

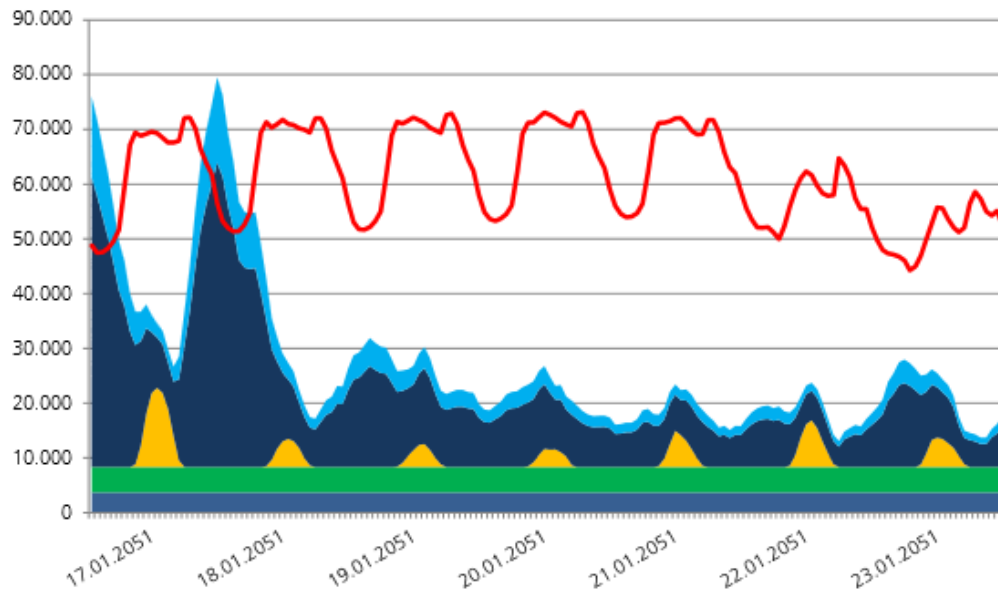


## An H2020 small scale storage project

**Servan LACIRE**  
**Innovation & Technology Director**  
**BOUYGUES ENERGIES &**  
**SERVICES**

# Storage is a Need

Decentralised small and medium-size storage solutions are indispensable for enabling the future energy system with a high share of intermittent Renewable energy sources.

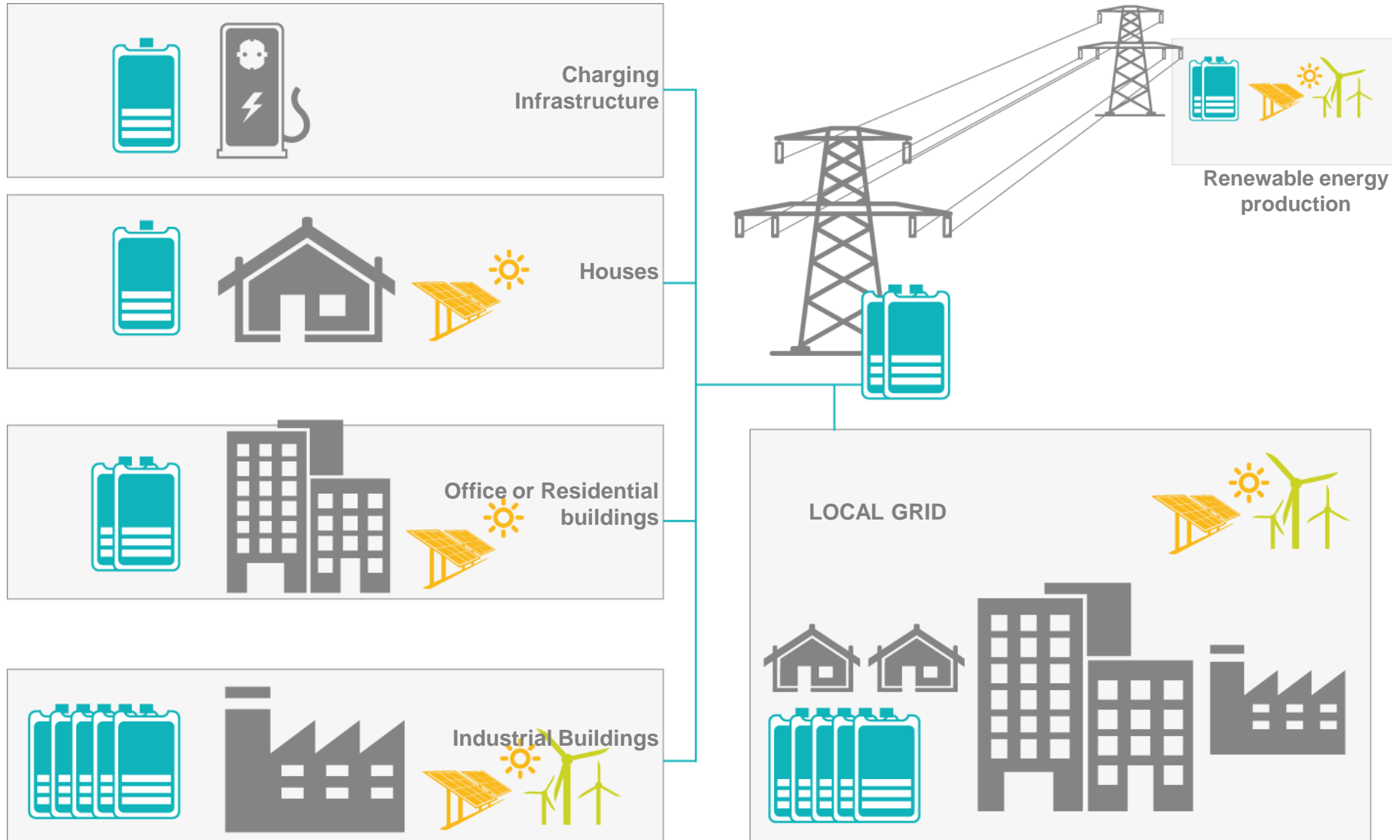


- **Distributed Storage is the key for a Smart Energy System.**

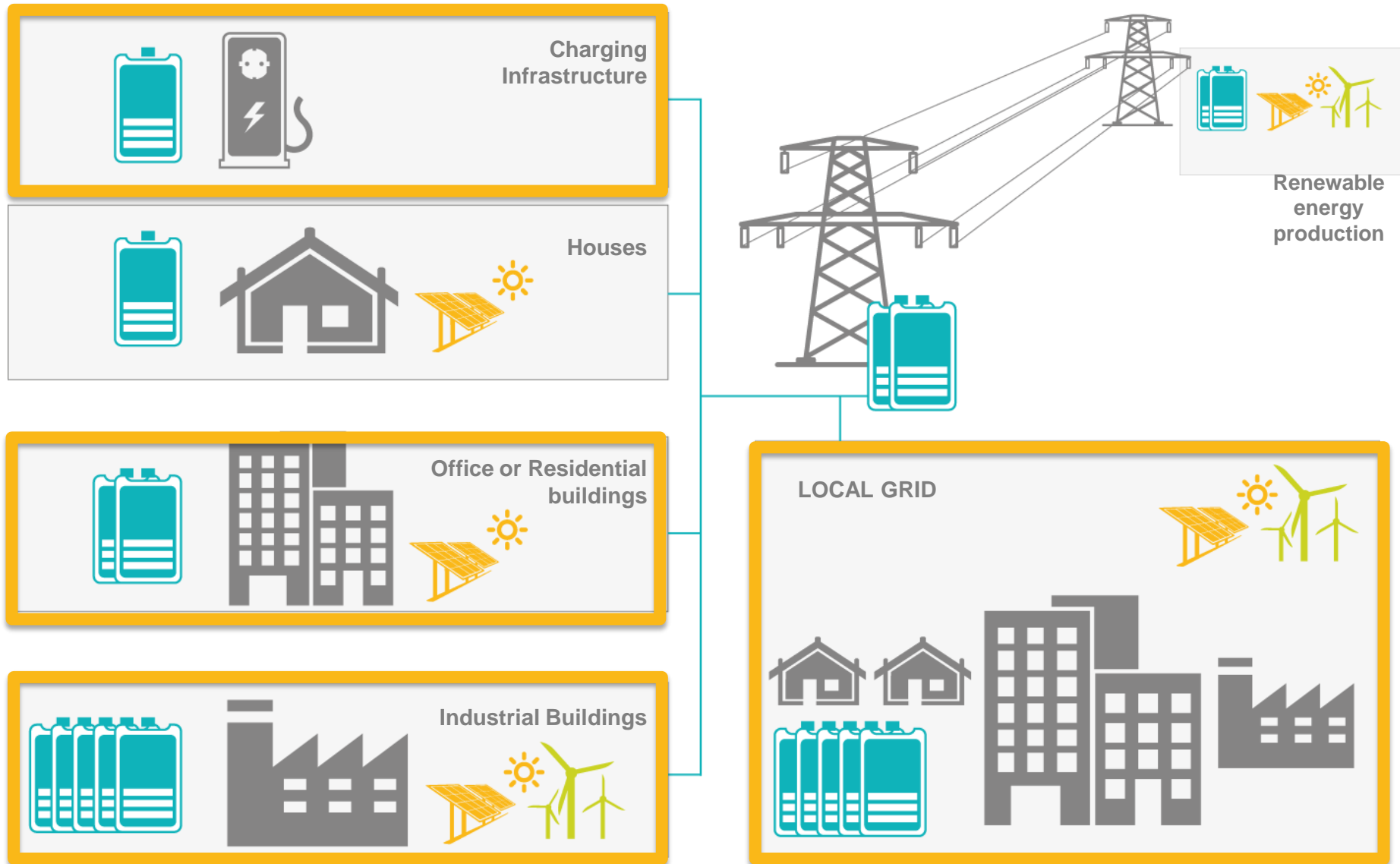
■ Hydropower    ■ Biomass    ■ PV  
■ Wind Offshore    ■ Wind Onshore    — Electricity Consump.

- **Electricity production and consumption in Germany during a week in January 2051 (Source: Fraunhofer UMSICHT, 2013 , p. 21 )**

# 6 energy storage markets



# ELSA's markets

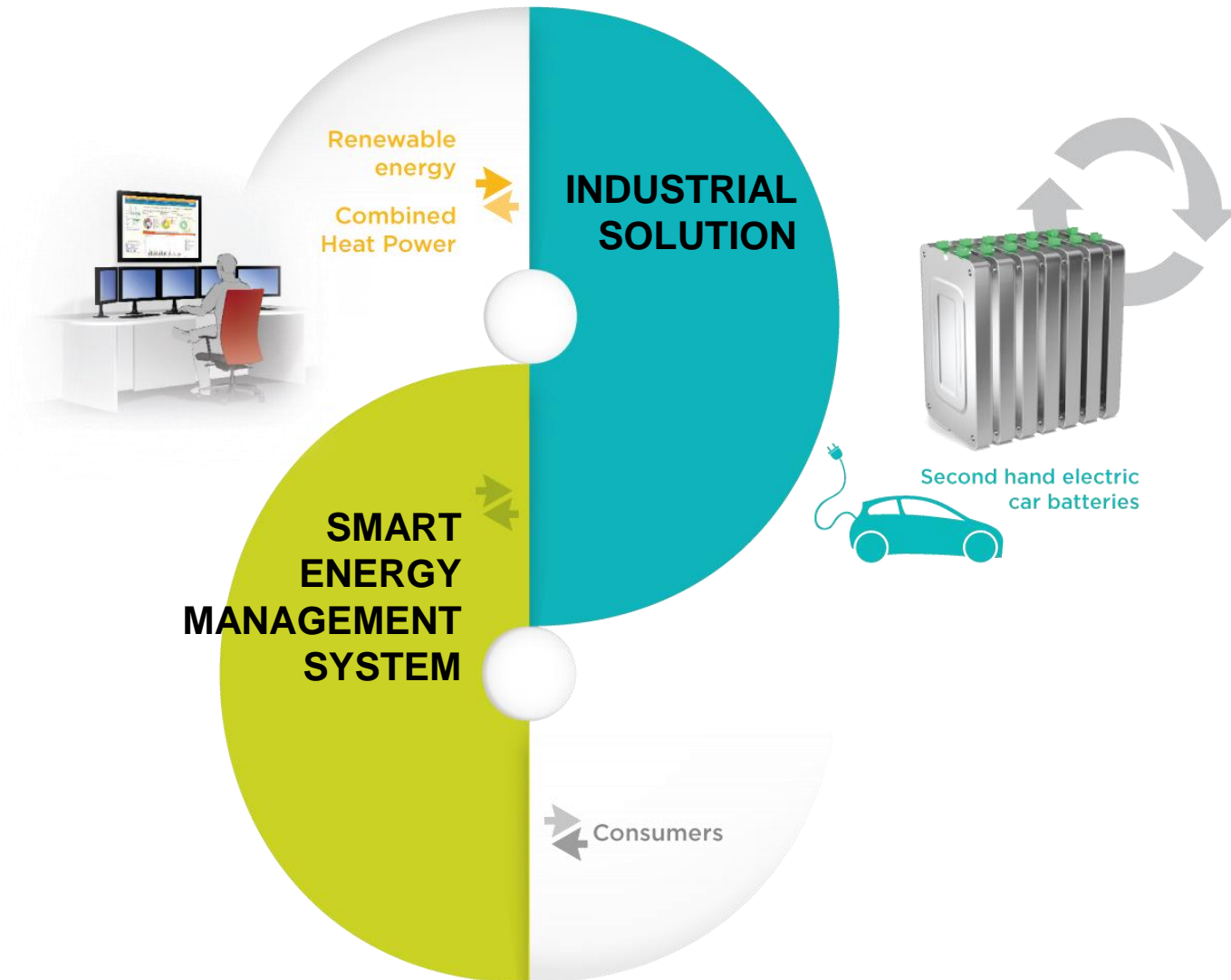


# A well balanced and experienced consortium



- ELSA Project in brief
- Energy Local Storage Advanced system
- Duration: April 2015 – March 2018 (36 Months)
- Total costs: 13 114 250 €
- Call: H2020-LCE-2014-3
- Topic: Local / small-scale storage
- ELSA is one of 23 Smart Energy projects of H2020.

# Benefit



# ELSA 4 keys



## Safe

- Security **EV Batteries**

## Scalable

- Scalable architecture with **12 to 96 kWh modules**
- **1 controller per battery**, able to manage batteries of different age and quality

## Affordable

divide by 4 the cost  
of the first  
prototype

- Direct Connection to Aggregator Platform for DSR revenues
- Using EV 2nd Life Batteries
- Power « on the shelf » Electronics Components

## Sustainable

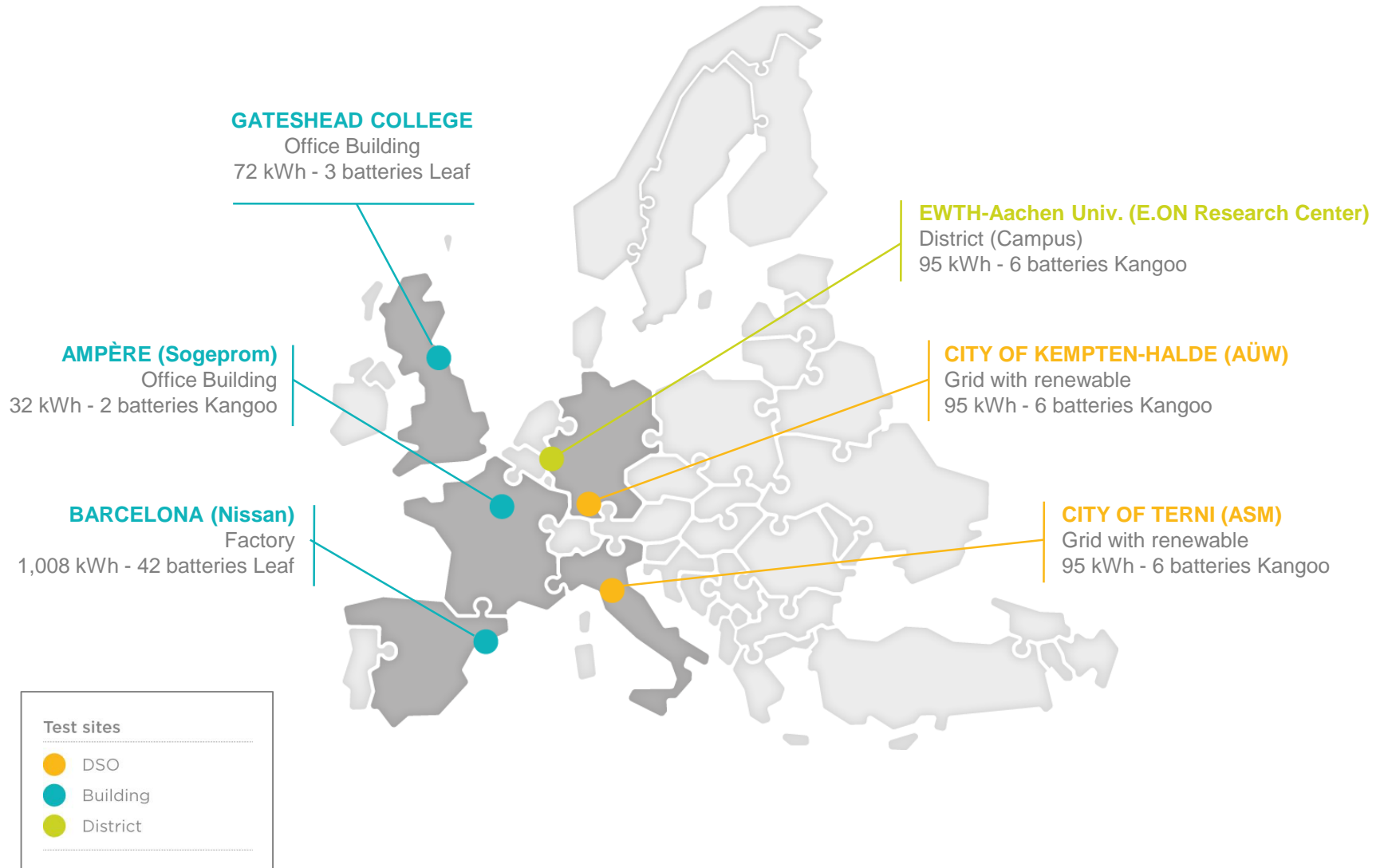
- Using EV 2nd Life Batteries



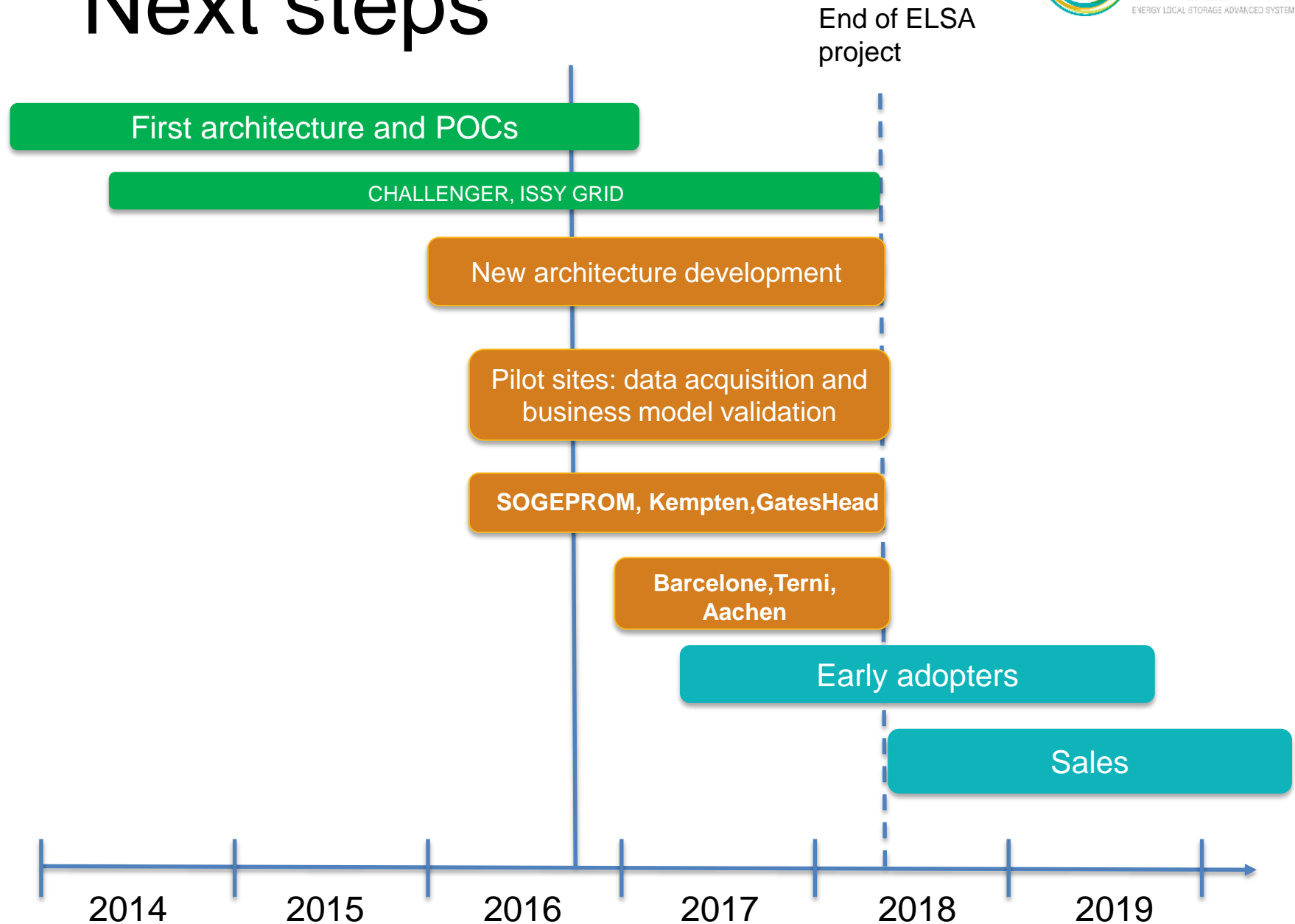


# First results

# 6 pilot sites in Europe



# Next steps



## Contact:

Servan LACIRE

Innovation & Technology Director

Bouygues Energy & Services

[s.lacire@bouygues-es.com](mailto:s.lacire@bouygues-es.com)



The project Energy Local Storage Advanced system (ELSA) receives funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 646125.



**RENAULT**

**NISSAN**

