

# CHART OF THE WEEK

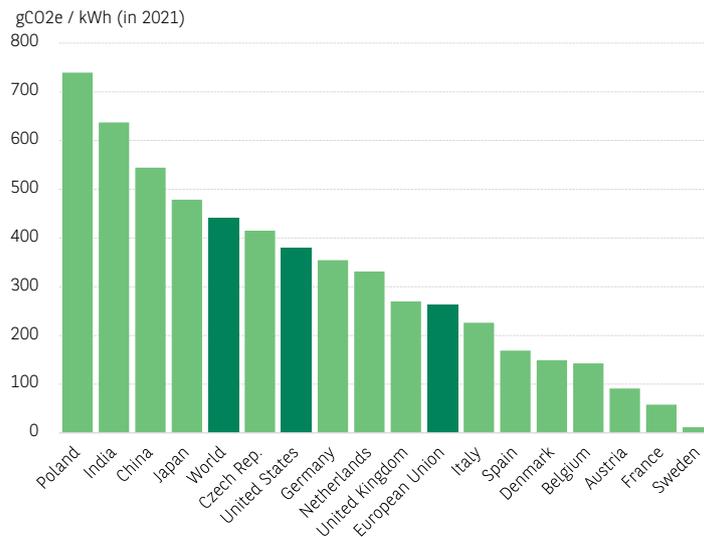


1 February 2023

## BEHIND THE WATTS, A BIG CONTRAST

Jean-Luc Proutat

### Carbon intensity of electricity



Source: Our World in Data, BP Statistical Review, BNP Paribas

The war in Ukraine has not had the same consequences everywhere - far from it. With the conflict on its doorstep, the European Union (EU) has had to try and free itself from its dependence on Russian fuels, as a matter of urgency and at a significant cost. At 800 billion euros in 2022, its bill for imported energy has more than doubled<sup>1</sup>. For its part, the United States has made a record profit from its energy balance, positioning itself as the leading supplier of liquefied natural gas (LNG) to Europe. Electricity prices gap have widened. In 2022, a megawatt hour traded in Europe at triple the rate charged in the US, at an average of 256 euros<sup>2</sup>. The historic benchmark (around 50 euros between 2000 and 2019) has been substantially exceeded.

Europe's competitiveness has been suffering, even more since Washington passed the Inflation Reduction Act, a protectionist law aimed at subsidising the North American battery and electric vehicle industry.

At a time when the energy transition is accelerating, the EU is starting with a disadvantage, but it certainly hasn't used up all its assets. Firstly, because its transport and energy infrastructures are not as obsolescent as they are in the United States, while they emit less CO<sub>2</sub>, which in the context of fleet electrification is a non-price advantage (chart). Secondly, because "green deal" investments (at least one third of the 1,800 billion euros of the NextGenerationEU stimulus package) are not insignificant and help attract foreign capital, including from the US (Financial Times, 2023<sup>3</sup>). And lastly, because the drop in the price of renewable energies combined with the introduction of a Carbon Border Adjustment Mechanism (CBAM) may over time tilt the competitive balance in favour of the EU.

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<sup>1</sup> From January to November 2022, extra-EU energy imports totalled 766 billion euros, or 836 billion euros (766 x 12/11) in annualised terms; in 2021, they were 390 billion euros. Source: Eurostat.

<sup>2</sup> In 2022, a megawatt hour of electricity was trading at an average price of 256 euros on the Amsterdam Power Exchange (the main European trading platform) compared to 73 euros on the Pennsylvania-New Jersey-Maryland Interconnexion (PJM, the main North American trading platform). Source: Refinitiv.

<sup>3</sup> Financial Times, 2023, *US fund managers turn away from China and look to Europe for growth*, January 23.

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