

Appendix

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Selection of entities

Countries: All UN-recognised countries and a number of self-governing territories and dependencies are analysed, comprising 202 entities in total. We do not include the EU as a separate entity. Country codes and names were sourced from the International Organization for Standardization (ISO) 3166-1 Alpha standard.⁵⁴ Country populations in 2019 were sourced from the United Nations (UN),⁵⁵ Gross Domestic Product (GDP) from the World Bank (2019, PPP using constant 2017 international USD)⁵⁶ and greenhouse gas (GHG) emissions from EDGAR (2018).⁵⁷

States & regions

We analyse the states, regions, and provinces (or other equivalent entities) of the top 25 emitting countries, which together account for over 80% of global greenhouse gas emissions. Specifically this comprises 806 states and regions from the United States, Australia, Canada, India, Russia, Japan, Germany, Iran, Saudi Arabia, South Korea, Mexico, Indonesia, Brazil, South Africa, France, Turkey, Italy, Thailand, Poland, Kazakhstan, United Kingdom, Spain, Taiwan, China, and Malaysia. As there are no

54 ISO 3166: Country Codes. International Organization for Standardization, Geneva, Switzerland. <https://www.iso.org/iso-3166-country-codes.html> [Accessed September 1, 2020]

55 United Nations, Department of Economic and Social Affairs, Population Division (2019) World Population Prospects 2019, Online Edition. Rev. 1. <https://population.un.org/wpp/Download/Standard/Population/> [Accessed September 1, 2020]

56 The World Bank (2019) World Development Indicators. <https://data.worldbank.org/indicator/NY.GDP.MKTP.CD> [Accessed September 1, 2020]

57 Guizzardi, Diego; Muntean, Marilena; Schaaf, Edwin; Lo Vullo, Eleonora; Solazzo, Efisio; Monforti-Ferrario, Fabio; Olivier, Jos; Vignati, Elisabetta (2019) EDGAR v5.0 Greenhouse Gas Emissions. European Commission, Joint Research Centre (JRC). <http://data.europa.eu/8gh/488dc3de-f072-4810-ab83-47185158ce2a> [Accessed September 1, 2020]

global datasets for names and population we compile them from a range of governmental and open-source repositories. We did not obtain comparable GHG or GDP data for all entities.

Cities

All cities with populations over 500,000 are analysed, comprising 1,170 cities in total. City populations and names in 2018 were sourced from the UN.⁵⁸

Companies

We analyse all 2,000 publicly-traded companies included in the Forbes Global 2000 list. Company sales, names, industry and location of headquarters are sourced from Forbes.⁵⁹

Data acquisition

A team of trained data collectors systematically looked at each entity to ascertain whether it had a net zero target, and what characteristics that target exhibited. We rely on publicly available sources such as entities' websites or published documentation, press releases, or news articles. Data to complete the relevant template for each entity (detailed Section IV) was acquired using the following process:

1. Cross checking entity name against the Race to Zero⁶⁰ member master list (access provided by the UNFCCC Secretariat), and the Energy & Climate Intelligence Unit (ECIU) Net Zero Tracker⁶¹ master list (access to data provided by ECIU);
2. Using Google Search to conduct the following internet searches in English and the entity's main language (if not English):
 - a. [entity name] net zero climate target,
 - b. [entity name] climate neutral,
 - c. [entity name] carbon neutral,
 - d. [entity name] zero emissions;
3. Reviewing relevant web pages relating to the entity's climate target; and
4. Using Google Search to conduct follow-on Internet searches as necessary.

The data acquisition activities were undertaken by volunteer coders from the University of Oxford and ECIU staff between August and December 2020. Before coding volunteers were given training material and walked through an hour-long induction and orientation. Members of the core research team were available to coders throughout the data collection process to answer questions and adjudicate ambiguities. Final acquisition and error checks on the target data were completed for non-state entities

58 United Nations, Department of Economic and Social Affairs (2019) Demographic Yearbook 2018. https://unstats.un.org/unsd/demographic-social/products/dyb/dyb_2018/ [Accessed September 1, 2020]

59 Forbes (2020) Global 2000: The world's largest public companies. <https://www.forbes.com/global2000> [Accessed September 1, 2020]

60 Race To Zero Campaign. <https://unfccc.int/climate-action/race-to-zero-campaign> [Accessed November 15, 2020]

61 Energy & Climate Intelligence Unit (2020) Net Zero Tracker. <https://eciu.net/netzerotracker> [Accessed November 15, 2020]