

## Client Briefing on the 2024 UK Emissions Factors

**ITPenergised** is a trusted advisor providing client-focused, reliable, commercially minded, environmental and energy consulting services.

The latest UK Government Emissions factors were published on 8th July 2024. These figures can be used for accurately reporting the carbon impact of business energy use.

We have provided a summary of the main points in relation to grid electricity and natural gas emission factors.

- Note that the electricity grid factors are based on 2022 grid mix data. This lag is standard and the 2024 factors should be used for calendar year 2024 emissions reporting.
  - The transmission and generation (T&D) emissions factor for grid electricity has increased from 2023 figure of 0.01792 kg CO<sub>2</sub>e per kWh to 0.01830 kg CO<sub>2</sub>e per kWh.
  - The generation emissions factor for grid electricity has not changed significantly from the 2023 figure, 0.20707 kg CO<sub>2</sub>e per kWh, to 0.20705 kg CO<sub>2</sub>e per kWh.
  - This means that the combined factor that most companies use is marginally higher than the 2023 figure of 0.22499 kg CO<sub>2</sub>e per kWh at 0.22535 kg CO<sub>2</sub>e per kWh .
- The natural gas emissions factor for 2024 has decreased slightly from the 2023 figure of 0.18293 kg CO<sub>2</sub>e per kWh to 0.18290 kg CO<sub>2</sub>e per kWh.

The grid carbon intensity remains higher than in 2022 as a result of a higher share of natural gas within the grid mix for the second year running. This goes against the trend of a steadily reducing electricity emissions factor for the years 2018-2022 largely due to a diminishing returns effect from the near-total phase out of coal from the grid mix, and the challenges in bringing new renewable generation online at scale due to grid constraints. It should be noted that UK electricity end users have all contributed to further installations of renewable energy generators, since 2021, which should be reflected in future emissions factors. The continued reduction of the electricity emissions factor for the past five years highlights the current higher intensity factor as an anomaly, albeit one which is now into its second year.

At ITPenergised, we are proud of our contribution. Despite the increase in electricity emissions factor, the grid is still continuing to decarbonise and many of our projects are very much based on achieving that outcome. We can help you with all aspects of your journey to net zero, from carbon footprinting to cradle-to-grave solutions for all renewable energy generation technologies.

