

States and regions tracking progress: Under2 Coalition

Under2 Coalition's submission to the Global Stocktake | August 2022

The Under2 Coalition would like to thank the UNFCCC for allowing us the participation as non-Party stakeholder in the first Technical Dialogues of the Global Stocktake (GST), held at the Bonn Climate Change Conference in June 2022.

Executive Summary

The Under2 Coalition is the largest global network of states and regions committed to reducing emissions in line with the Paris Agreement. Made up of more than 270 governments, the coalition represents 1.75 billion people and over 50% of the world's economy. The Coalition has been named one of the international partnerships with the highest potential for emissions reduction - 3.3-3.9GtCO₂e/year in 2030 – more than the current annual emissions of the EU ([Global Climate Action from Cities, Regions and Businesses Report](#), 2021).

Under2 Coalition states and regions have on [average reduced their emissions by 16% from their respective base years](#). This happened at the same time as global emissions rising by approximately 42% (1990-2015). This year we announced the fact that 37 Under2 Coalition members now have net zero carbon or all GHG emission targets and more are joining the Race to Zero.

This submission outlines the key findings from our [2022 Under2 Coalition Net Zero Progress Report](#), along with examples of initiatives that help states and regions in setting climate higher ambition and driving the implementation of challenging targets. It also highlights the biggest strength of the Under2 Coalition network: its ability to work together and find solutions as a group, even though members may be thousands of miles apart.

We recognize that enhanced NDCs will remain crucial to fulfilling the Glasgow Climate Pact, which commits parties to strengthen 2030 NDCs this year. At the same time, much more detail on the plans and policies to implement and deliver 2030 targets is required to ensure real emissions reductions this decade. There is a clear role here for states and regions to use their influence to drive positive change across the world.

The ambition set by leading state and regional governments of the Under2 Coalition should give Parties the confidence to raise their climate targets and catalyse broader

action. There is a clear need for multi-level governance and horizontal collaboration to ensure national or multinational ambition reflects the cumulative and potential impact of subnational contributions and that states and regions are involved in planning for meeting national targets.

Key Takeaways

Our recent report on the [2022 Under2 Coalition Net Zero Progress Report](#) indicates that:

- The number of states and regions globally reporting regional net zero targets has more than doubled in just one year, from 18 in 2020 to 46 in 2021.
- A third of all regional net zero targets reported are already in legislation.
- When compared with governments that do not have a regional net zero target or published net zero action plan, governments reporting both have, on average, most significantly reduced their GHG emissions since base year - with 25% reductions since average base year 1999.
- To help achieve net zero, many states and regions plan to sequester carbon through the regeneration and protection of nature, bringing benefits to communities and ecosystems.

The report also highlights actions that governments **can** take to increase their ambition and to ensure there are rigorous processes in place to monitor progress. It urges states and regions to:

- Develop and publish climate action plans that clearly outline how they will reach their climate targets – over half of reporting governments assessed have yet to publish climate action plans
- Strengthen their progress monitoring to reassess ambition of targets on a regular basis – just over half of governments with net zero targets reported a process in place for monitoring progress
- Clarify the extent to which they will rely on removals or sequestration to meet their targets by setting clear, separate targets for mitigation and removals and/or sequestration – only 11 governments reported any specific target for removals, and of these only one could be verified from documentation
- Clearly define any planned use of offsetting in climate targets and to limit these to a last resort through credible schemes

Launched last year, [the Under2 Ambition Tracker](#) supports the [Under2 Coalition's refreshed Memorandum of Understanding \(MoU\)](#), which commits members to reaching net zero emissions by 2050 or earlier. It is intended to help build a deeper understanding of members' pledges and progress, as well as to provide transparency and accountability on that progress.

1. Mitigation

1.1 Collective progress of Under2 Coalition states and regions towards achieving the mitigation goals of the Paris Agreement.

Ambition

In 2021, the Under2 Coalition committed to become a 'net zero coalition' by 2050 through our revised Memorandum of Understanding. Our MoU sets expectations for states and regions to act as climate leaders and pursue emissions reductions trajectories consistent with achieving net zero emissions as soon as possible. It also sets out expectations for mid-term targets for 2030 or earlier to demonstrate progress.

Last year, we launched a new initiative called the Under2 Ambition Tracker. This initiative aims to provide evidence from our members to the Under2 Coalition's updated 2021 Memorandum of Understanding. Our 2022 Under2 Coalition Net Zero Progress Report assessed the long-term climate mitigation ambition, action and impact from the 62 global states and regions that reported their data to the Under2 Ambition Tracker in 2021, 52 of which are members of the Under2 Coalition. Many states and regions have increased their long-term ambition and made their first regional commitments to achieving net zero emissions. The number of states and regions globally reporting regional economy-wide net zero targets has more than doubled in just one year, from 18 in 2020 to 46 in 2021.

76% of governments with net zero targets have set a target year of 2050, with the remaining quarter aiming earlier. The earliest net zero target years reported were set by Mato Grosso, Brazil, and Montgomery County, US, which both aim for net zero by 2035. States and regions with resource and capacity must aim for net zero earlier than 2050. However, only 4 of 26 reporting European, US and Canadian governments have set a target to achieve net zero by 2042 or earlier: Montgomery County, Kymenlaakso, Baden-Württemberg, and Prince Edward Island, the latter two of which have the earliest legislated targets (2040). A further five governments have set targets for 2045, including Hessen, which recently increased its ambition by bringing its net zero target forward five years from 2050.

One third of all net zero targets reported are currently in legislation, mostly those set by European and North American states and regions. Another third of governments have published an official declaration or mandate from the highest level of office (i.e., state governor or head of state) committing to net zero. The majority of these are Brazilian states that have published official decrees declaring alignment with and adherence to the Race to Zero campaign's requirements for net zero targets and planning. The remaining third of governments have announced their targets without formalising them in state legislature or by mandate or decree, and they are not legally binding. However, their net zero commitments are documented in policy or strategy documents or in official releases on government websites.

States and regions with net zero targets report much higher ambition in terms of gas and emissions coverage. Almost 90% of them report that their net zero targets cover at least emissions of carbon dioxide and methane, and many reporting coverage of several other gases as well. Almost 40% report their target covers emissions of all seven major greenhouse gases defined by the 2012 Doha Amendment to the Kyoto Protocol. However, our progress report found there was an absence of clear documentation of which greenhouse gases are covered by net zero targets. Within most target documentation, it was difficult to find clear reference, if any, to gas coverage of targets and ultimately, we were only able to verify 41% of the reported data. Most gas coverage data we were able to verify (68%) came from states and regions with legislated targets due to those typically having more comprehensive documentation of the details of their targets.

Beyond the 46 governments with net zero targets, nine governments, even in the absence of their own regional economy-wide net zero commitments, demonstrated significant and coordinated contributions to wider net zero goals. Six governments, for example, reported that they are contributing to the achievement of net zero targets set by their national governments or by the EU in the case of some European regions. A further two states, Connecticut and Oregon, commit, along with a group of other US states, to achieving net zero collectively no later than 2050 as part of the U.S. Climate Alliance (USCA).

Some states and regions have also set ambitious sectoral targets to support wider net zero goals. For example, Västra Götaland Region in Sweden is contributing to the national 2045 net zero target with a commitment and established plan to become independent from fossil fuels by 2030, which would result in total region-wide emissions reductions of 80% from 1990 levels. Similarly, Northern Ireland is contributing to the UK's 2050 net zero target with plans to reduce carbon emissions from its energy sector, which accounted for almost 60% of the region's total emissions in 2019, to net zero by 2050.

These targets and policies supporting a wider net zero commitment highlight the need for multi-level governance and horizontal collaboration to ensure national or multinational ambition reflects the cumulative and potential impact of subnational contributions and that states and regions are involved in planning for meeting national targets.

The Under2 Coalition continues to drive ambition at the state and regional level. Through [Net Zero Futures](#), in collaboration with the Scottish Government and Bloomberg Philanthropies, the Under2 Coalition has been mobilising state and regional action towards net zero emissions planning and target-setting and supporting governments in identifying common solutions. To date, over 80 state and regional governments from around the world have taken part in peer learning and knowledge sharing opportunities. Earlier this year, the Dialogue Series successfully united states and regions that have already set net zero targets with their peers to share latest best practice, promote solutions and connect with an international community of experts. Additionally, 50 state and regional governments joined the Race to Zero in 2021, with all committing to review their plans and progress this year.

Implementation

Looking at the change in GHG emissions over time, governments with a net zero target and available emissions data achieved average emissions reductions of 15% since an average base year of 1999. This is almost twice the average reductions achieved by governments without a regional net zero target, which averaged 8% reductions since the average base year 1996 (sample sizes of 26 and 7, respectively).

However, the bigger impact on actual emissions reductions appears to be achieved through planning rather than through ambition alone. Governments with published climate action plans have achieved seven times greater reductions in emissions than those that did not report any published planning documentation. States and regions that report a published climate action plan achieved average GHG emissions reductions of 21% since the base year 1999. Comparatively, governments that report no published climate action plans have reduced their GHG emissions by 3% on average since the base year (sample sizes of 16 and 13, respectively).

We see a slight increase in average reductions, the highest of all, in governments with both a net zero target and a published net zero plan. These governments have achieved an average of 25% reductions in GHG emissions since the base year 1999. These findings indicate that net zero ambition shown by governments must be combined with comprehensive and detailed planning to achieve more significant reductions in emissions over time. Thus, it is crucial that all governments develop, publish and begin implementing climate action plans as soon as possible, and that progress in actual emissions reductions is regularly reviewed so that ambition can be increased accordingly.

1.2 Efforts being undertaken by Under2 Coalition states and regions to plan, implement and accelerate action towards achieving the mitigation goals of the Paris Agreement.

Our 2022 Under2 Coalition Net Zero Progress Report also collected data on policies and measures being undertaken by states and regions to reduce their emissions. Just under half of all 62 reporting governments have a verified published climate action plan that outlines their region's long-term mitigation strategy. Over 70% of those are governments with a net zero target.

In contrast to reasonably low coverage of long-term climate action plans, we saw a high level of short-term climate-related action taking place in response to the COVID19 crisis, with 76% of all governments reporting they have implemented or are currently implementing green recovery plans or actions. Green recovery plans and actions were mostly reported as taking place in the buildings, energy production and supply, and agriculture, forestry, and other land use (AFOLU) sectors. Emissions reductions, and growth of the clean energy sector were reported as top priority outcomes for governments related to their green recovery actions.

Just over half of states and regions with a net zero target have already incorporated net zero into their public policies, and a further third report their net zero policies are in development.

Roughly one third of all states and regions with a net zero target report a verified published net zero plan which outlines a mitigation pathway specifically designed to support the achievement of the net zero target. A further 20% have published other verified planning documentation, including economic and emissions impact modelling of potential net zero strategies or decarbonisation plans that do not explicitly reference net zero but instead outline general regional mitigation strategies towards other targets.

Overall, this means that just over half of all governments with a net zero target are demonstrating some level of mitigation planning. A further quarter of governments with net zero targets report that a regional net zero plan is currently in development. The Under2 Coalition continues to support members in developing ambitious and effective sectoral policies to reduce their emissions and meet their targets. Convening at COP26, governments from the Under2 Coalition, U.S. Climate Alliance and C40 also acknowledged the need to move beyond 2050 targets and focus on the short-term and medium-term actions required to reach them. Therefore, we launched a set of 2030 commitments through our **Further, Faster, Together** campaign. 68 state, regional and city governments affirmed their urgent commitment to addressing the climate crisis by signing up to a range of cross-sector actions ahead of 2030.

The **Climate Pathway Project** has supported state and regional governments in developing transformational processes, or 'pathways', to reducing emissions. In 2021, after two and a half years of capacity-building workshops, vision and modelling exercises, stakeholder engagement and peer learning exchanges, each of the six participating governments from Brazil, Mexico and Peru successfully developed their pathways towards decarbonisation. These pathways center on 7-12 mitigation actions prioritised through broad stakeholder participation. The project had a strong knowledge sharing component, launching both a Pathways Framework (a step-by-step toolkit for governments to understand the pathways process) and the Pathways Communities of Practice: a bilingual platform that brought together 30 Latin American governments to learn from each other on the topic.

At the Under2 Coalition General Assembly in November 2021 we also announced the creation of a **Net Zero Emissions Policy Forum** to support governments to accelerate the transition to net zero emissions. This forum will provide a single platform for governments to address the policy challenges of deep decarbonisation. Specifically, the forum will provide a repository of policies and resources that can be accessed by members, facilitate collaboration between governments to design policies, share learnings and insights on key policy priorities, and speed up the transition to net zero.

Several initiatives within the coalition have sought to address specific sectoral emissions:

The **Industry Transition Platform**, joint project of the Climate Group and the German state government of North Rhine-Westphalia, funded by Stiftung Mercator, worked with 11 governments from highly industrialized regions across Europe and North America to develop strategies for cutting industry emissions while supporting growth, job creation and prosperity. These state and regional governments worked together to identify key challenges in transitioning their industries to be low carbon. They were advised by representatives from industry, system change experts and researchers, who provided participants with tailored technical support.

In the transport sector, the **ZEV (Zero Emission Vehicle) Community** is an established platform for government peer learning on zero emission vehicles, co-hosted by the Under2 Coalition and the ZEV Alliance, in partnership with C40 Cities and the U.S. Climate Alliance (USCA). The ZEV Community brings together a network of over 500 participants from more than 90 governments around the world to learn about new EV initiatives and to exchange information, experiences and best practice through regular webinars and peer forums. Through this collaboration, governments are developing the knowledge needed to set ambitious targets, switch public fleets to zero emission, roll-out supportive infrastructure and implement innovative policies.

1.3 Collective experience from Under2 Coalition states and regions on the barriers and challenges, opportunities, best practice, and lessons learned towards meeting the mitigation goals of the Paris Agreement.

As highlighted above, Under2 Coalition states and regions are becoming increasingly ambitious and have on average reduced their emissions by 16% from their respective base years. This happened at the same time as global emissions rising by approximately 42% (1990-2015).

The Under2 Coalition continues to support these efforts through its focus on peer-learning and sharing best practice. For instance, the **Climate Footprint Project** supports state and regional governments in improving their greenhouse gas (GHG) emissions tracking and reduction efforts. The first phase of this project concluded early last year with over 300 subnational actors from the seven primary project states and regions in Brazil, India, Mexico, and South Africa having received technical assistance and capacity-building training. An additional 70 states and regions globally participated in the Tracking to Action peer forum series and were able to access the toolkits, case studies, guidelines and an e-learning course developed as part of the project. The second phase of the project is set to start in 2022, and will provide flexible, fast, tailored capacity-building support to a broader set of states and regions in developing and emerging countries.

Climate Group, in partnership with Climate TRACE, is leading the **“States and Regions Remote Sensing” (STARRS) project**. Launched in January 2022, this innovative 12-month pilot initiative uses satellite imaging and machine learning technology to provide six states and regions in the Under2 Coalition with up-to-date greenhouse gas (GHG) emissions data. Many states and regions, particularly those in the Global South, lack access to comprehensive, high-quality, and up to date GHG emissions data. Even for those with the resources and capacity to regularly update their GHG emissions inventories, data is often at least one year old and so quickly becomes outdated. The project aims to establish a proof of concept of using these technologies to estimate GHG emissions at the state and regional level as one solution that can help to close the data and capacity gap, particularly in developing and newly industrialising economies. By providing recent GHG emissions data at a much faster rate and at a reduced cost, satellite imaging technology can allow governments with more limited resources and capacity to dedicate their time and resources to collaborative planning and impactful climate action.

However, real and significant barriers to ambitious climate action at the state and regional level remain. Issues such as lack of capacity, knowledge, finance, and other resources prevent the development of effective and impactful planning. The global

pandemic and series of geopolitical crises has added further pressure to already under-resourced governments in this respect. It is therefore crucial that these governments receive the support they need from the international community to decarbonise equitably and rapidly. One way that developed governments can support these efforts immediately is by incorporating clear actions related to global equity in their net zero targets and plans to help ensure global achievement of net zero by 2050.

2. Adaptation

2.1 Collective progress of Under2 Coalition states and regions towards achieving the adaptation goals of the Paris Agreement.

As subnational voices become increasingly aligned, we have also used communications to push for actions with other international groups. This included the [What's at State campaign](#) with Regions4, which highlighted what states and regions stand to lose if the 1.5 degrees target is not kept in sight, and a [joint statement](#) with C40 at COP26 calling for non-state actors to be recognised in the final 'Glasgow Package' – which they ultimately were, and which will help to elevate their work even further in the years ahead.

3. Finance Flows and means of implementation

3.1 Collective progress of Under2 Coalition states and regions in terms of making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development.

The Under2 Coalition supports emerging economy regions through the **Future Fund**. The Future Fund empowers subnational governments to accelerate the shift towards a world of net zero emissions, through strategic funding that supports climate activities in developing and emerging economy regions. In 2020, the Future Fund supported three transformational projects in Rondônia (Brazil), São Paulo (Brazil) and West Kalimantan (Indonesia). It also facilitated an online peer-learning exchange between Western Cape (South Africa) and the Climate Group and four learning activities between the Government of Scotland and all Future Fund-eligible members of the Under2 Coalition. In 2021, we continued to support emerging economy states and regions to accelerate their climate action by funding three new projects in Chiapas, Guanajuato and Yucatán (Mexico). The Future Fund is made possible thanks to ongoing financial support from the governments of Baden-Württemberg, Québec, Scotland, and Wales.

3.2. Collective progress of Under2 Coalition states and regions in terms of enhancing the capacity of developing country Parties to implement the Paris Agreement and efficacy of capacity-building efforts

The Under2 Coalition continues to facilitate knowledge sharing and capacity building through transformative projects covering key topics of interest to our members - transport, industry, short-lived climate pollutants, pathways, transparency and green recovery to name a few. The results of this work are shared with the whole Coalition and are available via our online Knowledge Hub.

For example, supported by UK PACT (Partnering for Accelerated Climate Transitions), the Climate Group has been working with The Climate Reality Project and Opepa to develop decarbonization visions for the energy and transport sectors in five departments in Colombia (Antioquia, Boyacá, Cundinamarca, Atlántico and Valle del Cauca). As part of the project, each state built its visions based on a catalogue of mitigation policy actions for the transport and energy sectors. These catalogues include a comprehensive list of potential actions for each sector that jurisdictions could include in their pathway to reduce greenhouse gas (GHG) emissions or increase GHG removals from the atmosphere compared to their “Business as Usual” (BAU) baseline scenario. In addition, the catalogues show which actions align to strategies selected by the national government for Colombia’s Long Term Climate Strategy (E2050) and Colombia’s Nationally Determined Contributions (NDCs). The project follows the Climate Group’s Pathways Framework to build visions with a multi-stakeholder and data-driven methodology.

4. Cross-cutting

4.1 Collective progress of Under2 Coalition states and regions to address the social and economic consequences and impacts of response measures while implementing mitigation policies and actions towards the achievement of the Paris Agreement goals

In our 2022 Under2 Coalition Net Zero Progress Report, exactly half of all governments report they consider equity in their plans to achieve their net zero targets. In line with the above, two distinct key principles of equity emerged at the subnational level from examining government-submitted documentation: ‘just transition’, which we consider to be actions related to equitably addressing the socio-economic needs of civilians within the jurisdiction as a result of decarbonisation efforts, and ‘global equity’, which we consider to be the principle of fairness in sharing the burden of mitigation of greenhouse gas emissions to achieve global net zero emissions by 2050.

Of the half that consider equity, all but one government are taking just transition principles into account. We see a range of actions to support a just transition being planned and implemented. For example, Amazonas (Brazil) reports that projects implemented in the Brazilian Amazon must respect a defined set of socio-environmental principles, including a commitment to improve the livelihoods and well-being of local communities. As part of Chungcheongnam-do’s energy transition policy, the government commits to a just transition in the province’s phase-out of coal by supporting re-skilling and job conversion of workers in the industry.

The **Just Transition Taskforce** is a collaboration between the Scottish Government and the Under2 Coalition that aims to connect global state and regional governments on just transition issues. Beginning in 2022, Climate Group is working with state and regional governments to identify the opportunities for greater collective and individual action on just transition and explore different approaches to integrating it into short and long-term climate action plans.

4.2 Collective progress of Under2 Coalition states and regions to ensure fairness considerations, including equity, are included in all mitigation policies and actions towards the achievement of the Paris Agreement goals

In our 2022 Under2 Coalition Net Zero Progress Report, only five states and regions (Basque Country, Catalonia, New York State, Wales, and Scotland) report the inclusion of global equity principles in their plans to achieve net zero. Catalonia's Climate Change Law states that the Catalan Government's actions towards net zero 'shall ensure not to increase the vulnerability of [developing] regions to the impacts of climate change and shall contribute to their development in a sustainable and carbon neutral way'.

Wales is working towards being 'a globally responsible Wales' – one of seven goals outlined in the Wellbeing of Future Generations Act. As part of this aim, the Wales for Africa programme funds small-scale projects in vulnerable African regions to help reduce emissions, environmental degradation and biodiversity loss, and to protect communities from the impacts of climate change.

Conclusions and further engagement with the process

All the initiatives and actions happening at subnational level, contribute to the sum of parts that are necessary to account when developing NDCs and in context of the global stocktake.

Commitments made by cities, local authorities and states need to be included, recognized, and monitored through UNFCCC processes, such as the NDCs and global climate stocktake reports, to inform our collective progress.