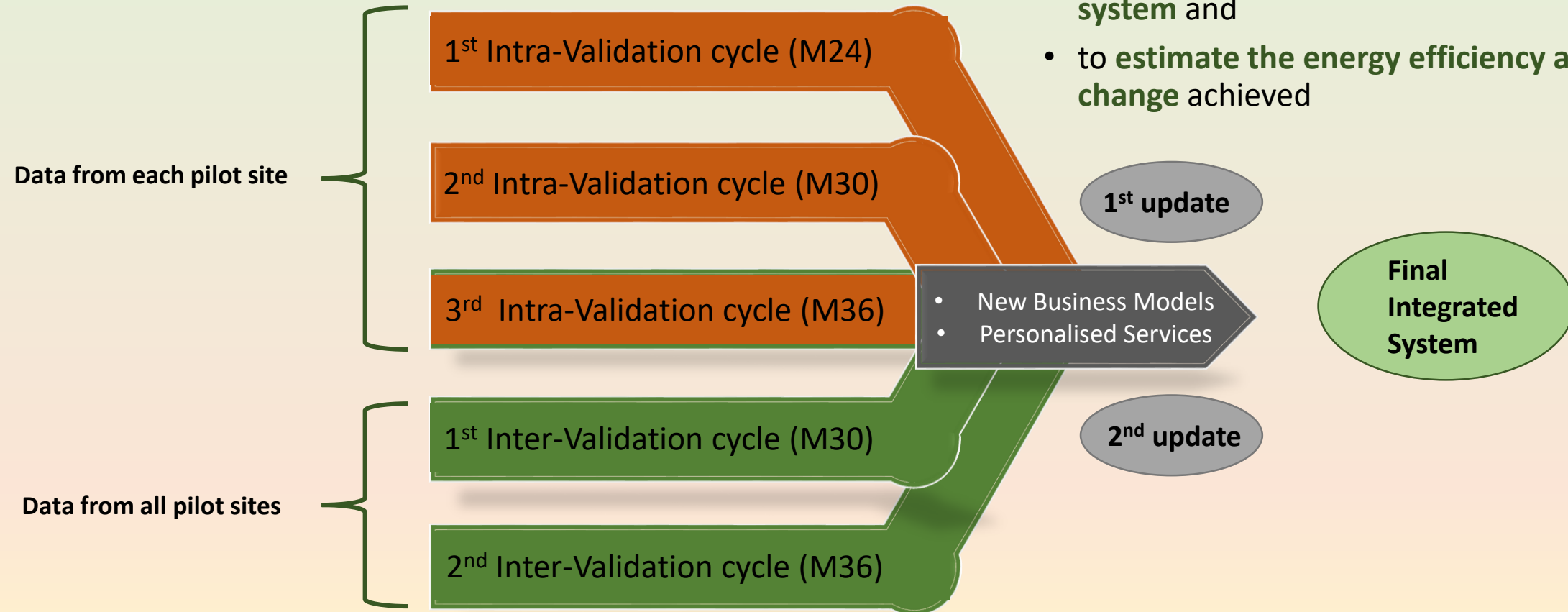
**At least 35  
consumers per  
pilot site**

# Experimentation Framework



Main purpose is:

- to **collect real-life data**
- to **evolve the users' behavioural models and the system** and
- to **estimate the energy efficiency and behaviour change** achieved





# The Partners



Verbund

vaasa **ETT**

**KAFKAS** **Φ** EURO-FUNDING



# Join us!



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**Thank you for your attention!**