WiseEVP

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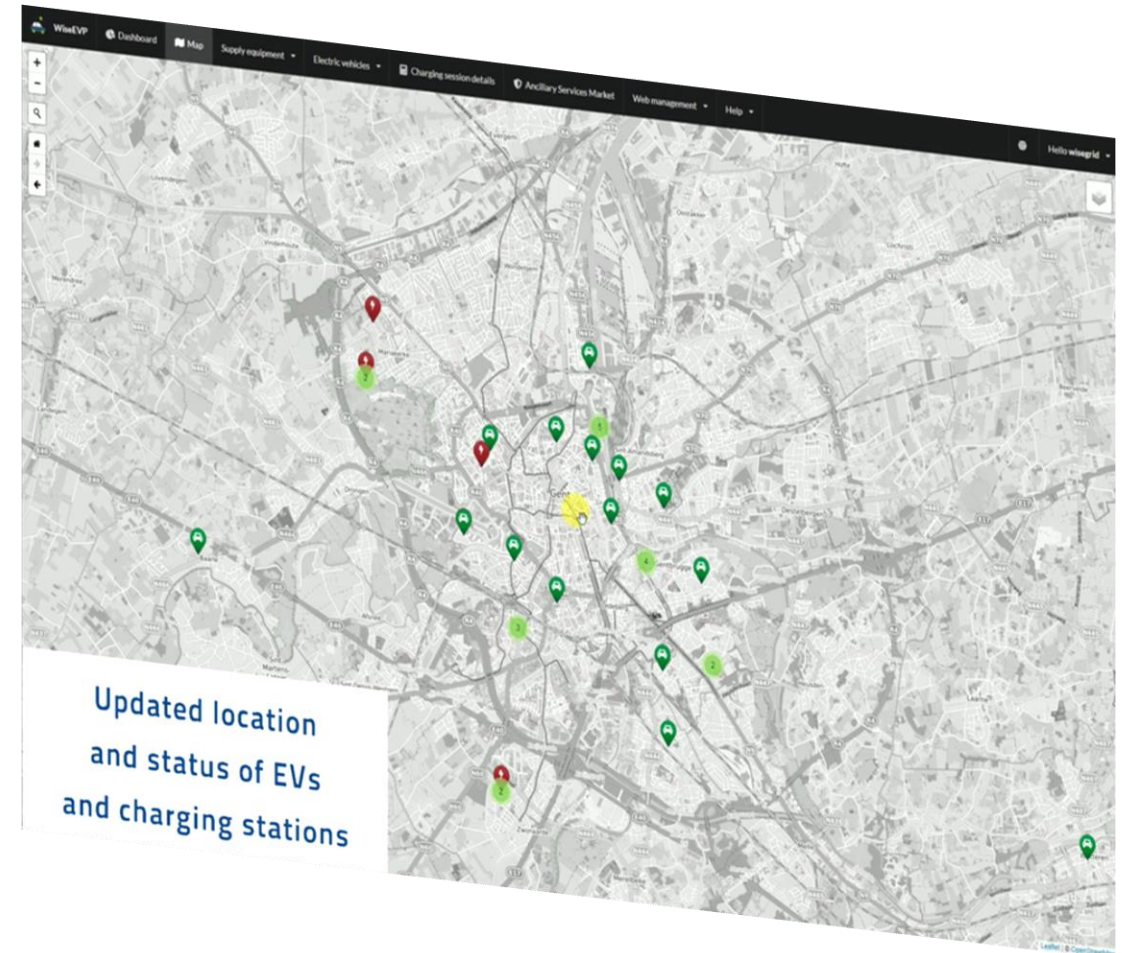
Introduction

- **Target users**: Mobility Services Providers and Charging point Operators
- **Objective**: optimize the activities related with smart charging and discharging of the EVs
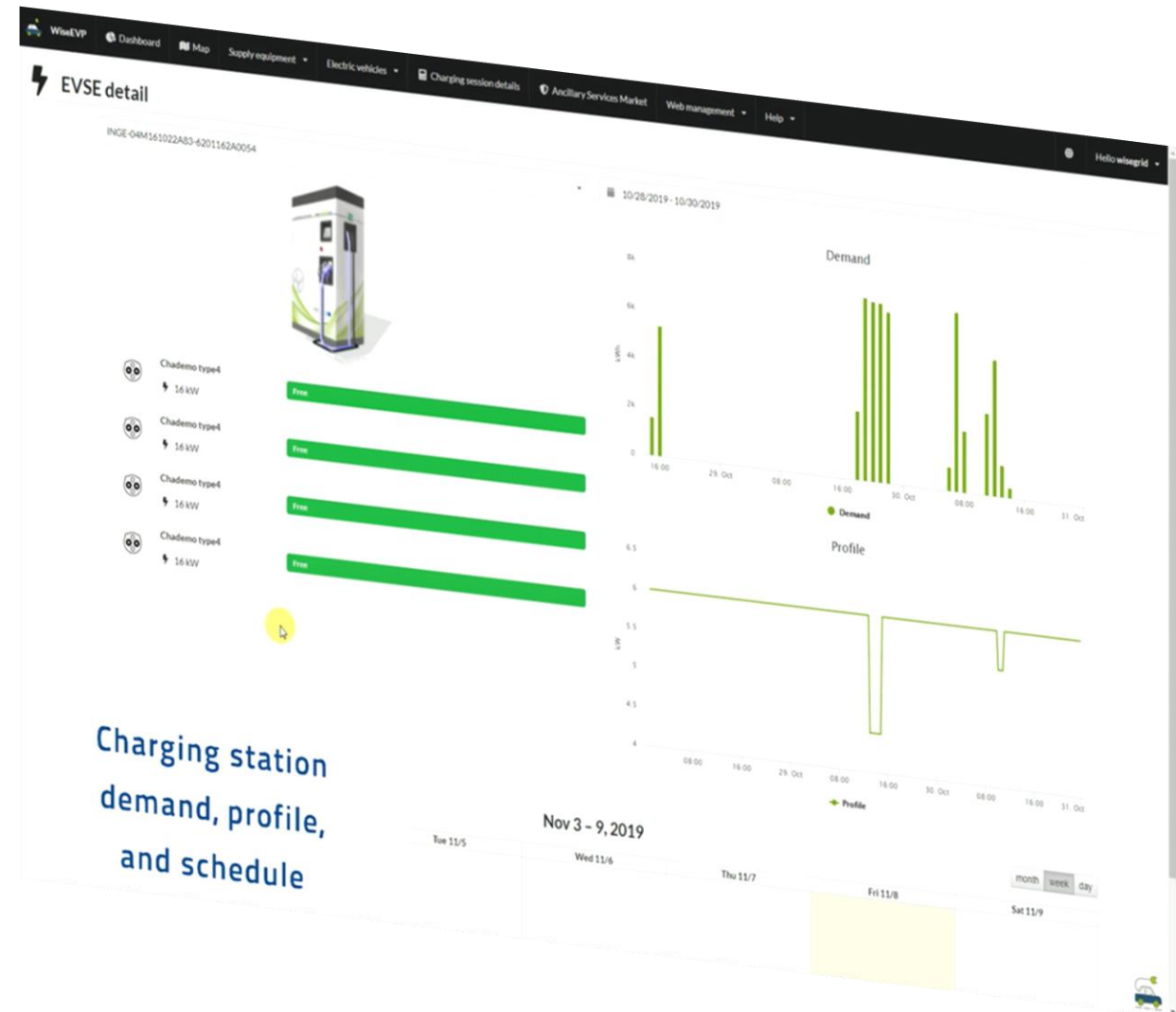
Challenges

- Bridge gap between electric mobility and electricity grid operation.

- Optimize highly demanding power flows from charging infrastructure.

- Increase observability and management of electric vehicles fleet

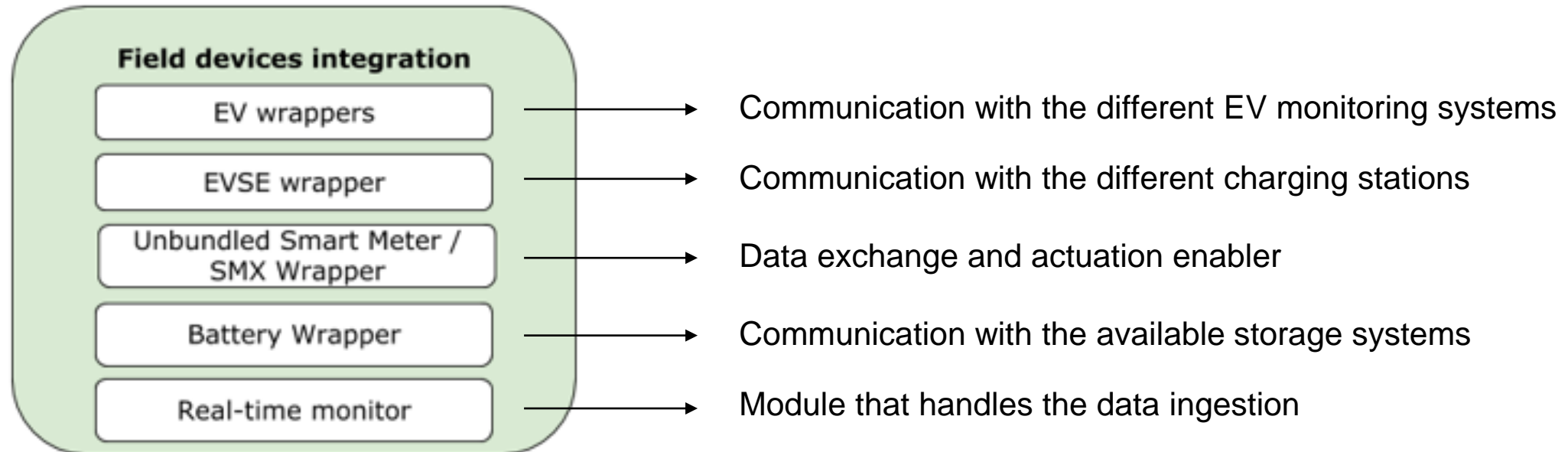Updated location and status of EVs and charging stations

Main Features

- Manage and control the whole EV fleet and EVSE portfolio

- Reduce the EV charging energy bill

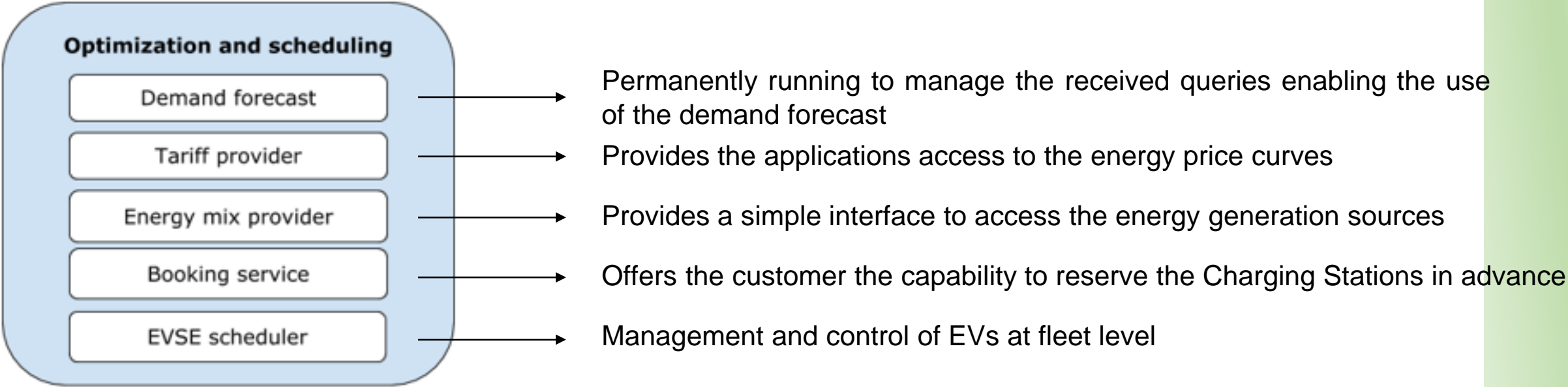- Follow high shares of RES production

- Support DSO operations

Charging station demand, profile, and schedule

Field devices integration

Field devices integration

- EV wrappers → Communication with the different EV monitoring systems

- EVSE wrapper → Communication with the different charging stations

- Unbundled Smart Meter / SMX Wrapper → Data exchange and actuation enabler

- Battery Wrapper → Communication with the available storage systems

- Real-time monitor → Module that handles the data ingestion

Optimization and Scheduling

Optimization and scheduling

Demand forecast	→ Permanently running to manage the received queries enabling the use of the demand forecast
Tariff provider	→ Provides the applications access to the energy price curves
Energy mix provider	→ Provides a simple interface to access the energy generation sources
Booking service	→ Offers the customer the capability to reserve the Charging Stations in advance
EVSE scheduler	→ Management and control of EVs at fleet level

Ancillary services

Ancillary services

- Flexibility forecast
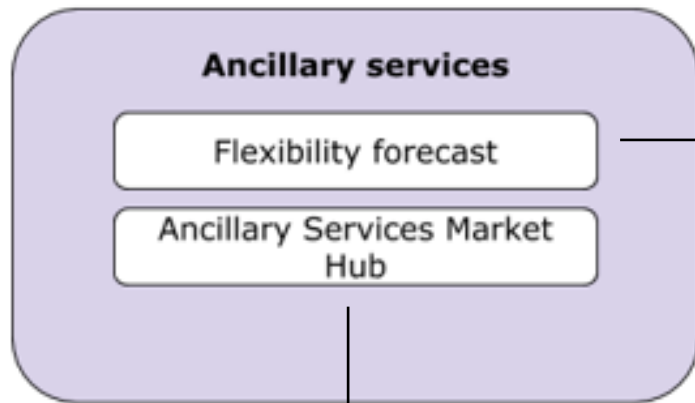- Ancillary Services Market Hub
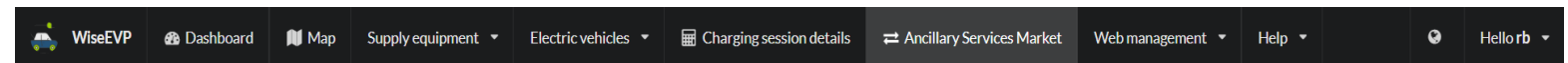
Module interacting with DSO in the Ancillary Services Market

Aggregated flexibility offers according to EV energy availability

- Minimize the cost (economic or environmental) for users
- Perform the regulation of the aggregated power, reacting to grid and RES integration support requests of each regulation area

| WiseEVP | Dashboard | Map | Supply equipment ▾ | Electric vehicles ▾ | Charging session details | Ancillary Services Market | Web management ▾ | Help ▾ | | Hello rb ▾ |

⇄ Demand response campaign details

Date	Required flexibility	Duration
20/07/2018 16:45	50 kW	02h 00min

History

Timestamp	Status	Sender	Recipient	Flexibility	Price
20/07/2018 12:58	Request posted	DSO Operator			
20/07/2018 12:58	Offer sent	Fleet Manager	DSO Operator	50 kW	120 €
20/07/2018 12:59	Order posted	DSO Operator	Fleet Manager	50 kW	120 €

Pilot sites

- **Crevillent**

- **Flanders**

- **Terni**
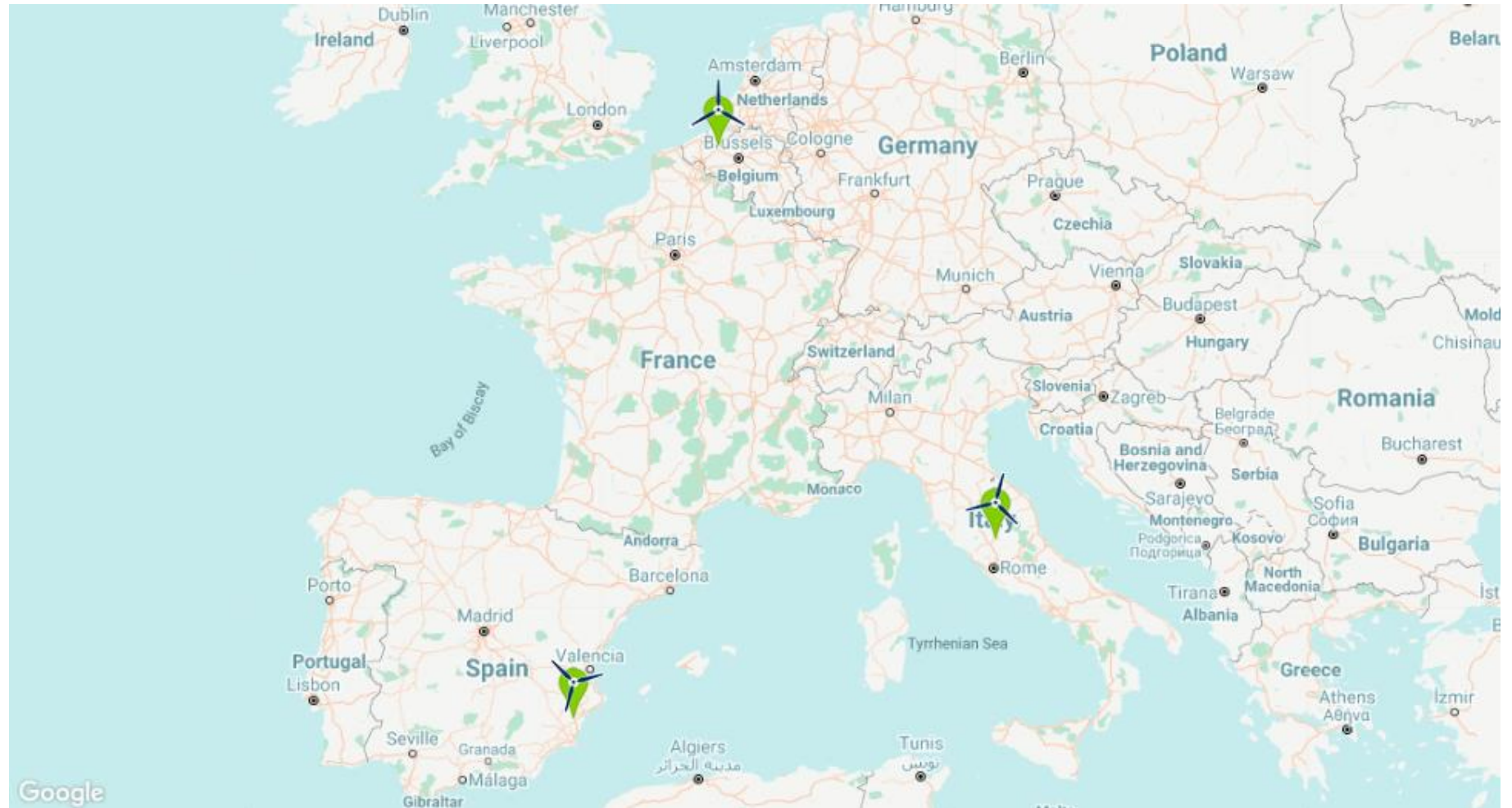
Demo

Thank you!

Esteban Pastor Calatayud