

Credibility of Net Zero Pledges: What Could Make Governments Retreat from Ambitious Climate Targets?

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SYNOPSIS

The credibility of net zero pledges emerged as a critical issue given that reaching net zero is inevitable to meet the 1.5°C global climate goal. Some governments' experience suggests that the governments could be tempted to postpone or abandon their net zero targets and plans under changes in political and economic conditions and circumstances. In this context, this policy brief examines why some countries and cities retreated from their climate ambition towards net zero emissions.

KEY POINTS

- Amid the proliferation of net zero pledges, it is observed that several national and municipal governments delayed their net zero targets and policies.
- Overreliance on carbon removal and external financial support could hinder achieving net zero targets.
- Governments may give up or postpone net zero targets and policies for political purposes.
- The current net zero pledges need to be scrutinised regarding their credibility and feasibility and ensure legally binding targets, concrete plans, and greater accountability for success and failure.

INTRODUCTION

As more urgent and ambitious action is required for all economic actors to contribute to achieving the global climate goal of limiting global warming to 1.5-2°C, an increasing number of governments and companies have pledged to reach net zero emissions since the late 2010s. According to the Net Zero Tracker data, 93 countries and 215 cities have made their net zero pledges as of December 2023, of which only 27 countries and 6 cities legislated for them. Although an increase in the number of pledges itself is a positive trend, such voluntary nature leaves a question mark over whether the countries and cities can actually meet their net zero targets. In other words, nonbinding targets without penalties and lack of concrete implementation plans entail a risk that the governments could be tempted to postpone or abandon their net zero targets and plans when they face challenges.

Indeed, several examples of national and municipal governments delaying net zero policies are observed. Costa Rica failed to meet its previous target of reaching carbon neutrality by 2021 and set a new target of net zero by 2050. Copenhagen, the capital city of Denmark, abandoned its plan to become a carbon-neutral city by 2025. More recently, the United Kingdom (UK)'s Prime Minister announced the relaxed implementation of some net zero policies. Critics warn more countries and cities will likely renege on their net zero pledges. The setback of not meeting the net zero targets may cast doubt on the credibility of ambitious climate targets and plans. Against this backdrop, this policy brief explores potential factors to discourage governments from meeting their net zero targets based on the cases of Costa Rica, Copenhagen, and the UK.

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ANALYSIS

Costa Rica: Heavy Reliance on Forest Carbon Sequestration and Lack of Concrete Policies for Primary Source of Emissions

Costa Rica is one of the pioneer countries that made early net zero pledges before the adoption of the Paris Agreement. In 2007, the President of Costa Rica, Oscar Arias Sanchez, declared that the nation would be carbonneutral by 2021, the 200th anniversary of Costa Rica's independence from Spain. This pledge incorporated was into the National Development Plans, which stated that the country's goal is to maintain a viable economy while producing little to no greenhouse gas (GHG) emissions. The carbon neutrality goal was reaffirmed in the first nationally determined contribution (NDC) submitted to the UNFCCC Secretariat in October 2016.

Since pledging carbon neutrality, Costa Rica has markedly decreased national GHG emissions with 99% of renewable energy hydropower) (including share of its mix and significant generation forest expansion. Climate Watch's Historical GHG Emissions data shows that Costa Rica's GHG emissions including the land use and land-use change and forestry (LULUCF) were reduced from 12.9 million tons of carbon dioxide equivalent (MtCO₂e) to 6.6 MtCO₂e between 2007 and 2012. However, it has not obtained net zero emissions, and the emissions have gradually increased again since then and reached 8.43 MtCO₂e in 2018. Hence, the target of carbon neutrality by 2021 disappeared in Costa Rica's updated NDC, submitted in December 2020. Instead, the government committed to an absolute maximum net emission of 9.11 MtCO₂e in 2030. It also stated this target is consistent with the trajectory of Rica's Long-Term Low-Emissions Costa Development Strategy (LT-LEDS) 2019, seeking net zero emissions by 2050.

One of the main reasons for this delay was that the country aimed to achieve net zero emissions based on forest carbon sequestration. Although the transportation sector was the country's largest emitter, reforestation and forest management have been central components of the country's GHG emissions mitigation strategy. National parks and private forest reserves have been expanded, and the Payments for Ecosystem Services scheme and tax exemptions for sustainable forest management have incentivised the preservation of tropical forests. Moreover, BanCO₂, an environmental bank established in 2013, sells and purchases carbon credits to support carbon offsetting of people and companies. However, these measures were not enough to achieve carbon neutrality despite a considerable increase in carbon removal from the LULUCF sector from 0.47 MtCO₂e to 7.32 MtCO₂e between 2007 and 2019. Much of the country's mature forests tended to capture less carbon than younger, faster-growing forests, leading to less reduction in annual GHG emissions than expected.

Meanwhile, several decarbonisation plans for the transportation sector have failed to move forward, including expanding bioethanol and biodiesel and boosting the use of electric and hybrid vehicles and public transportation. The government did not actively lead the cleaning up of this sector. As a result, GHG emissions excluding LULUCF grew from 13.38 MtCO₂e to 15.72 MtCO₂e between 2007 and 2019. Particularly, emissions from the transportation sector increased from 4.38 MtCO₂e to 6.13 MtCO₂e for the same period due to inefficient public transportation systems and a growing number of passenger cars with the economic growth and emerging middle class. Recently, as it has been widely thought that net zero will not be possible without decarbonising the transportation sector, the country passed a law to promote electric vehicles in 2018.

Copenhagen, Denmark: Uncertainty about External Funding

In 2012, the City Council of Copenhagen, Denmark, unveiled the Copenhagen 2025 (CPH 2025) Climate Plan, specifying the city's climate target to be the world's first carbonneutral capital city by 2025 and a pathway and strategies for it. This plan consisted of four pillars and various initiatives to advance action against these pillars. First, the city aimed at a 20% reduction in heat and electricity consumption by improving energy efficiency of the construction sector, retrofitting buildings, and increasing solar cell coverage. Second, regarding energy production, the city planned to build more onshore and offshore wind farms, replace coalfired power plants with biomass-fired combined power and heat units, and promote carbon-neutral district heating. Third, the city sought the transition towards green mobility to make 75% of journeys on foot, by bicycle, and by public transport. Key initiatives include improving public transport infrastructure, expanding cycling lanes, promoting lowcarbon fuels such as biofuels and hydrogen, and conducting behaviour change campaigns. Finally, several initiatives for the city's public sector were developed, including improving energy efficiency of street lighting and municipal buildings, installing solar panels on public buildings, and shifting to low-carbon municipal fleets and sustainable procurement.

mitigation Based on these initiatives. Copenhagen managed to reduce its CO₂ emissions by 38% from the 2005 levels in 2017, by 54% in 2019, and by 80% in 2022. However, in August 2022, the city abandoned the pledge to reach carbon neutrality by 2025 because it would not be able to complete the remaining 20% reduction that was supposed to be made by using carbon capture and storage (CCS) technology due to the failure in securing funding from the Danish government. In the original roadmap for CPH 2025, CCS was not considered as a mitigation option. Instead, it emphasised recycling and separating plastics from waste and advanced treatment of organic waste to reduce emissions from the waste-to-energy plants. However, a new roadmap for CPH 2025, published in 2021, reported that Copenhagen would still emit a net amount of 0.43 MtCO₂e in 2025 and suggested CCS installation to bridge this gap. The Copenhagen municipal government collaborated with several partners to install a CCS facility capable of capturing up to 0.5 MtCO2e per year on the Amager Resource Center (ARC)'s waste-to-energy plant. A pilot CCS facility was trialled to demonstrate the feasibility of the technology. The establishment of large-scale CCS was scheduled for completion in 2025, but the plan will not be realised due to a lack of finance. Copenhagen had Ultimately. to adiust timelines for its net zero pathway.

Copenhagen's experience highlights reliance on external funding could scupper the ambition of net zero. Whereas the municipal government invested heavily in installing wind turbines and solar panels, it counted on financial support from the European Union (EU) and the Danish government for the ARC's CCS project. The ARC applied for the EU Innovation Fund in 2020 to obtain approximately DKK 1 billion (SGD 195 million), equivalent to around 60% of the costs of the construction and 10-year operations of the CCS facility. The application was included in the shortlist but was finally not awarded the fund. In addition, the city argued the ARC incinerator would need to access part of the national government's DKK 8 billion (SGD 1.56 billion) fund to support CCS. However, the ARC was ineligible for this financial aid since it did not meet the equity capital requirements set by the national authorities.

United Kingdom: Political Strategy to Win Election

The UK government amended the Climate Change Act 2008 with tightened emissions targets in 2019. Originally, the UK's long-term target was to reduce national GHG emissions by 80% by 2050 compared to 1990 levels, but the amended Act stipulates that the UK will have net zero emissions by 2050. Besides this long-term target, the government has set interim targets of cutting GHG emissions by 68% by 2030 compared to 1990 levels and by 78% by 2035. To help achieve these targets, the UK government has introduced several decarbonisation policies for the power generation, land transportation, and building sectors. Thus far, the UK has appeared on track with a nearly 50% reduction in its GHG emissions including LULUCF from 761 MtCO2e in 1990 to 411 MtCO₂e in 2020. Given that the UK has more than 25 years left to meet its longterm goal, the UK is not a case that failed to deliver on its net zero pledge. However, it presents an example of diminishing the urgency of mitigation action by postponing the implementation of specific decarbonisation policies.

In September 2023, the UK Prime Minister, Rishi Sunak, announced that "a pragmatic, proportionate and realistic approach to reaching net zero by 2050" would be needed in order to relieve the financial burdens on UK households. He revealed a series of revisions to the timelines of existing plans: i) pushing back a ban on selling new petrol and diesel cars from 2030 to 2035; ii) delaying a ban on installing oil and LPG boilers and new coal heating for off-gas-grid homes to 2035 instead of phasing them out from 2026; iii) setting an exemption to the phase-out of fossil fuel boilers in 2035 while increasing Boiler Upgrade Grant from up to GBP 7,500 (SGD 12,600); and iv) dropping requirements for landlords to upgrade their properties to meet the energy efficiency standards, meaning scrapping a policy that landlords owing properties with energy efficiency below the standards cannot rent them from 2025. Subsequently to this speech, the government also granted permission to exploit the UK's largest untapped oilfield in the North Sea.

The core concern displayed in the Prime that ambitious Minister's speech was decarbonisation policies will hurt British citizens with high costs of living and lead to a loss of public support. He affirmed that people should make climate-friendly decisions by themselves, not by the government's force, and the policy changes would allow households to have more time for energy transition and save money. However, many political analysts interpreted this rollback as his electoral strategy to seduce traditional Conservative voters and low-income voters for the 2024 general election. That is, as the Prime Minister's ratings have fallen and his Conservative Party has been far behind the Labour Party in the polls for the last months, he intended to send a political signal that his party care more deeply about economic pressure on British families compared to the Labour opposition putting the priority on the green agenda. Indeed, a similar strategy, campaigning against extending low-emissions zones and charging a fee for drivers of polluting vehicles, led to the unexpected victory of the Conservative Party in a parliamentary election in July 2023 in Uxbridge, northwest London.

Although the government expects the suggested changes will not influence the UK's net zero achievement by 2050, many experts criticise that it is excessive optimism without scientific proof and the government's decision could make the targets hard to achieve by dampening the decarbonisation plans and investments of all economic sectors. Furthermore, they argue that the delay in the decarbonisation policies could increase the

cost burden, contrary to the government's expectation, and damage the country's credibility as a global leader in tackling climate change. Hence, the leader of the Labour Party, Keir Starmer, has pledged to revert to the previous targets.

CONCLUSION

As reaching net zero is essential for a global pathway to the 1.5°C goal, net zero pledges of countries and cities must be credible. However, the three examples reviewed reveal that net zero pledges might be vulnerable to changes in political and economic conditions and circumstances. Overreliance on carbon removal and external financial support also could hinder achieving net zero targets. Therefore, the current net zero pledges need to be scrutinised regarding their credibility and feasibility and ensure legally binding targets, concrete plans, and greater accountability for success and failure.

WHAT TO LOOK OUT FOR

- GHG emissions trajectory of countries and assessment of their compliance with NDCs and LT-LEDS
- Knock-on effects of early failure in achieving net zero targets
- Success or failure in awarding funds for Copenhagen's CCS project
- UK's general election in 2024

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