



# THE INNOVATION GAME CHALLENGES

## CHALLENGE 1

### Fast charging station with photovoltaic system

Audi Brussels is a maze. Numerous transportation devices daily drive uncountable kilometers on the more than 500.000 m<sup>2</sup> plant. Besides the internal supply chain vehicles that continuously provide the production, there are the employees and management who make their way to and from work every day by car. What if all these vehicles could run on solar power? What if Audi Brussels would offer fast charging stations with according PV-systems?

Can your team come up with an interesting and innovative concept solution to this challenge? Accept the challenge en show us how your solution will help Audi Brussels and other companies to push e-mobility to the next level.

## CHALLENGE 2

### Intelligent charging

By 2030, many companies will see their parking lot filled with electric company vehicles, connected to charging points for multiple hours. This will create an interesting situation: Cars arrive & leave at different moments throughout the day, users have different expectations regarding state-of-charge, the parking lot has cheap solar production, the charging infrastructure has a certain maximum capacity. On top of that, there is value to be found by offering flexibility in multiple Elia grid balancing services.

We challenge you to design the best charging strategy, taking into account all boundary conditions, bringing maximum value and offering a seamless experience for the EV drivers & the company.

## CHALLENGE 3

### Use e-tron batteries for temporary energy storage

Imagine the advantages if Audi Brussels would be able to use 100% of the available renewable energy. On our site, thousands of Audi e-trons are waiting to be shipped to a happy customer. They are charged at 35%, so 65% of the battery capacity is still empty. Audi Brussels is always searching for ways to optimize the energy consumption. At the same time, Audi brussels has many different sustainable sources on site. What if we could use these batteries to maximize the use of local renewable energy and help in balancing the electricity grid?

Can your team turn this opportunity into reality and give us an overview about how the system could look like and how we should use it?