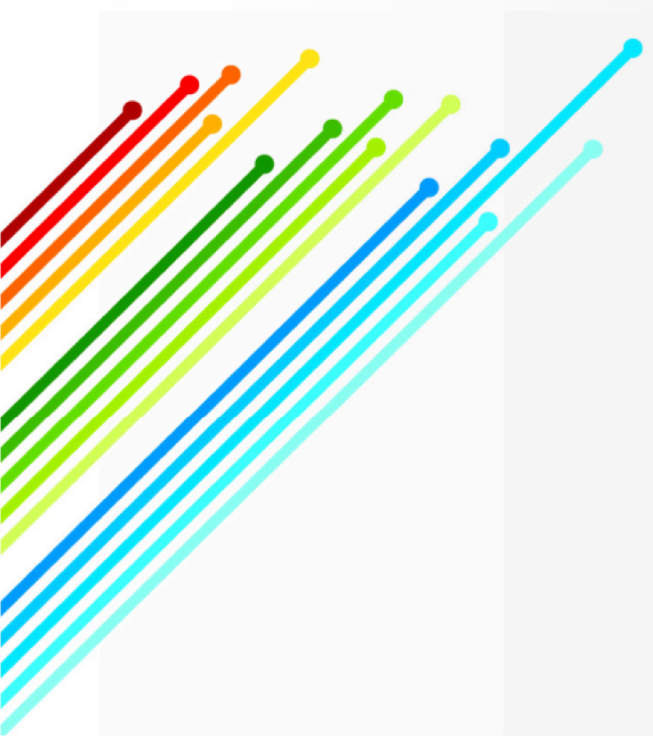




**RED**  
**ELÉCTRICA**  
CORPORACIÓN



**General  
Shareholders'  
Meeting  
2011**



**2010**

**Key year in reaching two significant milestones**



**We have successfully completed the single transport system operator (TSO) model**



**We have reinforced our world leadership in grid integration of renewables**

# Electricity

Axis around which the change towards an efficient and sustainable energy model can be made.

## GENERATION

- CO<sub>2</sub> free technologies:
  - Renewables.
  - Nuclear.
- Efficient technologies:
  - Co-generation.
- Future technologies using carbon capture and storage.

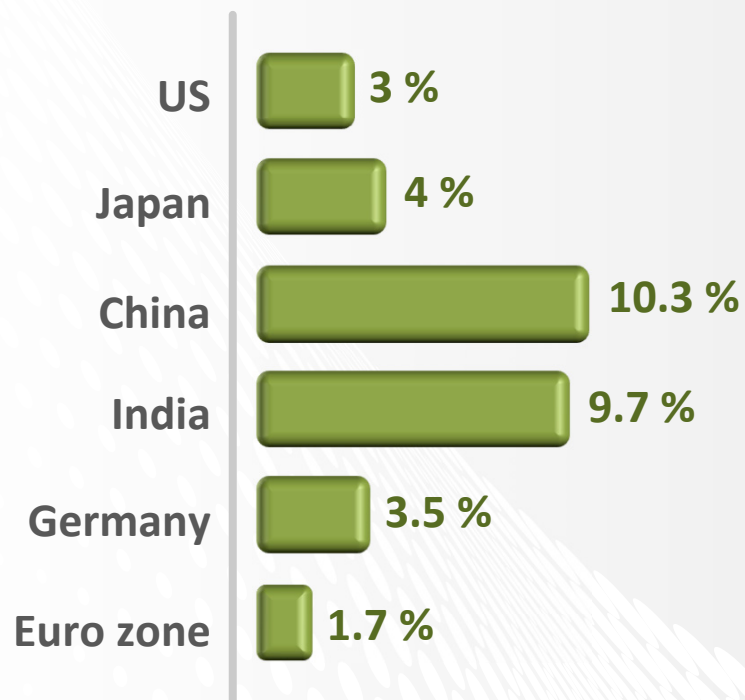


## DEMAND

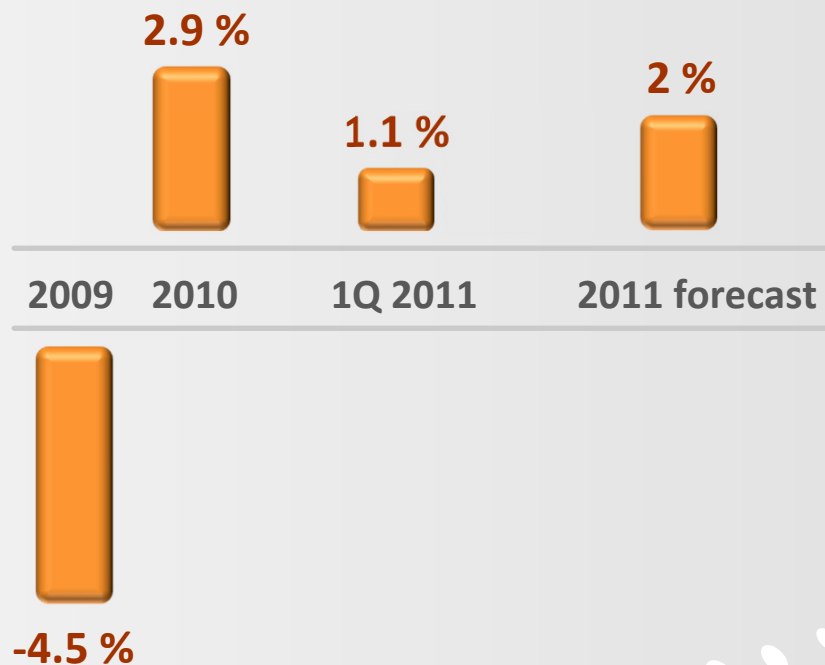
- Development of new, more efficient uses:
  - Heat pump.
  - LED.
- Roll-out of electric vehicles.
- Greater adaptability to more developed and more electricity dependent societies.

# Energy situation

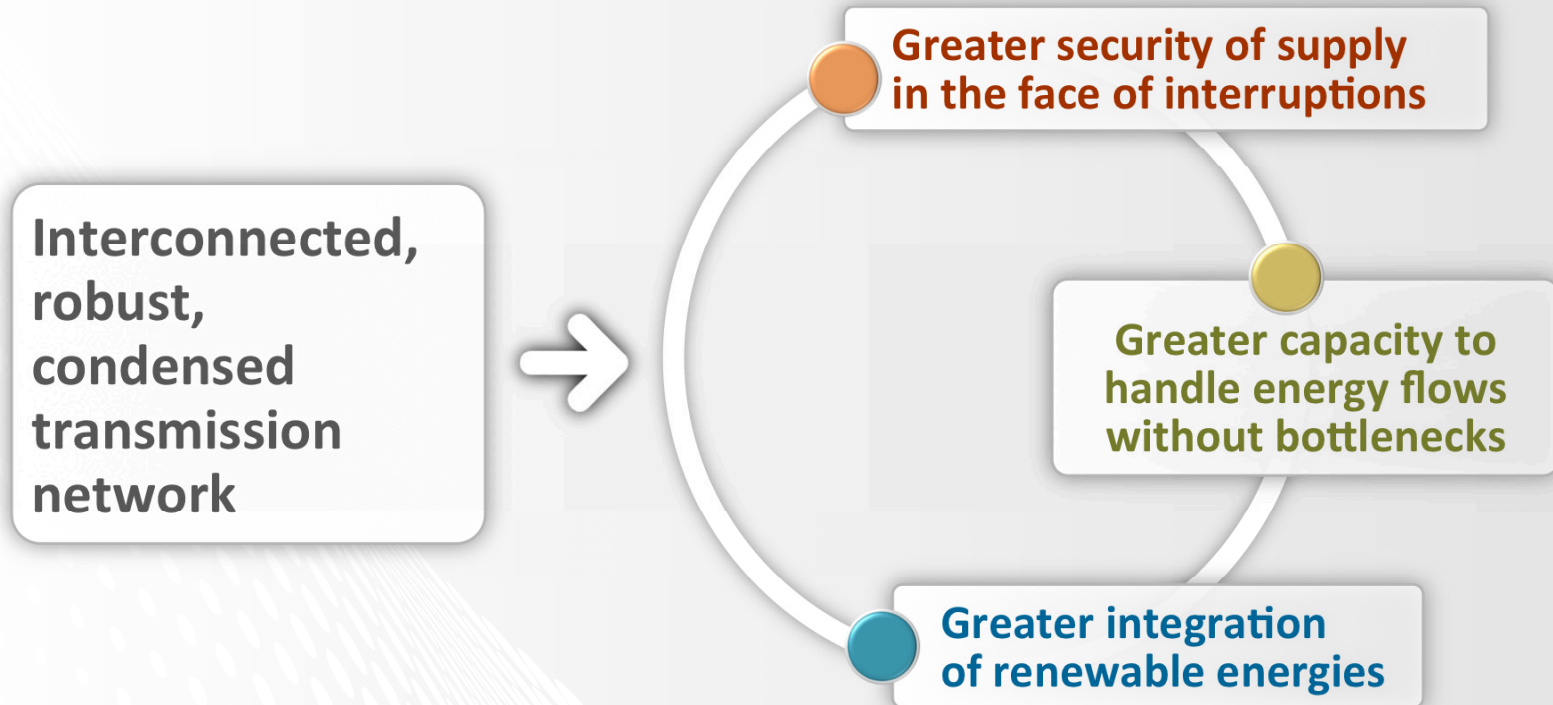
## Economic recovery ( $\Delta$ GDP)



## Rebound in electricity demand in Spain



# The role of power grids



# The role of power grids

Facilitating factor in achieving European energy policy objectives.

Single  
market

Energy  
efficiency

Technological  
innovation

Integration  
of renewables

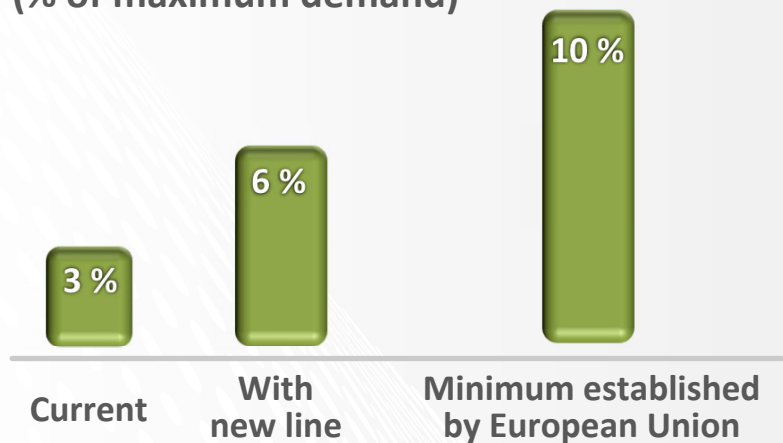
**OBJECTIVE**

**Greater investment in highly-interconnected large electricity grids**

# Strengthening interconnections with Europe

## Spain-France interconnection capacity

(% of maximum demand)



## New interconnection with France

- Double current interconnection capacity to 2,800 MW.
- Strengthen security of supply.
- Offer more support to grid integration of renewable energies.

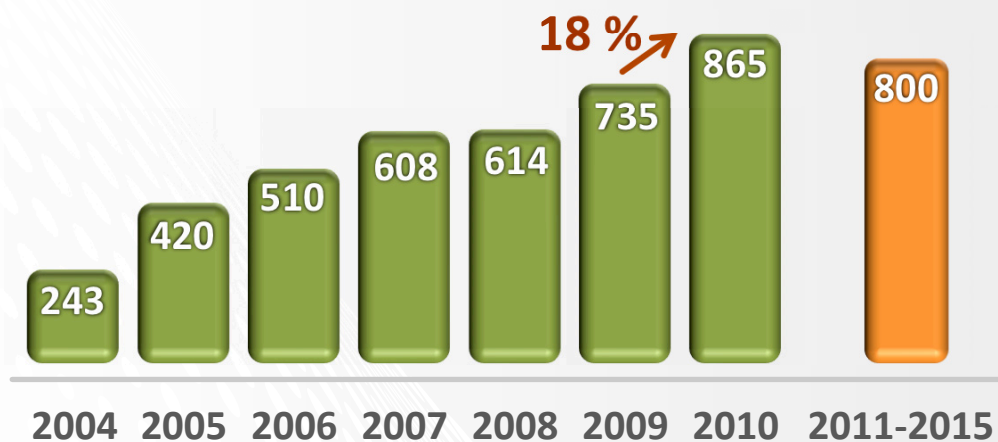
**OBJECTIVE**

**New interconnections to reach 6,000 MW of interconnection capacity by 2020**

# Improvement in transmission grid

## Grid investment

(€mn)



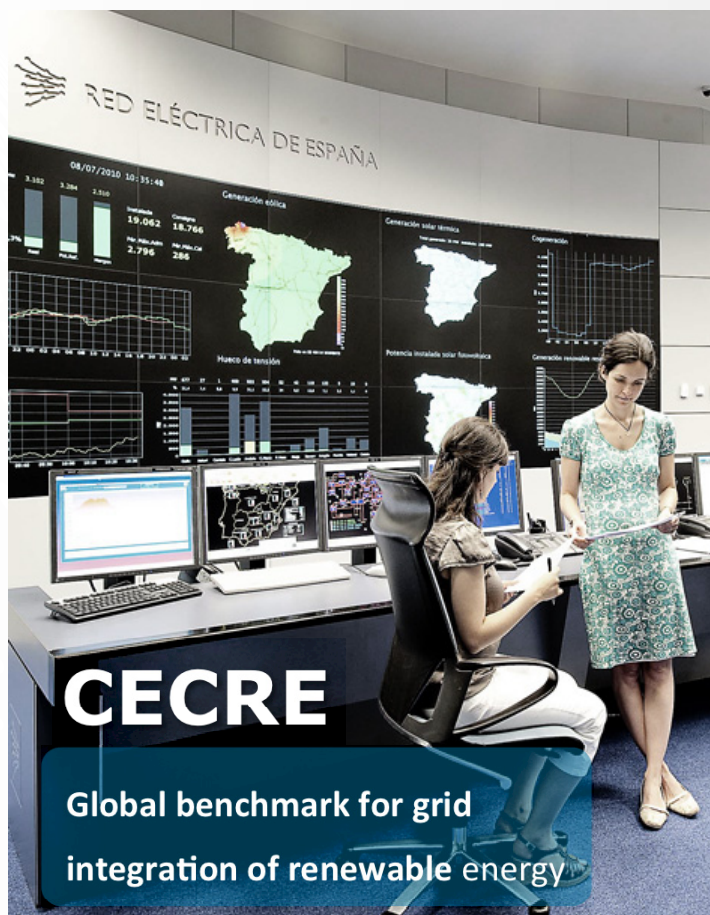
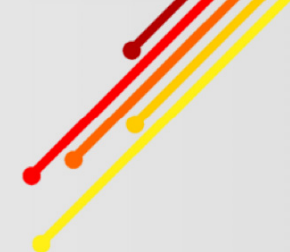
## Priority objectives

- Interconnection with France.
- Undersea connection with Balearic Islands and between Majorca and Ibiza.
- Further condense grid and create new transmission hubs.
- Integrate assets acquired.

**€4,000 mn investment in the period 2011-2015**



# Integration of renewable energies



## 2010

- **23,800 MW** of installed wind and solar capacity.
- **54 %** demand covered using wind power during some periods.
- **35 %** of annual demand covered using renewable sources.
- **21 %** less CO<sub>2</sub> emissions compared to 2009.

**We are world leaders in the integration of renewables**

# New challenges in future

## Promote demand-management strategies

### New challenges

- Offset the reduced manageability of renewable energy generation.
- Achieve greater demand flexibility.
- Smooth out the demand curve (smaller peak/trough ratio).
- Boost energy efficiency.



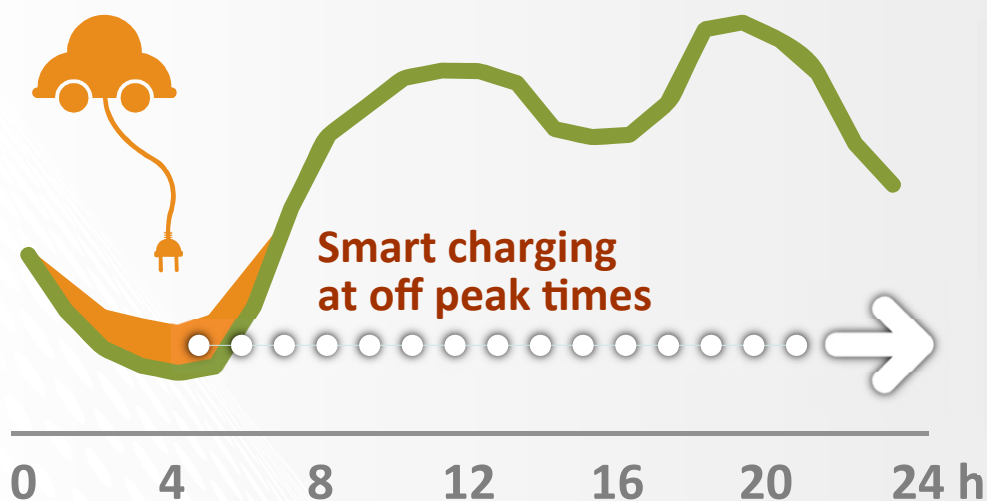
### New tools

- Greater pumping capacity available for system operation.
- Future energy storage technologies.
- Increase in flexible generation.
- Development of smart charging (electric vehicles).
- Flexible consumers and smart grids.

**Objective**

**Improve the overall efficiency of the electricity system**

# Roll-out of electric vehicles



## Benefits:

- Better use of renewable energies.
- Use of surplus generation and grid capacity.
- Smoothing out of demand curve.

## ... other benefits

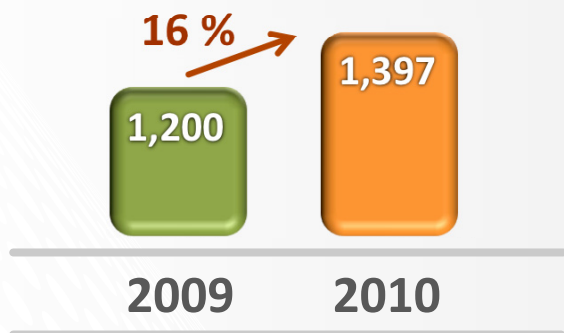
- Reduction of CO<sub>2</sub> emissions.
- Less dependence on foreign energy.
- Improvement in air quality and noise levels in streets.

## ... in the future

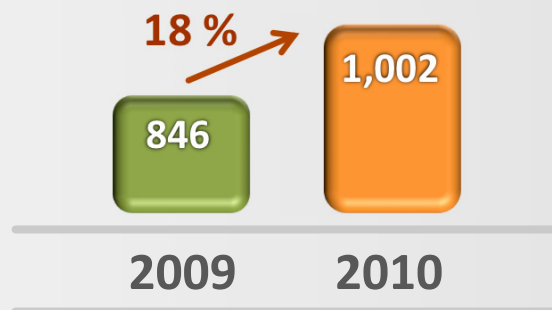
Will provide energy storage services.

# Key consolidated data

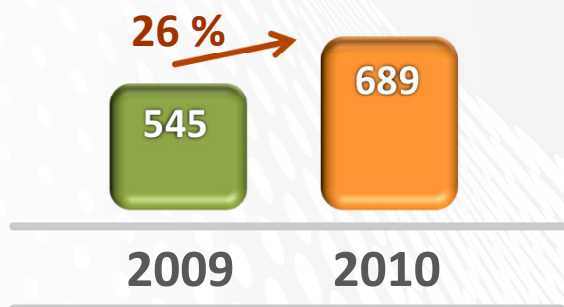
## Revenue (€mn)



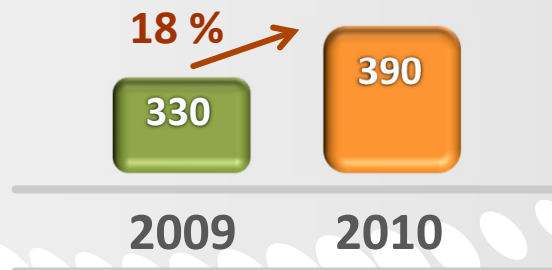
## EBITDA (€mn)



## EBIT (€mn)



## Net profit (€mn)



# Strategic Plan 2011-2015

