delivering its net zero target. The existence of a plan (or evidence that the company is working to develop one), nearer-term targets to ensure action proceeds, commitment to publish annual progress reports, and clarity about the Scopes of activities and emissions covered are among the key details that can give credibility to a net zero target. Another concern is 'offsetting' through carbon credits – the practice of paying for emission cuts or carbon removal (often, by implication, in developing countries) rather than cutting emissions. Studies show that offsets do not always provide fully additional effort, and reliance on them may present risks to effective mitigation. And while nature-based offsetting is becoming increasingly popular, there are limits on the natural resources available: a recent Greenpeace report found that just two companies, Eni and International Airlines Group, could 'exhaust up to 12% of the available total' of carbon dioxide offsetting through new forests. Put simply, offsetting cannot be a substitute for significant emissions cuts.

In this report we present what is, we believe, the first systematic analysis of significant emitters, looking at the robustness of net zero pledges as well as their scope. We look for evidence that entities have components of a credible plan in place, such as interim targets, a reporting mechanism and clarity on use of offsets; we do not assess whether such plans are internally coherent nor compatible with a global trajectory to the 1.5°C Paris Agreement target. This report is an 'opening snapshot' that will allow the anticipated strengthening of net zero targets to be tracked over time.

We surveyed more than 4,000 significant entities:

- all nations
- · all states and regions in the 25 highest-emitting countries
- · all cities with a population above 500,000
- all companies in the Forbes Global 2000 list.

Just a couple of years after interest in net zero really took off, the analysis shows that already 769 of these (19%) have a net zero target in place.¹³ Together, the commitments cover at least 61% of global greenhouse gas emissions, 68% of global GDP (assessed in purchasing power parity terms)¹⁴ and 56% of the world's population.

Our analysis shows that these commitments vary hugely in their quality. Already, 20% of existing net zero targets meet a set of basic robustness criteria. The proportions of entities whose commitments encompass measures such as interim targets (60%), a reporting mechanism (62%) and a published plan (44%) are reasonably high given how recently many of them made their net zero pledges. Some commitments contain key details such as the greenhouse gases covered, clarity on use of offsets, and

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¹⁰ https://www.carbontrust.com/resources/briefing-what-are-scope-3-emissions

 $^{{\}tt 11\ https://www.greenpeace.org.uk/wp-content/uploads/2021/01/Net-Expectations-Greenpeace-CDR-briefing.pdf}$

¹² See footnote 48 on page 19.

¹³ These numbers may differ from those in other analyses (eg. the UN's Race to Zero) because of different methodologies used - in particular, to define the scope of entities in the study.

¹⁴ See footnote 43 on page 16.

(for businesses) whether they cover emissions from the company's operations, value chain and/or products. However, many entities have not published these details as yet. The modest proportion that mandate near-term action also needs addressing.

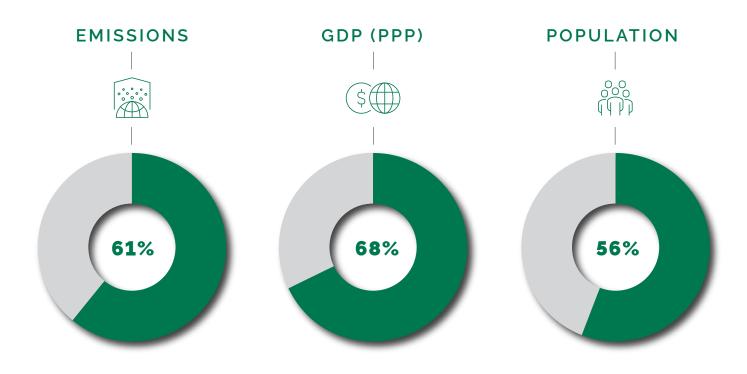


Fig. 1: Percentage of greenhouse gas emissions, GDP and population covered by national net zero pledges (the status of these pledges ranges widely, including proposed, in discussion, in policy document, in law and achieved. For more details, see Figure 5.). Population estimate also includes cities, states, and regions. GDP is assessed in purchasing power parity terms (see footnote 43 on page 16)

In the coming months countries, states & regions, cities and companies alike should ramp up their immediate action and provide greater clarity, with their intentions on offsetting a particular focus, to ensure their targets are seen as credible. Nations that have not yet set mid-century net zero targets, such as Australia, Russia and the Gulf states, should do so, including through publishing a net zero Long-Term Strategy as requested in the Paris Agreement. Those such as Japan that already have net zero targets must submit NDCs that are commensurate if they want their targets to have credibility. Entities that are members of the UN's 'Race to Zero' have pledged to meet a set of 'starting line' robustness criteria before COP26, and our analysis shows that most have work to do over the coming months.¹⁵

Net zero has come a long way in a very short time. A priority for governments, local authorities, investors and civil society over this and following years lies in turning pledges into plans, showcasing

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¹⁵ Comprising a pledge from a leader, a public plan detailing steps to be taken, an interim target, a commitment to publish progress reports at least annually, coverage of all emissions, and conditions on the use of offsetting - adopted from Race to Zero, https://unfccc.int/climate-action/race-to-zero-campaign

¹⁶ We include the US in this analysis as President Joe Biden made net zero by 2050 a central plank of his election manifesto. We include all EU nations except Poland which, at the time of data cut-off, was the only one objecting to the incoming bloc-wide net zero target.