

Χαρακτηριστικά Συστημάτων Ηλεκτρισμού και Φυσικού Αερίου Κύπρου

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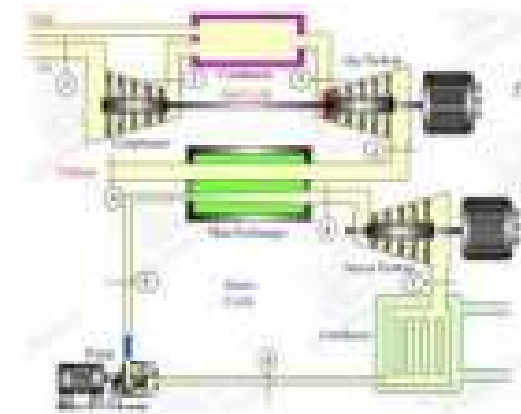
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Existing power generation system

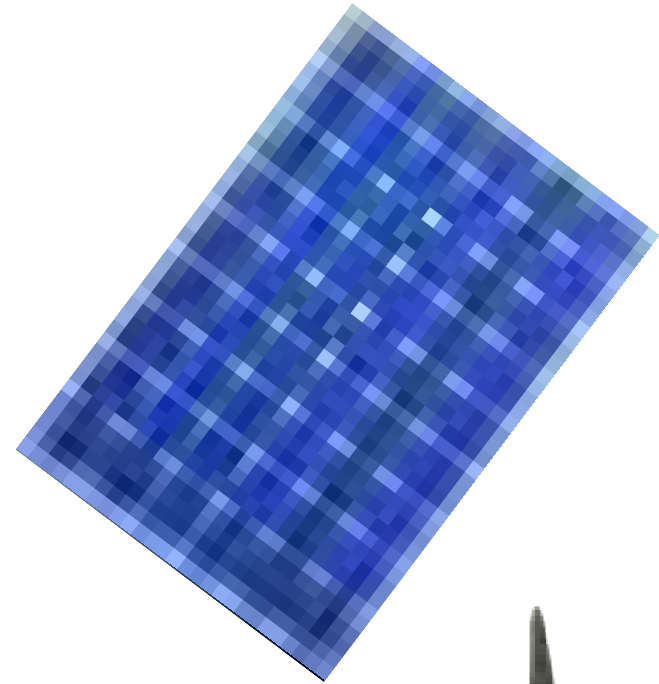
- **Steam turbine units (HFO)**
 - Dhekelia power station 6x60MWe
 - Vasilikos power station 3x130MWe
- **Internal combustion engines (HFO)**
 - Dhekelia power station 6x17.5MWe
 - W2E1 (Kofinou) station 3x1.5MWe
- **Combined cycles (Diesel)**
 - Vasilikos power station 2x220MWe
- **Gas turbine units (Diesel)**
 - Moni power station 4x37,5MWe
 - Vasilikos power station 1x38MWe



Existing power generation system (cont.)

- **Renewables**

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

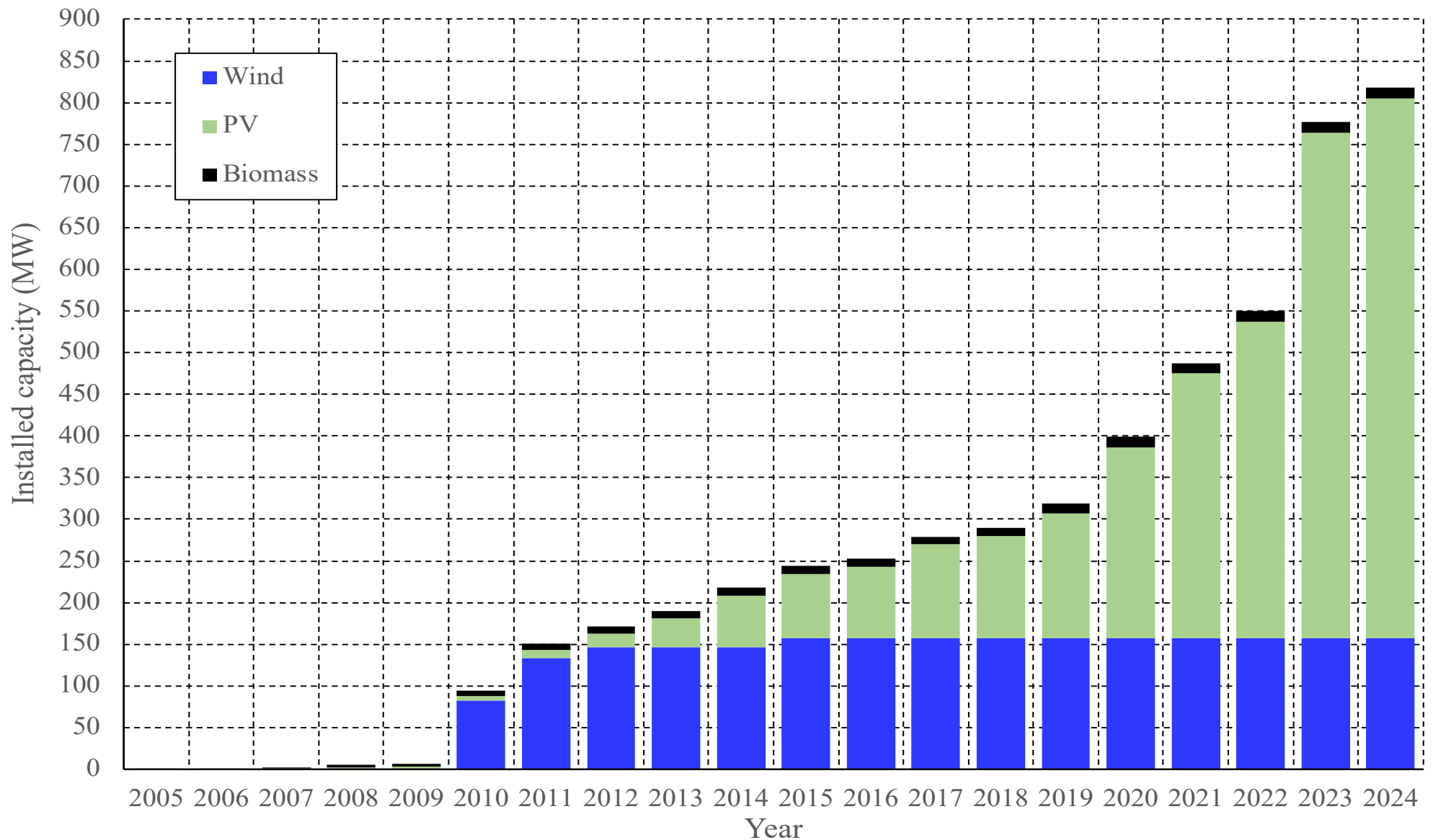


- **Total installed capacity:**

- **Conventional: 1488MWe**
- **Renewables: 818MWe**

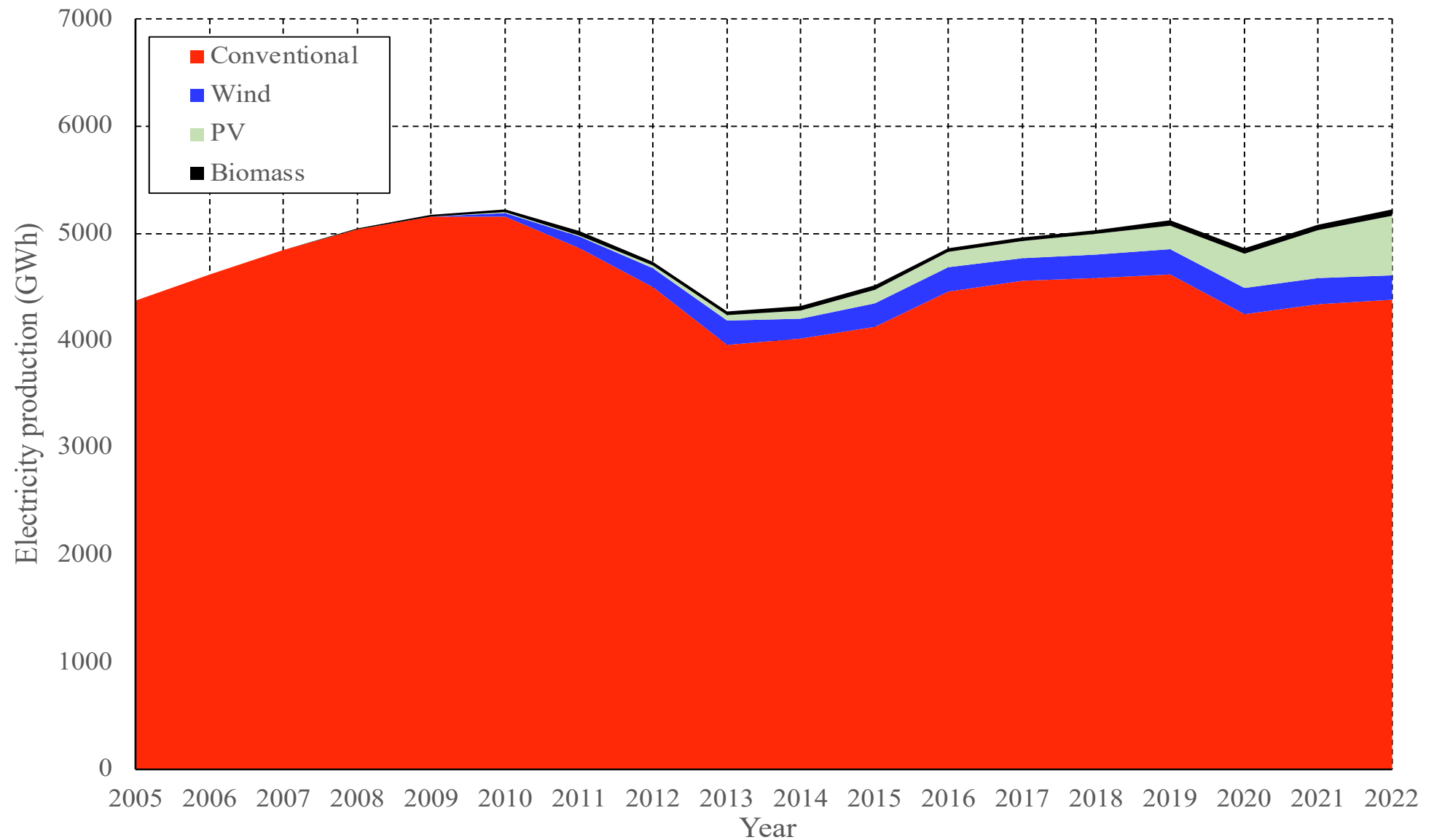


RES-E installed capacity*



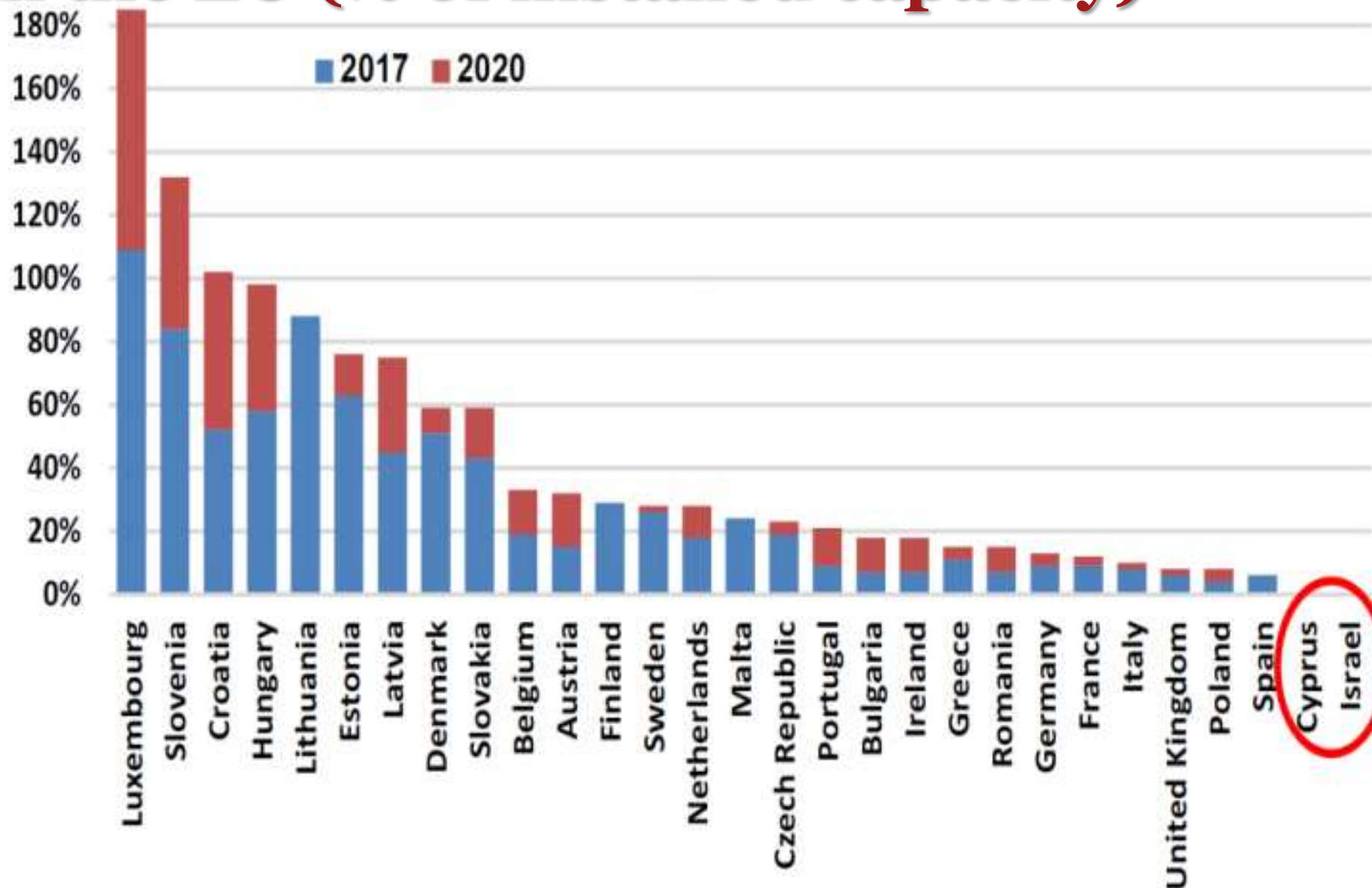
* www.cera.org.cy

Total electricity production per year*



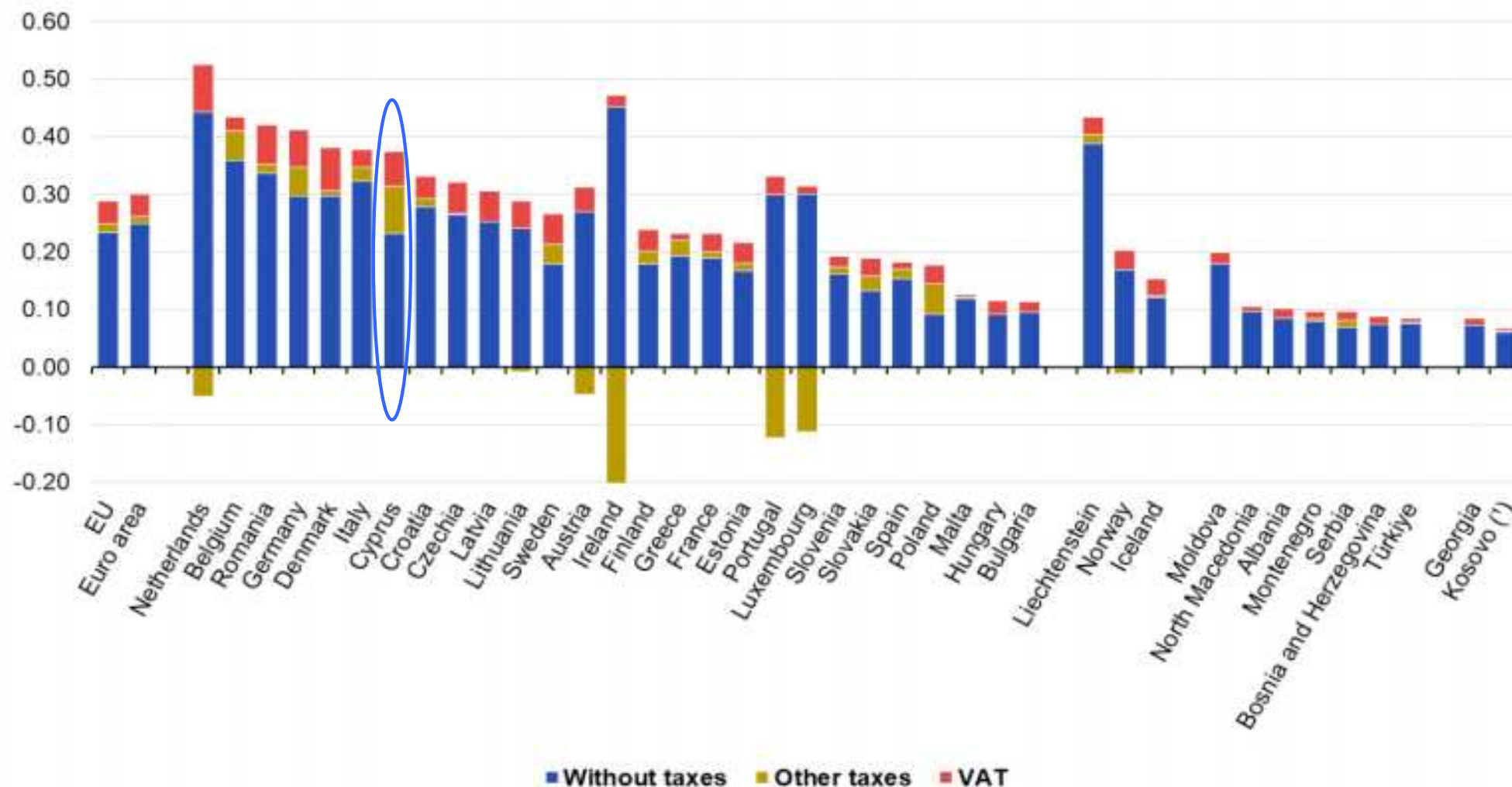
* www.cera.org.cy

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



EU statistics*

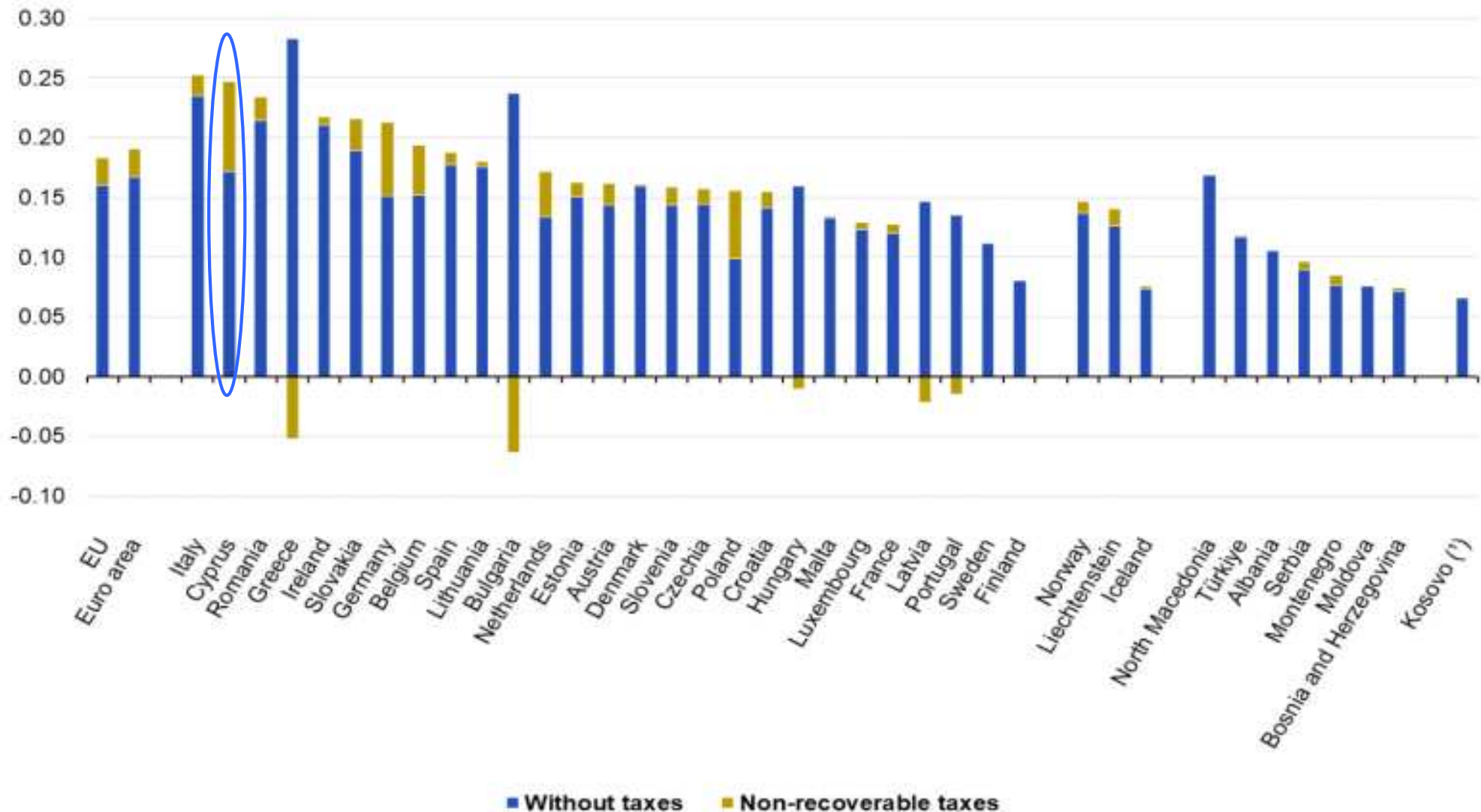
Electricity prices for household consumers, first half 2023
(euro per kWh)



* Eurostat

EU statistics* (cont.)

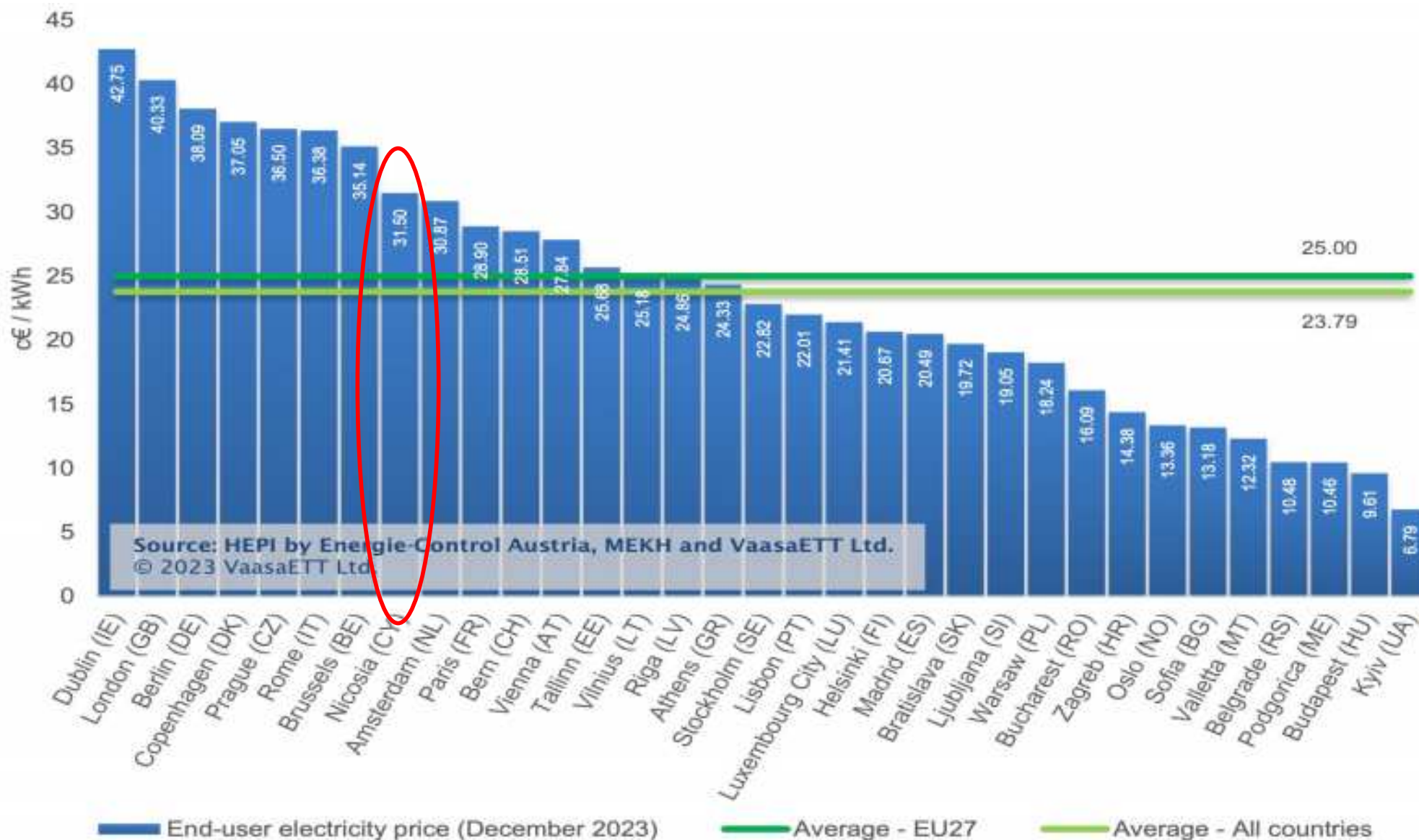
Electricity prices for non-household consumers, first half 2023
(euro per kWh)



* Eurostat

Ευρωπαϊκές και Εθνικές Στρατηγικές για Ενέργεια και Καύσιμα 2030-2050
Ινστιτούτο Περιβάλλοντος & Αειφόρου Ανάπτυξης, Λευκωσία, 15 Ιανουαρίου 2024

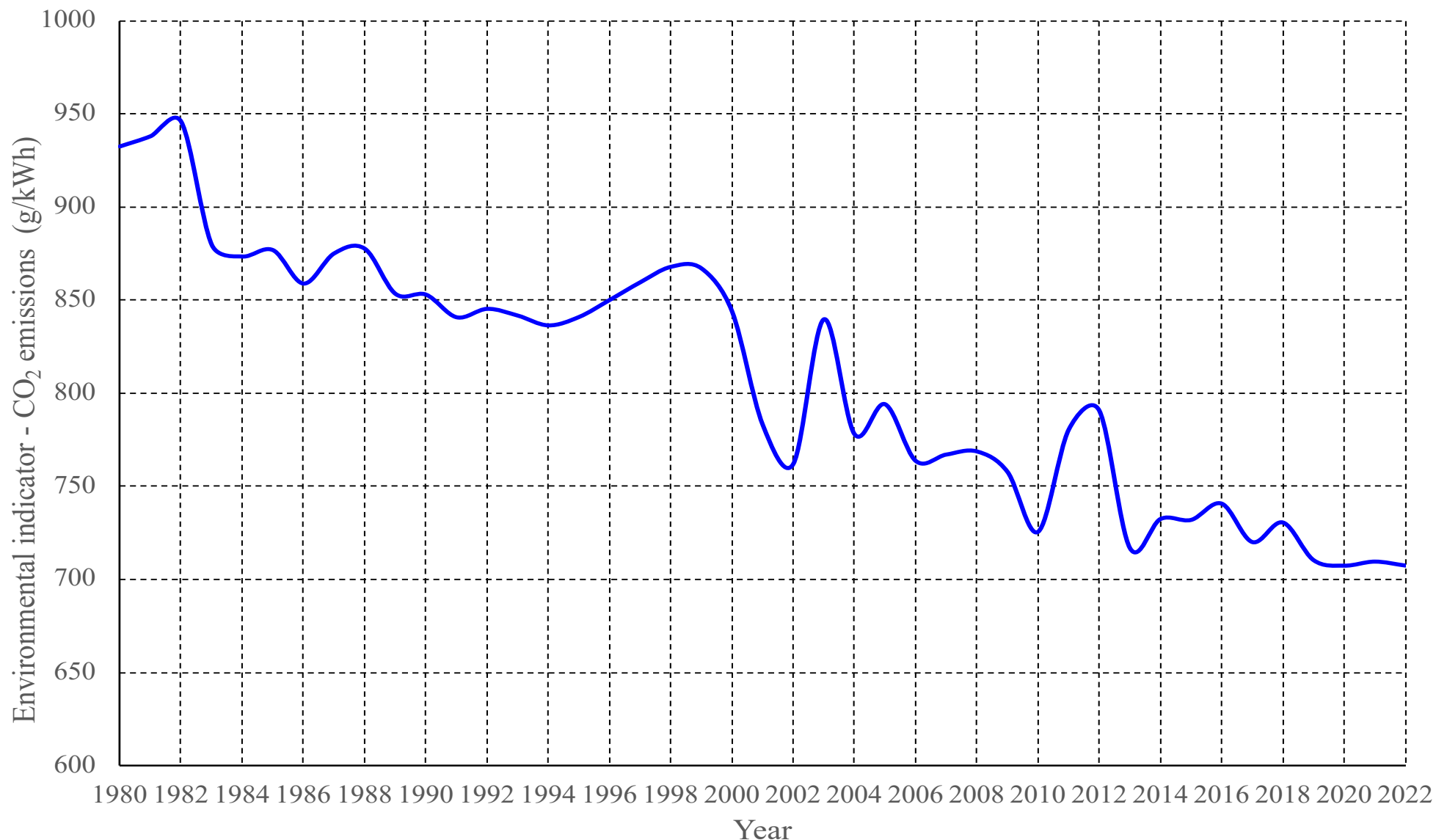
EU statistics (Dec 2023)*



* Household Price Index

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Electricity sector CO₂ environmental indicator



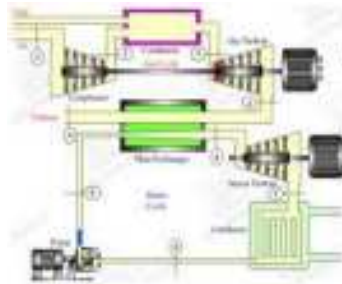
Existing natural gas system

- Under development !
- For power generation as a start...



Main indigenous energy sources in SE Mediterranean region

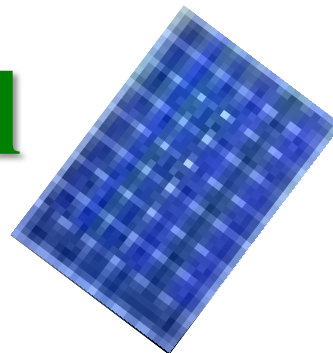
- Natural gas



- Wind potential

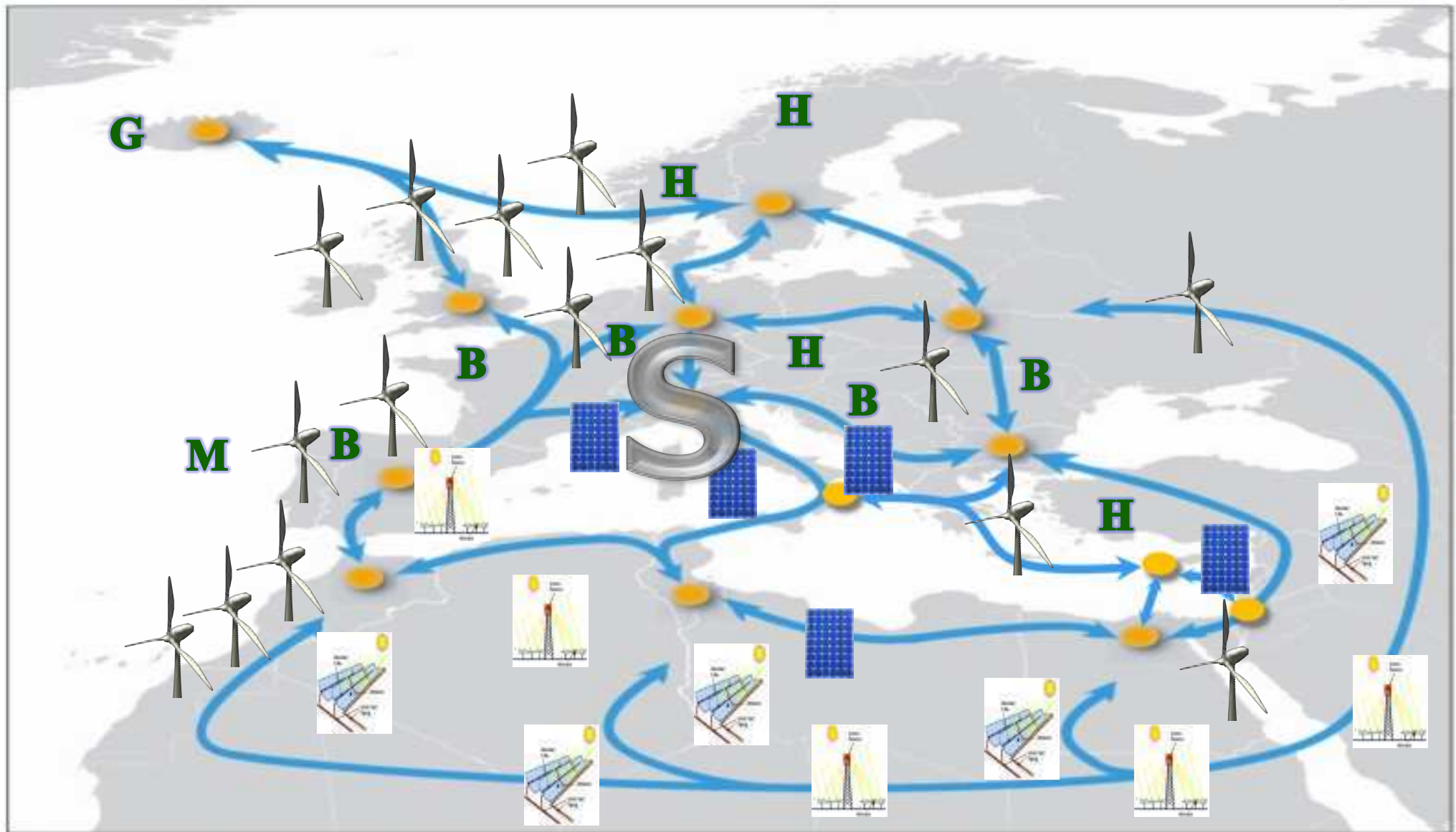


- Solar potential



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

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