BerkeleyHaas Case Series
Haas School of Business
University of California Berkeley

Date: January 1, 2023

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Net Zero Climate Commitments: Realistic Goal or Branding Exercise?

Net Zero is now a global megatrend,
but net zero isn't just a brand, or an expression of science,
or indeed a target. It truly is a global megatrend, a race,
and also a means to a cleaner, healthier way of life.

— PETER CHALKLEY
DIRECTOR, ENERGY AND CLIMATE INTELLIGENCE UNIT, WARC

In 2022, companies of all sizes and across multiple industries started to create and publicly announce Net Zero climate commitments. At the time, there was no generally accepted definition of "Net Zero" and instead, each company defined what metrics were included in tracking their commitment. Further, there was no globally recognized third-party accountability mechanism that would assure that these promises were being fulfilled; leaving companies to report their own progress without outside, independent verification.

As a result, many questions around the validity of these claims and their true impact on climate change were left unanswered. For example: How serious and achievable were these Net Zero claims? Behind these claims, how much effort was focused on customer appeal versus a core business strategy? How realistic were these claims and was there a plan by the company to back them up? With so many claims, how do stakeholders distinguish the true Net Zero commitments from those that are simply making the claim for the sake of the company brand?

Professor Andrew M. Isaacs prepared this case study with Natàlia Costa i Coromina (UC Berkeley, Master of Development Practice 2023) with assistance from Case Writer Aviva Legatt, as the basis for class discussion rather than to illustrate either effective or ineffective handling of an administrative situation.

State of Net Zero Pledges

One of the core topics of the World Economic Forum Annual Meeting in 2020 was "Net Zero." In fact, all companies that went to Davos were asked to commit to achieving net zero carbon emissions by 2050 or earlier. [1] As a result, dozens of companies across all industries (apparel, chemicals, financial services, food and agriculture, transport, manufacturing, healthcare, etc.) announced "Net Zero" pledges and joined the Alliance of CEO Climate Leaders. The definition of "Net Zero" in this request was left open, but it was assumed to imply that, by a certain date (2050) a company's GHG emissions starting that year would need to equal zero.[2] Critics said that the idea of "net zero" without accountable action has licensed a corporate attitude of "burn now, pay later" approach which has seen carbon admissions continue to soar.[3] After the Annual Meeting ended, several challenges with setting and achieving Net Zero pledges remained.

Inconsistency in standard global definition and scope

The report[4] published simultaneously to the open letter to Davos CEOs included declarations from several companies regarding net zero for 2050, including DSM, which claimed to reach net zero with 100% use of renewable energy and by implementing an internal carbon tax; Ango American, which targeted a 30% reduction in GH emissions; and Lenzing, which claimed it would reduce carbon-neural operations by an unspecified amount.

The same report, however, highlighted that only 1 in every 10 companies reporting to CDP, a non-governmental organization that collates voluntary emissions disclosures from nearly 7,000 large companies, had targets related to Scope 3 emissions, [5] where an average of 75% of a company's emissions are allocated according to the Greenhouse Gas Protocol. [6]

Two major follow-up efforts brought an additional level of skepticism and concern. Firstly, in March 2021, The Energy & Climate Intelligence Unit and Oxford Net Zero published a report that analyzed 4,000 significant entities, including all companies in the Forbes Global 2000 list. This report concluded that only 20% of companies' net zero claims met a set of basic robustness criteria; 60% had included interim targets; and 44% published a publicly available plan for meeting each target.[7]

Additionally, in December 2021, an editorial in *Nature* concluded that "There is no agreed definition or measure of it [net zero], and without this, it's impossible to know whether pledges will actually stop global warming."[8]

Missing technology to achieve permanent results at scale

At the time the pledges were announced, significant elements of the technology necessary for achieving net zero were nonexistent, prohibitively expensive, or in pilot stages. [9] There were also logistical and scale challenges with using new technologies, such as direct air capture, due to their

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[1] See Appendix.
[2] https://www3.weforum.org/docs/WEF_The_Net_Zero_Challenge.pdf
[3] https://theconversation.com/climate-scientists-concept-of-net-zero-is-a-dangerous-trap-157368
[4] https://www3.weforum.org/docs/WEF_The_Net_Zero_Challenge.pdf
[5] https://www3.weforum.org/docs/WEF_The_Net_Zero_Challenge.pdf
[6] https://www.wri.org/update/trends-show-companies-are-ready-scope-3-reporting-us-climate-disclosure-rule
[7] https://ca1-eci.edcdn.com/reports/ECIU-Oxford_Taking_Stock.pdf?mtime=20210323005817&focal=none
[8] https://www.nature.com/articles/d41586-021-03781-z
[9] https://time.com/6213466/carbon-removal-technology-investors-bet-big/

significant amounts of energy use, the dearth of CO_2 storage, and the limited cooperation of energy providers and governments.[10]

Given the lack of available emissions reduction solutions, many companies backed up their claims through the purchase of carbon offsets available at scale at the time: mainly forestry projects with little verification and limited, temporary, and reversible climate impact. [11]

However, public scrutiny started to increase at the time, under the criticism that offsets were delaying real reduction and were diluting responsibility.[12] "What we need is actual emissions stoppages—not trading of credits," said Mark Jacobson, a professor of civil and environmental engineering at Stanford University. [13]

Lack of third-party verification and accountability

A major challenge for these self-declared Net Zero pledges was that there was neither third-party verification that would set the definitions and scopes nor an accountability mechanism for progress relative to the pledge. Because of the limited accountability for and variability in Net Zero pledges, corporations could easily change targets, ignore historical emissions, or use different methodologies for calculating emissions.[14]

Published standards, such as Race to Zero and Science-Based Target Initiative provided guidance but lacked formal regulation and verification mechanisms.

Distinguishing Net Zero from Zero Impact

With the aim of making the Net Zero principle and its claims robust and comparable, a research collaboration among the Energy & Climate Intelligence Unit (ECIU), the Data-Driven EnviroLab (DDL), the NewClimate Institute, and Oxford Net Zero, developed the Net Zero Tracker.[15]

This open-source tracker allowed the public to compare and track the progress of several companies in size and industry in their Net Zero journey; distinguishing between target years, interim targets, and status of these targets (in corporate strategy, declaration, proposed or in discussion).[16] Additionally, the platform developed a comprehensive codebook to guide company Net Zero targets. Targets included guidance to specify the following: 1) overall emissions of a company; 2) the definition of the moment of net zero; 3) the baseline year; 4) interim progress targets; 5) emissions offshore or incurred in international flights; 6) emissions reported for Scopes 1, 2 and 3; 7) interim review process; and 8) whether Net Zero targets were considered as a determinant of executive pay.[17]

The above were clustered in 4 areas of comparison, which were used to rank the companies analyzed by Net Zero trackers:[18]

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[10] https://www.iea.org/reports/direct-air-capture-2022/executive-summary
[11] https://ccsi.columbia.edu/news/corporate-net-zero-pledges-bad-and-ugly
[12] https://www.greenpeace.org.uk/news/the-biggest-problem-with-carbon-offsetting-is-that-it-doesnt-really-work/
[13] https://www.wsj.com/articles/carbon-market-under-pressure-to-deliver-billions-in-climate-funding-11668203580?mod=hp_lead_pos4
[14] https://racetozero.unfccc.int/wp-content/uploads/2021/04/Race-to-Zero-EPRG-Criteria-Interpretation-Guide-2.pdf
[15] https://zerotracker.net/about
[16] https://zerotracker.net/#companies-table
[17] https://www.bp.com/en/global/corporate/news-and-insights/reimagining-energy/net-zero-by-2050.html
[18] https://zerotracker.net/methodology

1. The plan of the company and whether it was available publicly. The plan needed to include:

    a. Measures or steps for all emission scopes that were covered by the target
    b. Reportable data about expected emission reductions taking place within a certain time period
    c. Information on the extent to which measures/steps will be taken (e.g. If switching to electric vehicles is mentioned, is there a specific target/step, for example, 50% of the fleet? Are there detailed steps for how the goal will be achieved?)
    d. Schedule regular review of measures

2. A reporting mechanism and whether it happens annually, more regularly, or less often

3. The role of external offset credits (hereafter 'credits') to meet the targets under the Net Zero strategy

4. The inclusion or exclusion of Scope 3 emissions in the scope of the Net Zero strategy and definition

Examples: Assessing Net Zero Strategies and Commitments from the Partners of the World Economic Forum's Centre for Nature and Climate[19]

BP[20]

In 2020, BP launched a new ambition to be a net zero company by 2050 or sooner, in addition to "help the world get to net zero." The scope of their net zero goal by 2050 was expressed as "aiming to be net zero across operations, production and sales by 2050 or sooner." Additionally, the company set an interim goal to bring down operational emissions by 50% from a 2019 baseline by 2030.

BP's Net Zero strategy was structured across 5 aims: 1) Net zero across BP's operations on an absolute basis by 2050 or sooner; 2) Net zero on carbon in BP's oil and gas production on an absolute basis by 2050 or sooner; 3) 50% cut in the carbon intensity of products BP sells by 2050 or sooner; 4) Install methane measurement at all BP's major oil and gas processing sites by 2023 and reduce methane intensity of operations by 50%; and 5) Increase the proportion of investment into non-oil and gas businesses over time.

The public presentation of the company's Net Zero strategy included declarations such as: "Energy markets are changing, driven by climate change, technology and societal expectations, and the Board supports Bernard [BP's CEO] and his new leadership team's ambition for BP. Aiming for net zero is not only the right thing for BP; it is the right thing for our shareholders and for society more broadly. As we embark on this ambitious agenda, we will maintain a strong focus on safe, reliable, and efficient operations and on delivering the promises we have made to our investors."

[19] https://www.weforum.org/platforms/centre-for-nature-and-climate
[20] https://www.bp.com/en/global/corporate/news-and-insights/press-releases/bernard-looney-announces-new-ambition-for-bp.html

Microsoft[21]

Microsoft planned to be carbon negative by 2030 for all three emission scopes.[22] According to their definition, "Carbon negative" meant that the company was removing more carbon than it emits each year.[23] By 2025, Microsoft committed to shifting to 100 percent renewable energy supply and to electrifying its campus operations vehicle fleet by 2030. The company also planned to pursue the Living Future Institute Zero Carbon certification and LEED Platinum certification for the Silicon Valley Campus and Puget Sound Campus Modernization projects. Scope 3 emissions were planned to be reduced by phasing in an internal carbon tax to cover scope 3 emissions, the funds of which would be used to pay for sustainability improvements.

The planned target of 2030 to be carbon negative is expected to be achieved through a portfolio of negative emission technologies (NET), including afforestation and reforestation; soil carbon sequestration; bioenergy with carbon capture and storage (BECCs); and direct air capture (DAC). Criteria for measuring carbon removal included: (1) scalability; (2) affordability; (3) commercial availability and (4) verifiability. In 2022, Microsoft had invested about half of its 4-year $1 billion investment goal to fund climate innovation projects, under the assumption that solving these issues required technology that did not exist at the time.

HSBC[24]

In 2022, HSBC's commitment was "to reduce carbon emissions from its operations and supply chain to net zero by 2030 or sooner." In 2012, the company launched a *Reduce programme*, with 10 goals for cutting carbon and waste, and using less energy, water, and paper. By the end of the program in 2020, the company claimed to have exceeded or stretched nearly all of its targets.[25]

Regarding emissions from companies within its financial portfolio, in 2022, HSBC committed to aligning these to net zero by 2050 or sooner, acknowledging that this could be achieved only with customer partnership. To achieve this goal, HSBC announced the publication of a Climate Transition Plan starting in 2023, a commitment to phasing down fossil fuel financing, and a review and update of wider financing and investment policies. These three key steps were made public, together with a Cautionary Statement (Exhibit 2), and they encapsulated emissions in Scopes 1, 2 and 3.[26,27]

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[21] https://www.microsoft.com/en-us/corporate-responsibility/sustainability
[22] https://blogs.microsoft.com/blog/2022/03/10/an-update-on-microsofts-sustainability-commitments-building-a-foundation-for-2030/
[23] https://blogs.microsoft.com/blog/2020/01/16/microsoft-will-be-carbon-negative-by-2030/
[24] https://www.hsbc.com/who-we-are/our-climate-strategy
[25] https://www.hsbc.com/who-we-are/our-climate-strategy/net-zero-in-our-operations
[26] A 34% reduction in the absolute on-balance sheet financed emissions for the oil and gas sector by 2030 and a 75% reduction in the on-balance sheet financed emissions intensity for the power and utilities sector by 2030.
[27] https://www.hsbc.com/news-and-media/hsbc-news/hsbc-sets-financed-emissions-targets-for-oil-and-gas-power-and-utilities

Case Discussion Questions

1. How effective and transparent are the net zero corporate plans outlined in the case?
2. What is the impact of Net Zero pledges on a company's brand equity?
3. What does a company gain by declaring a Net Zero target? Are there any risks in doing so? / Should a company declare Net Zero targets? If so, when and how? If not, why not?

Appendix

Exhibit 1 Full text of the letter sent to Davos attendees for the 2020 World Economic Forum Annual Meeting

Acting on Climate Change

Dear Participant to the 2020 World Economic Forum Annual Meeting

The opportunity and the need for companies and investors to show leadership on climate change is more eminent than ever before.

Making a commitment to help tackle the urgent issue of climate change is also in line with the stakeholder imperative of the 2020 Davos Manifesto and the theme of the 50th World Economic Forum Annual Meeting: Stakeholders for a Cohesive and Sustainable World.

Consequently, as a leader of one of the world's foremost global companies and a valued partner of the World Economic Forum, we encourage you to use the opportunity of your upcoming participation to make a commitment to act on climate change.

If you have not done so already, we invite you to set a target to achieve net zero greenhouse gas emissions by 2050 or sooner. A short accompanying note to this letter provides some options to help you in this regard.

This initiative will be addressed at various Community Meetings taking place at the Annual Meeting.

We look forward to the Annual Meeting 2020 being a breakthrough moment for business action on climate change and thank you in advance for your consideration and leadership in helping the world address this urgent global issue.

Sincerely,

Brian Moynihan, Chairman and CEO, Bank of America, Chair of World Economic Forum International Business Council 2019-2020

Feike Sijbesma, CEO and Chairman of the Board, Royal DSM, Member of World Economic Forum Board of Trustees; Chairman of World Economic Forum Climate and Sustainability Initiatives

Klaus Schwab, Founder and Executive Chairman, World Economic Forum

In an accompanying note, the authors of the letter recommend companies publicly report their greenhouse gas emissions and disclose their climate-related financial risks and impacts. They also suggest companies "consider including a 2030 milestone target".

Source: https://www.weforum.org/agenda/2020/01/davos-ceos-to-set-net-zero-target-2050-climate/

Exhibit 2 HSBC Cautionary Statement — "Advancing HSBC's transition to net zero ambition"

Cautionary statement

This document contains both historical and forward-looking statements. All statements other than statements of historical fact are, or may be deemed to be, forward-looking statements. Forward-looking statements may be identified by the use of terms such as 'may,' 'intends,' 'aims,' 'ambition,' 'plan,' 'target,' 'will,' 'should,' 'potential,' 'reasonably possible' or 'anticipates' or the negative thereof or similar expressions, or by discussions of strategy. These forward-looking statements include statements relating to becoming a net zero bank and targets and methodologies for measuring financed emissions.

Achieving these aims is inherently uncertain and is subject to a number of risks and uncertainties, including the efficacy of government, customer, and HSBC's actions in managing and mitigating climate change; societal shifts in customer financing and investment needs; delays to the pace of change; development and use of new technology; ability to exploit growth or investment opportunities; changes in public expectations and other changes to business conditions; adverse changes in regulatory capital and tax regimes; data quality and the availability and development of methodologies for measuring financed emissions; and the other risks, uncertainties and assumptions about HSBC, as described under 'Cautionary statement regarding forward-looking statements' and 'Risk factors' contained in the HSBC Holdings plc Annual Report on Form 20-F for the year ended 31 December 2021, filed with the Securities and Exchange Commission on 23 February 2022 (the '2021 Form 20-F') available at www.hsbc.com. HSBC Holdings plc undertakes no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. In light of these risks, uncertainties and assumptions, the forward-looking events discussed herein might not occur. Investors are cautioned not to place undue reliance on any forward-looking statements, which speak only as of their dates. Additional information, including information on factors which may affect the HSBC Group's business, is contained in the 2021 Form 20-F.

Source: *https://www.hsbc.com/news-and-media/hsbc-news/three-steps-forward-in-our-net-zero-transition*