

FEDERAZIONE NAZIONALE
IMPRESE ELETTROTECNICHE
ED ELETTRONICHE



BUSINESS FORUM ITALIA-TUNISIA

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Federazione ANIE

Vice President for Internationalization

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ANIE has been representing the Italian Electrical Engineering and Electronic Industry for over 70 years.

The **ANIE Industry** in figures (in 2018):

- ❖ **78 billion Euros of total turnover**
of which
 - ❖ **58 billion Euros** represented by the **Electrical Engineering and Electronic Technologies (52% of export on total turnover)**
 - ❖ **20 billion Euros** represented by the **General Contractor Industry**
- ❖ **468,000 employees**
- ❖ **4% intra-mural R&D expenditure on total turnover** (less than 1% the corresponding % for Manufacturing Industry)
- ❖ In second place in **Europe** for total turnover
- ❖ Almost 60% of the total turnover in the Italian Electrical Engineering and Electronic Industry comes from SMEs

The **ANIE system** supplies technologies for public and private infrastructures in strategic markets:



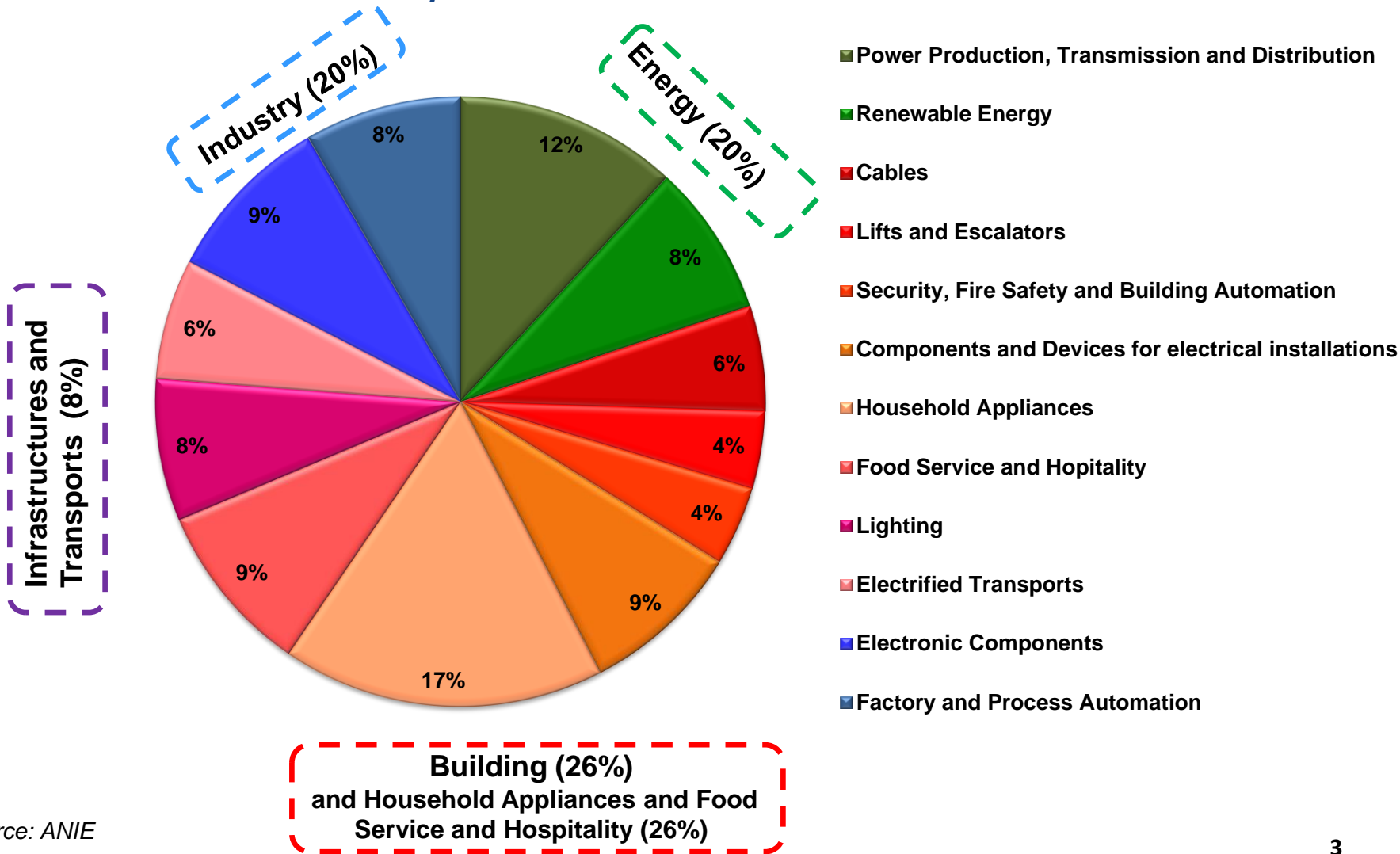
Italian Electrical Engineering and Electronic Industry

ANIE TECHNOLOGIES

% distribution of total turnover by sector and final markets



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Source: ANIE

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A CHANGING SCENARIO

Energy systems around the world are going through rapid transitions that affect many aspects of our lives.

1850-1900

Industrialization of Western economies: energy mix dominated by biomass

1900-1950

Expansion of global and local transport fueled by coal and oil

1950-2015

Rapid industrialization in China

2015-2050

Fast uptake of renewables in the energy mix



Source: McKinsey Energy Insights

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GLOBAL ENERGY TRENDS



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Major transformations are underway for the global energy market...



Energy demand is set to grow by more than 25% to 2040*

The global power mix is transforming, with an increasing share of renewables in generation

Among fossil fuels, natural gas demand continues to grow

The energy transition is based on decarbonisation and enabled by innovative technologies

The future is shaped by the rapid growth of electricity and digitalization

* Source: IEA

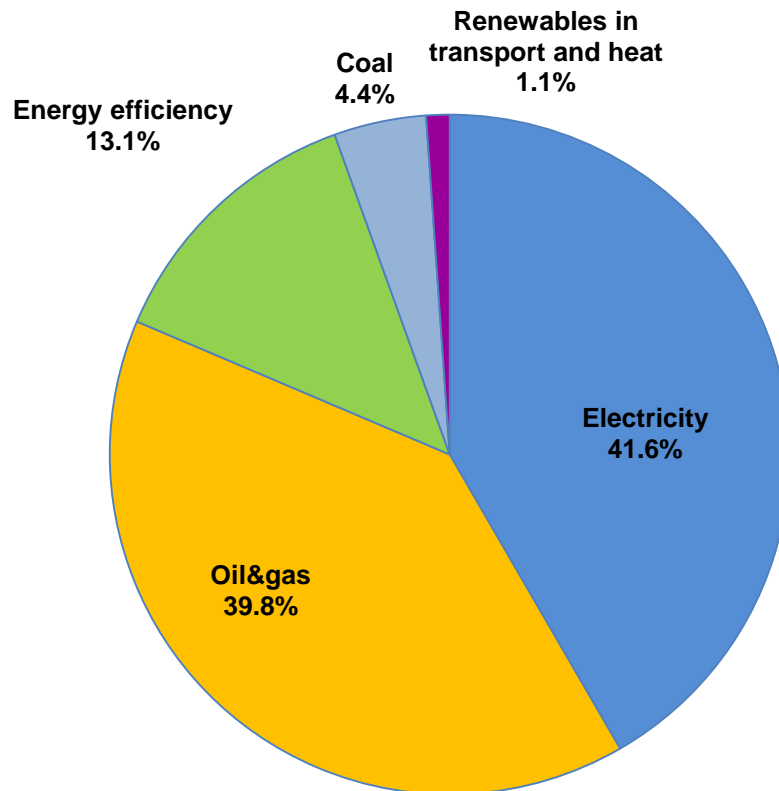
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Global Energy Investments (2017) % 1.8 Trillion US \$



Source: IEA



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**THE ITALIAN ELECTROMECHANICAL TECHNOLOGIES
are ready to face the challenges of
FUTURE ENERGY INFRASTRUCTURES**

Who we are



Some of the main figures in the Italian National Energy and Climate Plan (NECP)

- 30% share of energy from **renewable sources** in gross final consumption of energy by 2030
- 55,4% share of **renewable sources** in the electricity sector by 2030
- 43% **reduction** of the primary energy consumptions and 39,7% **reduction** of the final energy consumptions by 2030 (compared with PRIMES 2007 scenario)

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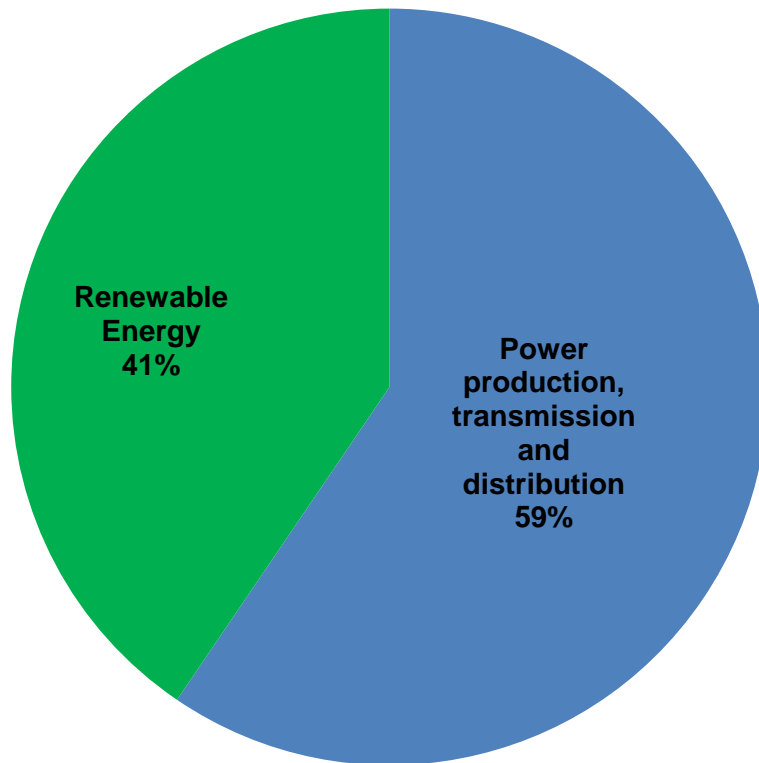
The Italian technologies for Power industry



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The Italian technologies for Power industry
Total turnover (11.5 billion euros), % distribution



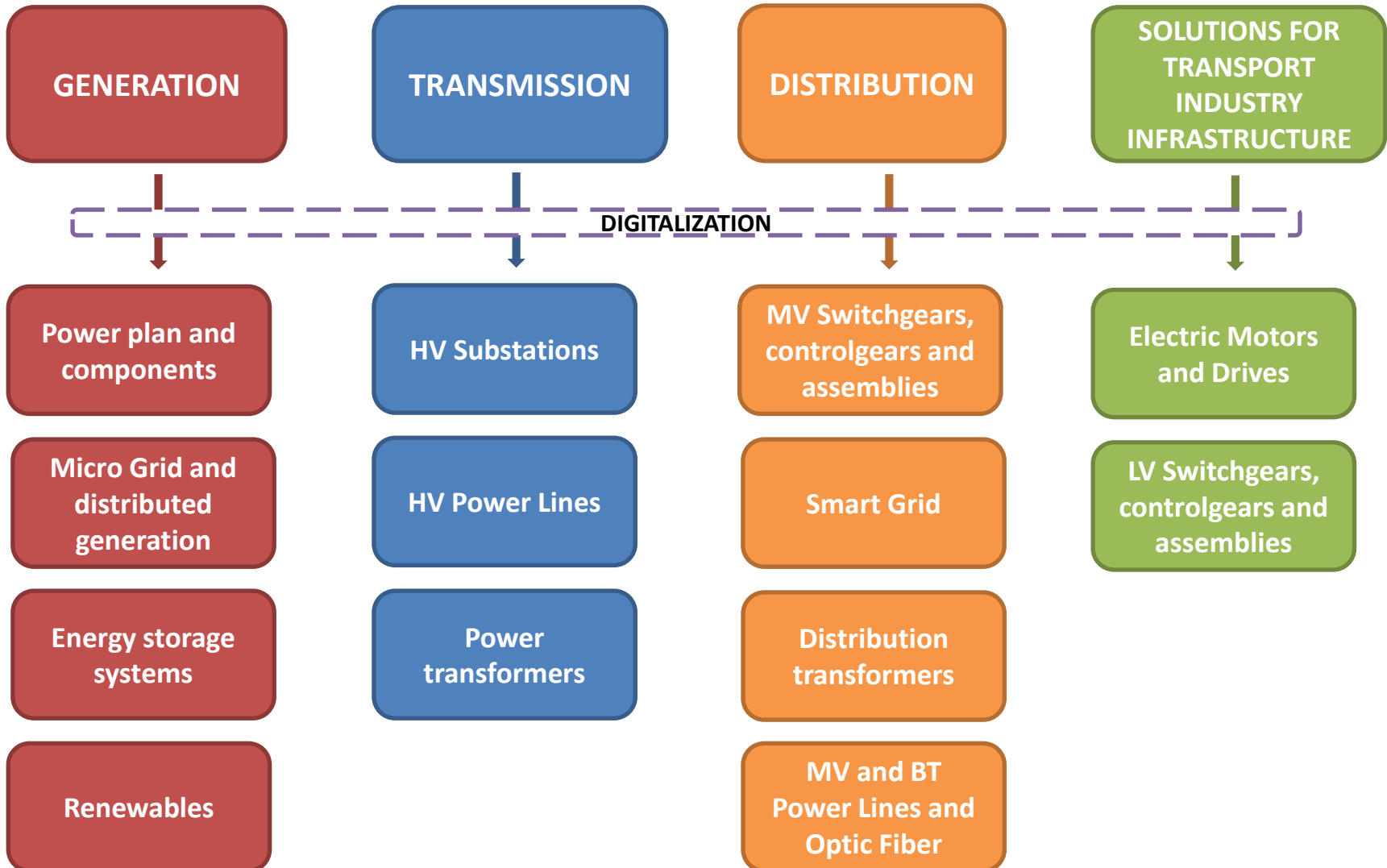
- ❖ Italy is the second **manufacturing hub** in Europe
- ❖ Looking at technologies for Power industry, **Italy** is second in **Europe** for production value and export, with a share of total European value of **10%**
- ❖ More than **50,000 employees** in the Italian Industry supplying technologies for Power industry

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The Italian technologies for Power industry OVERVIEW OF TECHNOLOGIES



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The Italian technologies for Power production, Transmission and Distribution - figures

	2015	2016	2017	2016/2015	2017/2016
	<i>million euro</i>			<i>annual % change rate</i>	
DOMESTIC MARKET	5,520	5,333	5,234	-3.4	-1.8
TOTAL TURNOVER	7,018	6,711	6,811	-4.4	1.5
EXPORT	4,519	4,416	4,493	-2.3	1.7
IMPORT	3,020	3,038	2,916	0.6	-4.0
TRADE BALANCE	1,499	1,378	1,577		

- Manufacturers of equipment, components and systems for the production (traditional sources), transmission, distribution and storage of electrical energy

Source: ANIE

- Storage
- Smart grid
- Transformers
- Switchgears and controlgears
- Rotating machines
- Power lines

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The Italian technologies for Renewable Energies - figures



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	2015	2016	2017	2016/2015	2017/2016
	<i>million euro</i>			<i>annual % change rate</i>	
DOMESTIC MARKET	3,539	3,442	3,552	-2.7	3.2
TOTAL TURNOVER	4,543	4,444	4,637	-2.2	4.3
EXPORT	2,138	2,124	2,233	-0.6	5.1
IMPORT	1,133	1,122	1,149	-1.0	2.4
TRADE BALANCE	1,004	1,003	1,084		

- ☪ Manufacturers of components and/or turnkey power plants
- ☪ O&M service providers
- ☪ Power producers from renewable energy sources

Source: ANIE

☪ Photovoltaic

☪ Hydroelectric

☪ Geothermal

☪ Wind

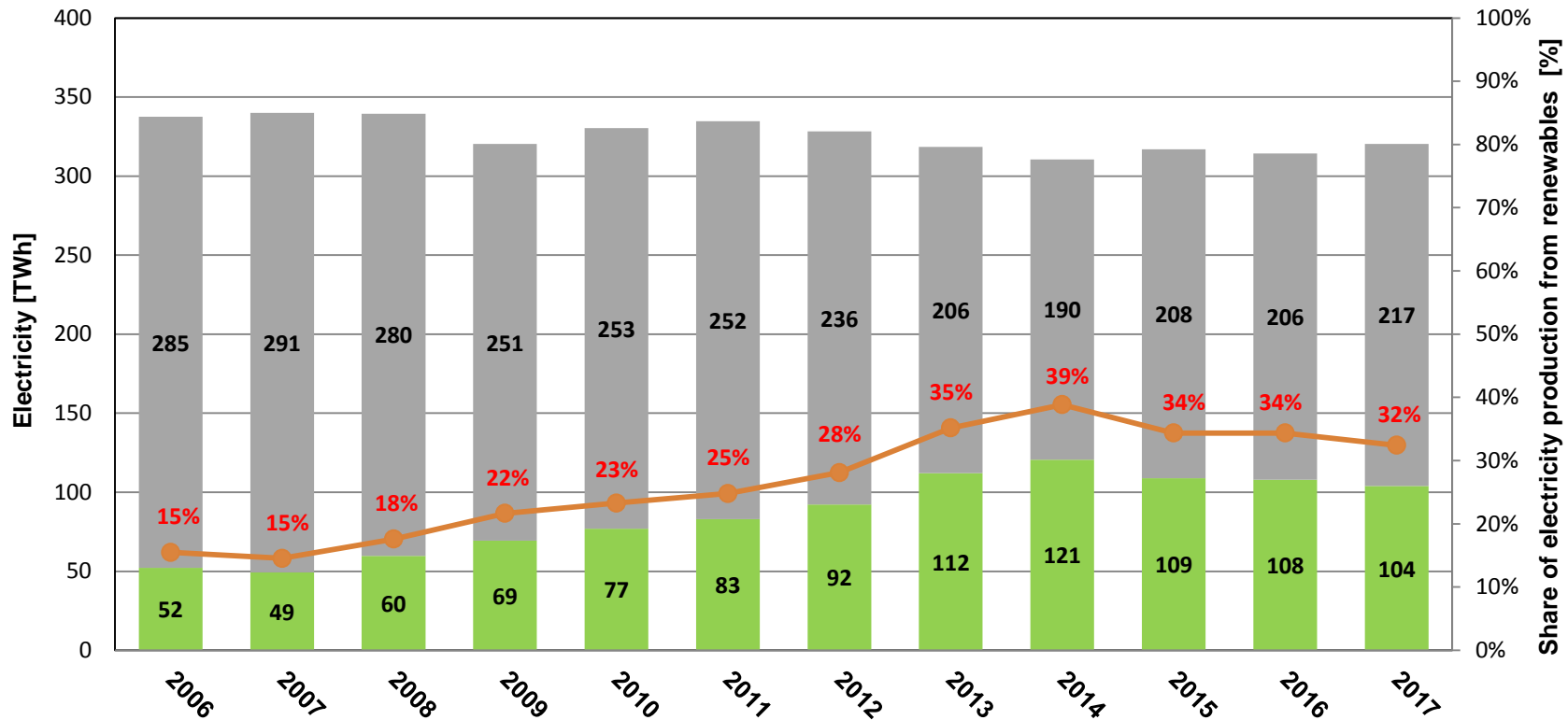
☪ Bioenergy

☪ Concentrated Solar Power

Italian total electricity production vs production from Renewables (2006-2017)



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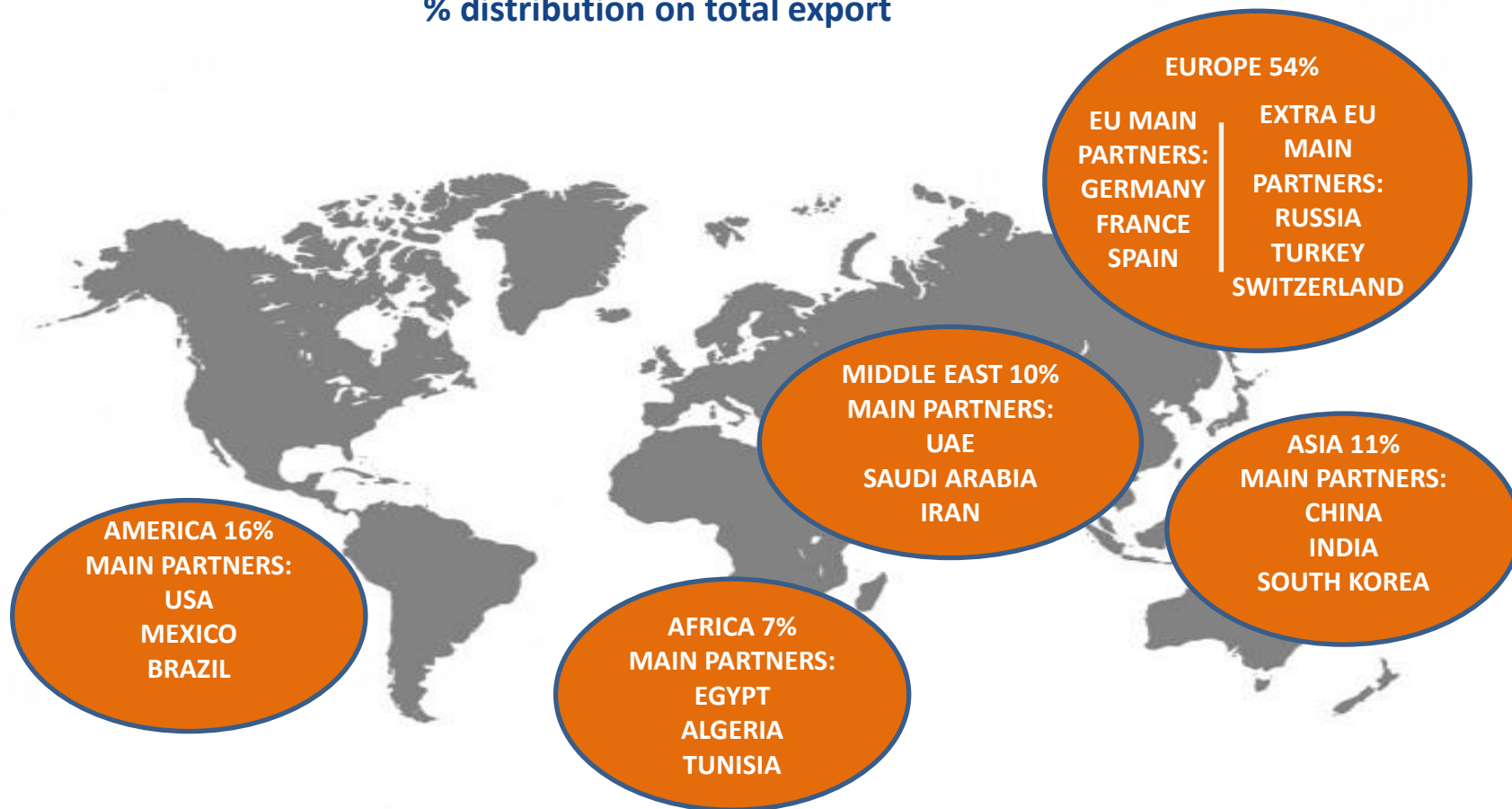
■ Electricity from Renewables
 ■ Electricity from other sources
 —●— Share of electricity production from renewables

- **Share of electricity production from renewables: 15% in 2006 - 32% in 2017**
- The amount of electricity from renewables doubled in 7 years
- **Extraordinary contribution** of hydropower, wind and photovoltaic.

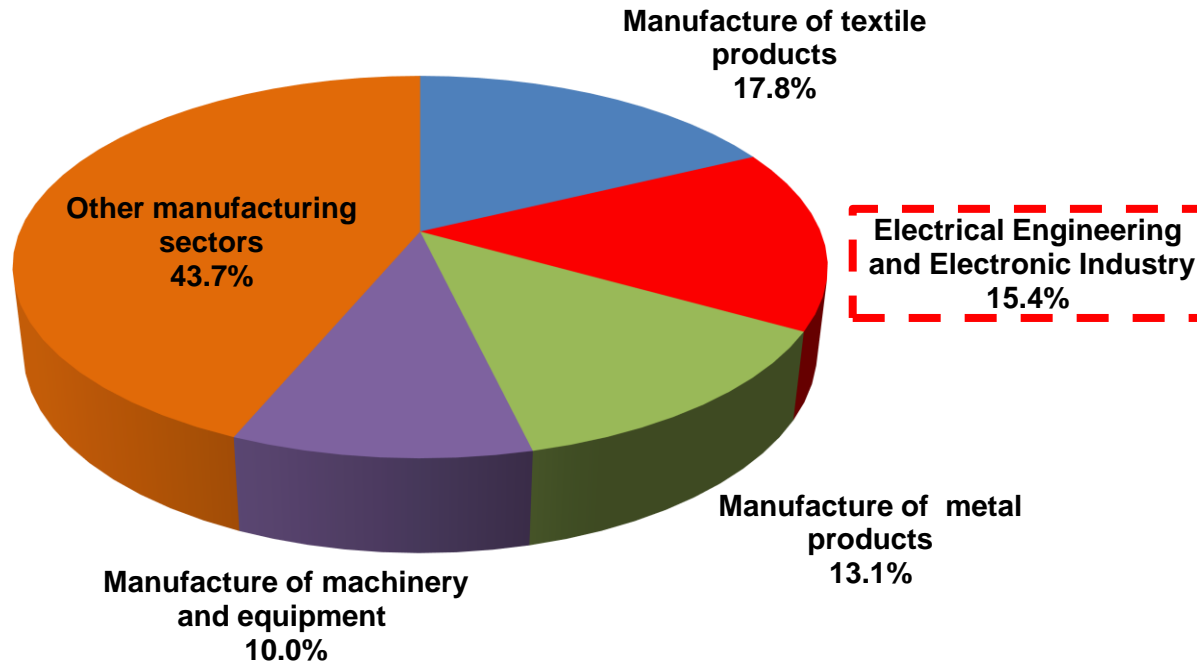
Foreign markets: the Italian technologies for Power industry



The Italian Export of technologies for Power industry by geographical area
% distribution on total export



Italian exports to Tunisia by industrial sectors (year 2018)



Source: ANIE processing on ISTAT data

- ❖ According to preliminary data, in **2018** the Italian exports of Electrical Engineering and Electronic technologies account for about **15%** of total Italian manufacturing exports to Tunisia, for a value of **528 million euro** and annual growth of **5.8%**.

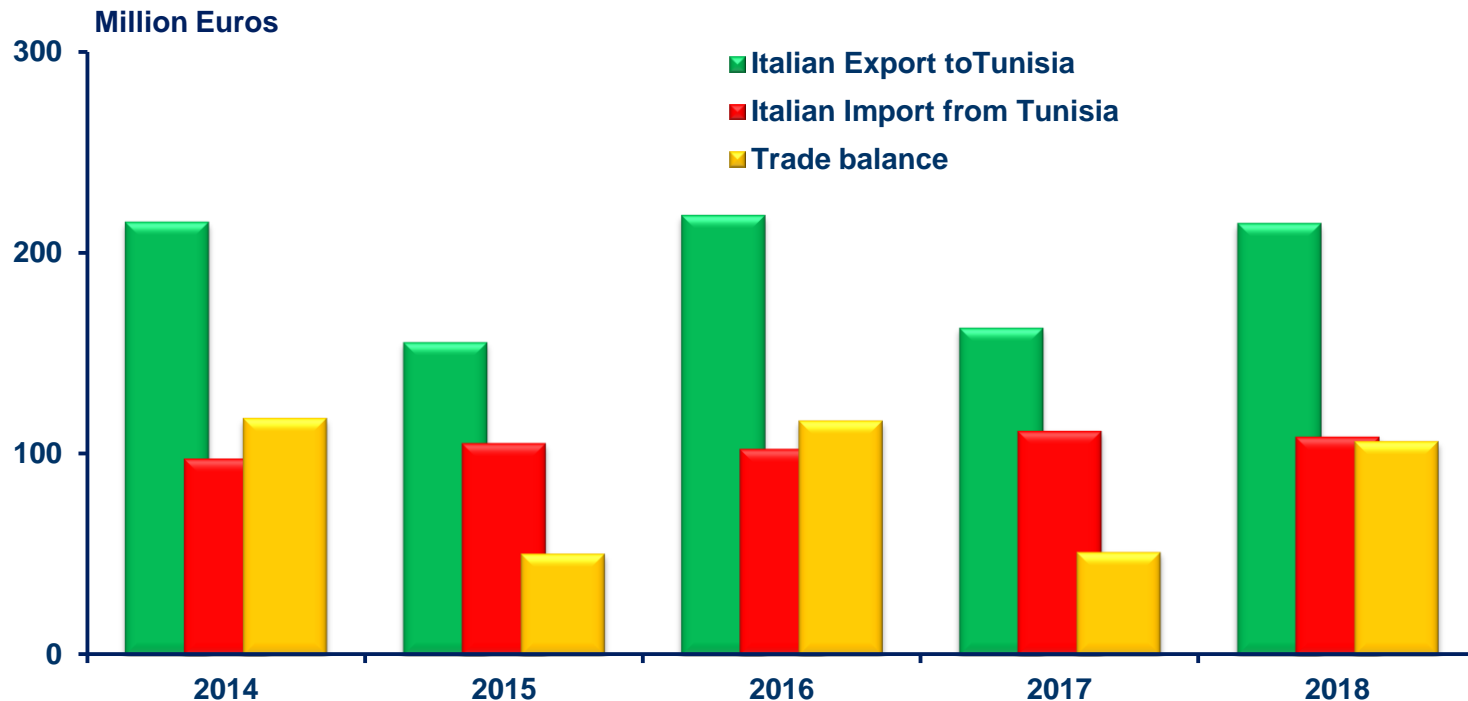
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Technologies for Power industry – Trade balance Italy-Tunisia



	Million Euros				
	2014	2015	2016	2017	2018
Italian Export to Tunisia	215.2	155.5	218.6	162.6	214.6
Italian Import from Tunisia	97.7	105.2	102.4	111.3	108.4
Trade balance	117.5	50.4	116.3	51.3	106.1

* Renewable and traditional energies

Source: ANIE processing on ISTAT data

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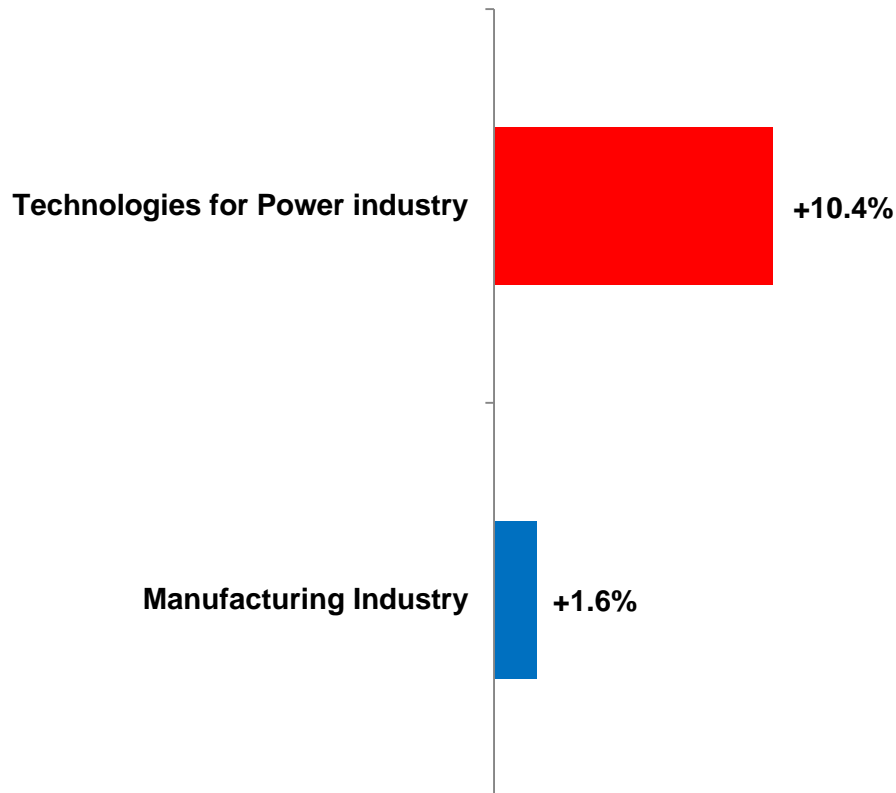


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The Italian exports of technologies for Power industry* to Tunisia

Compound Annual Growth Rate, 2013-2018



- ❖ According to preliminary data, in **2018** the Italian exports of technologies for Power industry account for about **40%** of total Italian Electrical Engineering and Electronic exports to Tunisia, for a value close to **215 million euro** and a double-digit growth.

- ❖ **+10.4%** annual growth rate of Italian exports of technologies for Power industry to Tunisia in **2013-2018** (+1.6% for Italian manufacturing exports)

* Renewable and traditional energies
Source: ANIE processing on ISTAT data



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**Thank you
for your attention**