Χαρακτηριστικά Συστημάτων Ηλεκτρισμού και Φυσικού Αερίου Κύπρου

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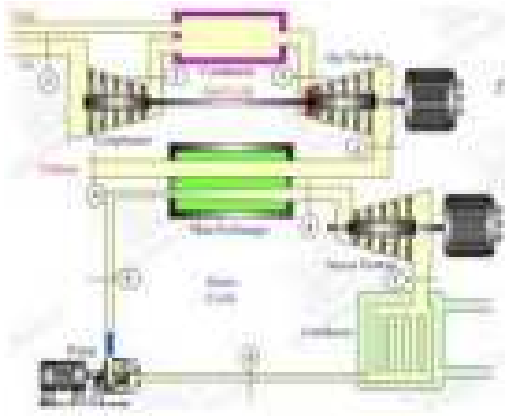
Existing power generation system

- **Steam turbine units (HFO)**
  - Dhekelia power station 6x60MWe
  - Vasilikos power station 3x130MWe

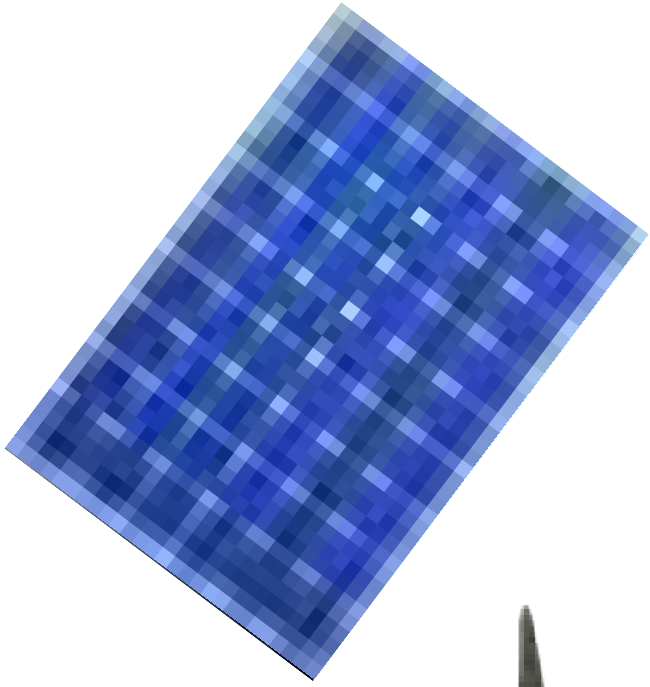
- **Internal combustion engines (HFO)**
  - Dhekelia power station 6x17.5MWe
  - W2E1 (Kofinou) station 3x1.5MWe



- **Combined cycles (Diesel)**
  - Vasilikos power station 2x220MWe
- **Gas turbine units (Diesel)**
  - Moni power station 4x37,5MWe
  - Vasilikos power station 1x38MWe

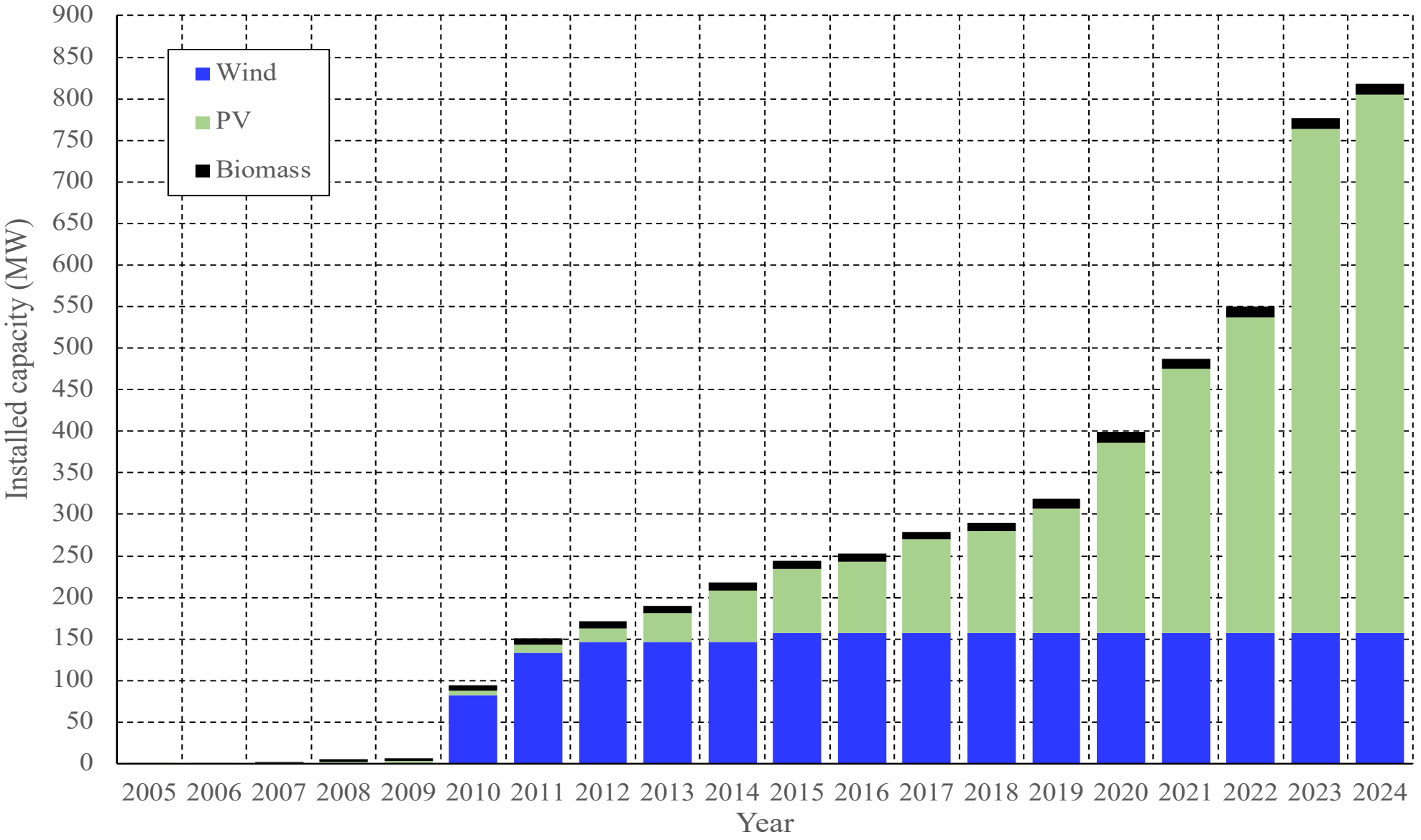
Existing power generation system (cont.)

- **Renewables**
  - **PVs: 648MWe**
  - **Wind: 157MWe**
  - **Biomass: 13MWe**



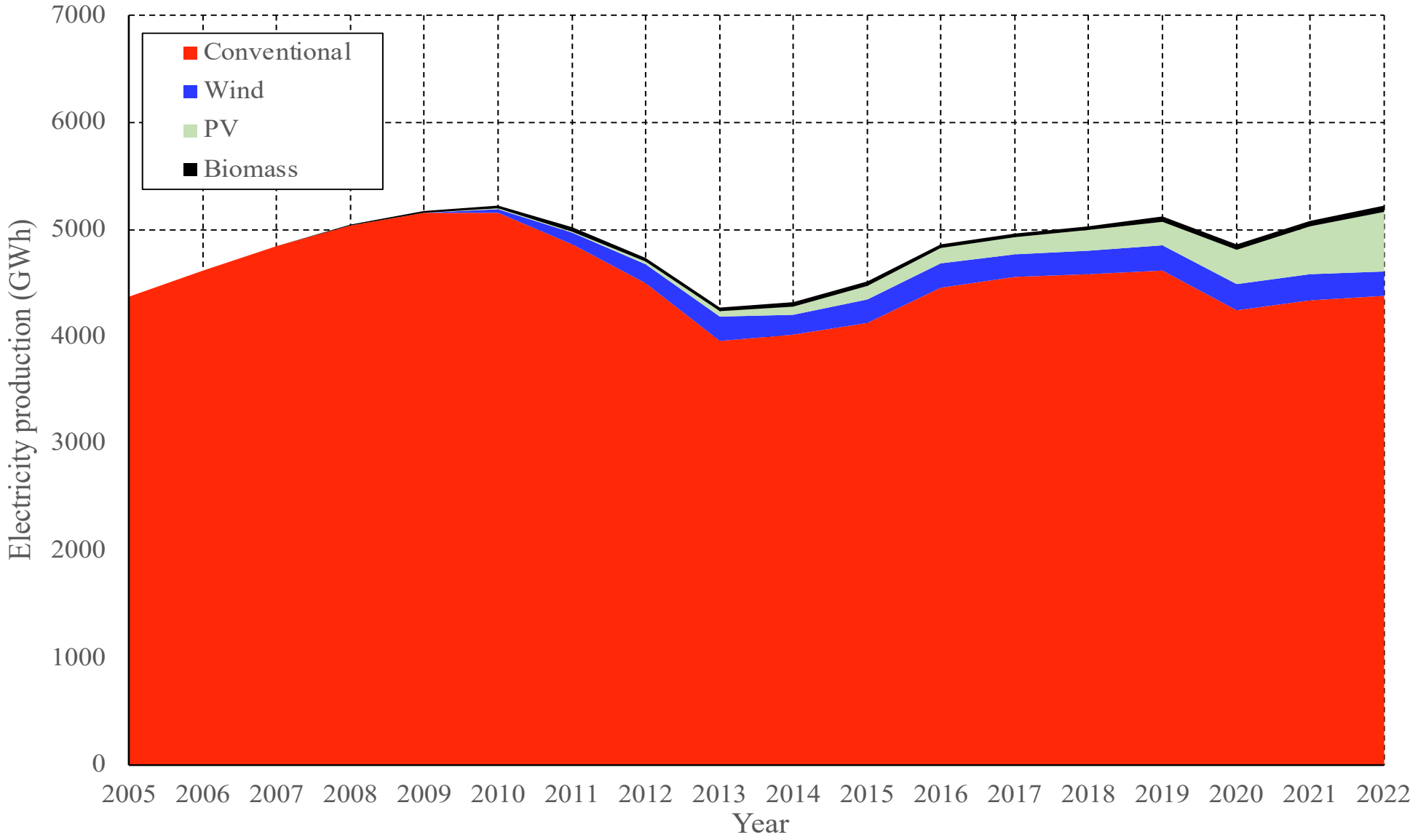
- **Total installed capacity:**
  - **Conventional: 1488MWe**
  - **Renewables: 818MWe**

RES-E installed capacity*



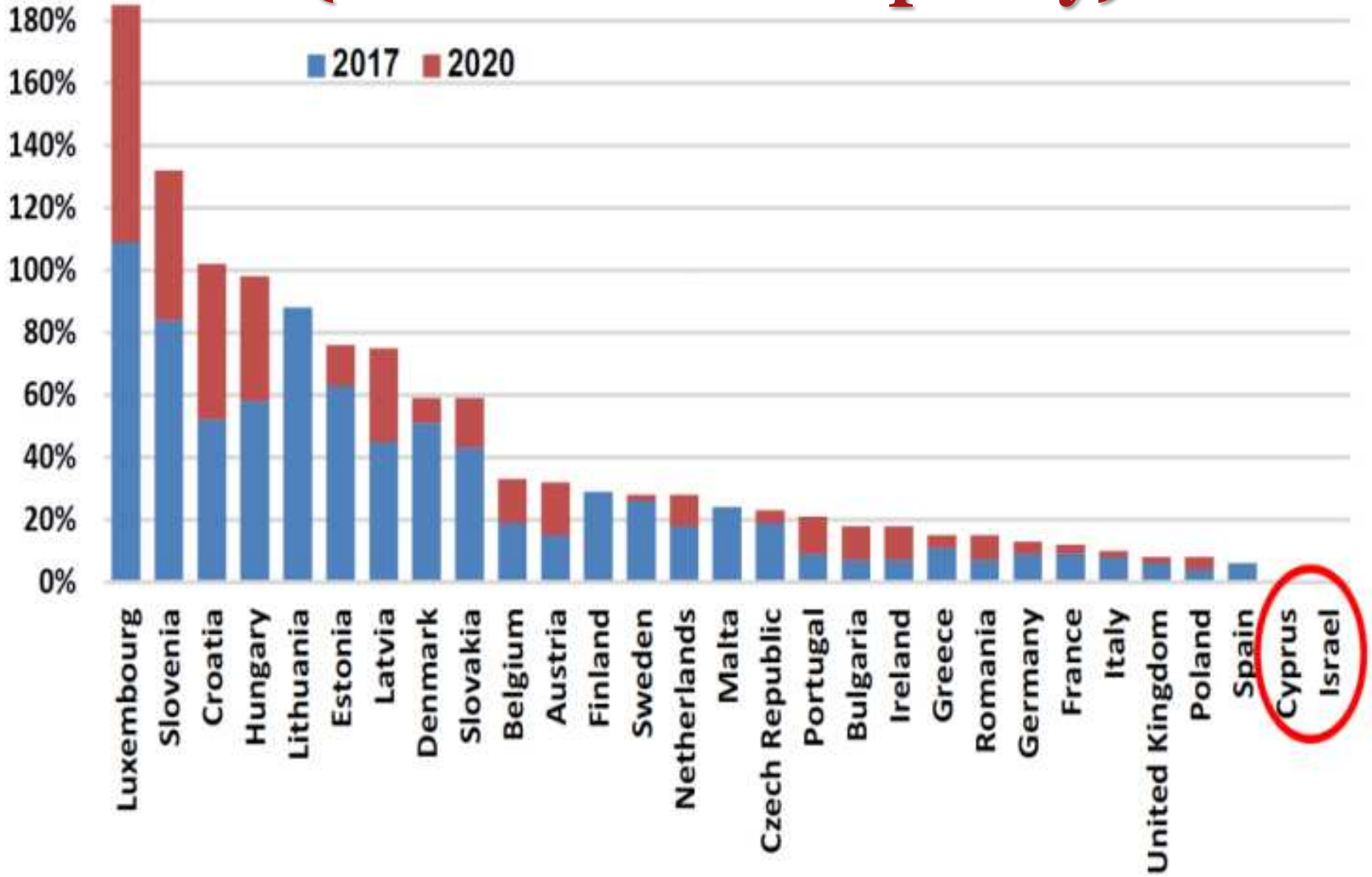
* www.cera.org.cy

Total electricity production per year*

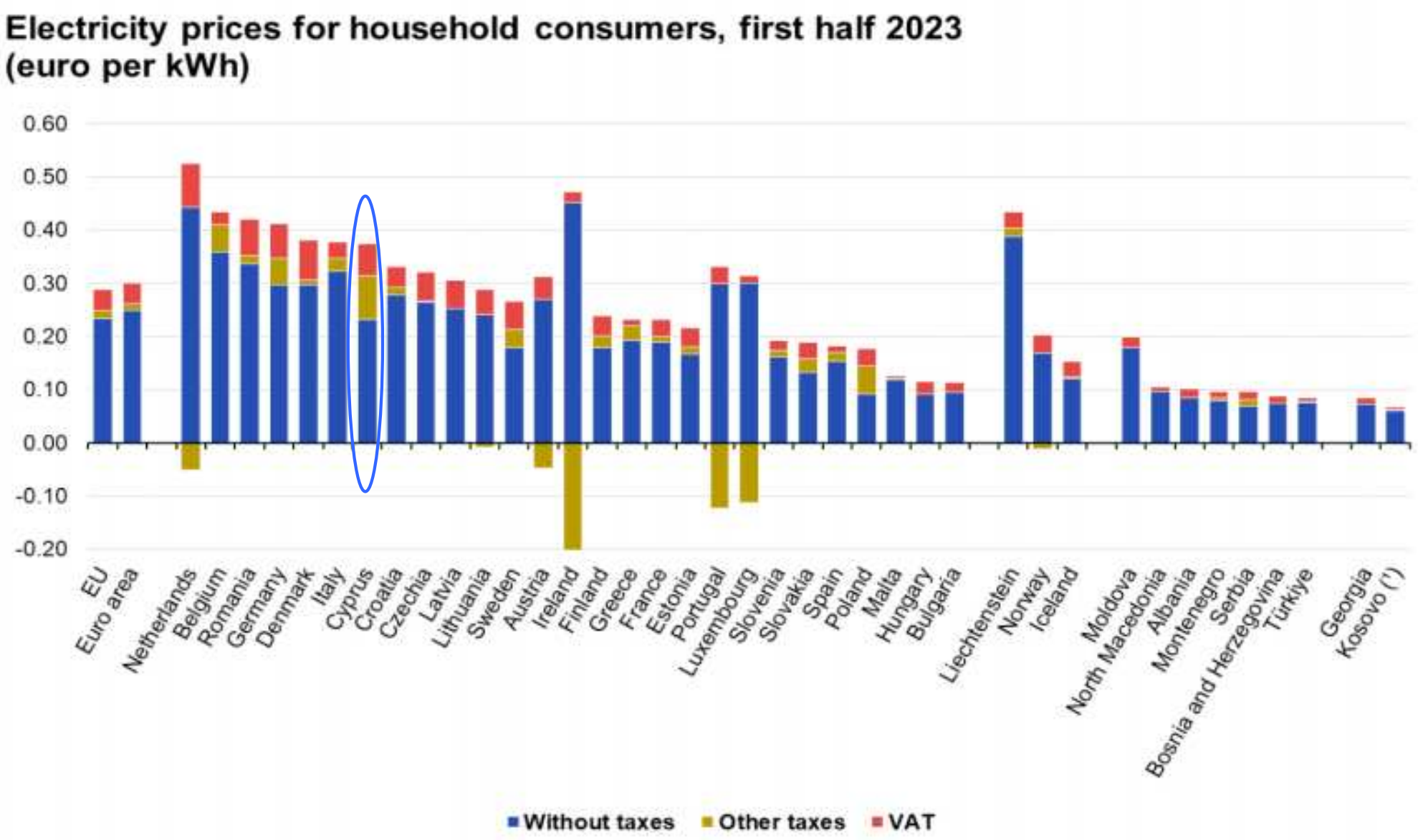


*** www.cera.org.cy**

Interconnection between countries in the EU (% of installed capacity)

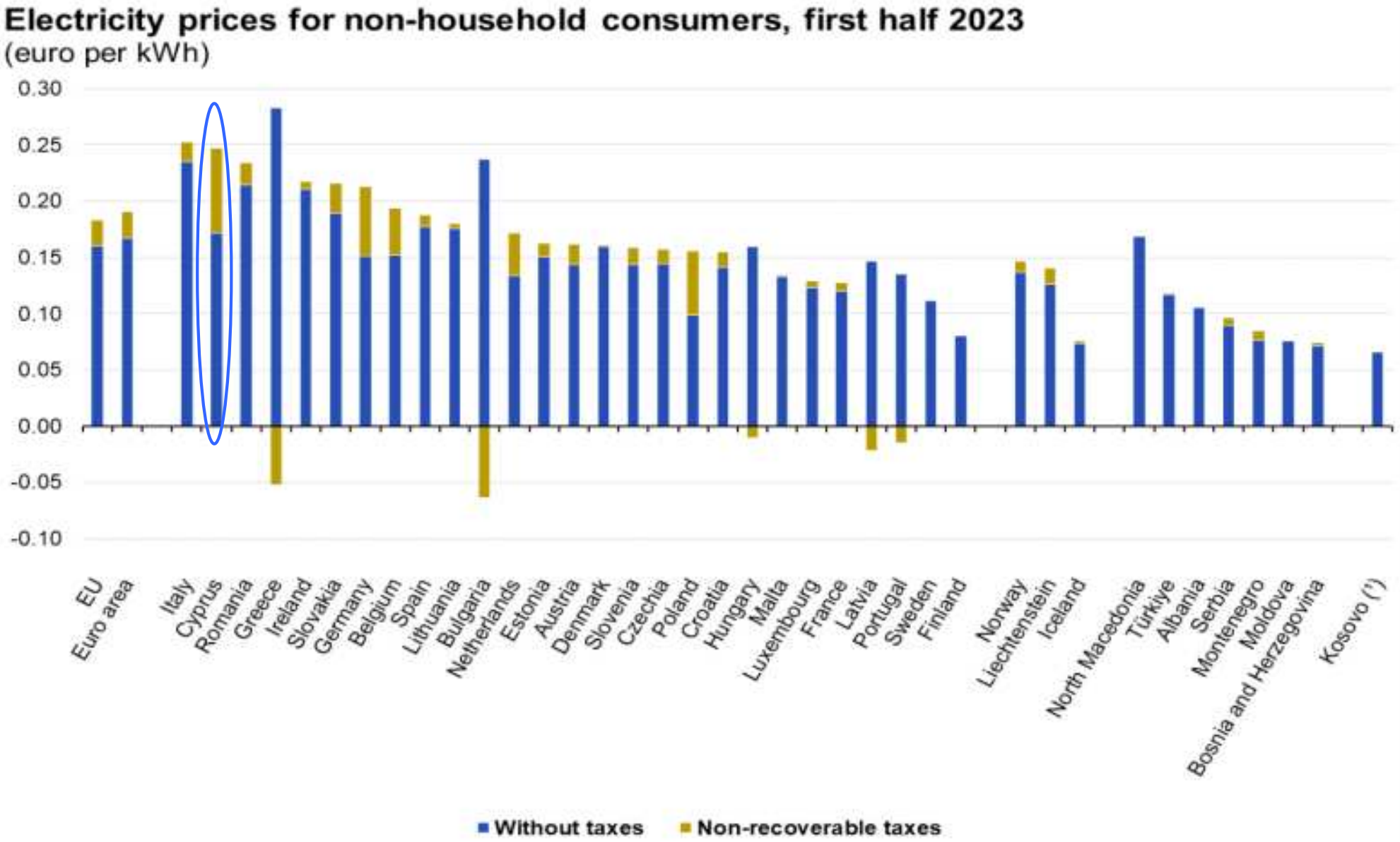


EU statistics*



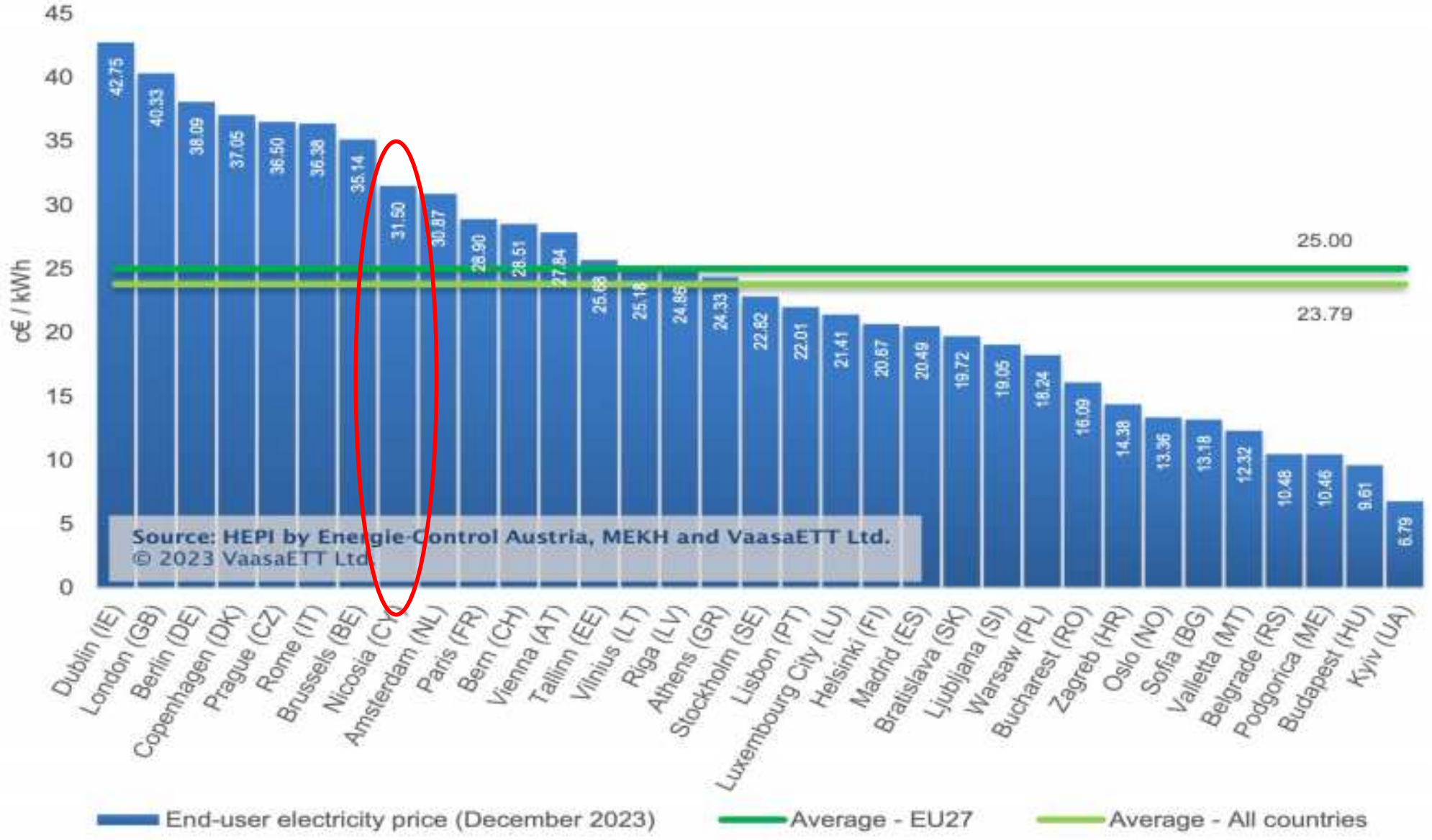
*** Eurostat**

EU statistics* (cont.)



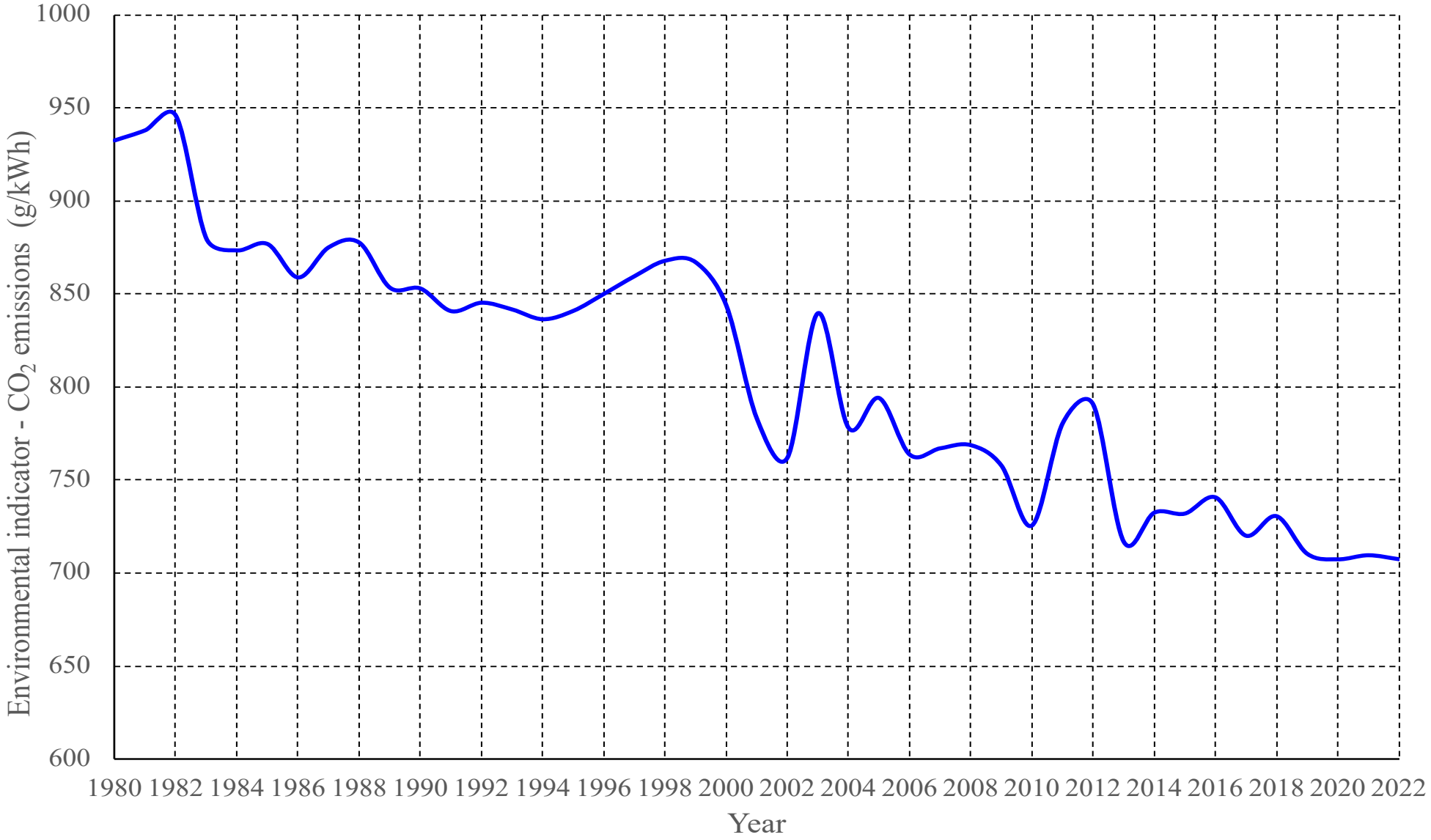
*** Eurostat**

EU statistics (Dec 2023)*



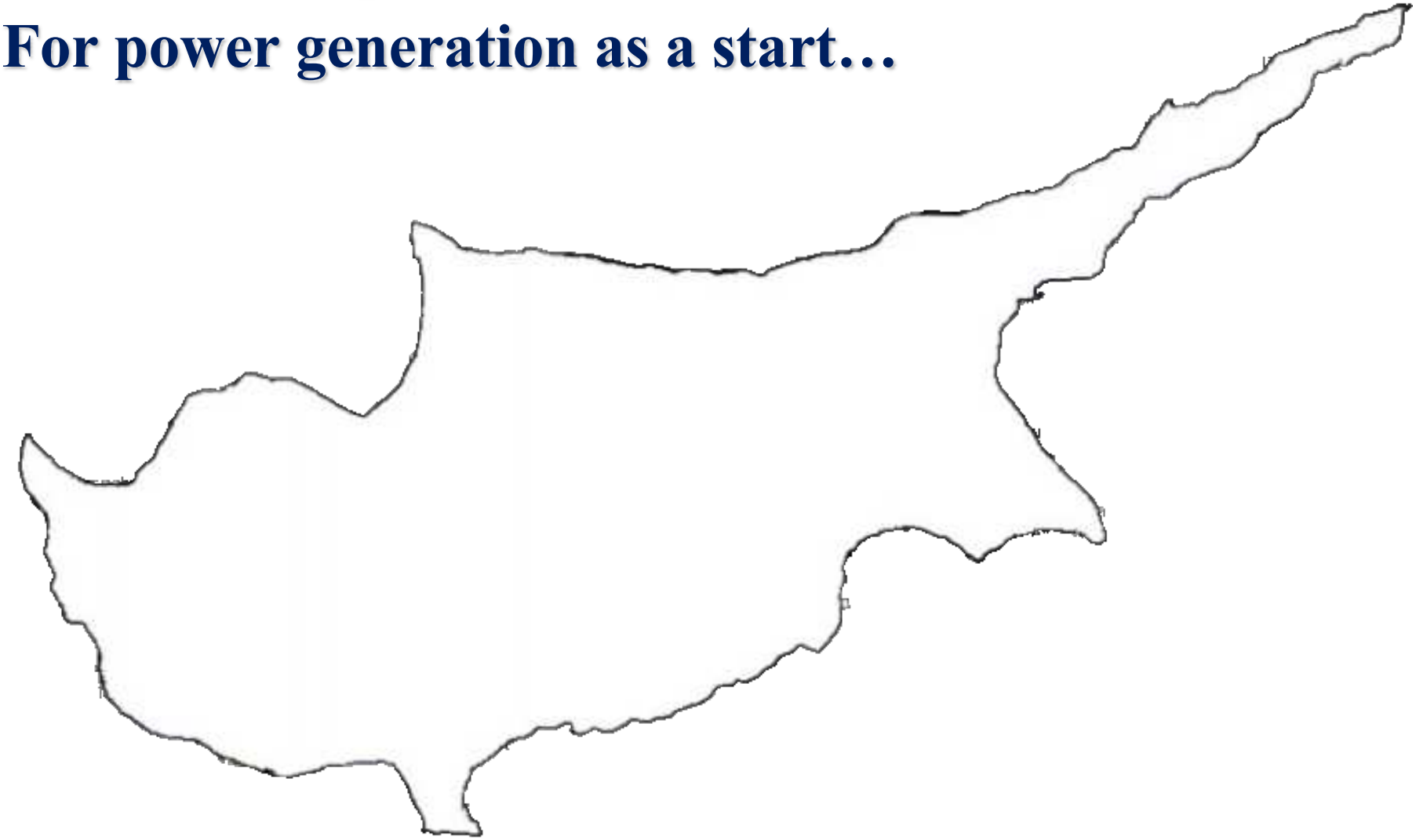
*** Household Price Index**

Electricity sector
CO_2 environmental indicator



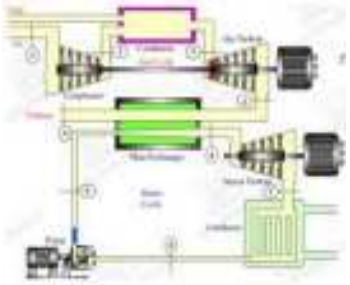
Existing natural gas system

- **Under development !**
- **For power generation as a start…**



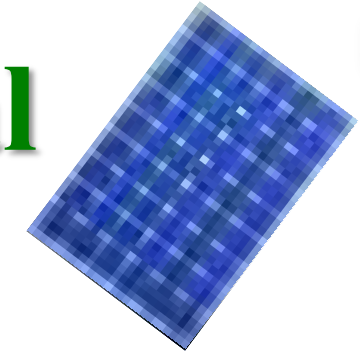
Main indigenous energy sources in SE Mediterranean region

- Natural gas

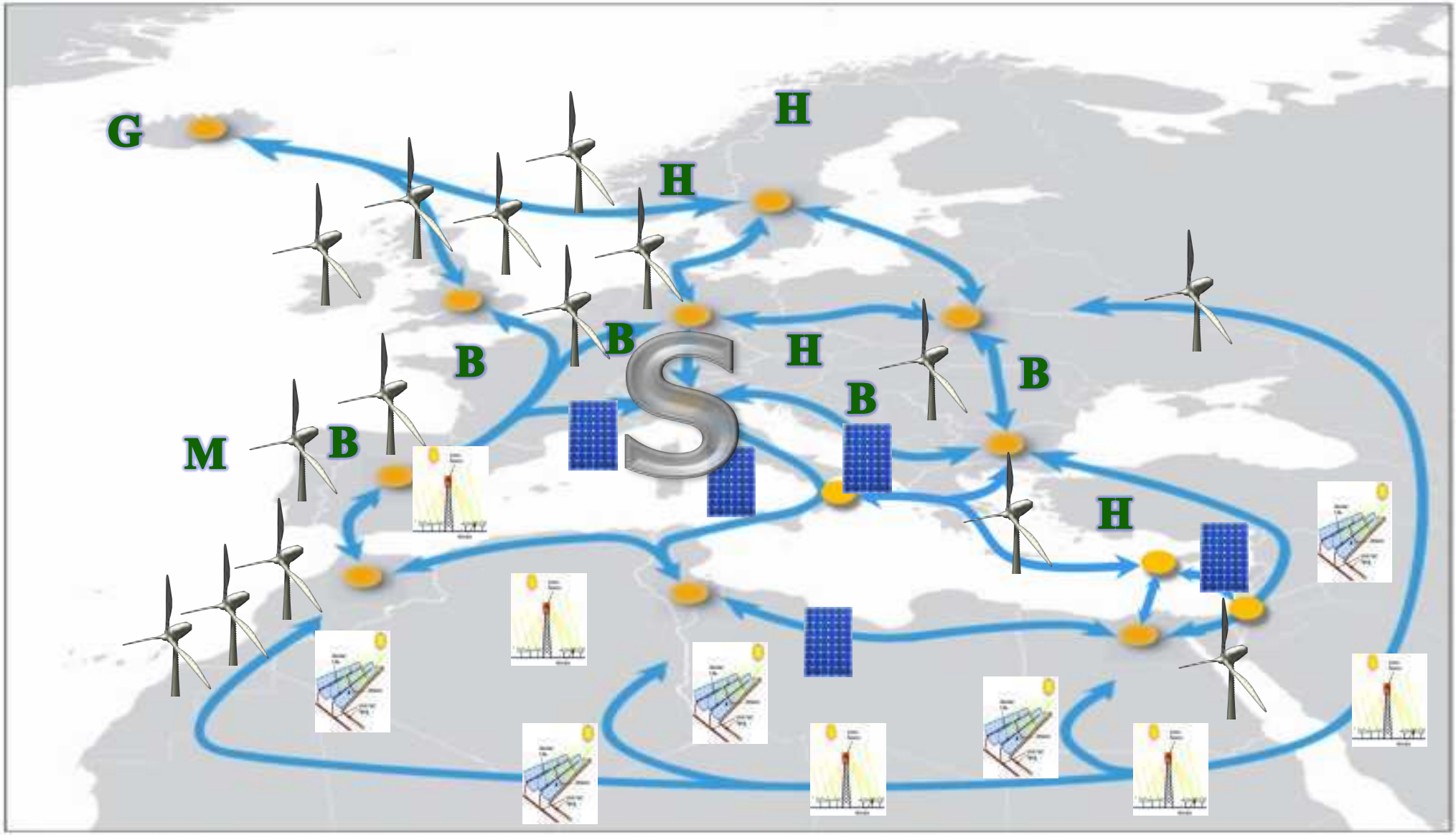


- Wind potential

- Solar potential



The Super Smart Grid after 2050*
(may allow for 100% RES)



* Poullikkas A., 2013, *Sustainable Energy Development for Cyprus*, ISBN: 978-9963-7355-3-2