Statistics on Carbon Majors

Australia

BHP

- Emissions from BHP alone were sufficient to make **50 of the 213 analysed heatwaves** between 2000 and 2023 possible. In other words, in a hypothetical world where only BHP's emission existed, **50 heat events** would still have occurred, highlighting the significant role of their individual contribution to climate change.
    - Including the December 2018 - January 2019 heatwave in Australia

Santos

- Emissions from Santos alone were sufficient to make **49 of the 213 analysed heatwaves** between 2000 and 2023 possible. In other words, in a hypothetical world where only Santos's emission existed, **49 heat events** would still have occurred, highlighting the significant role of their individual contribution to climate change.
    - Including the December 2018 - January 2019 heatwave in Australia

Woodside Energy

- Emissions from Woodside Energy alone were sufficient to make **49 of the 213 analysed heatwaves** between 2000 and 2023 possible. In other words, in a hypothetical world where only Woodside Energy's emission existed, **49 heat events** would still have occurred, highlighting the significant role of their individual contribution to climate change.
    - Including the December 2018 - January 2019 heatwave in Australia

Whitehaven Coal

- Emissions from Whitehaven Coal alone were sufficient to make **41 of the 213 analysed heatwaves** between 2000 and 2023 possible. In other words, in a hypothetical world where only Whitehaven Coal's emission existed, **41 heat events** would still have occurred, highlighting the significant role of their individual contribution to climate change.
    - Including the December 2018 - January 2019 heatwave in Australia

Indonesia

- Emissions from Adaro Energy, Bumi Resources, and Pertamina individually were sufficient to make **50 of the 213 analysed heatwaves** between 2000 and 2023 possible. In other words, in a hypothetical world where only their emission existed, **50 heat events** would still have occurred, highlighting the significant role of their individual contribution to climate change.

Japan

- Emissions from INPEX alone were sufficient to make **50 of the 213 analysed heatwaves** between 2000 and 2023 possible. In other words, in a hypothetical world where only INPEX's emission existed, **50 heat events** would still have occurred, highlighting the significant role of their individual contribution to climate change.
    - Including the July 2010, the May - September 2013, May 2015, July 2015, and the June-July 2022 heatwaves in Japan

- Emissions from Taiheiyo Cement alone were sufficient to make **49 of the 213 analysed heatwaves** between 2000 and 2023 possible. In other words, in a hypothetical world where only Taiheiyo Cement's emission existed, **49 heat events** would still have occurred, highlighting the significant role of their individual contribution to climate change.
    - Including the July 2010, the May - September 2013, May 2015, July 2015, and the June-July 2022 heatwaves in Japan
- Emissions from Mitsubishi Corporation alone were sufficient to make **44 of the 213 analysed heatwaves** between 2000 and 2023 possible. In other words, in a hypothetical world where only Mitsubishi Corporation's emission existed, **44 heat events** would still have occurred, highlighting the significant role of their individual contribution to climate change.
    - Including the July 2010, the May - September 2013, May 2015, July 2015, and the June-July 2022 heatwaves in Japan

France

- Emissions from TotalEnergies alone were sufficient to make **50 of the 213 analysed heatwaves** between 2000 and 2023 possible. In other words, in a hypothetical world where only TotalEnergies's emission existed, **50 heat events** would still have occurred, highlighting the significant role of their individual contribution to climate change.
    - Including the July 2006 and June-July 2019 heatwaves in France.

Germany

- Emissions from BASF, Heidelberg Materials, and RWE individually were sufficient to make **50 of the 213 analysed heatwaves** between 2000 and 2023 possible. In other words, in a hypothetical world where only their emission existed, **50 heat events** would still have occurred, highlighting the significant role of their individual contribution to climate change.
    - Including the August 2003 heatwave in Germany

Italy

- Emissions from Eni alone were sufficient to make **50 of the 213 analysed heatwaves** between 2000 and 2023 possible. In other words, in a hypothetical world where only Eni's emission existed, **50 heat events** would still have occurred, highlighting the significant role of their individual contribution to climate change.
    - Including the July-August 2003, August 2011, August 2018, and June 2019 heatwaves in Italy.

Norway

- Emissions from Equinor and Petoro both individually were sufficient to make **50 of the 213 analysed heatwaves** between 2000 and 2023 possible. In other words, in a hypothetical world where only their emission existed, **50 heat events** would still have occurred, highlighting the significant role of their individual contribution to climate change.
    - Including the May 2022 heatwave in Norway.

Poland

- Emissions from LW Bogdanka, Orlen PGE Group, and Polska Grupa Gornicza individually were sufficient to make at least **48 of the 213 analysed heatwaves** between 2000 and 2023 possible. In other words, in a hypothetical world where only their emission existed, at least **48 heat events** would still have occurred, highlighting the significant role of their individual contribution to climate change.
    - Including the May-September 2022 heatwave in Poland
- Emissions from Poludniowy Koncern Weglowy alone were sufficient to make **35 of the 213 analysed heatwaves** between 2000 and 2023 possible. In other words, in a hypothetical world where only Poludniowy Koncern Weglowy's emission existed, **35 heat events** would still have occurred, highlighting the significant role of their individual contribution to climate change.
    - Including the May-September 2022 heatwave in Poland

Spain

- Emissions from Repsol alone were sufficient to make **50 of the 213 analysed heatwaves** between 2000 and 2023 possible. In other words, in a hypothetical world where only Repsol's emission existed, **50 heat events** would still have occurred, highlighting the significant role of their individual contribution to climate change.
    - Including the August 2003, July-August 2006 and May-September 2022 heatwaves **that occurred** in Spain

Netherlands

- Emissions from Shell alone were sufficient to make **51 of the 213 analysed heatwaves** between 2000 and 2023 possible. In other words, in a hypothetical world where only Shell's emission existed, **51 heat events** would still have occurred, highlighting the significant role of their individual contribution to climate change.

UK

- Emissions from BP alone were sufficient to make **51 of the 213 analysed heatwaves** between 2000 and 2023 possible. In other words, in a hypothetical world where only BP's emission existed, **51 heat events** would still have occurred, highlighting the significant role of their individual contribution to climate change.
- Emissions from Anglo American, British Coal Corporation, and Rio Tinto individually were sufficient to make **50 heatwaves** between 2000 and 2023 possible. In other words, in a hypothetical world where only their emission existed, **50 heat events** would still have occurred, highlighting the significant role of their individual contribution to climate change.

Russia

- Emissions from Gazprom alone were sufficient to make **51 of the 213 analysed heatwaves** between 2000 and 2023 possible. In other words, in a hypothetical world where only Gazprom's emission existed, **51 heat events** would still have occurred, highlighting the significant role of their individual contribution to climate change.

Argentina

- Emissions from YPF alone were sufficient to make **50 of the 213 analysed heatwaves** between 2000 and 2023 possible. In other words, in a hypothetical world where only YPF's emission

existed, **50 heat events** would still have occurred, highlighting the significant role of their individual contribution to climate change.

Brazil

- Emissions from Petrobras alone were sufficient to make **50 of the 213 analysed heatwaves** between 2000 and 2023 possible. In other words, in a hypothetical world where only Petrobras's emission existed, **50 heat events** would still have occurred, highlighting the significant role of their individual contribution to climate change.
    - Including the February 2010 heatwave that occurred in Brazil.
- Emissions from Vale alone were sufficient to make **38 of the 213 analysed heatwaves** between 2000 and 2023 possible. In other words, in a hypothetical world where only Vale's emission existed, **38 heat events** would still have occurred, highlighting the significant role of their individual contribution to climate change.
    - Including the February 2010 heatwave that occurred in Brazil.

Saudi Arabia

- Emissions from Saudi Aramco alone were sufficient to make **51 of the 213 analysed heatwaves** between 2000 and 2023 possible. In other words, in a hypothetical world where only Saudi Aramco's emission existed, **51 heat events** would still have occurred, highlighting the significant role of their individual contribution to climate change.

Canada

- Emissions from Canadian Natural Resources, Cenovus Energy, Ovintiv, Suncor Energy, Teck Resources, ARC Resources, and Obsidian Energy individually were sufficient to make at least **49 of the 213 analysed heatwaves** between 2000 and 2023 possible. In other words, in a hypothetical world where only their emission existed, at least **49 heat events** would still have occurred, highlighting the significant role of their individual contribution to climate change.
    - Including the British Columbia 2021 heatwave that occurred in Canada

US

- Emissions from Chevron and ExxonMobil individually were sufficient to make **51 of the 213 analysed heatwaves** between 2000 and 2023 possible. In other words, in a hypothetical world where only their emission existed, **51 heat events** would still have occurred, highlighting the significant role of their individual contribution to climate change.
    - Including the July 2005, July-August 2006, June 2021, and June-July 2023 heatwaves that occurred across the US.

India

- Emissions from Coal India alone were sufficient to make **51 of the 213 analysed heatwaves** between 2000 and 2023 possible. In other words, in a hypothetical world where only Coal India's emission existed, **51 heat events** would still have occurred, highlighting the significant role of their individual contribution to climate change.
- Emissions from ONGC India and Singareni Collieries both individually were sufficient to make **50 of the 213 analysed heatwaves** between 2000 and 2023 possible. In other words, in a

hypothetical world where only their emission existed, **50 heat events** would still have occurred, highlighting the significant role of their individual contribution to climate change.

Emissions from Adani Enterprises alone were sufficient to make **31 of the 213 analysed heatwaves** between 2000 and 2023 possible. In other words, in a hypothetical world where only Adani Enterprises's emission existed, **31 heat events** would still have occurred, highlighting the significant role of their individual contribution to climate change.