

The world is how we shape it



sopra  steria

Sopra Steria

Energy Platform

Q1 2024



Summary

01 Energy Platform

02 Use Case: **Energy Communities**

Appendix



Disclaimer

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01

Energy Platform

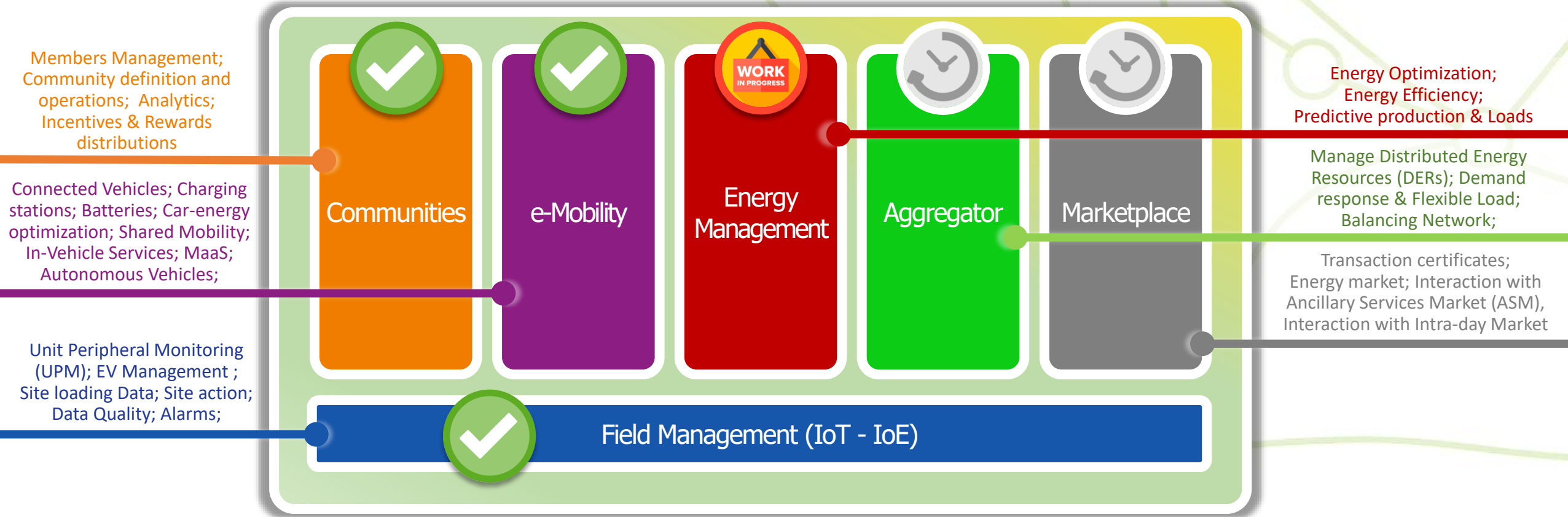


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Sopra Steria is working with a strategic vision to create an innovative solutions to support the new challenges of the energy transition.

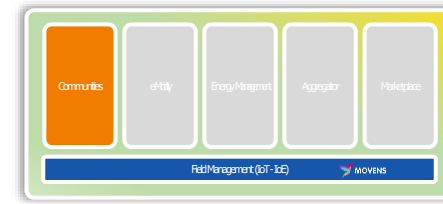
Sopra Steria is developing an energy platform to provide an effective solution to manage new challenges and opportunities related to the energy transition, providing the necessary tools that allow energy monitoring, sharing, optimizing flows orchestration through an energy management frameworks, maximizing potential benefits, driving towards sustainability.

ENERGY PLATFORM



02

Use Case: "ENERGY COMMUNITIES"



Community Development

Administration

Analysis

Device Management

eMobility

Support & Consulting

Our solution is designed in specialized modules integrated together.

They can be activated and customized according to specific business scenarios with flexibility and scalability.



Communities Development

DESIGN

- Solar panel customizing
- Battery capacity sizing
- Component assembling

SIMULATION

- Production
- Consumption
- Economic results
- Investment Evaluation

OPTIMIZATION

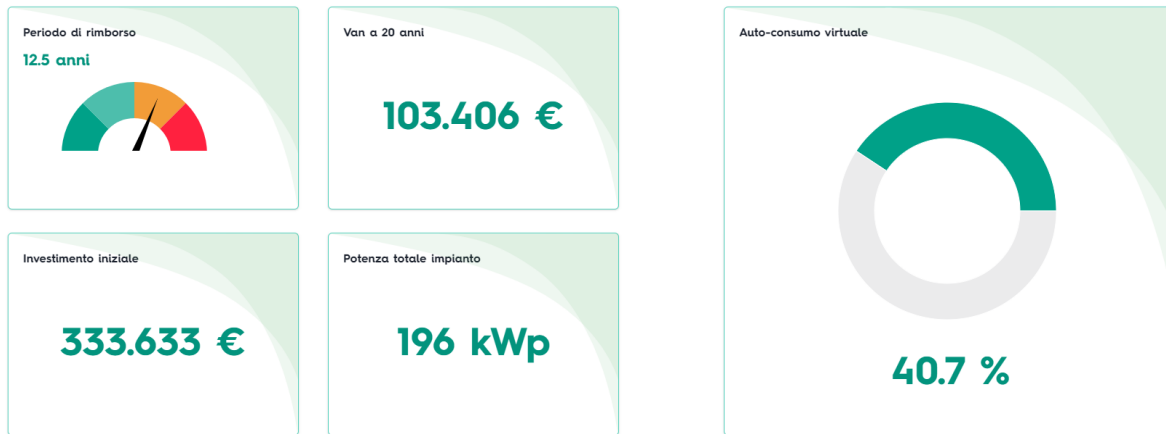
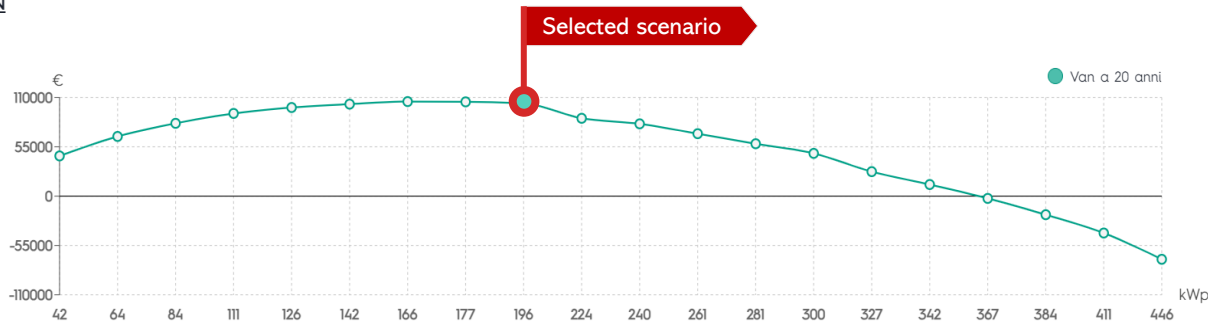
- Iterative design
- Investment proposal



OPTIMIZATION CHALLENGES



VAN



Auto-consumo virtuale ed energia auto-consumata



The optimization process is starting from the community configuration design during the investment evaluation phase.

The platform simulator support to identify optimum scenarios detecting the best VAN in the time interval, helping the asset sizing process.



Communities Administration

COMMUNITY OPERATION

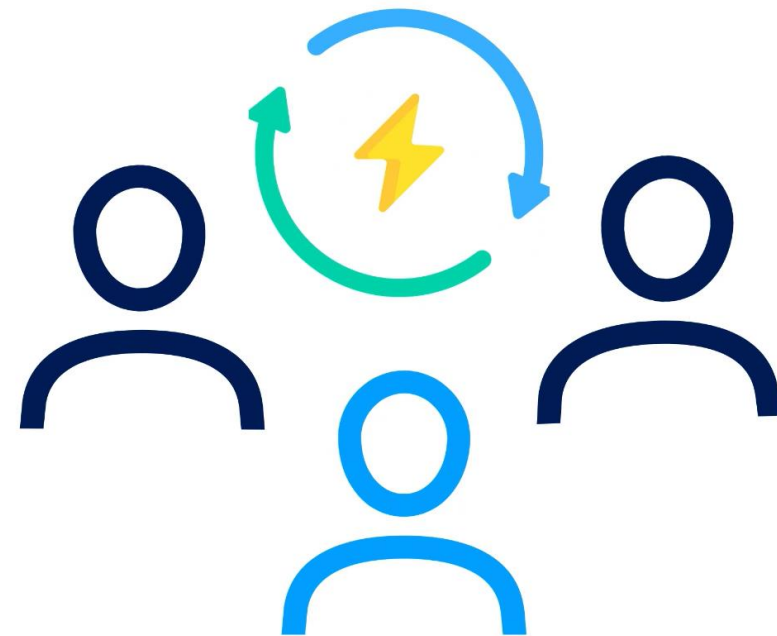
- Members management
- Community configuration
- Analysis results
- Alerts & Alarms

INCENTIVE CALCULATION

- Regulatory customizing rules
- Community Incentive determination
- Distribution's rules to community members

REWARD MANAGEMENT

- Members accounting balance
- Members recognition





CONNECTION

- Solar panel
- Batteries
- Metering
- Smart Devices
- Electric Vehicles (EV)
- EV Charging stations

MEASUREMENT

- Production
- Consumption
- Data quality

REMOTE CONTROL

- Inverter
- Smart Devices (DR)
- Electric Vehicles (EV)

Devices Management





PERFORMANCE EVALUATION

- Data Visualization
- Results calculation

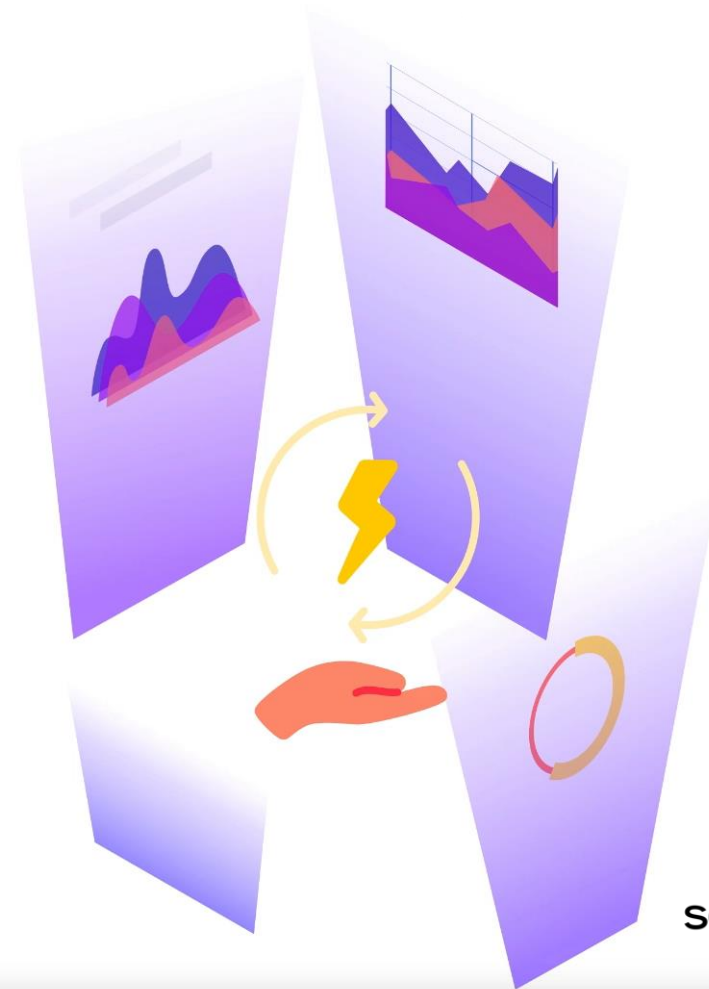
PREDICTIVE

- Solar production
- Battery optimization
- Consumption

OPTIMIZATION

- Performance optimization
- Battery management
- Reward maximization

Analysis



APPENDIX



Platform Overview: "ENERGY COMMUNITIES"

ENERGY COMMUNITIES



energy4green



Dashboard

Mappa comunità

Anagrafica comunità

Ciao

Benvenuti su energy4green

Configuratore

Azioni rapide

Crea nuova comunità



14

Comunità energetiche

Mappa > Anagrafica >



4

Comunità di Autoconsumo

Mappa > Anagrafica >



3

Da completare

Mappa > Anagrafica >

Profilo

Configuratore

Lingua

Italiano

Logout

Solterra Steria



Dashboard

Mappa comunità

Anagrafica comunità

Logout

Roma Est
3 4 2 Non attivo

Dettaglio

Simulazioni

Attiva COOPERATIVA SOCIALE ABC

Dati Generali [Modifica](#)

Tipologia membro
Prosumer

Zona mercato di appartenenza

Codice cabina primaria di appartenenza

Annulla

Conferma

Attivo dal
27/06/2023

Cessato dal
-

IBAN
IT 12 A 12345 12345 123456789012

Aggiungi Dati Catastali +

Aggiungi Dati di Consumo +

Aggiungi Impianto di produzione +

Aggiungi Sistema di accumulo +

Dati Catastali Fabbricati

[Rimuovi](#)

Indirizzo *

Via Mario Bianchini, 51

Comune *

Roma

Foglio *

1126

Particella *

2646

Sub *

58

Zona censuaria *

6

Cat. *

A/2

CL *

7



- Dashboard
- Mappa comunità
- Anagrafica comunità
- Logout

Roma Est
3 4 2 Non attivo

Dettaglio Simulazioni

Attiva COOPERATIVA SOCIALE ABC

Dati Generali [Modifica](#) [Duplica](#)

Tipologia membro Prosumer	Zona mercato di appartenenza	Codice cabina primaria di appartenenza
Attivo dal 27/06/2023	Cessato dal -	IBAN IT 12 A 12345 12345 123456789012

- ✓ Dati Catastali Fabbricati [Rimuovi](#) +
- ✓ Dati di Consumo [Rimuovi](#) +
- ✓ Impianti di produzione [Rimuovi](#) +
- ✓ Sistemi di accumulo [Rimuovi](#) +

ENERGY COMMUNITIES



energy4green

energy4green interface showing a map of Europe with energy community locations marked by blue and purple pins. The left sidebar contains navigation options: Dashboard, Mappa comunità (selected), and Anagrafica comunità. A search bar is labeled "Cerca in comunità". Below it, a list of 21 communities is shown, with the following details:

- IREN - VERCELLI_02**
Comunità energetica
Vercelli (Piemonte), ITALIA
10 ⚡ 2 🏠 0
- IREN - FERRARA_01**
Comunità energetica
Ferrara (Emilia-Romagna), ITALIA
6 ⚡ 2 🏠 0
- IREN - VARESE_01**
Comunità energetica
Varese (Lombardia), ITALIA
12 ⚡ 2 🏠 0
- IREN - PORDENONE_01**
Comunità energetica
Pordenone (Friuli-Venezia Giulia), ITALIA
9 ⚡ 2 🏠 0
- IREN - VICENZA_02**
Autoconsumo
Vicenza (Veneto), ITALIA
8 ⚡ 2 🏠 0

The map shows various countries including Francia, Svizzera, Austria, Slovenia, Croazia, Bosnia ed Erzegovina, Serbia, Montenegro, Kosovo, Albania, Grecia, Bulgaria, Romania, and others. A "Crea nuova comunità" button is visible in the bottom right corner.

ENERGY COMMUNITIES



energy4green

Cerca in comunità

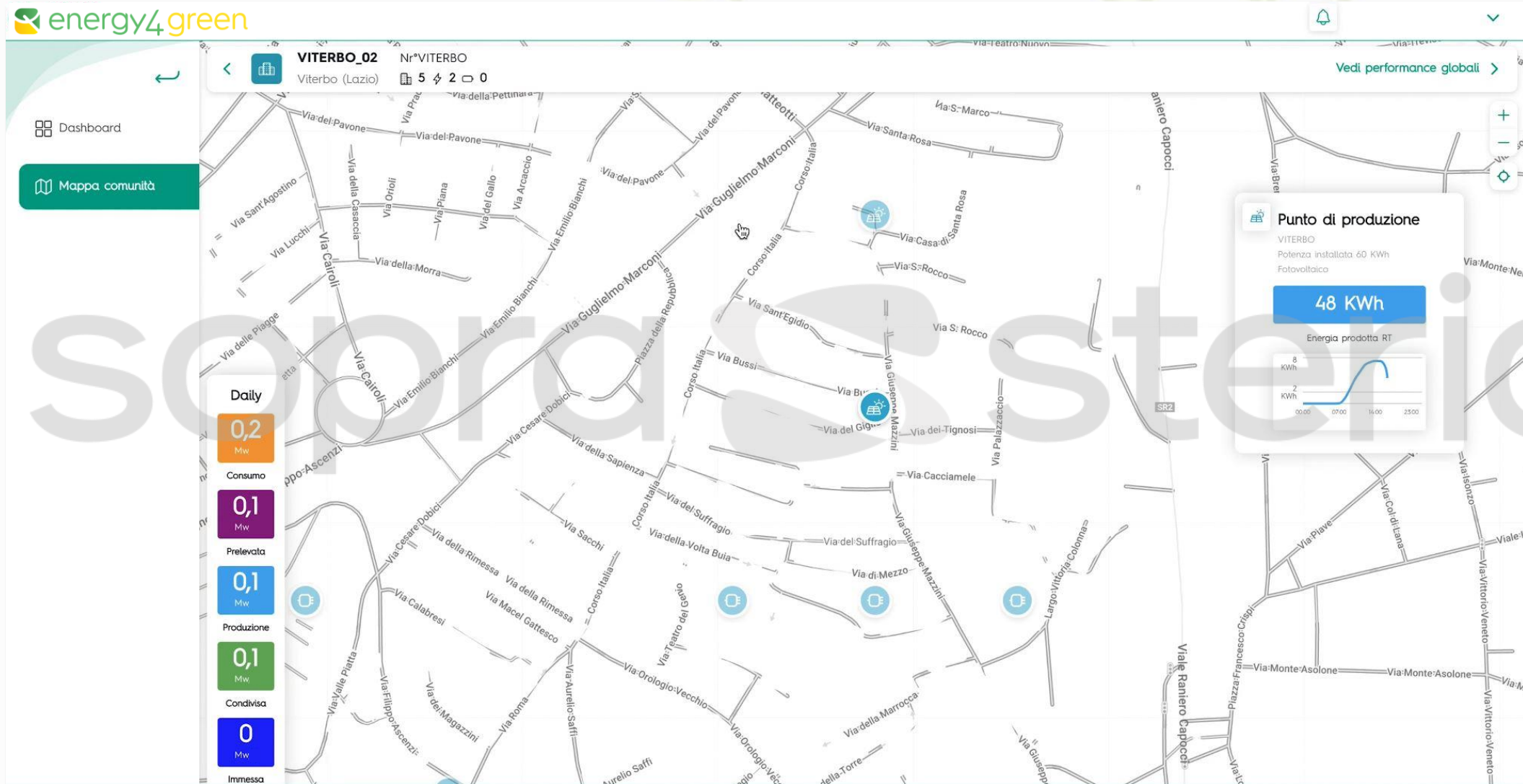
16 Comunità/AUC

Dashboard

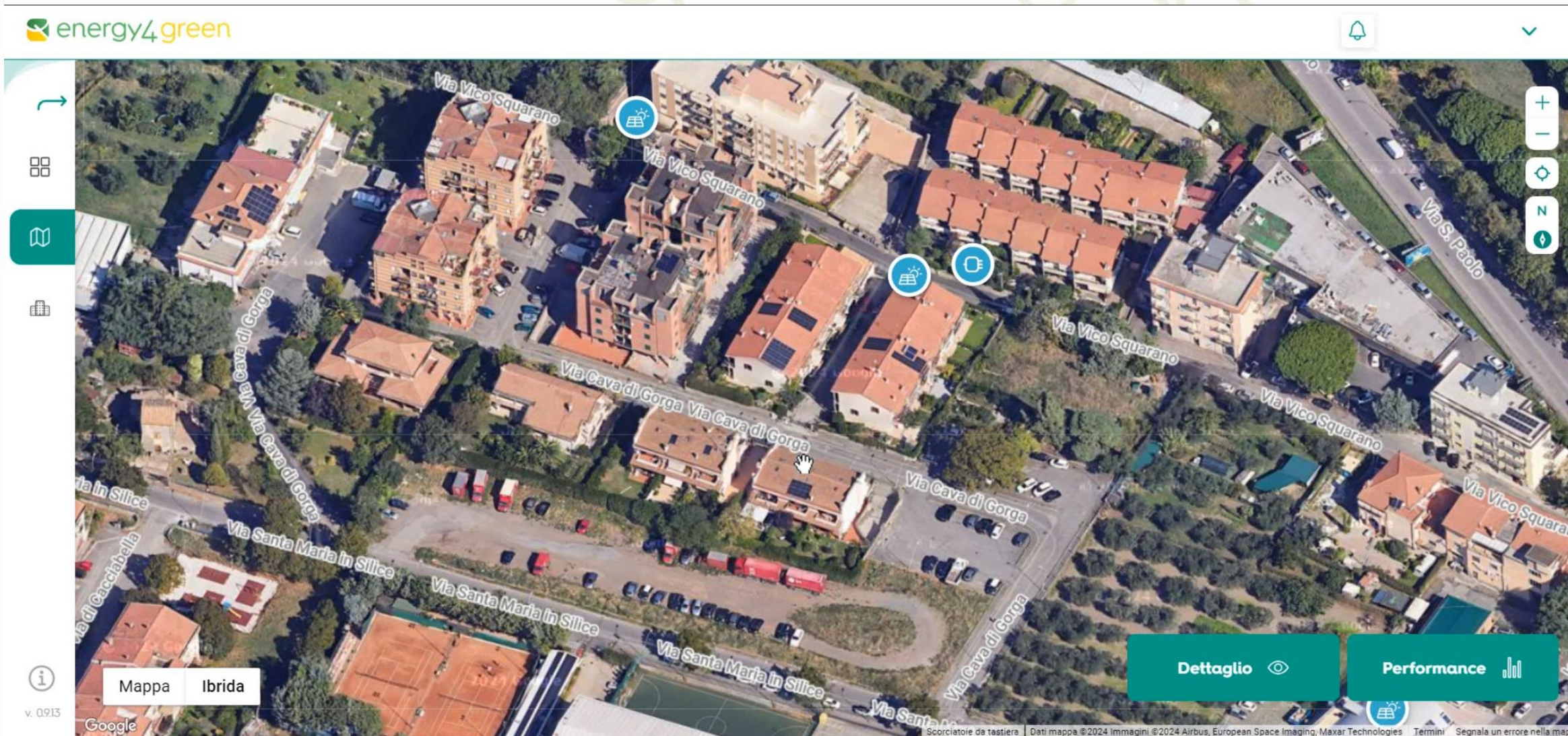
Mappa comunità

- IREN - VERCELLI_02**
Comunità energetica
Vercelli (Piemonte), ITALIA
10 ⚡ 2 🏠 0
- IREN - FERRARA_01**
Comunità energetica
Ferrara (Emilia-Romagna), ITALIA
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Autoconsumo
Vicenza (Veneto), ITALIA
8 ⚡ 2 🏠 0

ENERGY COMMUNITIES



ENERGY COMMUNITIES



ENERGY COMMUNITIES



ENERGY COMMUNITIES



energy4green



Dashboard

Mappa comunità

VITERBO_02
Viterbo (Lazio) 5 2 0

Analytics

Consuntivo dati

Giorno 8 Settembre 2022

Energia prodotta: 0,08 MWh

Energia immessa: 0,02 MWh

Energia consumata: 0,17 MWh

Energia condivisa: 0,06 MWh



ENERGY COMMUNITIES



energy4green



- Dashboard
- Mappa comunità

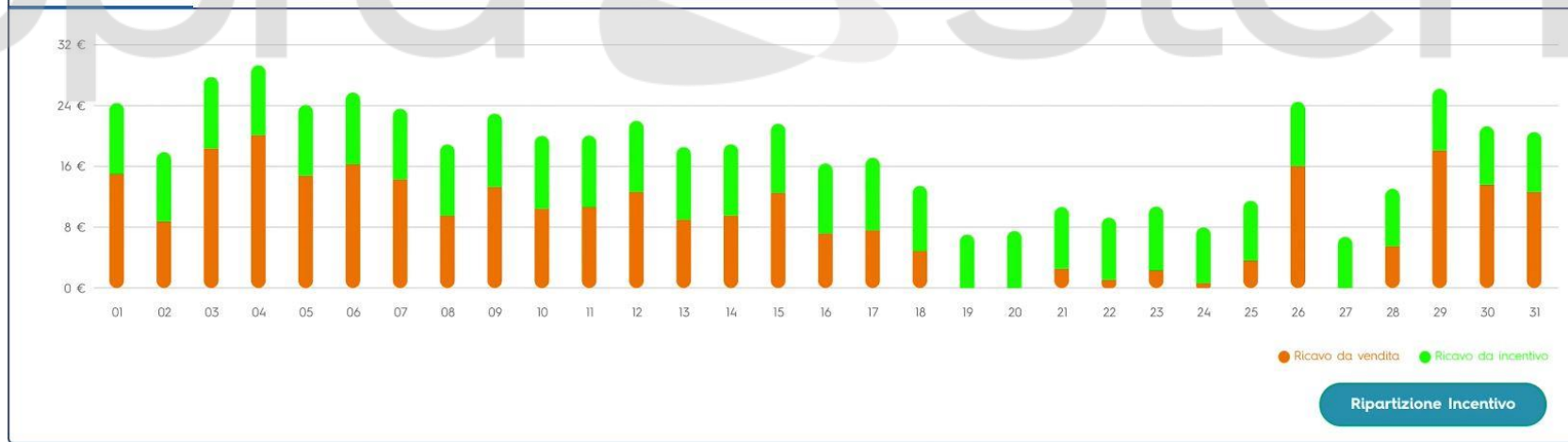
VITERBO_02
Viterbo (Lazio) N°VITERBO 5 2 0
Tipo contratto: RID prezzi zonali
Metodo ripartizione incentivi: Per energia condivisa

Analytics

Consuntivo dati Agosto 2022

Energia prodotta: 2,86 MWh Energia immessa: 0,59 MWh Energia consumata: 5,72 MWh Energia condivisa: 2,27 MWh Ricavo da incentivo: 268,75 € Ricavo da vendita: 291,35 €

Istogramma incentivo Energia condivisa Consumi individuali Impianti Vendita/Acquistata



ENERGY COMMUNITIES



energy4green



Report

Impostazioni

Scarica PDF ↓

Incentivo stimato Incentivo effettivo GSE
146,43€ [Inserisci valore](#)

Gennaio 2024 ▼

Denominazione	Stato Membro	Tipo Membro	Millesimi(%)	Ripartizione Incentivo Stimato(€)	Ripartizione Incentivo GSE
Alessandro Rossi	Attivo	Prosumer	38.46	5.63	
Alice Esposito	Attivo	Prosumer	38.46	5.63	
Alice Salvatore	Attivo	Prosumer	38.46	5.63	
Andrea Lombardi	Attivo	Prosumer	38.46	5.63	
Andrea Parisi	Attivo	Prosumer	38.46	5.63	
Anna Antonelli	Attivo	Prosumer	38.46	5.63	
Aurora Ferrari	Attivo	Prosumer	38.46	5.63	
Beatrice Bianchi	Attivo	Prosumer	38.46	5.63	
Chiara Esposito	Attivo	Prosumer	38.46	5.63	



v. 0916

ENERGY COMMUNITIES



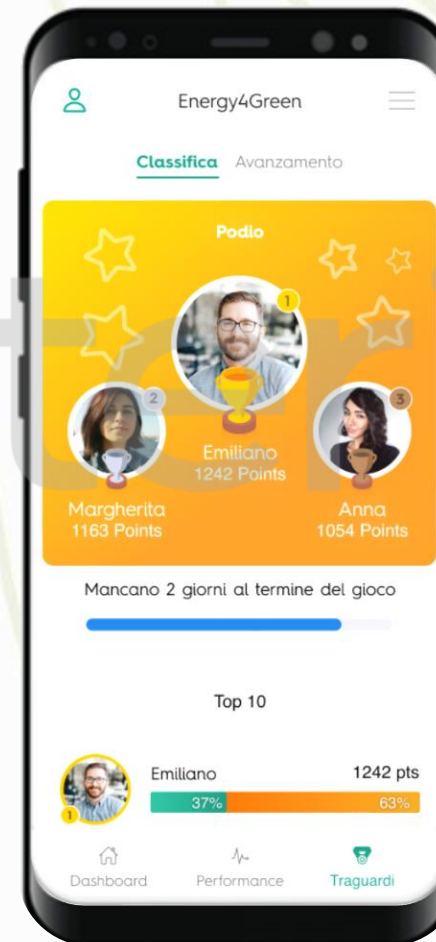
Suggerimenti



Performance



Gamification



Thank You!



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