

FEDERAZIONE NAZIONALE
IMPRESE ELETTROTECNICHE
ED ELETTRONICHE



CONFINDUSTRIA

ITALY-SAUDI ARABIA: BUSINESS AND INDUSTRIAL COLLABORATION FOR ENERGY AND BUILDING TECHNOLOGIES

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Vice President of ANIE Energia

Milan, 20/10/2015

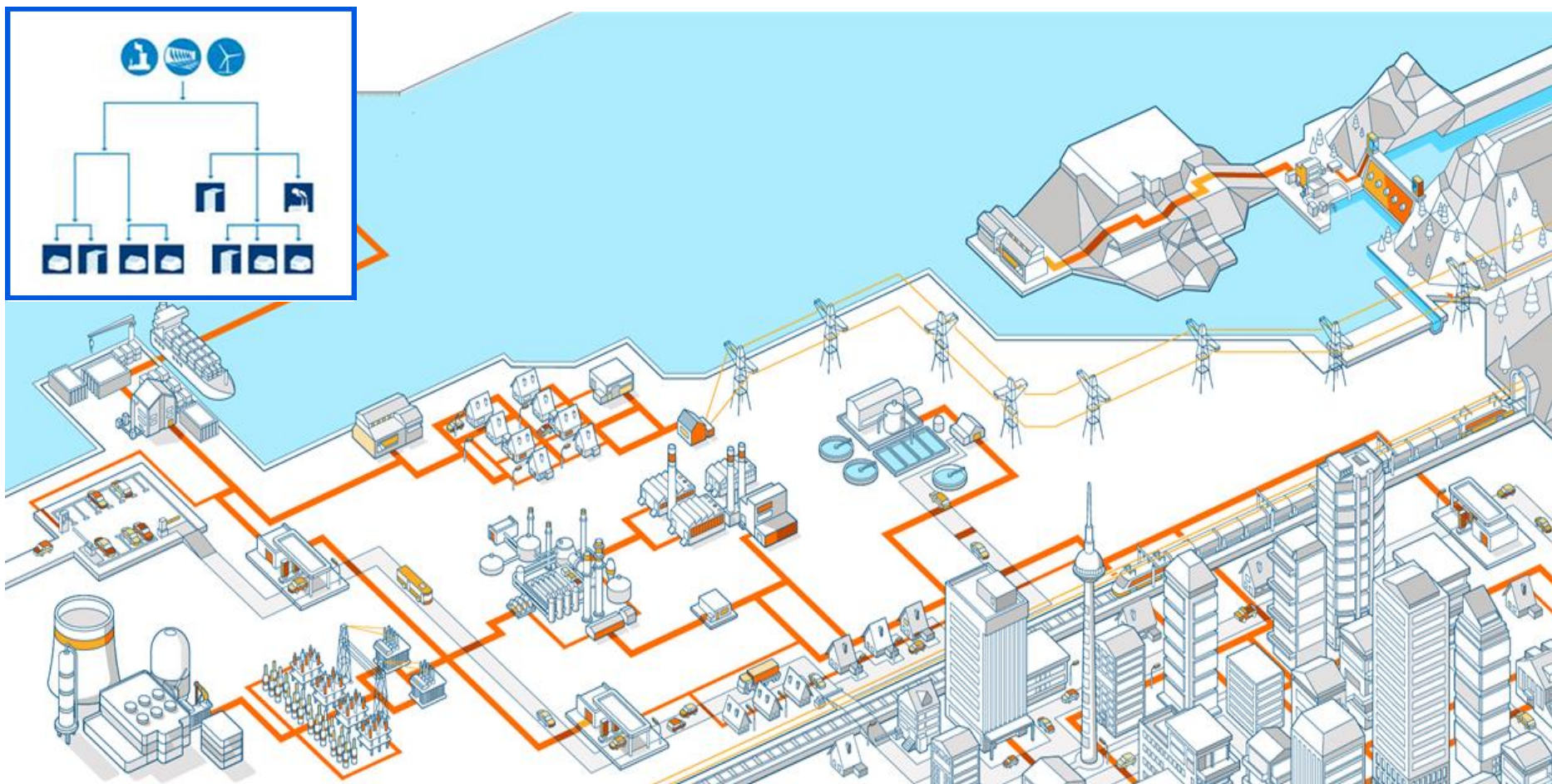
Topics

- Development of the electrical network
- Italian RES generation trend
- Feedback from the 7 Smart Grids Pilot projects
- Smart Devices and solutions applicable to other fields

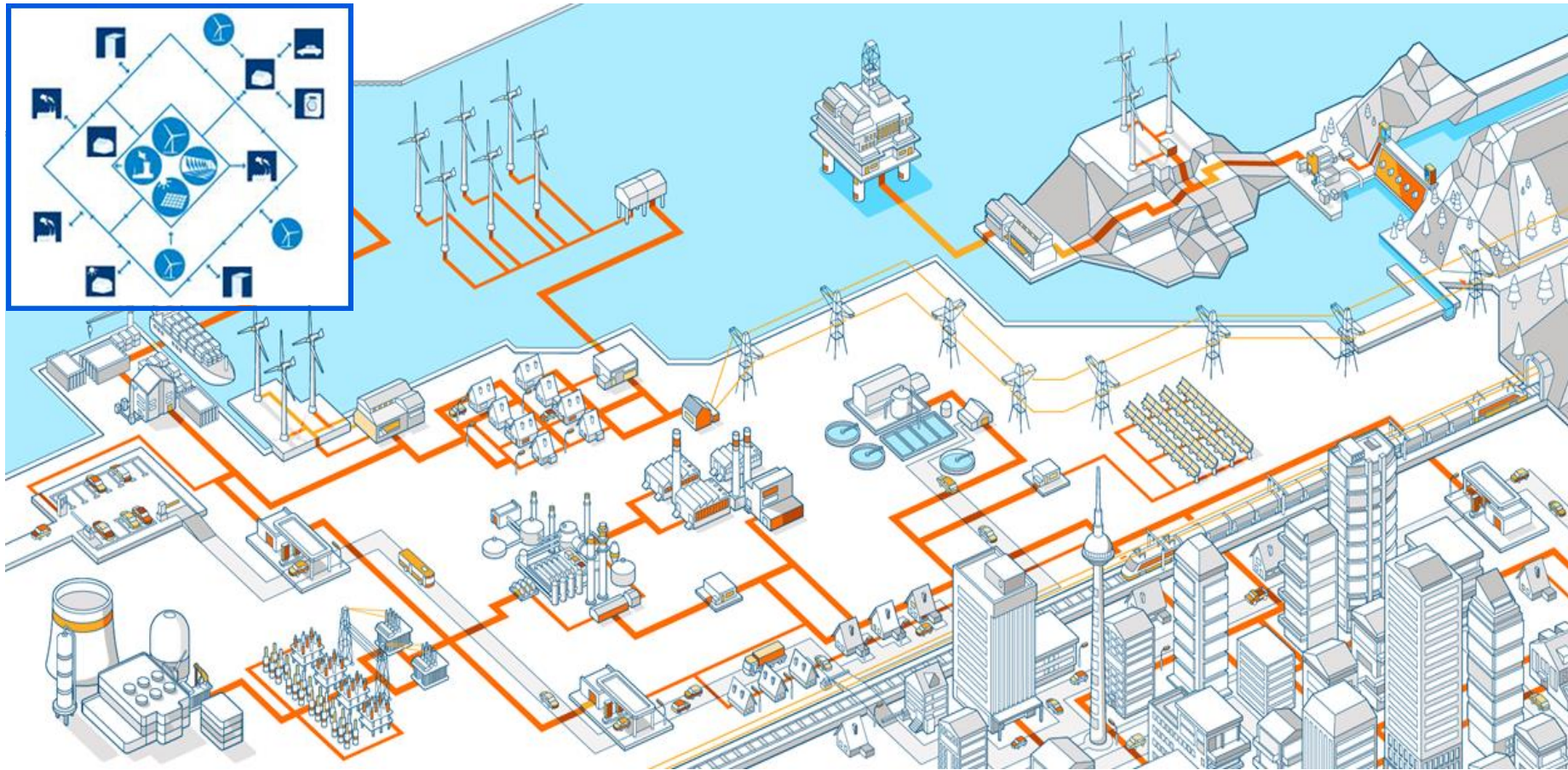
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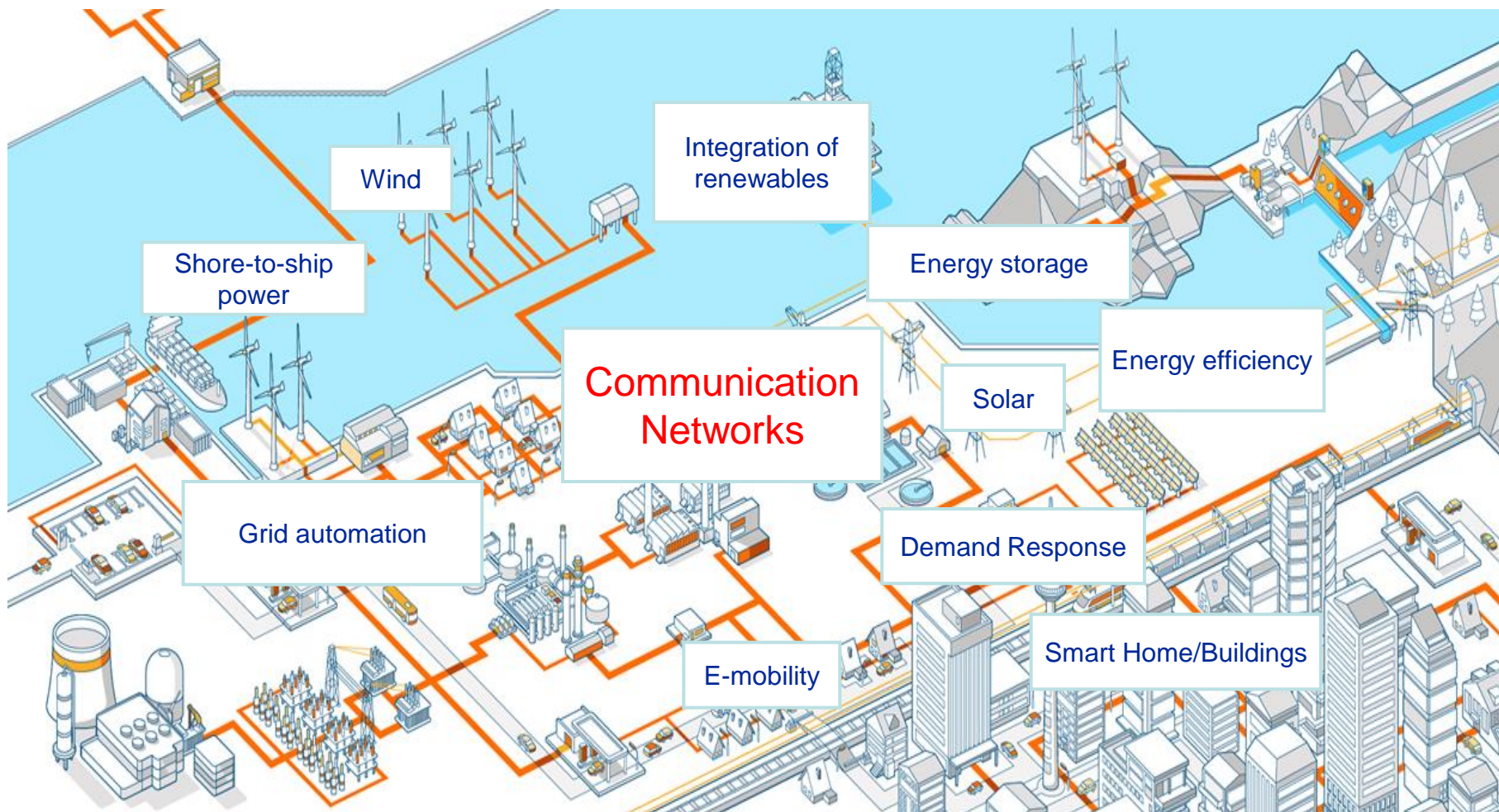
Traditional power grid



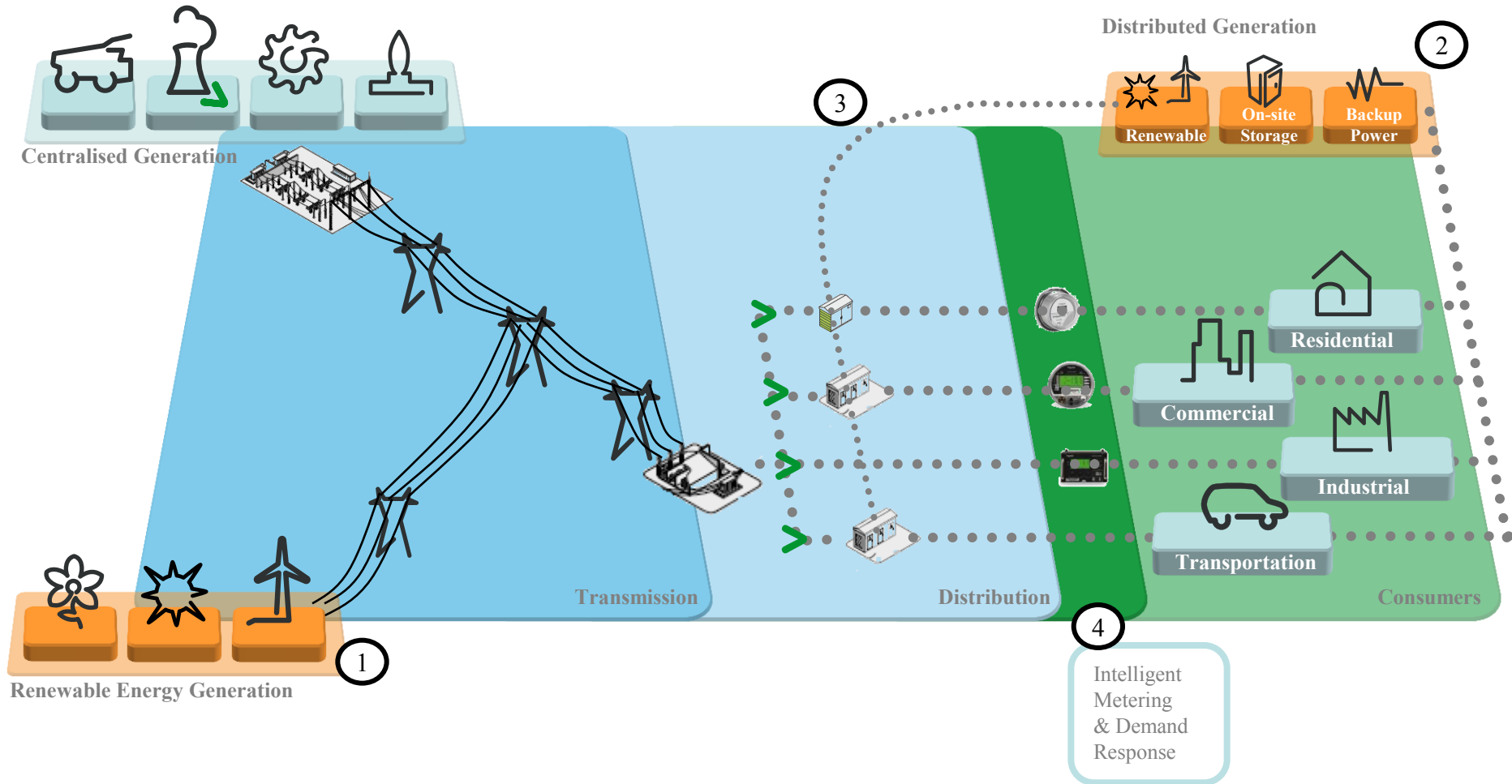
The evolving grid



The evolving grid



Structure of the Smart Grids



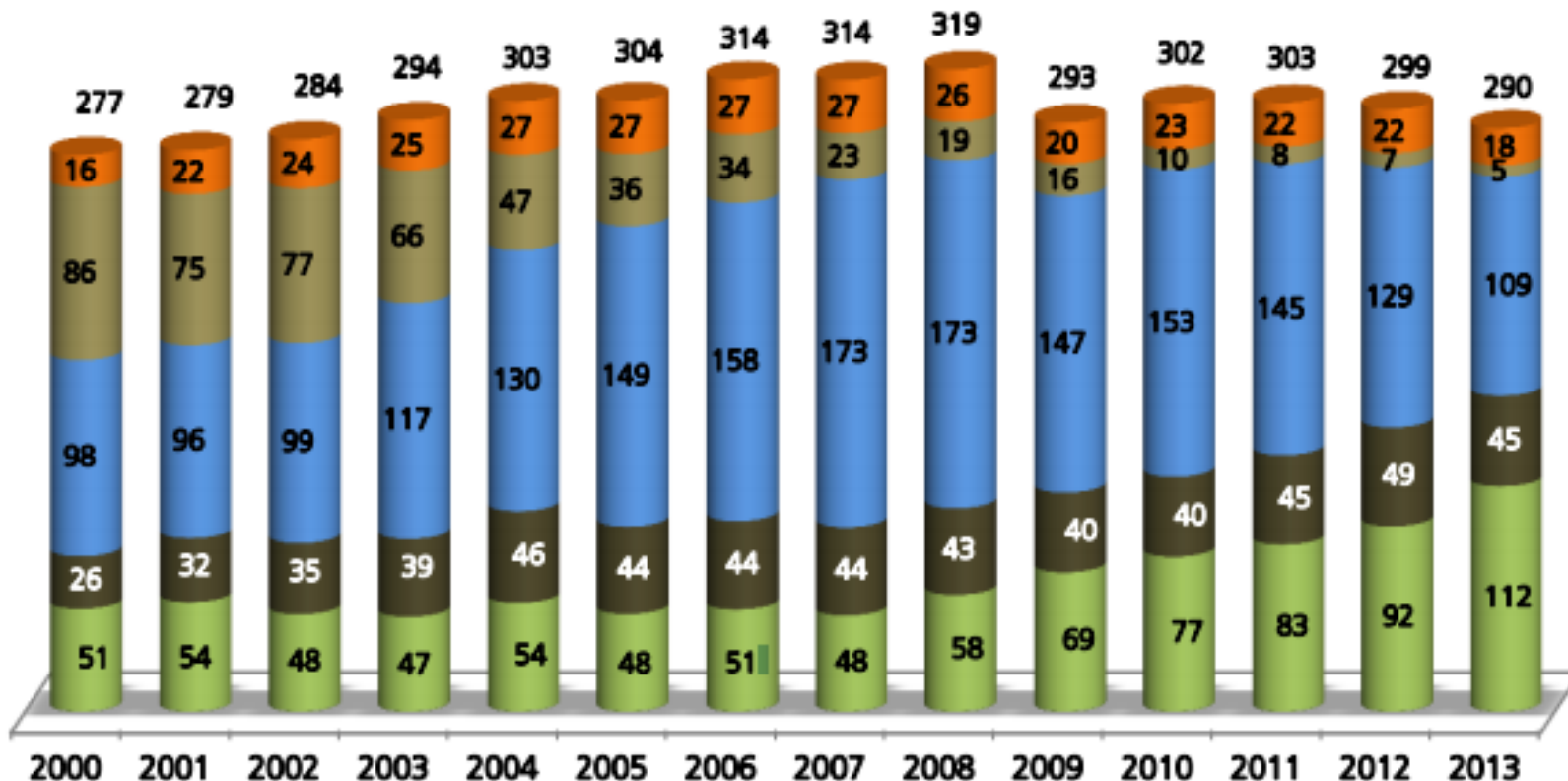
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Total gross generation in Italy

TWh

■ FER ■ Carbone ■ Gas Nat. ■ Prod. Petroliferi ■ Altro



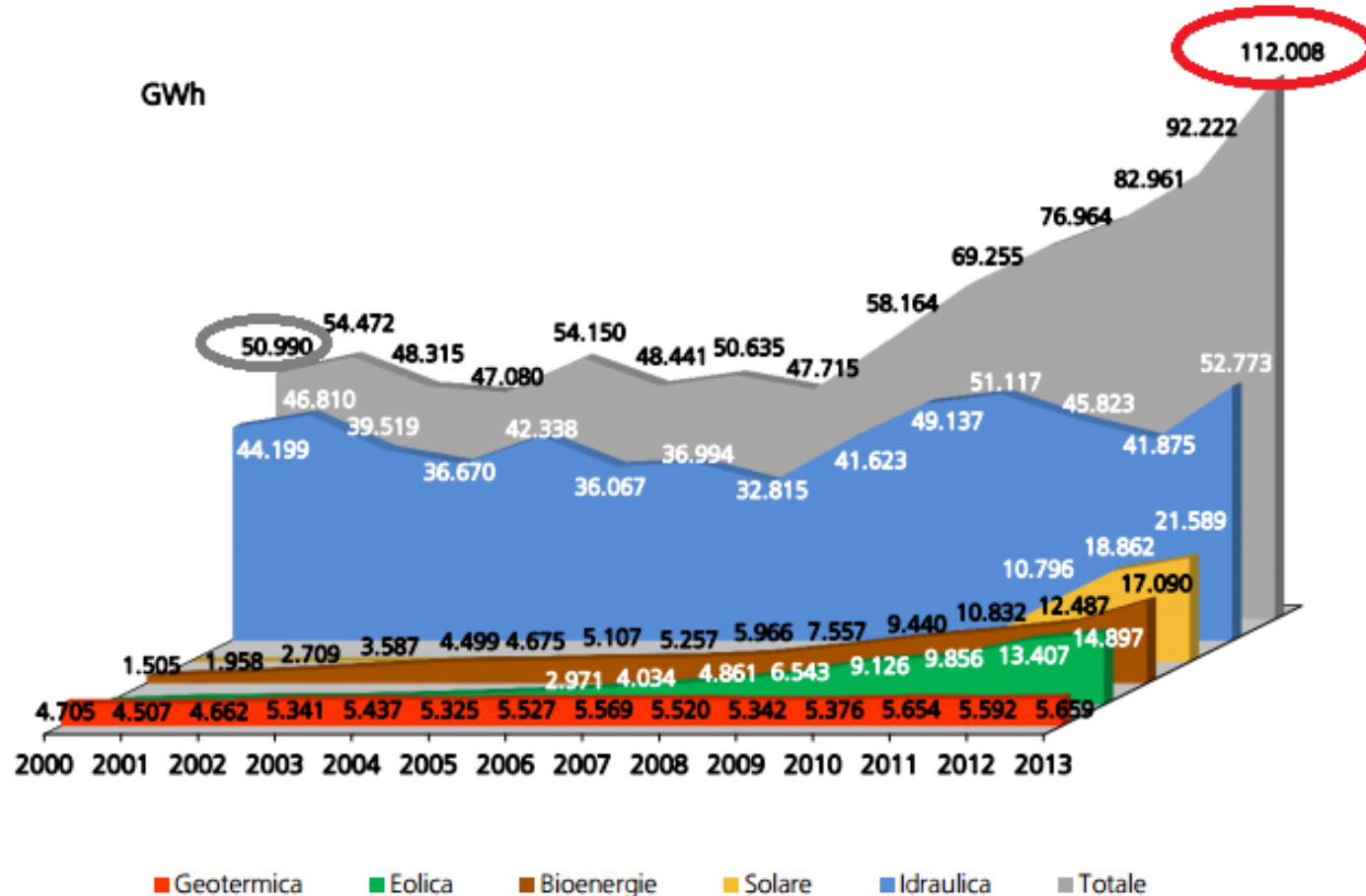
In 2000: RES - 51 TWh
(18,4% of total gross energy generation)

In 2013: RES 112 TWh
(38,6% of total gross energy generation)

Electricity generation from renewables in Italy

Number and capacity of renewable power plants in Italy in 2013

- ❖ **Solar:** 591,000 photovoltaic plants with a capacity of 18 GW
- ❖ **Wind:** 1,386 plants with a capacity of 8,5 GW
- ❖ **Bioenergy:** 2.409 plants with a capacity of 4 GW
- ❖ **Hydro:** 3.250 hydro power plants with a capacity of 18,3 GW
- ❖ **Geothermal:** 34 geothermal plants with a capacity of 772 MW



Source: GSE

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7 Smart Grids Pilot Project



- Role of the Authority (bonus /malus approach)
- Selection of 7 pilots
- Development of smart devices, identify solutions
- Measuring KPI
- Deployment

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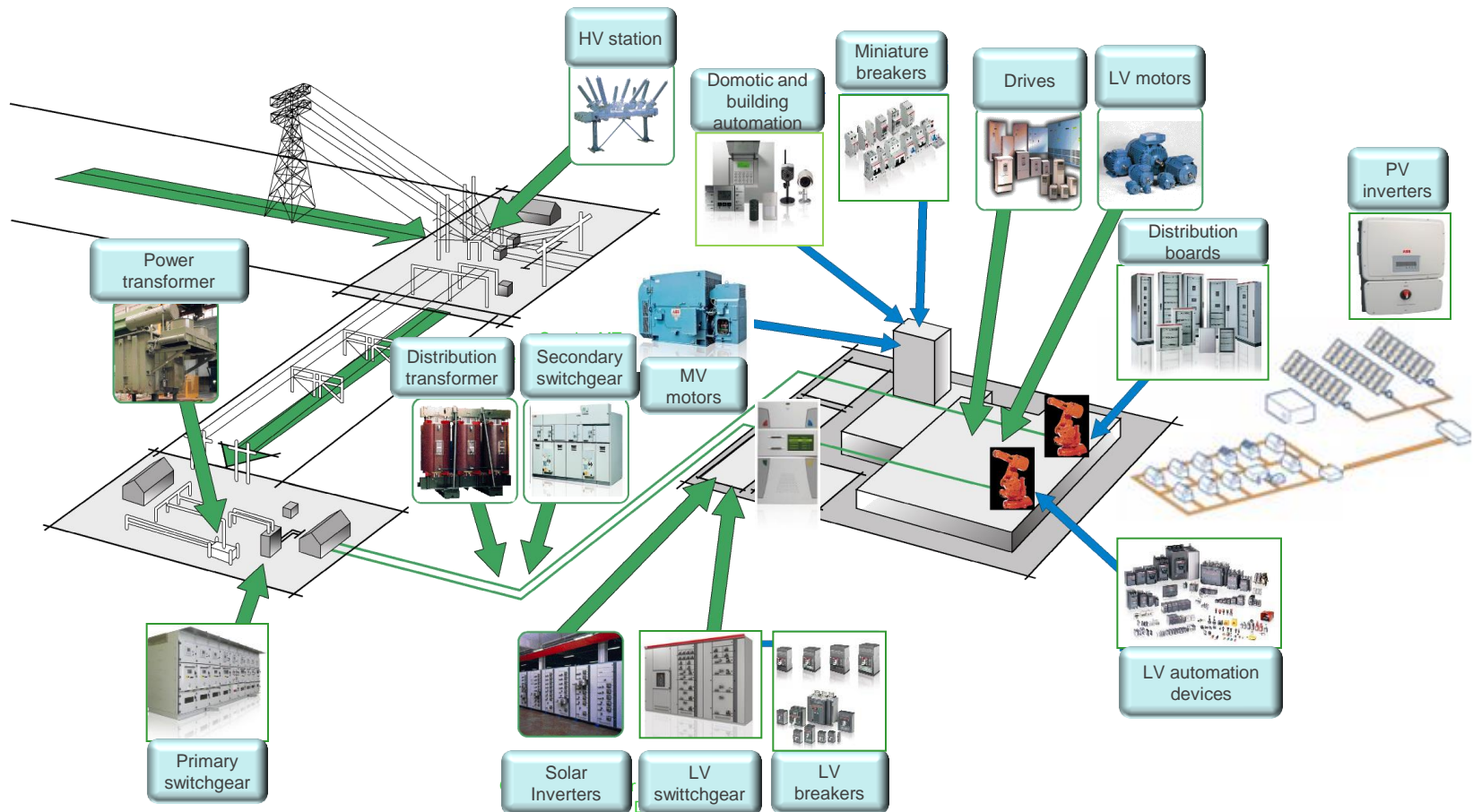
Smart devices and solutions



- Service continuity
 - Process plants
 - Airports
 - Data centers
- Remote controlling
 - Electrical Utilities
 - Water distribution systems
- Energy efficiency

Electrical grid

Smart and energy efficient components from Main components from Italian manufacturers





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Thank you for your attention