



1. Launched in 2008 by Endesa.

2. It is a large-scale test project that develops the implementation, in a real environment, of all the Smart Grid technologies.



- 3. The project has been carried out in "Misericordia Beach".
- 4. Participation of 300 industrial users, 900 sector service users and 11.000 residential customers, with 63 MW of contract demand and 70 GWh/year of consumption.

## **An Integral Project**



- 1. Testing 17.000 smart meters
- 2. Grid automation for real time monitoring and control: 72 communicated MV/LV transformer substations, 5 MV lines (20 kV) with 40 km of circuits
- 3. Integration of renewable generation
- 4. Battery storage at the medium and low voltage level
- 5. LED lighting with 200 elements
- 6. 4 electric vehicles.
- 7. Development of technology for charging electric vehicles and V2G
- 8. Active demand side management
- 9. Development of a management system for the efficient use of energy at domestic and SMEs level

## **An Integral Project**



**Resources needed** 31 M€ from European Fund through CDTI (Center for the Industrial and Technology development, under the Economy and Innovation Ministry)

Evidence of success -	•	Users of the Smart grid: 300 industrial customers, 900 service customers, 11.000 households. Increasing of renewable energy use: 15% average per month CO2 reduction: more than 15% average per month Energy efficiency improvement: more than 25% average per month
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# Zero Emissions Mobility to All



### **Project developed in the context of the JSIP (Japan-Spain** Innovation Program) for technological cooperation. **Z@M**2ALL NEDO ->CDTI MITSUBISHI avesa m rhi min Participating companies: ayesa Telefonica endesa A Mitsubishi Corporation HITACHI





User









### - Daily progress -

#### https://vms.zem2all.com/des/html/#/menu/top.html





- Municipal actions -

Provision of sites for operation and demonstration centres

Provisions of locations for 7 fast charging stations

- Cooperation with Fuengirola and Marbella for the location and installation of 2 QCS
- Use of 20 EV (finally 45)

**75% bonus for EV in Vehicles Tax during 4 years** 

□ Access to EV restricted in historical centre.

- Free surface parking reservation (15 exclusive parking spaces)
- **Free parking in blue zone (SARE)**
- Bonus in municipal car parks (45 minutes free)
- Vertical and horizontal signs for charging points and exclusive parking.





# Zero Emissions Mobility to All

