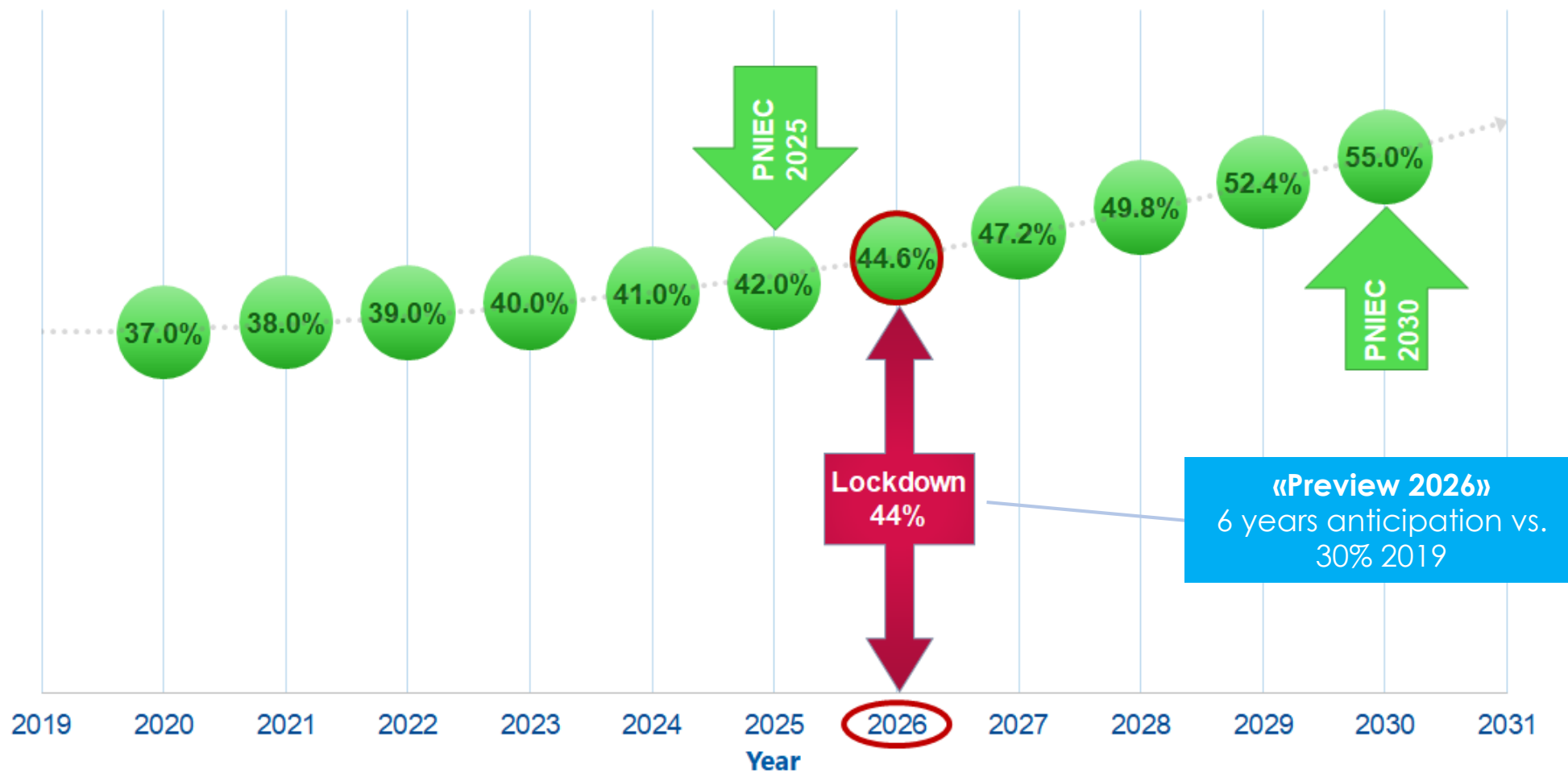


# Impact of the COVID-19 crisis on the power sector

# Renewables penetration – Lockdown period vs 2030 Horizon



Notes: RES penetration is the ratio between yearly energy production from RES and yearly energy demand

Source: CESI

# The lockdown measures have caused a drop in the electricity demand in the countries affected by the pandemic

## Full Lockdown



-25% energy demand per week

## Partial Lockdown



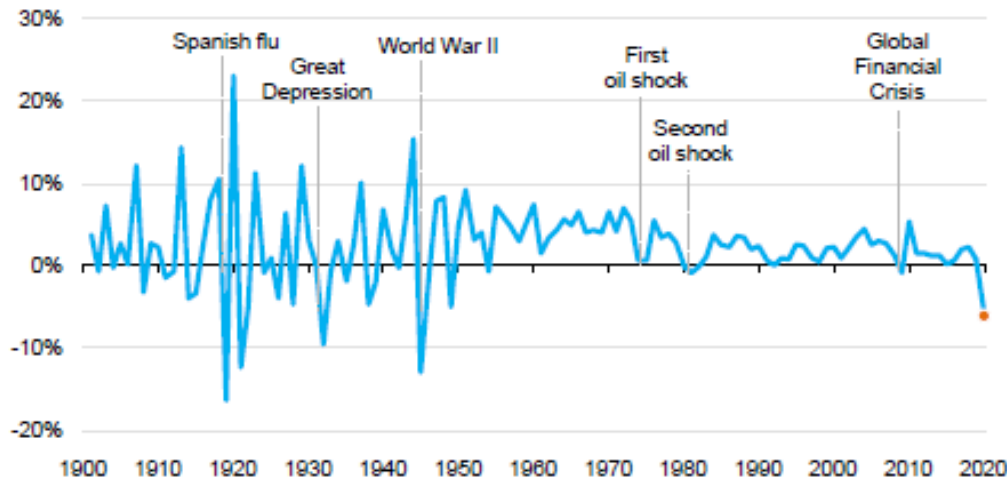
-18% energy demand per week

## World

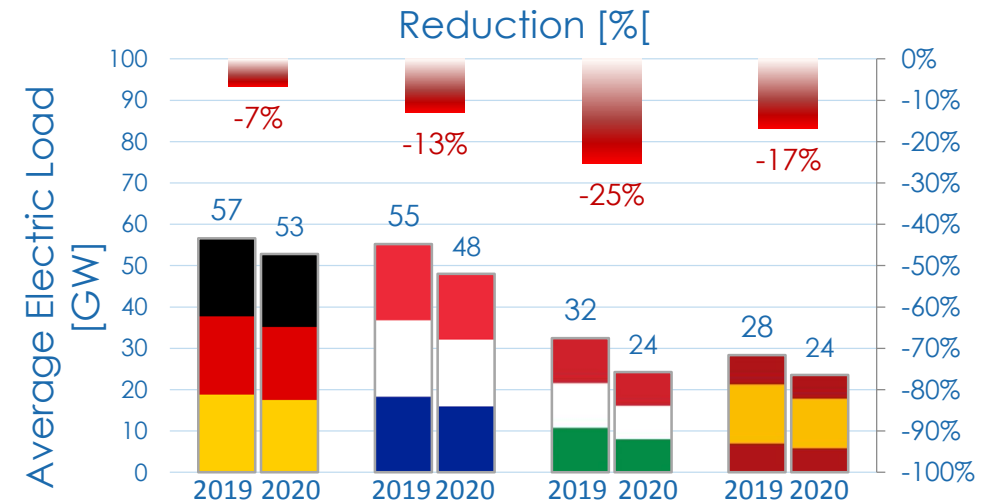


Q1 2020: -3.8%  
FY 2020: -6% energy demand

### Flactuation of primary energy demand 1900-2020



### Variation of electricity demand – Lockdown period 2020 vs. 2019\*



In Italy, one of the Countries most affected by the pandemic, we have witnessed a decline in energy demand of nearly 25%, caused by the lockdown measures. Germany, France and Spain recorded a drop between 7% and 17%

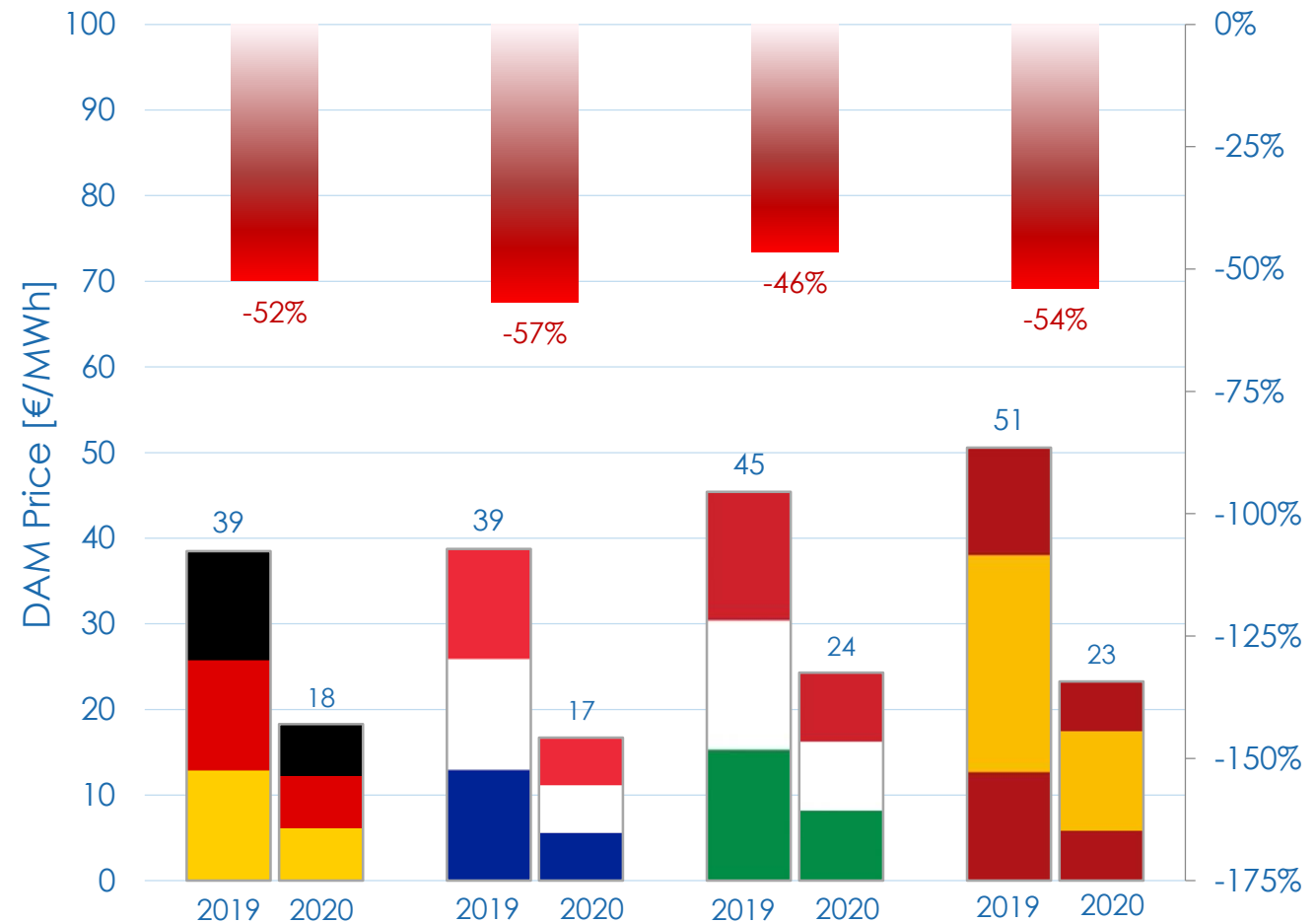
# Price Reduction Day-Ahead-Market[%] - 2020 vs. 2019

Dates of the beginning of lockdowns:

Italy	9 March
Spain	14 March
France	17 March
Germany	21 March

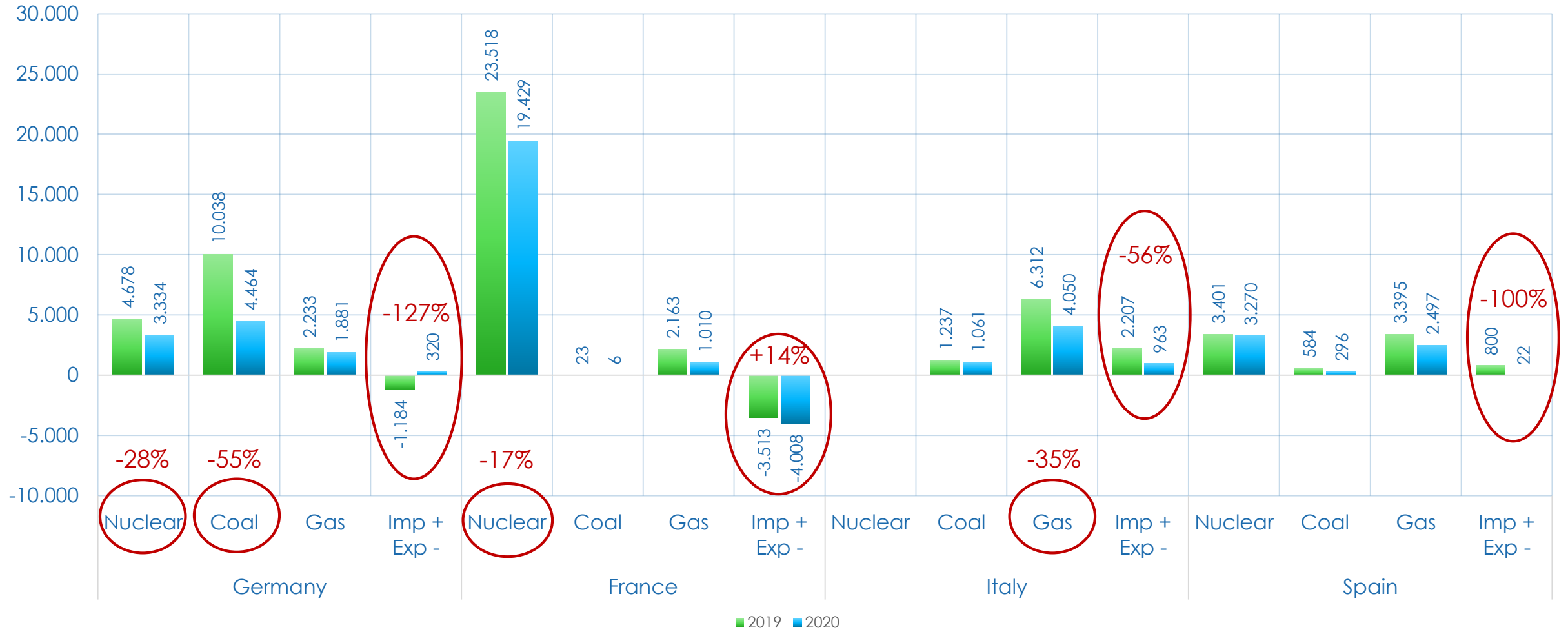
No price alignment between Central Europe and peripheral areas

Lockdown period 2020 vs. 2019  
21/03/2019 - 10/04/2019 vs. 21/03/2020 - 10/04/2020

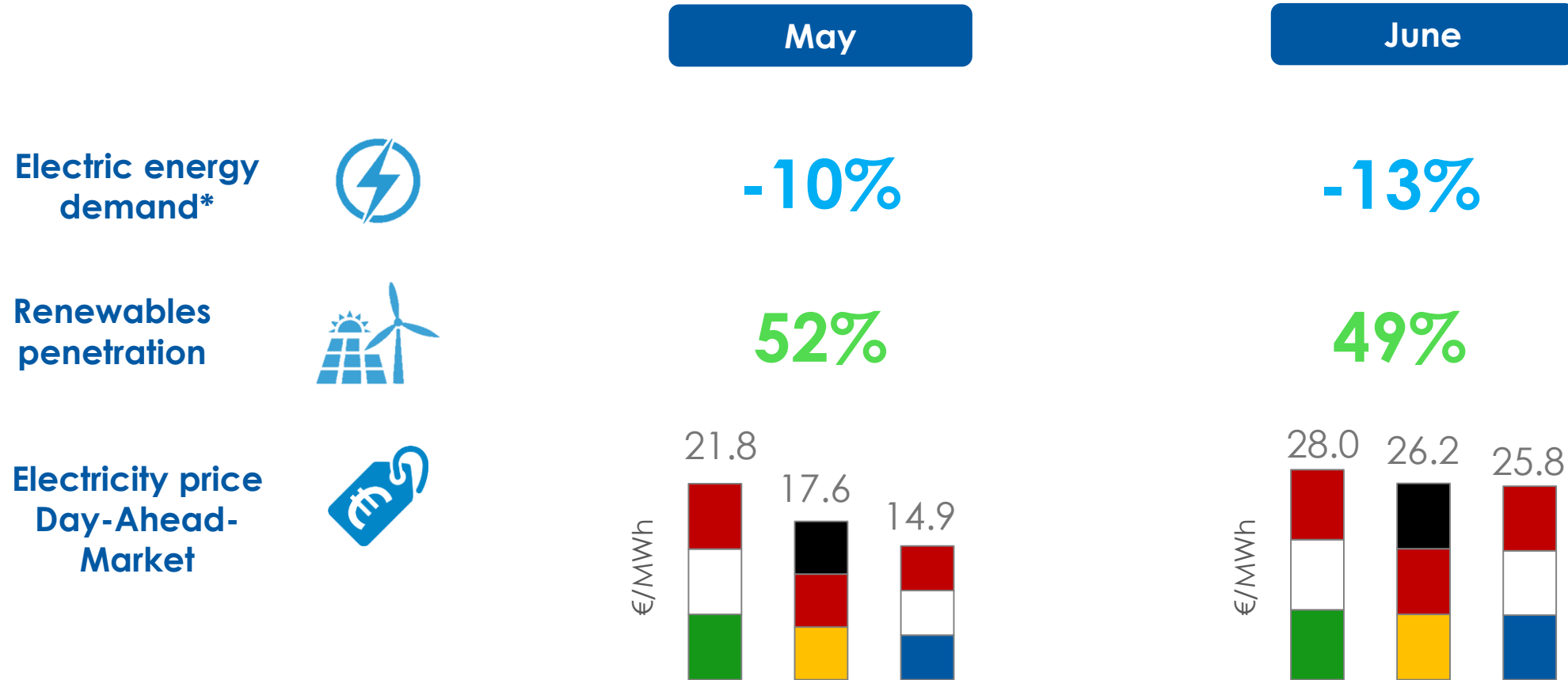


# Generation drop per energy source and cross-border exchanges during lockdown [GWh] - 2020 vs. 2019

Lockdown period 2019 vs. 2020  
21/03/2019 - 10/04/2019 vs. 21/03/2020 - 10/04/2020



# Post-Lockdown situation in Italy



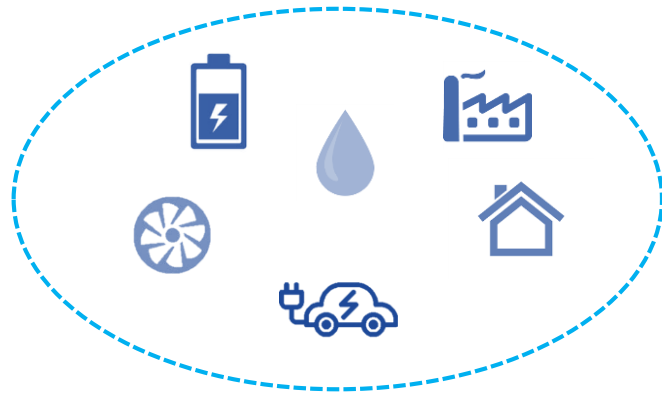
We can see the first signs of a slow recovery, with a reduced price differential between Italy, Germany and France. The share of renewables on the load has increased further compared to the previous months

# Possible solutions to face the next challenges and make the decarbonization of the sector systemic

During this crisis, the Italian energy system benefited from the investments made in recent years and was able to guarantee a constant supply of energy to citizens and businesses.

However, there have been clear indications on the needs for future investments, which can guarantee a safe energy system, capable of accommodating increasing quantities of renewable energy.

## 1 Increased flexibility and resilience of the energy sector



## 2 Realization of interconnection infrastructures



The electricity sector can be a driving force for economic recovery through the realization of public and private investments in infrastructure, renewable plants and assets for system flexibility