



Plan Zero - The Energy Transition - Data sources and References

“In 2019, the world used over 6 times more energy than in 1950.”

Reference: According to data from Our World In Data, Global primary energy consumption by source, based on data from Vaclav Smil (2017) and BP Statistical Review of World. Energy, Global energy demand data used: 1950 = 28,516 TWh; 2019 = 173,340 TWh

Link: <https://ourworldindata.org/grapher/global-energy-substitution?time=earliest..latest>

Breakdown of global greenhouse gases by sector

Reference: WRI / ClimateWatch data (2020), cited in Our World in Data

Link: <https://ourworldindata.org/ghg-emissions-by-sector>

“72% of emissions come from gas used for heating and hot water and the remaining 28% comes from electricity use.”

Reference: OVO's own analysis, conducted by The Carbon Trust (2020)

“The global carbon budget”

Reference: Future Earth (2020) and the Global Carbon Project

Link: <https://futureearth.org/initiatives/other-initiatives/global-carbon-budget/> and https://www.youtube.com/watch?v=aD0EgwohZwg&feature=emb_logo

“Net Zero Tracker”

Reference: Energy and climate intelligence unit - net zero emissions race

Link: <https://eciu.net/netzerotracker>

“Over the last decade, global carbon emissions *increased* by an average of 1.2% per year. Over this decade, we need carbon emissions to *decrease* by 7% per year.”

Reference: Friedlingstein, P. et al (2020): Global Carbon Budget 2020, Earth Syst. Sci. Data, 12, 3269–3340

Link: <https://doi.org/10.5194/essd-12-3269-2020>

“When the world came to a standstill in 2020, ⁷ global carbon emissions fell by 8%.”

Reference: International Energy Agency (IEA) (2020), World Energy Outlook 2020

Link:

<https://www.iea.org/reports/global-energy-review-2020/global-energy-and-co2-emissions-in-2020>

Definition of Digitalisation

Link: <https://www.iea.org/reports/digitalisation-and-energy>

Definition of Decentralisation

Link: <https://www.edie.net/definition/Decentralised-energy/33>



“To get to net zero by 2050, ¹¹ 60% of global electricity needs to come from renewables by 2030”

Reference: International Energy Agency (IEA) (2020), World Energy Outlook 2020,
Link:

<https://www.iea.org/reports/world-energy-outlook-2020/achieving-net-zero-emissions-by-2050>

“since 2013, the global demand for coal has begun to fall for the first time in decades. In the UK, it’s nearly been phased out completely!”

Reference: BEIS 2019 UK GHG emissions

Link:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/875485/2019_UK_greenhouse_gas_emissions_provisional_figures_statistical_release.pdf

“When energy demands fell in 2020, due to the pandemic, there were periods of time where no electricity in the UK came from coal-fired power stations. Our longest coal-free stretch was 67 days, up to June 2020.”

Reference: The Guardian, “Great Britain heads for record coal-free period during lockdown”

Link:

<https://www.theguardian.com/business/2020/jun/09/great-britain-coal-free-industrial-revolution-electricity>

“The cost of solar panels dropped by a massive 82% and onshore wind fell by 40% between 2010 and 2019.”

Reference: The International Renewable Energy Agency (IRENA) (2020) Renewable Power Generation Costs in 2019

Link: <https://www.irena.org/publications/2020/Jun/Renewable-Power-Costs-in-2019>

“It’s now cheaper to install renewable infrastructure than it is to build fossil-fuel power plants in most parts of the world.”

Reference: MIT Evaluating the causes of cost reduction in photovoltaic modules (2018)

Link:

<https://www.sciencedirect.com/science/article/abs/pii/S0301421518305196?via%3Dihub>

“This means that in developing countries – where 860 million people still don’t have access to energy – it will be as if not more affordable to leapfrog the fossil fuel era and go straight to renewables.”

Link:

<https://www.weforum.org/agenda/2020/01/can-emerging-economies-leapfrog-the-energy-transition/>

“In 2018, global investments in installing renewable energy sources were 3 times higher than in coal and gas-fired power plants combined”

Reference: UNEP Global Trends in Renewable Energy Investment report 2019

Link:



<https://www.unenvironment.org/news-and-stories/press-release/decade-renewable-energy-investment-led-solar-tops-usd-25-trillion>

“If we carry on as we are, experts predict that renewables will overtake coal soon, becoming the largest source of electricity generation worldwide by 2025.”

Reference: International Energy Agency (IEA) Renewable Power Tracking Report June 2020

Link: <https://www.iea.org/reports/renewable-power>

“Electrifying everything means our global electricity demand is going to double by 2050”

Reference: McKinsey, The Global Energy Perspective 2021 report.

Link:

<https://www.mckinsey.com/~media/McKinsey/Industries/Oil%20and%20Gas/Our%20Insights/Global%20Energy%20Perspective%202021/Global-Energy-Perspective-2021-final.pdf>