

# Climate change is real. What governments do matters.



# Global Spotlight Report #16

Theme: Recommendations To Help Countries Make Paris Agreement Pledges That Are 1.5 Degrees Compliant

#### Introduction

To ensure the well-being of our planet, every country needs to strengthen the emission reduction pledges it made to the Paris Agreement in 2015. The pledges of 2015 are too low to prevent widespread climate driven devastation from affecting all parts of the world, especially those countries which are poor and vulnerable.

A recent report of the Inter-Governmental Committee on Climate Change (IPCC) reports that we have until 2030 to cool the planet down to 1.5 degrees Celsius above what the earth's temperature was in the pre-industrial age.



For Global Spotlight Report #16 Climate Scorecard, we asked our country managers to provide a short-list of policy recommendations that their countries can follow that would decrease the temperature of the planet and ensure 1.5 degree compliancy. We hope that these recommendations gain traction with NGOs, research organizations and the private sector who are in a position to advocate for their countries to strengthen their Paris Agreement pledge.

Under the terms of the Agreement, countries are encouraged to strengthen the ambition of their 2015 pledge by 2020.

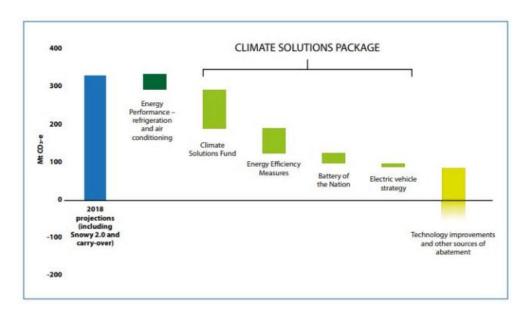
We urge our readers and followers to review the policy recommendations in this Report. Adapt them, share with others, and give us feedback on how they can be improved.

# **COUNTRY REPORTS**

# **Australia**

Australia's NDC is an unconditional target of 26-28% emissions cuts by 2030 (relative to 2005 levels). The pledge states Australia must develop a comprehensive, "economy wide" emissions reduction strategy, and that it can include emissions reductions due to land use changes and reforestation. As we currently stand, Australia needs to cut ~700Mt of carbon emissions between now and 2030 to hit this target. This is no small order, especially when you consider that Australia's total emissions have continued to rise over the last decade.

How does Australia's current government think that a ~700Mt target could be achieved? The official government strategy looks like this:

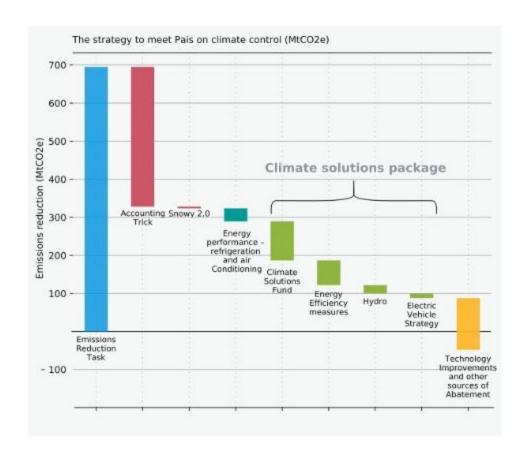


Australia's official Paris strategy as advertised to the public

But why does the vertical axis only go up to ~300Mt? That's because the cornerstone of the Australian government's strategy is to use carryover "credits" accrued from participating in the Kyoto Protocols to account for more than half of the target. That's correct: Australia's current government is quietly trying to meet more than half its Paris commitments with accounting, not actual emissions cuts.







Australia's **actual** Paris strategy

Obviously, this has not been received well internationally. All other signatories to the Paris Agreement have ruled out the use of Kyoto credits. In fact, if the gamble fails and Australia's strategy is ruled invalid, the Australian government will be liable for as much as \$18 billion in emissions offsets - a cost that will have to be borne by Australian taxpayers. And all this is just for Australia's *initial* Paris pledge, based on limiting global warming to 2 degrees. To meet an enhanced Paris target and help limit warming to 1.5 degrees, Australia will need to cut a further 3,300Mt.

The conservative government that came up with the strategy was recently re-elected for another three years, and have insisted they will not change course. Which means Australia will miss its Paris targets by a wide margin, and stands little to no hope of meeting 1.5 degree emissions targets. So, what workable policies could be enacted immediately to put Australia back on track to meet its Paris goals?





# **Policy Recommendations**

### 1. Introduce fuel & efficiency standards for ICE (internal combustion engine) vehicles

In 2016 (under the previous conservative Prime Minister Malcolm Turnbull) a government plan was hatched to set basic fuel and vehicle efficiency standards. The government estimated this would save 65Mt of emissions by 2030: nearly 10% of Australia's Paris goal! The plan was shelved, but the opportunities for easy emissions savings remain. For example, the head of a top automotive industry body revealed last year that Australian ICE vehicles could achieve a 3-5% emissions reduction "overnight" if simple sulphur limits were placed on fuels sold in Australia.

# **Activity Rating:** \*\*\*\* Moving Forward

The hard work has already been done on ICE vehicle and fuel standards around the world, and Australia stands to save a heap of emissions by implementing the most basic standards, most of which won't require any technological interventions. All that is required is government will to pass and implement the measures.

# 2. Cap methane loss in unconventional gas extraction

Methane gas escaping from fracking wells is one of the fastest growing sources of greenhouse emissions globally. Gas companies routinely underestimate the magnitude of methane leakage from their wells: a recent study in the US estimated fugitive emissions from fracking were 60% higher than companies reported to the EPA, and in Australia researchers suggest that the industry estimate of 0.1% leakage is about 50 times too low. Companies are often reticent to curb methane emissions because of expensive fixes and maintenance costs, and the boom in fracking opportunities is leading to substandard practices in pursuit of quick profits. A government-enforced limit on methane leakages is possible, but the penalties would need to outweigh the costs of fixing and maintaining fracking wells, otherwise companies will wear the fine rather than controlling fugitive emissions.

# **Activity Rating: \*\* Standing Still**

As shown in Western Australia earlier this year, any kind of government attempts to make gas companies pay for their pollution faces stiff opposition. It makes perfect sense to force companies to ensure minimal emissions of a greenhouse gas deadlier than  ${\rm CO_2}$ , but vested interests mean implementing a legal limit and then monitoring and enforcing breaches is an uphill battle. However, with fugitive emissions jumping to nearly 60Mt in 2018, they pose a serious obstacle to Australia achieving any meaningful emissions cuts and must be urgently addressed.





# 3. Use Renewable Energy to Support the Agriculture Sector

Combining wind & solar technologies with traditional agriculture is growing in popularity. In particular, sheep/solar paddock projects are proving a hit, with solar panels not causing any problems for the ground beneath in terms of sheep productivity - they even provide extra protection for lambs against predators! A number of Australian projects show that wind farms can co-exist with prime grazing land, with cattle, sheep and horses unaffected by the presence of turbines. Hosting renewable energy generation on their land has the added benefit for farmers of additional income from rent, or allows them to produce their own electricity and live off-grid.

# **Activity Rating:** \*\*\* Right Direction

Typically, Australian farmers are conservative and difficult to persuade to try new techniques, especially when framed around saving carbon emissions. But the success of projects in Australia and globally is clear and only needs a receptive government to help support the spread of similar schemes. If the conservative parties currently in government continue to oppose renewable technologies on an ideological basis then they are denying farmers the opportunity to save on running costs and optimise their land use. Giving the farmers the tools they need to drastically slash their carbon footprint is a no-brainer, especially considering no national strategy for cutting agricultural emissions is likely to be articulated in the near future.

# **Take Action:**

Please send the following message to the policymaker(s) below.

Dear Mr. Taylor,

As the newly-minted Minister for Energy & Emissions Reduction, you have a huge task on your hands to make sure Australia meets its Paris commitments. Your government plans to achieve over half of Australia's promised emissions cuts by an accounting trick: a risky strategy that will most likely backfire and cost the Australian taxpayers billions of dollars. We urge you to see that there are a plethora of straightforward & necessary emissions cuts that could be made across a wide range of sectors, with most of them amounting to sizeable chunks of Australia's 700Mt savings target.

Changes to vehicle and fuel standards were devised by your government in 2016 and could save over 60Mt of emissions by 2030, and would require almost no technological interventions. If simple sulphur limits were placed on petrol sold in Australia every car would save 5% of its emissions instantaneously! Reducing Australia's carbon-intensive transport sector will be key to meeting our Paris pledge, so it's best to start with low hanging fruit.

Preventing spikes in fugitive methane emissions from unconventional gas is crucial if Australia is going to get near it's Paris goals. While regulating the gas industry will be an uphill battle, these spikes threaten to wipe out any emissions savings made in other areas. Studies in the US show that the gas industry vastly underestimates its fugitive emissions, and needs to be held properly accountable by responsible governments.

Finally, it's been demonstrated that renewable energy and traditional farming can co-exist, giving farmers the benefits of generating their own energy and still being able to rear livestock. Showcasing projects like Clint Nugent's solar lambing paddock and the White Rock wind farm in Glen Innes would be a great way of getting farmers on board with slashing their own emissions and contributing to the growth of renewable energy in Australia. Farmers would be more than willing to listen to a government that supports such projects and lets them take their carbon footprint into their own hands.

#### **Contact Information:**

Honorable Angus Taylor MP Minister for Energy & Energy Reductions 18 Hill Street Camden Camden NSW 2570

Telephone: +612 4658 7188 angus.taylor.mp@aph.gov.au

@AngusTaylorMP

#### Learn More:

- <a href="https://www.theguardian.com/environment/2019/feb/05/among-the-worst-in-oecd-australias-addiction-to-cheap-dirty-petrol">https://www.theguardian.com/environment/2019/feb/05/among-the-worst-in-oecd-australias-addiction-to-cheap-dirty-petrol</a>
- <a href="https://www.theguardian.com/technology/2016/dec/20/government-says-new-ef-ficiency-standards-says-could-cut-fuel-spending-by-28bn">https://www.theguardian.com/technology/2016/dec/20/government-says-new-ef-ficiency-standards-says-could-cut-fuel-spending-by-28bn</a>
- https://www.climatecouncil.org.au/wp-content/uploads/2018/09/CC\_MVSA0154
   -Report-Transport V5-FA Low-Res Single-Pages.pdf
- <a href="https://www.usatoday.com/story/news/nation/2018/06/21/emissions-greenhous-e-gas-methane-higher-than-epa-thinks/722391002/">https://www.usatoday.com/story/news/nation/2018/06/21/emissions-greenhous-e-gas-methane-higher-than-epa-thinks/722391002/</a>



- <a href="https://www.theguardian.com/environment/2016/oct/26/australia-coal-seam-gas-emissions-may-be-vastly-underestimated-report">https://www.theguardian.com/environment/2016/oct/26/australia-coal-seam-gas-emissions-may-be-vastly-underestimated-report</a>
- https://www.theland.com.au/story/5256360/can-a-solar-farm-be-a-lambing-padd ock/
- <a href="https://cleantechnica.com/2017/11/24/combining-solar-panels-agriculture-make-s-land-productive/">https://cleantechnica.com/2017/11/24/combining-solar-panels-agriculture-make-s-land-productive/</a>
- <a href="http://www.climateplus.info/2019/03/08/cheap-accounting-tricks-and-sovereign-risk-the-morrison-governments-climate-policy/">http://www.climateplus.info/2019/03/08/cheap-accounting-tricks-and-sovereign-risk-the-morrison-governments-climate-policy/</a>
- <a href="https://www.smh.com.au/politics/federal/huge-gamble-coalition-faces-18b-hole-if-climate-plan-trips-up-20190516-p5104i.html">https://www.smh.com.au/politics/federal/huge-gamble-coalition-faces-18b-hole-if-climate-plan-trips-up-20190516-p5104i.html</a>
- <a href="https://www.smh.com.au/federal-election-2019/how-do-labor-and-the-coalition-plan-to-cut-carbon-emissions-20190429-p51ic8.html">https://www.smh.com.au/federal-election-2019/how-do-labor-and-the-coalition-plan-to-cut-carbon-emissions-20190429-p51ic8.html</a>

This Post was submitted by Climate Scorecard Australia Country Manager, Julian Atchison



# Brazil

By signing the Paris Agreement on September 2016, Brazil pledged an ambitious "intended Nationally Determined Contribution (iNDC)" in order to contribute to the global response to the threat of climate change by keeping a global temperature rise during the 21<sup>st</sup> century well below 2 degrees Celsius above pre-industrial levels while also pursuing efforts to limit the temperature increase even further to 1.5 degrees Celsius (as per the United Nations Framework Convention on Climate Change - UNFCCC website).

Brazil assumed the commitment of reducing greenhouse gas emissions by 37% below 2005 levels in 2025 and, subsequently, by 43% below 2005 levels in 2030. This pledge set an absolute target in relation to a base year (2005), covers 100% of the Brazilian territory, is economy-wide and follows as metric the 100-year Global Warming Potential (GWP-100) using IPCC AR5 values.

As per the document sent to UNFCCC, the Brazilian government sees adaptation as a fundamental element to tackle climate change and enhance resilience of populations, ecosystems, infrastructure and production systems. In this sense, a National Adaptation Plan – NAP – was formulated and its implementation is still in course.

The Brazilian NAP, which involves several stakeholders (from government to population, private initiative and academia), has as its main goal implementing knowledge management systems, research, technology, actions and processes to conduct climate adaptation planning. Through the NAP, Brazil's vision for its adaptation undertakings is to integrate, where appropriate, vulnerabilities and climate risk management into public policies and strategies, as well as to enhance the coherence of national and local development strategies with adaptation measures.

# **Policy Recommendations**

In order to achieve its commitment to the UNFCCC, Brazil's main tackling areas and plans are:

#### 1. Sustainable Use of Bioenergy

Brazil already has a large and successful biofuel program, including cogeneration of electricity through the use of biomass, but in order to comply with its pledge, it expects to increase the share of sustainable biofuels in the Brazilian energy mix to approximately 18% by 2030, by expanding biofuel consumption, ethanol supply and the share of biodiesel in the diesel mix;

### 2. Improvement of Land Use and Deforestation:







Brazil was able to implement a deforestation plan that, throughout 2004 to 2014 achieved the impressive result of reducing deforestation rate in the Brazilian Amazon by 82%, which contributed to the reduction of emissions from deforestation by 55%. Further, the country plans to strengthen and enforce its Forest Code, at a Federal level; obtain zero illegal deforestation in the Amazon by 2030; restore and reforest 12 million hectares of forests by 2030; and enhance sustainable native forest management systems;

### 3. Increased Use of Renewable Energy

To achieve its INDC pledge, Brazil has committed to a 45% share of renewables within the energy matrix by 2030 through the expansion of both non-fossil and renewable energy sources (other than hydropower) and the increase of efficiency gains in the electricity sector.

# **Activity Rating: \*\* Standing Still**

Brazil's strategies for achieving its Paris Agreement commitments are now in danger. As per the Climate Action Tracker website – <a href="www.climateactiontracker.org">www.climateactiontracker.org</a> 2005, the base year for Brazil's NDC targets was a year with particularly high emissions. Since then emissions have been increasing at a faster rate than GDP per capita, even in recession years, as shown by the SEEG – System for Estimating Greenhouse Emissions.

Brazil's progress in mitigating forestry emissions, a key part of the country's total GHG emission reduction, has stopped since 2005, with deforestation and resulting emissions gaining speed once again.

According to the most recent assessment of Climate Action Tracker, with currently implemented policies, Brazil will reach emissions levels (excluding Land Use, Land use change and Forestry) in 2025 and 2030 that are actually 28% and 33% higher than 2005 levels. With deforestation in a rising trend and being LULUCF the largest source of GHG emissions in Brazil, the NDC assumed with the Paris Agreement is heavily endangered.

Considering that the other tackling fronts, such as renewable sources of energy and bioenergy are heading towards their goals (more due to a natural aptitude Brazil has for both than due to political efforts), it is now urgent that the Brazilian government start strengthening policies envisaging reduction of deforestation, not only in order to comply with its NDC but mainly due to the relevance our forests have for environmental services, biodiversity and carbon sequestration in a worldwide scale.



#### Take Action:

Please send the following message to the policymaker(s) below.

Dear Minister,

We recommend that your Ministry update the greenhouse gas emissions pledge of Brazil to the Paris Agreement before November 2030. Your updated pledge should be aimed at reaching a target of 432 MTCO2. We recommend that, in order to achieve this goal, you make efforts to comply with the Brazilian Forestry Code and implement stricter deforestation controls, especially in the Brazilian Amazon, including local oversight, dismantlement of illegal logging, cattle-ranching and grains production, and envisaging the protection of local communities and biodiversity.

#### **Contact Information:**

Mr. Ricardo Salles, Ministry of Environment Telefones: (61) 2028-1057/1289/1422 Esplanada dos Ministérios, Bloco B, 5º andar 70068-900 - Brasília - DF

This Post was submitted by Climate Scorecard Brazil Country Manager, Rafel Gerseley







# Canada

Canada was one of the first countries to sign and ratify the Paris Agreement (2015). The Canada Pan-Canadian Framework on Clean Growth and Climate Change (PCF) was adopted December 9, 2016, a plan to reduce greenhouse gas emissions (GGE) and meet its Paris Agreement targets to reduce GGE by 30% below 2005 levels by 2030 or to 523 Megatonnes (Mt). 2030 projections now take into account carbon contributions of the land use, land-use change and forestry sector.

In signing the UN Secretary-General's June 2018 Declaration of Ambition and in December 2018, prior to COP 24, Canada's Minister of Environment and Climate Change (ECC) acknowledged a need to step up Canada's ambition by 2020. In the meantime, the federal government remains focused on Canada's current target through policy measures in the PCF.

The global issue though is the target. Canada's pledge to reduce emissions is currently not in line with limiting global warming to 1.5°C.

The World Resources Institute indicates global emissions need to drop by 40-50%. Canada's carbon emissions in 2010 were 692 Mt, meaning a reduction to about 380 Mt by 2030. Climate Action Tracker's analysis, says Canada's current plans are "insufficient", even with the PCF. They calculate 2030 projections need to be 327 Mt, not 523 Mt.

A November 2018 study in *Nature Communications* found that if the rest of the world followed Canada's current climate policies, there would be an increase of more than 5°C by 2100. The author, Dr. Yann Robiou du Pont, said the report will help encourage the UN's process of re-assessing global climate commitments by 2020, which numerous studies have now found falls far short of 1.5. Canada should be decreasing their emissions by nearly 70%, he says.

Climate Action Now states there is just over four years' worth of current emissions left before it becomes unlikely we'll meet 1.5C without overshooting or relying on unproven new technologies. This all is a substantial push to say Canada needs to do more.

In 2017, Canada's GGEs were 716 Mt, a net decrease of 15MT or 2% from 2005 emissions. The Energy sector was 583 Mt, or 81%, Agriculture and IPPU sectors (8% each), and Waste (3%).

At the end of December 2018, the Minister of ECC outlined actions to date, including a price on pollution, work to phase-out coal power, investment in green infrastructure such as light rail and an electric-vehicle charging network, doubling the amount of protected nature by 2020, reducing plastic pollution, overhauling the federal environmental assessment regime, working to make buildings more efficient and creating a new clean



fuel standard to lower fuel carbon intensity used in transport, buildings, and industry. We are heading in the right direction but need to move so much faster. Over the last five years, Canada's average reduction nationally has been only one Mt per year.

# **Policy Recommendations**

### 1. Continue and Strengthen Carbon Pricing

Provinces and territories were given the flexibility to implement either a price-based system or cap-and-trade system with a minimum price of \$10/tonne in place by 2018, rising to \$50/tonne by 2022. The federal system began April 1, 2019 in provinces or territories requesting it or not having a system in place already. The goal is to regulate and reduce fossil fuel use, and establish a performance-based system for large industry. David Suzuki calls it a monetary price on carbon-based fuels and other sources of pollution. A national shift by households, businesses and industry to cleaner technologies increases the demand for energy-efficient products shifting the damage from GGEs back to those responsible to create greener practices. Results are predictable and cost-effective.

Sweden's tax is roughly \$189 per tonne, France's \$83. The October IPCC report says global prices may need to be several thousand dollars per tonne in 2030 to keep warming below 1.5°C. Revenue remains in the jurisdiction of origin. Canada's ECC Ministry oversees the policy.

### 2. Scale Up Efforts to Reduce Energy Sector Emissions

The largest contributor to Canada's GGEs, is the energy sector. It is recognized, there are measures in the PCF meant to be scalable. It notes the use of clean electricity and low-carbon fuels as foundational to reduce emissions. Underway are an accelerated coal phase-out, methane regulations for oil and gas production, and a national clean fuel standard. Canada has a 90% renewable energy target committed to by 2030, already supported by a power supply mix which is quite low-carbon.

#### 3. Eliminate Fossil Fuel Subsidies

Not having this works against other actions to fight climate change. The ECC is asked to strengthen Canada's Ambition by adding the elimination of subsidies to the PCF recognizing a public consultation process now underway until June 30, 2019, related to Ottawa's pledge to eliminate "inefficient fossil fuel subsidies" by 2025.

# 4. Consider IPCC Guidelines for Any New Policies Adopted by the Ministry of ECC

The IPCC advises most scientific literature specific to 1.5°C is only just emerging thus impact studies are limited in comparison to climate-change projections. There are







currently also insufficient studies focusing on regional changes, impacts and consequences at 1.5°C and 2°C of global warming.

The IPCC notes adaptation is expected to be more challenging for ecosystems, food and health systems at 2°C than at 1.5°C. Many transitions are unprecedented in terms of scale and imply deep emissions reductions in all sectors, a wide portfolio of mitigation options and a significant upscaling of Pathways with no or limited overshoot show system changes that are more rapid and pronounced over the next two decades.

The IPCC states feasibility and sustainability of carbon dioxide removal (CDR) can be enhanced by a portfolio of options deployed at substantial, but lesser scales, rather than a single option.

The IPCC sees strengthened multilevel governance, institutional capacity, policy instruments, technological innovation and transfer and mobilization of finance, and changes in human behaviour and lifestyles are enabling conditions that enhance the feasibility of mitigation and adaptation options for 1.5°C-consistent systems transitions. Thus the questioning of stabilization methods of all options can help to avoid risks such as those that are long-lasting and irreversible while achieving a fixed 1.5°C limit.

IPCC assumptions regarding future trends in population, consumption of goods and services (including food), economic growth, behaviour, technology, policies and institutions are all priorities to achieve a rapid phase-out of CO2 emissions. Key sectors are energy and land use. Biofuels, energy supply and conversion technologies, energy consumption, and supply and end-use energy efficiency must be considered. Within land use; food demand, agricultural productivity, terrestrial carbon management, and biofuel production all need transformation. Scenarios must incorporate regional differentiation in sectoral and policy development.

**Action Rating:** \*\*\* Moving Forward

#### Take Action:

Please send the following message to the policymaker(s) below.

Canada needs to ensure that Canada is 1.5°C compliant by 2030 and to consider adopting the recommendations that Climate Scorecard is putting forward to achieve this goal.

#### **Contact Information:**

The Honourable Catherine McKenna, Minister of Environment and Climate Change

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For more information, please email Climate Scorecard Canadian Country Manager, Diane Szoller at Canada@climatescorecard.org. info@canbikelondon.ca





# China

China has been committed to peak its carbon emission and to increase the share of non-fossil fuels in primary energy consumption to 20% by 2030. With the current policies, it is estimated that China is on track to meet these goals. However, China's NDC is not ambitious enough to limit the warming below 1.5 °C as required by the Paris Agreement unless other countries make greater efforts.

Currently, policies that benefit CO2 emissions reductions are not fully or effectively implemented. There are about seventeen influential policies for limiting CO2 emissions to date. (Gallagher et al, 2019) The six policies that are frequently cited are:

- Feed-in tariffs for renewable energy
- Energy efficiency standards for power plants and motor vehicles
- Non-fossil energy targets
- Mandated caps on coal consumption
- Energy efficiency standards for buildings and equipment
- The key enterprise program for energy efficiency.

However, the discrepancy between the policies designed and the implementation of the policies creates a gap that limits China's ability to support the Paris Agreement.

China will achieve its promised 2020 and 2030 emission reduction pledges as they presently stand. However, neither of these targets are compatible with limiting global temperature increase to 1.5 °C. In order to reach the 1.5 °C goal, China needs to reduce its carbon emissions to below 8399 MtCO2e/a. The successful conclusion of power-sector reform, and the full implementation of a national emission trading system after 2020 are important goals for China to achieve in order to be able to support the goals of the Paris Agreement

# **Policy Recommendations**

### 1. Complete Power Sector Reform

To do this China needs to (1) severely restrict and ultimately eliminate coal as its main energy source, and (2) expand its program of subsidies and quotas for the renewable energy sector. China has stated it will reach a national share of non-fossil fuel to 20% by 2030. This goal should be attainable with China's existing program of renewable energy subsidies being implemented at the provincial level. Subsidizing renewable energy is a priority as it reduces the importance of coal as the major energy provider.





However, in order to become 1.5 degrees compliant, a rapid decrease of coal usage as a primary energy source is a necessity. The exploration of new coal sites in Shanxi province and the importation of more coal after 2017 are going to create a large amount of emissions and should be discouraged.

### 2. Full Implementation of the National Emission Trading System (NETS) after 2020

The full implementation of the ETS system not only requires a transparency of carbon data but also needs to be adapted to t local scenarios. In 2013 and 2014, China started to implement a pilot National Emission Trading System in seven provinces. The pilot included the cement, electricity, heat, petroleum and oil extraction industries. In each province the pilot was designed locally by a combination of representatives from provincial and municipal Development and Reform Commission, local emission trading exchanges, and thought leaders in universities and think tanks.

In the 13<sup>th</sup> Five Year Plan, 2016 – 2020, China is scaling-up the ETS system and testing it on a national level. Learning from the pilot trials, it is found that the implementation of ETS locally is the key to obtain accurate carbon data. Only then will the use of a marketplace for carbon reduce carbon emission efficiently.

China needs to evaluate lessons learned from its piloting of the National Emissions Trading System, and sully implement the system from 2019 to 2030. A full implementation of NETS will greatly help reduce emissions and make China 1.5 degrees compliant.

# **Activity Ranking: \*\*\* Moving Forward**

China has the opportunity to have its greenhouse gas emission levels by 1.5 degrees compliant which would enable it to be fully supportive of the Paris Agreement. However, in order to do so it needs to fully implement existing policies, especially by completing its power sector reform and fully implementing its national emissions trading system.

#### **Take Action:**

Please send the following message to the policymaker(s) below.

Dear National Development and Reform Commission,

We would really like you to continue your great work to fully implement the policies China has put in place to reduce emissions and help achieve the goals of the Paris Agreement. However, we would recommend you take steps to bring greenhouse gas emissions to below 8399 MtCO2e/a by 2030 in order to support the goal of keeping global warming below 1.5 degrees Celsius. To do this we recommend that you fully implement your efforts to complete power sector reform and fully implement the national emissions trading





system. This will enable China to play a global leadership role in efforts to prevent the disastrous effects of global warming.

Thank you!

#### **Contact Information:**

Su Wei National Focal Point for UNFCCC Director General Department of climate change National Development and Reform Commission Beijing, People's Republic of China

#### Learn More:

Gallagher, K., Zhang, F., Orvis, R., Rissman, J., & Liu, Q. (2019). Assessing the policy gaps for achieving china's climate targets in the paris agreement. Nature Communications, 10(1), 1-10. doi:10.1038/s41467-019-09159-0

This Post was submitted by Climate Scorecard China Country Co-Manager, Siya Tong





# **European Union**

According to the 2030 climate and energy policy framework, putting forward a legally binding European Union (EU) targets, the EU needs to pledge to a 40% reduction in domestic emissions by 2030 in comparison to 1990 (Council of the European Union 2014) to comply with the 1.5 degree Celsius target of the Paris Agreement by November 2030. Also, the EU must pledge to increase the share of renewables in total energy demand to 32% as well as increase the energy efficiency of 32.5%. Climate Scorecard suggests that the following 3 strategies to guide the EU in strengthening its Paris Agreement pledge and make it 1.5 degrees compliant.

# **Policy Recommendations**

### 1. Increase the Goals of the EU's Energy Performance of Buildings Directive

To reduce emissions in the building sector the EU has adopted in 2018 the Energy Performance of Buildings Directive which requires that in 2050 all existing buildings are Nearly Zero Emissions Buildings. However, the suggested renovation rate of 3% is not sufficient to reach this goal and is below the level that is considered to be compatible with the Paris Agreement.

Compatibility with the Paris Agreement requires going significantly beyond these parameters: it means increasing renovation rates to 5% annually, all new and renovated buildings being carbon neutral, and full electrification/phase-out of fossil fuels for water and space heating. At the same time the Eco-design Directive and the Energy Labelling Regulation make it possible for the Commission to accelerate improvements in the energy efficiency of domestic appliances.

# 2. Increase the Share of Renewable Energy in Total Energy Demand

The EU has recently adopted policies including a binding target of 32% for the share of renewable energy in total energy demand that would make the EU reach a share of renewable energy in electricity generation of 55% by 2030. According to scenarios developed by European research institutions, in order to meet Paris Agreement targets in GHG emissions reduction, it is recommended for the EU to take further steps in its engagements. Indeed, for decarbonizing the electricity supply sector, the EU needs to deploy renewable energy faster than Denmark which had the highest growth rate of renewables between 2009 and 2015.

By applying Denmark's rate to the whole EU would lead to an increase of 49-59% in 2030 and 63-98% in 2050 of renewables, leading to emissions reductions of between 77-99% below 1990. The relevant EU institutions are the Directorate-General CLIMA (a



department of the European Commission responsible for developing and carrying out Commission's policies on climate action), ENVI Committee (which is drafting and adopting resolutions relevant to climate change policy which are later discussed; amended and voted upon by the European Parliament), and the Council of the European Union which adopts general goals in terms of emissions reduction and decides about the overall direction of European energy and climate policy.

Regarding the financing of climate actions, several funds and mechanisms have been put in place within the EU to encourage investments in low carbon energy projects, improvement of energy efficiency and electrification of other sectors.

# 3. Implement Full Electrification of the EU's Road and Transport Sector

Finally, in order to be compatible with the Paris Agreement, the climate action tracker estimates that the EU's road and rail transport sector should be almost fully electrified using low carbon electricity by 2040. The last new internal combustion car should be sold before 2035. Such a rapid pace for removing carbon from this sector will require faster action from the European institutions like decreasing costs of electric vehicles along with the declaration of some member states to ban the sale of combustion cars.

To date, the discussed target of reducing average emissions from new passenger and small utility vehicles by at least 35% between 2021 and 2030, complemented with a quota for sales of electric vehicles of 35%, is a step in the right direction, with more stringent targets needed to support a faster transition to zero emissions transport.

# **Activity Rating: \*\* Standing Still**

To stay below the Paris Agreement's 1.5°C limit, the IPCC Special Report on 1.5°C finds that a very substantial increase in effort is required to peak global GHG emissions as soon as possible, reduce CO2 emissions to net-zero around 2050 and total GHG emissions shortly thereafter

#### Take Action:

Please send the following message to the policymaker(s) below.

Dear Mr. Arias Cañete,

We recommend that your Ministry update the greenhouse gas emissions pledge of the European Union to the Paris Agreement before November 2030. Your updated pledge should be aimed at reaching a target of 758 MTCO2.

We recommend that you implement the following policies in order to reach this target:

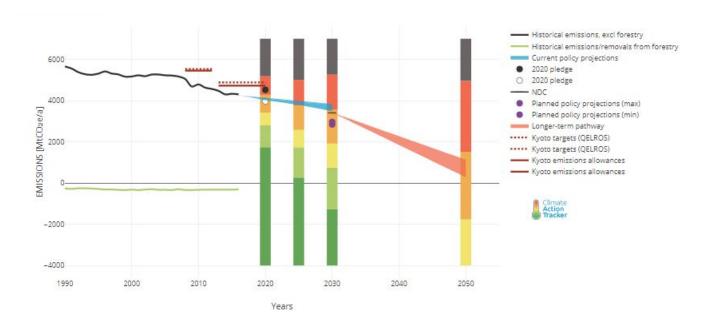






- An increase of 49-59% in 2030 and 63-98% in 2050 of renewables in the energy sector.
- An increase of the renovation rates to 5% annually and all new and renovated buildings being carbon neutral, and full electrification/phase-out of fossil fuels for water and space heating in the building sector.
- The full electrification of the road and rail transports sector by 2040.

The reductions in these three sectors alone are enough to reduce EU28 total greenhouse gas emissions by up to 52% below 1990 levels in 2030. This shows that the EU can and needs to ratchet up its 2030 target to make it consistent with the Paris Agreement.



### **Contact Information:**

**European Commission** Rue de la Loi / Wetstraat 200 1049 Brussels Belgium cab-arias-canete-archives@ec.europa.eu

### Learn More:

 https://climateactiontracker.org/documents/505/CAT 2018-12-06 ScalingUp EU FullReport.pdf





This Post was submitted by Climate Scorecard EU Country Manager, Lise Favre





# France

In its National Low-Carbon Strategy, <u>Stratégie Nationale Bas Carbone</u>, France had set a clear trajectory on reducing CO2 emissions. That strategy is consistent with the European framework, but neither of these strategies can reach the +1.5°C objective of the Paris Agreement. Climate Scorecard urges the European Union and France to step up their game and adopt policies with near-term and long-term measures consistent with the +1.5°C objective.

# **Policy Recommendations**

### 1. Implement a CO2 Price & Dividend System

In this proposal, a Climate Income is redistributed to all EU citizens, so the increased price of CO2-intensive products and services is offset by an extra income giving individuals enough buying power to choose & purchase low-CO2 solutions;

### 2. Regulate CO2 Emissions from Electric Power

The energy transition to low-CO2 power entails access to a low-CO2 power grid. Otherwise, users will have no other choice than to stick to CO2-intensive power and fossil fuels, turning the CO2 price into an unescapable trap! Therefore, it is of paramount importance to ensure a rapidly diminishing CO2-intensity of the power grid. This can be accomplished only by tight CO2-emission requirements on domestic production & imports of electric power.

# 3. Support the availability of Low CO2 Vehicles

Availability of low-CO2 vehicles is a prerequisite to raising the price of CO2. Otherwise, that will be yet another trap for low-income household who cannot afford to buy expensive low-CO2 niche vehicles. This can be achieved only by disincentivizing the use of high-CO2 emission vehicle.

Policies & thresholds: 1 ton = 1 metric ton = 1000 kg = 1 million grams; 1 kg = 1000 g = 1000 grams



Year 2020 2025 2030 2040 2050	Price of CO2 (domes tic & import s) in €/kg 100 200 400 1000 2000	Mandatory shutdown of all power plants with CO2 emisssions beyond threshold in gCO2/kWh 900 600 400 200 100	Forbidden urban/highw ay usage of all passenger cars with CO2 emisssions beyond threshold in gCO2/km 400 300 200 100 50	Forbidde n imports & sales of passenge r cars with CO2 emisssion s beyond threshold in gCO2/km 300 200 100 50 20	Forbidden urban/highway usage of freight trucks with CO2 emisssions beyond threshold in gCO2/km/ton of freight 400 300 200 100 50	Forbidden imports & sales of freight trucks with CO2 emisssions beyond threshold in gCO2/km/ton of freight 300 200 100 50 20
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# **Activity Ranking - \*\*\* Moving Forward**

France has decided to reach carbon neutrality by 2050 and is leading a coalition of eight countries asking the European Union to do likewise. Setting short-term and long-term goals for the price of CO2 and CO2 emissions of the power grid and road vehicles is an efficient way, and maybe the only one, to do so.

### **Take Action**

Write to French Republic President, Mr. Emmanuel Macron and Environment Ministers, Mr. François de Rugy, Mrs.. Brune Poirson and Mrs. Emmanuelle Wargon:

Mister President, Mr. & Mrs Environment Ministers, Dear Sirs, Dear Ladies,

France has decided to reach **Carbon Neutrality by 2050** and is leading a coalition of eight countries asking the European Union to do likewise. Setting short-term and long-term goals for the price of CO2 and CO2 emissions of the power grid and road vehicles is an



efficient way, and maybe the only one, to do so. If we really want to succeed, we need to get France and the EU on track with these 3 measures.

We are looking forward to your answer and working on climate action together. With our respectful and best regards,

[sign name]

#### **Contact Information:**

President Emmanuel Macron <a href="http://www.elysee.fr/ecrire-au-president-de-la-republique/">http://www.elysee.fr/ecrire-au-president-de-la-republique/</a>

The Environmental Transition Ministry francois.de-rugy@ecologique-solidaire.gouv.fr brune.poirson@ecologique-solidaire.gouv.fr emmanuelle.wargon@ecologique-solidaire.gouv.fr

To contact us for more information, email Climate Scorecard French Country Manager, Stephan Savarese at stephan@climatescorecard.org

Version française:

Phase 2: Bulletin no. 16 France

# Activité: Système de Suivi de l'Action Climatique

Dans sa <u>Stratégie Nationale Bas Carbone</u>, la France avait établi une trajectoire claire en matière de réduction des émissions de CO2. Cette stratégie est cohérente avec le cadre européen, mais aucune de ces stratégies ne peut atteindre l'objectif de +1,5°C de l'Accord de Paris. L'ONG ClimateScorecard (tableau de bord du climat) invite l'Union européenne et la France à intensifier leur action et à adopter des politiques comportant des mesures à court et à long terme compatibles avec l'objectif de +1.5°C.

Ces politiques devraient comprendre un calendrier clair de trois mesures concrètes proposées ci-après:

1. Prix et dividende du CO2, comme proposé dans l'initiative européenne sur le prix du carbone: <a href="https://bit.ly/EUiniSOP">bit.ly/EUiniSOP</a>; dans cette proposition, un Revenu Climat est redistribué à tous les citoyens de l'UE, de sorte que le prix accru des produits et services à forte intensité de CO2 est compensé par un revenu supplémentaire donnant aux individus un pouvoir d'achat suffisant pour choisir et acheter des solutions à faible taux de CO2;



- 2. Émissions régulées de CO2 provenant de l'énergie électrique: la transition énergétique vers une énergie à faible teneur en CO2 implique l'accès à un réseau électrique à faible teneur en CO2. Sinon, les utilisateurs n'auraient d'autre choix que de s'en tenir à l'énergie et aux combustibles fossiles à forte intensité de CO2, transformant le prix du CO2 en un piège incontournable! Il est donc primordial d'assurer une diminution rapide de l'intensité en CO2 du réseau électrique. Cela ne peut se faire qu'en imposant des exigences strictes en matière d'émissions de CO2 sur la production nationale et les importations d'énergie électrique.
- 3. La disponibilité de véhicules à faible émission de CO2 est une condition préalable à l'augmentation du prix du CO2. Sinon, ce sera un autre piège pour les ménages à faible revenu qui n'ont pas les moyens d'acheter des véhicules de niche à faible émission de CO2 aussi chers qu'aujourd'hui. Cet objectif ne peut être atteint qu'en supprimant progressivement les véhicules à fortes émissions de CO2.

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Policies & thresholds: 1 ton = 1 metric ton = 1000 kg = 1 million grams; 1 kg = 1000 g											
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Year	) in €/kg	h	gCO2/km	gCO2/km	of freight	n of freight					
2020	100	900	400	300	400	300					
2025	200	600	300	200	300	200					
2030	400	400	200	100	200	100					
2040	1000	200	100	50	100	50					
2050	2000	100	50	20	50	20					
	Fast-Forwarding Worldwide Deep Decarbonation										

# **Evaluation:** \*\*\* en net progrès

La France a décidé d'atteindre la neutralité carbone d'ici 2050 et mène une coalition de huit pays demandant à l'Union européenne de faire de même. Fixer des objectifs à court et à long terme pour le prix du CO2 et des émissions de CO2 du réseau électrique et des véhicules routiers est un moyen efficace, et peut-être le seul, de le faire.

#### Action pour le climat :

Ecrivez au président de la République, Monsieur Emmanuel Macron et au Ministère de l'Environnement à Mr. Le Ministre François de Rugy et Mesdames les Secrétaires d'Etat Brune Poirson et Emmanuelle Wargon:

#### Exemple de contribution:

« Monsieur le Président, Monsieur et Mesdames les Ministres,

La France a décidé d'atteindre la neutralité carbone d'ici 2050 et dirige une coalition de huit pays demandant à l'Union européenne de faire de même. Fixer des objectifs à court et à long terme pour le prix du CO2 et des émissions de CO2 du réseau électrique et des véhicules routiers est un moyen efficace, et peut-être le seul, de le faire. Si nous voulons vraiment réussir, nous devons mettre la France et l'UE sur la bonne trajectoire avec ces 3 mesures.

### Notre proposition

Pour que la France atteigne ses objectifs de réduction des émissions de CO2, **Saving Our Planet** et **Climate Scorecard** sont prêtes à faire au Gouvernement des propositions concrètes et réalistes, comme celles-ci : <u>bit.ly/CN2050FFWD</u>

Avec nos salutations les plus respectueuses, [Prénom Nom] »

#### Envoyez ce Message d'Alerte:

Ecrivez à Monsieur le Président de la République, Emmanuel Macron, Champion de la Terre:

http://www.elysee.fr/ecrire-au-president-de-la-republique/

Ministère de la Transition Ecologique et Solidaire: francois.de-rugy@ecologique-solidaire.gouv.fr brune.poirson@ecologique-solidaire.gouv.fr emmanuelle.wargon@ecologique-solidaire.gouv.fr

# Ecoles, associations et organismes d'enseignement ou services sociaux

Devenez partenaires de Climate Scorecard en vous inscrivant sur :







# https://www.climatescorecard.org/partners/

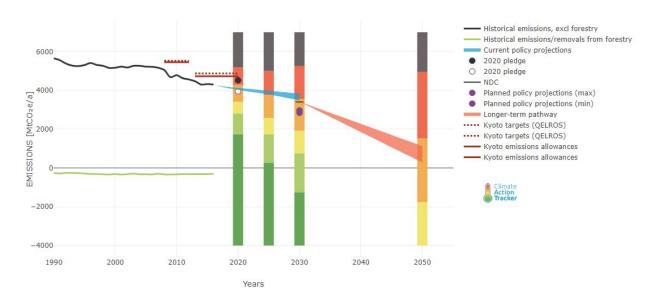
Pour nous contacter, envoyez un courriel au Directeur National de Climate Scorecard, Stephan Savarese <a href="mailto:stephan@climatescorecard.org">stephan@climatescorecard.org</a>





# **Germany**

Among the other 196 countries, Germany agreed to the Paris Agreement in 2015. It was ratified in the country on the 6<sup>th</sup> of October 2016. Shown below, is a projection from Climate Action Tracker of emission level that EU countries need to achieve to become 1.5 degrees Celsius compliant by 2030. All countries within the European Union have agreed to work towards the achievement of this target to guarantee a sustainable future for future generations.



As can be seen from above, however, it can clearly be said that with the current policies in place, the ambitioned target of keeping global warming below 1.5 degrees will not be met. From the above, it is likely that despite all changes implemented, the European Union would still steer towards a 2-3 degrees warming.

Germany, in particular being one of the bigger economies and the population richest countries within the European Union currently aims for a 3-degree warming according to a study released by the German "Tagesschau" in December 2018<sup>1</sup>. Based on the study, Germany needs to reduce its  $CO_2$  emissions by 56% to reach the initial target of 2 degrees C warming only.

The most recent IPCC report stated that the target of 2 degrees would not be sufficient to prevent the major collapses of global ecosystems. The IPCC Report recommended a target of 1.5 Degrees Celsius and urged countries to put in place policies to reach this target by 2030. To reach the 1.5 degrees target. Germany is required to reduce its national emissions by at least 67% by 2030.





# **Policy Recommendations**

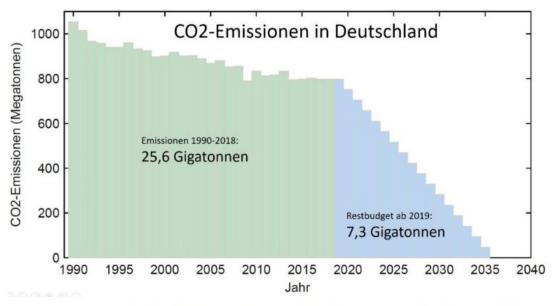
Climate Scorecard recommends a strategy for making Germany 1.5 degrees Celsius compliant by 2030 that consists of (a) Fully implementing existing policies and (b) Implementing new, complementary policies.

# 1. Fully Implement Existing Climate Policies

Multiple plans, initiatives and concurrent policies do exist, which could aid would enable Germany to reach its 2030 target IF they were properly implemented and followed. Following, the Paris agreement, the central government ratified the national 'Climate Protection Plan 2050', which aims towards reducing national CO<sub>2</sub> emissions by 85-90% and regenerate up to 60% from renewable energies.

It covers the essential elements, which are required to reach the initially set targets, such as strategic measures and visions for all sectors, milestones for every decade and the flexibility to increase the initially set targets. Unfortunately, as the annual 'Climate Protection Report 2018', revealed the first milestone of 2020 will not be reached and Germany will fail its target of reducing CO<sub>2</sub> emissions by 40% with 8%. However, it is not too late to accelerate work on implementing the Climate Protection Plan, which we recommend doing.

The most recently discussed 'energy transition' policy needs to be more strongly enforced. More priority should be put to meet the set targets. The extension of the national grid needs immediate extension, to enable the transport of the generated electricity from the northern part of the country to the population rich cities, such as Berlin, Munich and Cologne, rather than encouraging the import of liquified natural gas (LNG) from the United States by deepening the harbors in northern Germany. More innovative activities need to be supported with funding by the federal government with specific targets for specific regions.



CO2-Emissionen in Deutschland. Grün: Emissionen bis 2018 nach Zahlen des Umweltbundesamtes (für 2018 habe ich denselben Wert wie 2017 veranschlagt, da die Zahl noch nicht veröffentlicht ist). Blau: exemplarische lineare Emissionsminderung, die einem fairen Beitrag Deutschlands zu den Paris-Zielen entsprechen könnte.

Grafik: Prof. Stefan Rahmstorf, Creative Commons BY-SA 4.0.

Figure 1. Essential reduction of CO2 emissions in Germany to become net zero by latest 2036 to lie within the rest carbon budget of 7.3 giga tons. <sup>3)</sup>

### Agriculture and Transport

- Promote electric farm vehicles such as the UBO Farm Bike which can cover a range of 120 km with one load
- Install a wind turbine or small solar panel that can be used for charging these vehicles.

This could be achieved by finally endorsing a national carbon tax that could be used for initiatives like the mentioned above. Concurrently, the cost of one farm bike is \$5,300 US, which is likely to drop in the future due to lower manufacturing prices, higher demand and improved technology. The encouragement to invest in sustainable vehicles like this should be encouraged by the government, with giving subsidies for such a purchase. Another alternative would be to increase the tax for trucks LkW Maut (tax for trucks), which could then be used for better alternatives.

#### Infrastructure, Transport and Tourism

 Create car-free city centres, only allowing electric vehicles and public transport can be allocated restricted routes allowing easy access in an out of the 'car free area'.





Cities like Amsterdam and Malmö, Copenhagen and Wyk on the island Föhr, are undertaking such programs and can be used as models. More power stations for electric vehicles and e-bikes need to be installed to make this transition happen. Initial increases of parking tickets would provide the cities with funds to cover the cost of these stations.

Stakeholder in charge: The Ministry of Transport, regional and city councils are encouraged to work together to create these car-free city centers. International initiatives should be studied and taken over if possible and improved with further German innovative designs.

### **Forestry**

Increase forest areas and diversity

The government could add a paragraph to the existing Bundeswaltgesetz (*National Forestry Law*) that for every tree that is cut, three new ones have to be immediately planted in the country. Similar measures have been successfully implemented in Sweden.

Stakeholder in charge: The Ministry of Food and Agriculture that is responsible to enforce the National Forestry Law and thereby should take actions in this regard.

#### Education and Academic Research

• Increase investments in environmental education and awareness-raising campaigns.

Each school, each industry and business need to be aware of the current climate change challenges facing Germany and the world. Every citizen should be aware of the Paris Agreement, the sustainable development goals and be provided with options as to what they can do to help Germany mitigate and adapt to climate change. A number of grassroots initiatives that focus on sustainable consumption need to be scaled-up. For example, a minimal carbon footprint program already exists but needs to be further supported and encouraged to grow. The "Zero Waste" movement, which is currently taking off should be supported further.

Stakeholders in charge: Ministries for the environment and for education should collaborate on efforts to increase the quality and strengthen the impact of formal and non-formal environmental education efforts.

# **Activity Rating:** \*\*\* Moving Forward

As outlined above and within the recommendations sections, it can be said that the framework and the policies are in place to 'theoretically' make a transition to a low carbon







society. It is possible to reach the 1.5 degrees Celsius threshold if all regulations would be effectively enforced and modified slightly.

#### Take Action:

Please send the following message to the policymaker(s) below.

Dear Minister Schulze, Minister Klöckner, Minister Altmaier, and Minister Scheuer,

We encourage you and the Ministries of "Environment and Nuclear Security," "Food and Agriculture," "Energy and Economy," and "Transport and Digital Infrastructure" to update Germany's greenhouse gas emissions pledge before November 2030. As reported by the BMU, the country needs to reduce its emissions by at least 70% before 2030 in order to reach the 1.5 degree Celsius target. This is equivalent to a reduction of approximately 700 million tonnes CO<sub>2</sub> equivalent.

It needs to be clarified that there are still sources of CO<sub>2</sub> emissions such as international flight traffic and the international carbon budgets on imported products, which are not but should be captured in Germany's calculations. Hence, Germany should increase its emissions reduction targets. To achieve these ambitious targets, it is essential to identify smart transitions and apply systems' thinking across ministries and sectors.

Therefore, you are asked to take into consideration the above recommendations and particularly strengthen the Bundeswaltgesetz "Federal Forest Law", make additional modifications to the EEG combining agriculture with transport, encourage sustainable city designs by providing federal government support to city councils when incorporating carbon-free city centres into the development plan.

Finally, the government is asked to enforce a transparent supply chain by businesses, which should be endorsed with the already planned "Wertschöpfungskettengesetz", focusing not only on human rights but also on the carbon footprint of a product<sup>4</sup>.

Another final modification, which could be made is to encourage the implementation of displaying the carbon footprint of groceries of all sorts and within the hospitality sector. It is important to act now and not wait. As you said in the Klimaschutzplan 2050: "Dekarbonisierung bedeutet Umbau der Industrie und nicht Deindustrialisierung. Im Gegenteil: Nur wenn hochindustrialisierte Länder wie Deutschland den Beweis antreten, dass das Erreichen der nationalen Klimaschutzziele den wirtschaftlichen und industriellen Erfolg des Landes nicht negativ beeinträchtigt, werden uns andere Länder folgen."

#### **Contact Information:**

#### Svenja Schulze

Federal Minister for Environment and Nuclear Security







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Email: ub.muenster@spd.de

#### Julia Klöckner

Federal Minister for Food and Agriculture Ministry of Food and Agriculture

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#### Peter Altmaier

Federal Minister for Economic Affairs and Energy

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Email: peter.altmaier@bundestag.de

#### **Andreas Scheuer**

Federal Minister for Transport and Digital Communication

**Deutscher Bundestag** 

Platz der Republik 1, 11011 Berlin Phone Number: +49 30 227 73119 Email: andreas.scheuer@bundestag.de

#### Learn More:

- Article on Germany's concurrent emission targets, December 2018 <a href="https://www.tagesschau.de/ausland/klimaziele-109.html">https://www.tagesschau.de/ausland/klimaziele-109.html</a>
- Klimaschutzplan 2050 (*Climate Protection Plan 2050*) Germany https://www.bmu.de/download/klimaschutzplan-2050/
- Article on Study for reaching Zero carbon emissions by 2036:
   <a href="https://scilogs.spektrum.de/klimalounge/wie-viel-co2-kann-deutschland-noch-ausstosse">https://scilogs.spektrum.de/klimalounge/wie-viel-co2-kann-deutschland-noch-ausstosse</a>
   n/
  - New Zealand Start-Up of electric Farm Bikes:

http://www.ubcobikes.com/case-studies/

• Article on proposed Wertschöpfungskettengesetz ("transparent supply chain law")







https://www.handelsblatt.com/politik/deutschland/lieferketten-berlin-will-unternehmen -zu-globaler-verantwortung-zwingen-/24088046.html?ticket=ST-1004463-C1Sc ZzrARQUtbqW9BnOj-ap3

This Post was submitted by Climate Scorecard Germany Country Manager, Berit Mohr: Contact Berit@climatescorecard.org

# India

India's current 2030 climate track projection is 4496 MT as against needed 1281 MT, falling in real terms, behind the scheduled catch up under the categories of 2 degree Celsius compatible countries that need to further make emission level reductions in order to become 1.5 degree Celsius compatible. It may be noted that the Climate Tracker for India's last review is available as of December 3, 2018 and may be read with the caveat that the commitments with this rating are consistent with the 2009 Copenhagen 2 degree Celsius goal; therefore, they fall within the country's fair share range but are not fully consistent with the Paris Agreement. If all government targets were in this range, warming could be held below, but not well below, 2 degree Celsius and still be too high to be consistent with the Paris Agreement 1.5 degree Celsius limit.

India is a quasi-federal nation where policy-making falls on the central government in New Delhi while actions on-ground activities rest squarely with sub-regional government. Moreover, climate change, environment and forestry are in the concurrent list of the Indian constitution and sub-regions are equally important in Table of Precedence as regards the actions on such issues.

However, there are adequate arrangements embedded in policy-making systems that drive coordination, resources allocations to sub-regional actors, collective review of plans and reporting.

Nonetheless, India can consciously initiate more action and strengthen its initiatives to implement the following plans to stay 1.5 degree Celsius compliant as per its commitment.

# **Policy Recommendations**

#### 1. Cut Out Coal

The Intergovernmental Panel on Climate Change's special report is clear in its exposition of an impending climate crisis, calling nation-states to take urgent action to mitigate a potential crisis, asking among other measures a total phase-out of coal in a time-specific manner. What would it essentially mean for India and probable ways in which the country can adopt a phase-out action plan (by the year 2050) for its coal-fired power generation.

Feasibility for a gradual phase-out by India is not that improbable given the fact that renewable energy now offers cheaper electricity on a tariff basis than two-thirds of existing coal generation. For instance, India can well save up to USD 4 billion in annual power purchase cost basis 2016 pegged tariffs. To further advance the case, there can possibly be the three tangible ways in which coal phase-out by India can be implemented.



**First**, coal power plants in the pre-construction phase can be scrapped with existing 63 gigawatts (GWTs) of coal in this phase, through inter-ministerial coordination and finding realistic solutions including but not limited to assessing the vacated land into renewable plants – solar and wind.

**Second**, Coalswarm data tracker shows approximately 40 GWTs in active construction against approximately 70 GWTs of coal construction officially. It is suggested that no further investments in this risky venture are made.

**Third**, Retrofitting of old coal plants in the country will not bring any tangible benefits – neither in cost nor on environmental benefits- and it is suggested that the old and polluting coal plants are phased out as per a monitored time table - 1.7 GWTs by 2019, 22.7 GWTs by 2022 and 25.5 GWTs by 2027 (2018 National Electricity Plan).

Ministries concerned: Coal; Power; Renewable; Heavy Industries; NITI Aayog

# 2. Implement Further Efforts to Diversify India's Energy Mix and Focus More on Renewable Sources:

India is leading International Solar Alliance (ISA) through South-South and triangular cooperation with more than 100 nations and is committed to producing 175 gigawatt of renewable energy target by the year 2022.

India's policy on renewable and solar energy is due soon for review directly by the Indian prime minister. In renewing the policy the government should consider involving the private sector both for the financing of large renewable projects and also for scaling up of ongoing projects. To support the transition from coal to renewable energy, the government should put in place a carbon market mechanism and extend it to the MSME sector

Ministries concerned: Ministry of Power; Renewable Energy

#### 3. Invest in More Green Technologies

Green technology needs to become a priority for research and development. Adequate financial resources also need to be stepped up to pursue a time-bound outcome from these efforts. Areas covered should range from alternative energy sources, new nodal transport systems, e-mobility, battery storage, availability of charging systems, green coal, alternative energy sources from synthetic elements etc.

#### 4. Build A Rapid Urban Metro Transport



India has been investing heavily in creating urban transport systems for the public at an affordable price point. Major cities including Delhi, Mumbai, Kolkata and Chennai have already started initiating a world-class transport system, cutting massively in the use of fossil fuels in the process.

However, last-mile connectivity and expanding the networks to semi-urban and rural areas must be taken up on priority to serve a large populace. The government should also undertake time-bound measures to run its metro services 100 percent on solar by the year 2022 and introduce e-mobility by providing subsidies to vehicular transport that would like to run on battery. More actions like the Perform, Achieve and Trade (PAT) scheme should be scaled up to better reach the country's climate targets with the first cycle of the PAT scheme already is resulting in savings of 5.6 GW and 31 MtCO2e between 2012 and 2015 (BEE, 2018).

Ministries concerned: Transport; Power; Railways

### 5. Create a Policy Framework that Moves India Towards a Circular Economy

The Indian is unable to find routine and systemic solutions to manage its emissions both in urban and semi-urban areas. Crop burning is one such phenomenon that continues to deteriorate air quality during winters. This situation can firmly be addressed if the government takes steps to move towards a circular economy ecosystem. With the growing scarcity of natural resources and exponential accumulation of waste, the government needs to move ahead with legislation to embed circular economy mechanisms within the country's growth model.

Ministries concerned: Corporate Affairs and Environment, Forests and Climate Change

### 6. Support Climate Resilient Agriculture

India still depends to a large extent on its agriculture both for informal employment and food security. It is one of the key sectors that contribute to climate change and environmental pollution. Water resources optimization, low water-intensive seeds, more efficient methods of irrigation, climate-resilient seeds and investing smartly into developing climate-resilient technologies will take India ahead in its efforts to remain compliant to its commitments to Paris agreement. These efforts can be supplemented by planting more trees to create effective 'carbon sinks' and 'generating more forest cover.'

*Ministries concerned*: Agriculture, Water Resources and Environment, Forests and Climate Change.

#### 7. Incentivize the Use of Electric Vehicles:



Limited by lack of clean mobility infrastructure, progressive policies and coordination between the federal and the sub-regional governments, the case of gradual movement from diesel and petrol vehicles to the introduction of electric vehicle in India has taken longer than originally anticipated.

As per OICA (The International Organization of Motor Vehicle Manufacturers 2018 Statistics, the sales of passenger vehicles in India during the period (2016-2017) in respective categories of passenger vehicles, SUVs and vans stood respectively at 2103, 762 and 182 (in thousands), causing air pollution to critical proportions failing to meet WHO guidelines for safe levels, putting people at additional risk of respiratory diseases and other health problems. In order to promote clean mobility and incentivising the use of electric vehicles, India would need to put in place a comprehensive policy of phasing out petrol and diesel variants while incentivising use of electric vehicles by the public.

This should include preparations for electric vehicles, building e-highways, the creation of robust infrastructure of charging points, consultation of the auto industry, the facilitation of inter-ministerial coordination, incentivized phasings-out of petrol and diesel cars by offering subsidies on the basis of overall domestic value addition per kilowatt-hour (KWh) basis, and an expanded scope of clean fuel technology beyond two and three-wheelers including but not limited to manufacturing 50 Gigawatt hour (GWh) batteries by the year 2030. It is also estimated that the annual subsidy given to manufacturers after sales will be in the range of USD 1.6 billion, hence, the role of domestic and multi-lateral financial institutions will be key to keep India's plan on clean mobility, moving on and adhering to 2030 agenda.

Ministries concerned: Road and Highways, Finance, Power, NITI Aayog

**Activity Rating:** \*\*\* Moving Forward

India has been one of the early entrants in the comity of nations to commit to the Paris Agreement. It continues to stay the course in relation to its 2015 Paris Agreement commitment. India, however, has to continue to focus on putting in place more progressive climate actions to remain compliant to Paris agreement and become 1.5 degrees Celsius compliant by 2030.

#### Take Action:

Please send the following message to the policymaker(s) below.

We, the people, have the fundamental right to healthy living through a cleaner climate and a greener environment, steadily accompanied by low levels of pollution and hazardous emissions. This can be possible when we undertake collective action in staying course to Paris agreement's premise of complying with 1.5 degrees Celsius by the year 2030, among other nationally determined actions and plans.





Keeping in view the urgency of action and Climate Scorecard's recommendations, call to take action can be requested to the Indian Prime Minister at his following social media contact details for solicitation of his direct involvement in the matter.

#### **Contact Information:**

Shri. Narendra Modi

Hon'ble Prime Minister of India

Email: Narendramodi1234@gmail.com

Twitter handle: @pmoindia Facebook: fb.com/pmoindia

**Instagram:** https://instagram.com/narendramodi **Linkedin:** https://in.linkedin.com/in/narendramodi

This Post was submitted by Climate Scorecard India Country Manager, Pooran Chandra Pandey.





### Indonesia

Indonesia's emissions in 2014 were 894 MtCO2e/a (excluding forestry) according to Climate Action Tracker. By 2030, Indonesia must reduce emissions to 551 MtCO2e/a to avoid 1.5 Celsius warming. From planned policies, Indonesia should emit 1094 in 2019 increasing up to 1630 MtCO2e/a by 2030. Indonesia must reduce emissions by about 400-600 MtCO2e/a in each year to avoid the 1.5 Celsius increase. To decrease yearly emissions by up to 1/3 of their projected levels, Indonesia needs to green its energy, forestry, and agricultural sectors.

### **Policy Recommendations**

### 1. RUPTL Plan Greening and PLN Licensing Reform

The poor management of PLN (Perusahaan Listrik Negara), the state energy company, and the energy sector will not be compatible with a world below a 1.5 Celsius increase. The RUPTL Plan (Rencana Usaha Penyediaan Tenaga Listrik, the goal energy mix for 2025) stands at 30% coal - 22% oil - 23% renewables -25% natural gas. The targets for natural gas and renewables need to be raised and coal needs to decrease to achieve emissions reductions of 400-600 MtCO2e/a a year. The existing targets will be difficult to achieve while PLN's plant licensing process remains shadowy and out of line with national energy targets. Future RUPTL must increase renewable and gas in the energy mix and PLN must increase transparency in its licensing process.

The energy mix targets are creeping in the right direction but corruption, poor leadership and poor administration are rampant. The mishandling of the energy sector includes the cancellation of renewable energy projects and the shady investment in low grade, lignite coal. PLN has dumped 24 private renewable energy projects that had a combined capacity of 324.12 MW. PLN has failed to foster renewable energy; of the 70 projects that the company signed power purchasing agreements for, these projects have only produced 35 MW of power. 29 projects with a capacity of 780.75 MW are underway, but given PLN's threat of closing projects that have not met financial close, these strides in renewables may falter. While renewable energy projects are halted, 18 mine-mouth power plants that consume lignite coal – low grade and low calorific coal – are under construction. Lignite producers lobby PLN to approve licenses for mine mouth plants; power plants which can consume lignite coal and that are built next to mines.

#### 2. Implement a New Phase of The Permanent Forest-Peatland Moratorium

The now permanent moratorium should include pre-2011 licensed areas of intact, primary forest and peatland. The moratorium should also protect 433,000 square kilometers of secondary forests, half of which is designated as production forest, meaning



it could be cleared by pulp and paper or logging concessions and a further tenth is licensed to palm oil concession holders. In a 2017 WRI analysis, Indonesia could fall under its 2030 cap of 2 gigatons of CO2 emissions if it protects pre-2011 licensed forests and peatlands and includes secondary forests in its moratorium on clearing. Protecting all primary forest, peatland, and secondary forest will ensure Indonesia reaches its 2030 pledge to the Paris Agreement and potentially exceed the BAU baseline to prevent the 1.5 C increase.

The forestry and land use sector is performing better than energy. The moratorium on primary forest clearing and peatland conversion has been made permanent. Since 2011, the moratorium has been renewed three times. This is an important step to prevent massive emissions from land fires which are the result of forest clearing and peatland drainage for primarily palm oil production. The permanent moratorium will protect at minimum 660,000 square kilometers of carbon rich forests. In 2018, 3,400 square kilometers of forest were cleared, the lowest rate in over a decade. GFW at WRI attributes this fall to the peat protection policies put in place after the historically destructive land fires in the summer of 2015. The new phase of the moratorium should be marked with the expansion of its protection and improved enforcement. The 2011 moratorium prevents new licenses that would clear or disturb in primary forest and peatland. Pre-2011 licensed concessions that have not yet cleared forest may still do so.

### **Activity Rating: \*\*\*\* Moving Forward**

The greening of the RUPTL Plan, PLN licensing reform, and implementing a new Phase of the permanent forest-peatland conversion moratorium will enable Indonesia to become 1.5 degrees Celsius compliant and can form the basis for strengthening Indonesia's commitment to the Paris Agreement. However, implementing these recommendations will not happen unless the government takes steps to weed-out administrative corruption and puts in place a mechanism for effectively monitoring the implementation of both initiatives.

#### **Take Action:**

Please send the following message to the policymaker(s) below.

To the Minister of Energy and Mineral Resources Ignasius Jonan and Minister of Environment and Forestry Siti Nurbaya Bakar,

You are both responsible for implementing Indonesia's commitment to the Paris Agreement. We recommend that your Ministry update the greenhouse gas emissions pledge of Indonesia to the Paris Agreement before November 2030. Your updated pledge should be aimed at reaching a target of 551 MTCO2. We recommend that you implement the following policies in order to reach this target: RUPTL Plan Greening, PLN Licensing Reform, and the protecting of licensed primary forest, licensed peatland, and currently unprotected secondary forests.



#### **Contact Information:**

Minister of Energy and Mineral Resources Ignasius Jonan: <a href="klik@esdm.go.id">klik@esdm.go.id</a>
Minister of Environment and Forestry Siti Nurbaya Bakar: <a href="pusdatin@menlhk.go.id">pusdatin@menlhk.go.id</a>

This Post was submitted by Climate Scorecard Indonesia Country Manager, Tristan Grupp



# **Japan**

We propose that the Japanese government revise its INDC to a reduction of greenhouse gas emission by 40% from the 1990 level (765 MTCO2) by 2030. The government's current goal is a 26% reduction from the 2013 level (17 percent reduction from the 1990 level), but this seems inconsistent with the cabinet decision to achieve an 80 percent reduction by 2050.

According to a scenario presented by Japan's Union of Concerned Scientists on Energy Mix and Climate Target, 40 percent reduction by 2030 is achievable by combining the efforts to reduce energy consumption and to increase renewables.

### **Policy Recommendations**

Therefore, based on its report, we propose the government:

1. Reduce energy consumption by 30 percent through the promotion of electrification of transportation and steel production.

As both the automotive and steel industries are fundamental in the Japanese economy, political support for the transition to electric vehicles (EV) and electric arc furnaces (EAF) is essential for conducting such substantial restructuring of the sectors without losing their competitiveness.

2. Stop planning, constructing and exporting coal power plants anymore.

Promoting coal energy is nonsensical given that Japan does not produce coal domestically. If the government is truly concerned about its energy security, as the Ministry of Economy, Trade and Industry always says, it makes sense to stop depending on imported coal. Even without introducing carbon pricing, the government should have a sufficient budget for expanding renewable energy capacity if it from coal.

### **Activity Rating:** \*\*\* Moving Forward

The proposed policies make sense, but their implementation is contingent on a variety of critical factors. Despite the financial and technological capacities to implement the suggested policies, the government and strong interest groups behind Ministry of Economy, Trade and Industry such as Keidanren (Japan Business Federation) are obsessed with protecting the coal and nuclear industries. As a result, the long-term strategy for the implementation of the Paris Agreement recently announced by the government is far less ambitious than what Japan can technically implement.





#### Take Action:

Please send the following message to the policymaker(s) below.

Dear Minister of Economy, Trade and Industry, Hiroshige Seko,

We recommend that your Ministry update the greenhouse gas emissions pledge of Japan to the Paris Agreement before November 2020. Your updated pledge should be aimed at reaching a target of 765 MTCO2. We recommend that you implement the following policies in order to reach this target: Promotion of electrification, Ban on coal plants, and Expansion of renewable sources.

#### **Contact Information:**

Minister of Economy, Trade and Industry, Hiroshige Seko Ministry of Economy, Trade and Industry Web: https://mm-enquete-cnt.meti.go.jp/form/pub/honsyo03/contact\_us

Ministry of Economy, Trade and Industry Secretariat of the Agency for Natural Resources and Energy Director General Affairs Division Strategic Planning Division
Person in charge: Akamatsu, Tomizawa, Ozawa
Phone: 03-3501-1511 (extension 4471)
03-3501-2096 (direct)
03-3580-8426 (FAX)

This Post was submitted by Climate Scorecard Japan Country Manager, Kenta Matsumoto



### Mexico

As a signing part of the Paris Agreement, Mexico committed to revising its NDC every 5 years. The first review period will take place in 2020, thus, the country must work to enhance its contribution in order to be on track with the global goal of limiting the increase of temperature below 2°C (now 1.5°C).

The NDCs revisions are not limited to *increasing ambition*, but can also include strengthening transparency, appointing responsible institutions, assigning budget or working on specific policy pathways. However, it is paramount for Mexico to raise its ambition, as it is currently not on track with achieving its long-term target of reducing GHG emissions by 50% by 2050.

Mexico is already experiencing the effects of climate change: the delayed rains and extended warm days early this year factored in the many fires surrounding Mexico City, which greatly contributed to an air quality crisis that lasted nearly a week. The country has also experienced an increase of intensity and frequency of other extreme weather events, such as hurricanes and droughts. For this, and many more reasons, climate change mitigation and adaptation ought to be a national priority.

Aligning with the *below* 2°C target is in Mexico's best interest, as its population, economy, and ecosystems could be severely impacted by a temperature increase above 2°C. Moreover, several studies have pointed at how extreme weather events and loss of ecosystem services (some of the many effects of climate change) have a greater impact on low-income groups, thus increasing inequality and worsening conditions for the vulnerable. This is of particular interest for the current administration, which has a strong social focus.

Mexico's NDC includes reductions in GHG emissions and black carbon, a short-lived pollutant. Moreover, following the COP21 in 2015, the country introduced its Energy Transition Law, which includes the clean energy targets of 25% of electricity generation by 2018 and 35% by 2024. Although Mexico has undertaken meaningful policy-making and institution-building around climate change, it will need additional policies to meet its NDC pledges, which, as of today, fall short on the mitigation required to reach the emission level needed to attain the 1.5C warming ceiling. In fact, if the current conditional Mexican NDC is achieved, the efforts would be compatible with a 3°C scenario.

Nevertheless, the country has all the necessary tools to face the actual climate emergency. Mexico has a strong institutional system, technical capacity, and useful research and information for decision makers. If this is enhanced and coordinated with other efforts, the country could achieve the level of GHG mitigation required to meet

Paris goals whilst also contributing to the economy, population wellbeing, and ecosystem health.

### **Policy Recommendations**

There are plenty of options for effective climate action, two of them are listed below:

### 1. Reinforcing and Improving the National Carbon Tax

A carbon tax establishes a price on carbon emissions through assigning a cost on the CO2 contained on fossil fuels. In the 2014 tax reform, the Mexican government approved a carbon tax. However, its effect has been limited, as it excludes natural gas and turbosine and the use of the collected resources is not entirely transparent. Moreover, the rates are too low: in 2017, the tax had a value of 2.30 USD /tCO2.

Refining and enhancing this tool could greatly contribute to emission reduction efforts and tax collection. Furthermore, it can aid in the control of pollution, encourage technological innovation, and allow for flexibility in emission reduction. Necessary improvements include ensuring that all fossil fuels are covered and increasing the tax linearly over time, aiming at a range of \$40-80 / tCO2e by 2020 and \$50-100 / tCO2 by 2030, according to The High-Level Commission on Carbon Prices.

The implementation of the carbon tax should be progressive, lessening the burden on lower-income sectors. Furthermore, tax revenue should be invested in low-carbon technologies, innovation, and the implementation of climate policies.

#### 2. Investing in and Stabilizing Policies for Efficient Transportation Systems

The transport sector in Mexico is the second biggest emitter of CO2, with a contribution of 26% of the national total and auto transportation covering 23% of that total. Most of the emissions of this sector come from private vehicles, which have been boosted with urban expansion.

The increase of the private vehicle fleet has brought big problems regarding inefficient mobility, bigger emissions, and appalling air quality. However, the Mexican government has invested most of the sector's federal resources (75%) in road infrastructure, such as new highways and roads, that benefit mostly private vehicles, while only 23% is invested in public transport or cyclist and pedestrian infrastructure.

There is a real necessity to invest in public transport and have policies that consider integrated transport systems attending the demand of travels, mainly in cities. Integrated systems must consider strategies to promote the use of public transport instead of private cars through more efficient ways of massive transport, connected with other



non-motorized transport ways, such as walking and bike paths, along with the implementation of bike sharing systems.

Mexico City has already established a good bike sharing system, with which 232 tons of CO2e were avoided from 2010-2012, and, according to the Climate Initiative of Mexico (ICM), the transport emissions could even reach a reduction of 37 million tons of CO2e per year by 2030 if the right strategies and plans are implemented.

# Activity Rating \*\*\*\* Moving Forward

Mexico has all the requirements to meet its climate goals and to increase its ambition to be on track with Paris Agreement targets. The proposed policies are aimed to cut emissions in the most pollutant sectors. They should be doable, as the country counts with suitable technical and financial resources and there are already success cases, such as the bike sharing system "Ecobici" in Mexico City.

#### **Take Action:**

Please send the following message to the policymaker(s) below.

We recommend that Mexico's government, along with the Ministry of Environment and Natural Resources, update the national greenhouse gas emissions pledge to the Paris Agreement before November 2030. The updated pledge should be aimed to be on track with the global temperature increase below 1.5°C.

We recommend that Mexico implements and strengthens the following policies in order to reach this target: Reinforcing and improving the national carbon tax; and investing in and establishing policies for efficient public transport systems.

These policies will not only help Mexico to reduce its GHG emissions, but they would bring co-benefits like better air quality and public health, while saving money and improving people's life quality through sustainable mobility, shorter travel times, and road safety.

#### **Contact Information:**

Secretary of Environment and Natural Resources-Victor Manuel Toledo

Emails: atencion.ciudadana@semarnat.gob.mx

Website: https://www.gob.mx/semarnat

Telephone: 54900900 Ext. 12000/12076/12001

Address: Ejercito Nacional 223,

Col. Anáhuac, Delegación Miguel Hidalgo,

Ciudad de México, México,

Z.C. 11320







#### Learn More:

- https://www.worldbank.org/en/results/2017/12/01/carbon-pricing
- <a href="https://www.gob.mx/inecc/acciones-y-programas/inventario-nacional-de-emision">https://www.gob.mx/inecc/acciones-y-programas/inventario-nacional-de-emision</a> es-de-gases-y-compuestos-de-efecto-invernadero
- <a href="http://www.iniciativaclimatica.org/transporte/">http://www.iniciativaclimatica.org/transporte/</a>
- <a href="https://elpoderdelconsumidor.org/wp-content/uploads/2018/02/enfrentando-cambio-climatico-con-movilidad-eficiente-y-sustentable.pdf">https://elpoderdelconsumidor.org/wp-content/uploads/2018/02/enfrentando-cambio-climatico-con-movilidad-eficiente-y-sustentable.pdf</a>

This Post was submitted by Climate Scorecard Mexico Country Managers, Aline Nolasco Escalona and Valeria Lopez-Portillo



# **Nigeria**

Nigeria's NDC seeks to provide an integrated and comprehensive strategic approach towards promoting a low carbon, high growth, climate-resilient path for national sustainable development.

In its 2015 NDC, Nigeria pledged to unconditionally reduce GHG emissions by 20% by 2030, compared to business as usual (BAU) emission levels. It aimed to achieve this goal by improving energy efficiency by 20%, providing 13 GW of renewable electricity to rural communities that are currently not connected to the electric power grid, and by ending the flaring of gas.

Nigeria's efforts to achieve its NDC pledge are in danger of being overshadowed by new national policies and action plans that are far from eco-friendly in their overall packaging and implementation. The projects are the Economic Recovery and Growth Plan (Medium Term Plan 2017-2020); the Presidential Initiative on Fertilizer; Nigeria's Coal Power Project; and the Anchor Borrowers initiative.

These conflicting new policies come from a party which is diametrically opposed to the proper implementation of the NDCs strategies. The policies of the new administration also leave Nigeria's ability so strengthen its commitment to its Paris Agreement pledge by 2020 in question. Not only that, but the country may not be able to implement policies that would reduce the country 1.5 degrees by 2030, as is recommended for all countries in the latest IPCC report.

As part of the country's commitment, the bill for an act to prohibit gas flaring (prohibition and punishment) in Nigeria which passed its second reading in 2017 was passed into law by the Senate on April 17, 2019. Irrespective of the flaring routine or non-routine flaring. This is a commendable step towards ending gas flaring by 2030.

## **Policy Recommendations**

Climate Scorecard recommends that Nigeria adopt the following policies and incorporate them in updating its emissions reduction pledge to the Paris Agreement:

- Work towards ending gas flaring by 2030
- Work towards off-grid solar PV of 13GW(13,000MW)
- Efficient gas generator 2% per year energy efficiency (30% by 2030)
- Transport shift car to bus
- Improve electricity grid
- Climate smart agriculture and reforestation Trajectory



We additionally recommend that the government strengthen policies related to agriculture and renewable energy as follows.

#### 1. Support Climate Smart Agriculture

Agricultural emissions are contributed by methane (CH4) released from the guts of ruminants (cattle, sheep and goats), nitrous oxide gases from fertilizer use, and carbon dioxide from fuel use in heavy agricultural machinery. Although methane and nitrous oxide (N2O) are emitted in smaller quantities than carbon dioxide (CO2) than fossil fuel use, they have climate impacting potential that is 25 and 300 times greater, respectively. Additional estimates of greenhouse gas emissions precursors NOx, CO, NMVOCs, and SO2 reveal that Nigeria has 75 percent of its population releasing dangerous gases through the agricultural industry.

Moreover, the initiative that provides fertilizers, herbicides to farmers at low interest rate should have recourse to the country's NDCs. Considering long term value; fertilizers emit GHGs and are not effective thus the government should have better soil management strategies (crop rotation, mixed cropping and cover cropping) safer environment and organic farming structure including farmers with temporal inputs. Formal and informal institutional arrangements rural people engage in for the effective conservation of forests; including innovative community concession arrangements where the local communities are totally included in the project and bans placed on the use of forest resources by the Government agencies.

We advocate for the encouragement of a wide range of partnerships between the aforementioned parties and local forest management. They also should form focused groups linkages between farmers and the universities and agro-research institutes, to achieve a local content adoption implementation of NDCs.

#### 2. Strengthen Investment in Renewable Energy

Renewable energy based off-grid electrification is a more climate friendly. The **National Renewable Energy and Energy Efficiency Policy (NREEEP)** of 2015 provides an overarching framework for renewable energy and energy efficiency, thereby functioning as an umbrella policy for the various existing documents and serving as a reference document (anchor) for concrete implementation measures.

These policy objectives and implementation strategies have been carefully defined with the fundamental guiding premises that energy is crucial to national development goals and that government has a prime role in meeting the energy challenges facing the nation. Furthermore, the dependence on oil can be reduced through the diversification of the nation's energy resources, aggressive research, development and demonstration (R D&D), human resources development, etc. Consequently the overall energy policy objectives may be summarized as follows: i. To ensure the development of the nation's energy



resources, with diversified energy resources option, for the achievement of national energy security and an efficient energy delivery system with an optimal energy resource mix

To curb challenges of vandalization, poor maintenance, and overloading experiences, we need to educate end-users, vendors, and agencies throughout Nigeria. It is vital to raise awareness about the importance of implementation, monitoring, and validation teams set up by the government. Then the Federal Ministry of Power can repeat it 2014 launched the initiative; Operation Light-up Rural Nigeria, which is aimed at utilizing renewable energy for electrifying rural communities in all 36 States in the country this way renewable energy take bit by bit (from small scale) gradual implementation to large scale.

Relevant government bodies should also be well equipped to enforce stringent environmental impact assessment standards right from project conception, to minimize the environmental impact of energy projects. Appropriate monitoring, reporting and verifying systems to help assess improvement in performance, increase employment and welfare, This is to focus on reducing emissions not displacing it.

### **Activity Rating:** \*\*\* Right Direction

Nigeria knows what it has to do to strengthen its efforts to reduce emissions and make the country 1.5 degrees Celsius compliant by 2030. It now needs to political will to do it.

#### Take Action:

Please send the following message to the Policymaker below:

Dear sir.

We applaud the government for the steps taken to end gas flaring. We recommend an urgent synergistic approach and action by reconsidering the existing policies that are not recourse to the country's NDCs if Nigeria is to meet her 2030 Paris Agreement pledge. Thank you.

#### **Contact Information:**

**Send Message to:** Dr. Yerimah Peter Tarfa The Director. Department of Climate Change; Ministry of Environment, Mabushi, Abuia Email: petertarfar@hotmail.com

Email: info@climatechange.gov.ng







### **Learn More:**

- <a href="http://www.nationsencycopadia.com/Africa-nigeria">http://www.nationsencycopadia.com/Africa-nigeria</a>
- https://www.4unfccc.int

This Post was submitted by Climate Scorecard Nigeria Country Manager, Priscilla Offiong





### Russia

Despite the rising public awareness and concern of climate impacts and the increasing international pressure to act on reducing carbon emissions, many of the world's top-10 emitters' commitments and actions to and in support of the 2030 objectives of the Paris Agreement (maintaining emissions below levels contributing to a 1.5 degree Celsius global warming tipping point) are woefully under-achieving among the countries that also lead the global economy.

The Russian Federation is among this group, designated as 'Critically Insufficient', according to its current projected emissions level that will contribute to a 4 degree Celsius world (see Climate Action Tracker). Recent emissions calculations for the year 2030 (i.e. 2, 792 MT) suggest that Russia would need to establish policies and activities to reduce its emissions 1, 015 MT by that year in order to obtain the Paris Agreement's objective: maintaining an average global climate warming tipping point of 1.5 degrees Celsius (Climate Action Tracker).

Russia's "extreme weather events" have doubled since 1991, including flooding, massive forest fires and decreased resiliency for some of the country's most iconic ecosystems such as Lake Baikal in addition to increased deterioration of infrastructure. Regarding economic viability, in 2016, Russia's then-Minister of Natural Resources, Sergey Donskoy, told Rossiyskaya Gazeta that the country loses about "4-6 percent of its GDP annually due to environmental devastation", as relayed again in Russia Beyond in 2018.

While these consequences are observed, acknowledged and recorded, the presiding priority is to build resilience and adaptive capacity to climate-related threats over prospects for reducing emissions.

The plan for ratification of the Paris Agreement (to be ratified this year), would provide for the preparation of a draft presidential decree on the approval of the goal of limiting GHG emissions by 2030. Ratification of the Paris Agreement will not necessarily amount to Russia fully contributing to a world below a 1.5 degree C increase in global climate as its emissions pledges for 2020 – 2030, and Russia (as of 2016) had emissions levels 30% below those recorded for 1990.

# **Policy Recommendations**

1. Strengthening and Passing the Federal Law on State Regulation of Emissions and Absorption of Greenhouse Gases and on Amending Select Legislative Acts of the Russian Federation. Draft



Aside from the pending ratification of the Paris Agreement, a draft legislation by the Ministry of Economic Development (<u>Federal Law on State Regulation of Emissions and Absorption of Greenhouse Gases and on Amending Select Legislative Acts of the Russian Federation. Draft</u>. December 4, 2018), carries real agency for regulating on CO2 and greenhouse gas emissions defining a general scope and direction for emissions reductions.

The draft law has been negatively received by Russia's Union of Industrialists and Entrepreneurs (UIE), which presented an "alternative 'weaker' piece of legislation" as the organization reported that it would not support the draft in its current form, as reported by Climate Home News.

However, Climate Scorecard believes that the draft Federal Law bears real promise for regulating CO2 and greenhouse gas emissions and that this first forward-thinking piece of legislation should not renege on its aims due to concerns of the UIE. We recommend that this draft law be passed but that it contains updated emissions reduction targets per sector and provide a framework for a carbon trading economy.

Ministry Concerned: Ministry of Economic Development

# 2. Reinforcing National Adaptation Initiatives (such as 'Ecologia') Policies with Defined Mitigation Reduction Goals per Sector

The National Project – Ecologia /  $\Theta$  к о л о г и я programme (approved in 2018) – is targeted on air pollution reduction, reforestation and improving waste management and other sectors. Although it touches on various aspects, none of which directly relate to GHG emissions reductions.

While climate change consequences are already being observed and experienced in Russian communities, adaptation has been prioritized ahead of emissions mitigation. This is acceptable for the immediate and short-term. To work toward ensuring favorable development, economic and environmental situations in the future for Russians, the midand long-term scenarios for these sectors will ultimately depend on the degree to which global climate warming will disrupt plans and policies for advancing (or even maintaining) said sectors as well as lead to more variable future outcomes. Therefore, Russian policy makers must underscore the importance of acting on both climate adaptation (i.e. the current and anticipated consequences of climate change) alongside mitigation (the source of climate change) to safeguard its interests and communities.

Advisor and Special Representative to the President on Climate Issues, Ruslan Edelgeriyev, recently discussed the intention of the federal government of Russia to develop a federal law on the state regulation of greenhouse gas emissions as a long-term development strategy up to the year 2050, as reported in an interview by the Russian News Agency TASS. Further details were not discussed on this potential draft federal law.



Organizational Leads: Ministry of Environment in coordination with the Federal Service for Hydrometeorology and Environmental Monitoring and the Institute of Global Climate and Ecology.

#### 3. Incentivize Research, Development and Transition investments among Big Emitters

Even as Russia's industrial sector has retracted greatly since the end of the Soviet Union, representing a huge dip in emissions since 1991 (1990 being the base year in international emissions calculations), the countries development of energies from fossil energy sources is contributing to negative climate impacts domestically and internationally. The tasks of the organizational leads below entails applying a variation of corporate responsibility on the major energy producers through an incentivized investment program to facilitate strategies for transitioning to renewable energy.

Additionally, fossil energy companies should be incentivized to invest in existing and new energy-producing technologies, setting a roadmap for the transition to high-impact carbon trading with its (Russia's) traditional energy trade partners. Continuing to excuse itself from Paris Agreement ratification and not detailing more advanced emissions reduction pledges may mean a loss of competitiveness, unnecessary costs as well as being excluded in trade deals. Russia's fossil energy companies have expressed that they stand to be at the greatest disadvantage when it comes to mitigation policies that have yet to be ratified and/or implemented. However, these companies are at, arguably, the most advantageous position for investing in new energy generating technologies from renewable resources.

Russia's current processes leading up to the possible ratification of the Paris Agreement include the ongoing "stocktaking" of Russia's forests and their capacity to absorb CO2, but, given the country's current natural capital, wealth this should not be used to excuse stakeholders from acting on emissions reductions and the policies that are to reinforce a robust carbon market.

The main objective is to incentivize fossil energy companies to invest in existing and the new energy-producing technologies, setting a roadmap for transition to high-impact carbon trading with its (Russia's) traditional energy trade partners.

Earlier this year and in late 2018, Russia's fossil energy companies have expressed that they stand to be at the greatest disadvantage when it comes to mitigation policies yet to be ratified and/or implemented. However, this trajectory for future development is situated along the road ahead. Excluding itself from Paris Agreement Commitments may mean a loss of competitiveness, unnecessary costs as well as being excluded in trade deals. In a letter to the Environment Ministry on January 17, 2019, Alexander Shokhin, head of the Russian Union of Industrialists and Entrepreneurs (RSPP), wrote that "Russian

producers are interested in ratification (of the Paris Agreement)" as "the absence of national obligations and state regulation of activities to combat climate change may serve as a pretext for imposing economic restrictions on Russian companies", also citing concerns over loss of competitiveness and unnecessary costs as reported in an article by Climate Home News.

This concern from the head of the RSPP represents a valuable leverage point for Russia to act towards becoming a boon in emissions mitigation as opposed to a burgeoning burden.

Organizational Leads: Ministry of Economic Development in collaboration with the Federal Service for Hydrometeorology and Environmental Monitoring.

#### 4. Implement a new carbon tax based on lessons learned from international efforts

Staying economically competitive and developing sustainably do not have to be mutually exclusive. Russia's currently rich expanses of forests, flora and fauna are the currency of the future in addition to advances in technology and healthier urban environments. However, waiting to act on strengthening and safeguarding its investments for a 'Green Economy' risks depreciation of its inherited and developed assets. As mentioned earlier, Russia is already experiencing a wide and varied array of climate change consequences that are damaging infrastructure and deteriorating ecosystems. The longer Russia takes to act and treat emissions reductions as a priority, the more the country stands to lose out on a leadership role in a future economy where it can both trade credits domestically -- through a carbon tax on fossil fuels -- and internationally -- through emissions trading system with enhanced development with perceived trade partners -- with other countries behind the carbon curve.

A share of the funds received through the initiatives would support the policy initiative above (#3), and, more specifically: the carbon tax and credits could reinforce aims and development of mitigation initiatives, paired with adaptation strategies, as Russia is correct in emphasizing that the current state of affairs of climate change are present, requiring actions now to aid communities in coping with new-found situations.

As previous experience in attempting to implement carbon tax or emission trading, following the Kyoto Protocol and as reported by the Climate Action Network, Russian economic development specialist and environmental policymakers would be advised to maneuver around prior international shortcomings:

- Mutual Settlements on carbon quotas or disallowing the use of offsetting; i.e. there should be a focus on reducing emissions and not on mutual settlements between carbon quotas;
- Considering so-called environmental integrity issues in project evaluation for any international exchange of mitigation outcomes;



- Eliminating duplicated or (the double-entry) data in emissions accounting;
- International credit disbursement should complement ambitious actions at the national level.

### **Activity Rating: \*\*\* Right Direction**

#### **Take Action:**

Please send the following message to the policymaker(s) below.

Dear Minister of Economic Development of the Russian Federation, Oreshkin Maxim Stanislavovich:

We recommend that your Ministry take the helm of strategically developing and backing policies that advance Russia's mitigation efforts. Claiming success through minimally-intentional efforts to reduce emissions is not seen as the best means to ensure an economically viable and fruitful future. Updating the greenhouse gas emissions pledge of the Russian Federation to the Paris Agreement before November 2030 is to ensure that Russia's efforts to further preserve its natural resources, adapt to current climate consequences through adaptation- and resilience-building measures, as well as assert its innovative potential.

However, this depends on your ministry's support for updating the Paris Agreement pledge to reach a target of 1,015 MTCO2.

We recommend that you reinforce and communicate the strategic development and the passing of the draft Federal Law Federal Law on State Regulation of Emissions and Absorption of Greenhouse Gases and on Amending Select Legislative Acts of the Russian Federation. Draft in order to develop tactfully defined goals in order to reach the needed revision to the Paris Agreement Pledge of 1,015 MTCO2.

Supplementing Russia's current projection and emphasis on relying on carbon sequestration based on its expanse of natural resources, which respectfully need to be guarded with new synergies between mitigation and adaptation policies, are the following policy recommendations:

- Reinforcing National Adaptation Initiatives (such as 'Ecologia') Policies with Defined Mitigation Reduction Goals per Sector

Relying solely on adaptation policies and initiatives are not enough to stave off climate consequences and/or their intensification in the future. Adaptation actions need to be coupled with mitigation/GHG reduction efforts that are defined by clear, quantifiable goals per sector.



- Incentivize Research, Development and Transition investments among Big Emitters & Implement a new carbon tax based on lessons learned from international efforts

Critical planning for the establishment of Research and Development as well as Carbon-Market incentive mechanisms to bridge the interests of stakeholders as well as spur changes to the development and energy sectors are to be supported by these two recommended policies.

The time for your consideration and action on more impactful Emissions-reducing policies as well as the creation of incentive mechanisms is critical.

#### **Contact Information:**

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This Post was submitted by Climate Scorecard Russia Country Manager, Colette Linton: Contact Colette@climatescorecard.org





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# Saudi Arabia (English)

Saudi Arabia is currently projected to reach 1,105 Mt (Megatons) of carbon emissions per year by the year 2030, if it abides by its Paris Climate Nationally Determined Contribution (NDC). In order to limit global warming to 1.5 aC, the country needs to decrease its carbon emissions to 376 Mt per year by 2030. To reach this goal, we recommend that the government adopt the following policies.

### **Policy Recommendations**

#### 1. Increase Renewable Energy Capacity

There exists a huge potential for the country to reduce its emissions through the development of solar and wind energy projects, because it currently obtains almost all of its energy needs from burning large amounts of oil and natural gas. As part of its "Saudi 2030 Vision", the government plans on generating 10% of its energy needs from renewable energies by 2030. If Saudi Arabia does indeed follow through with its recent declaration to build several solar megaprojects, it has the potential to generate a much larger amount than 10% from renewable energies, and therefore reduce its dependence on fossil fuel, and thereby reducing its carbon emissions.

#### 2. Expanding Energy Efficiency Programs

Green building technology should be implemented in all new infrastructure and be used to retrofit old buildings as well. This will decrease the amount of energy needed to electrify Saudi Arabia's cities, and therefore decrease the amount of fossil fuels needed to burn for energy, thereby lowering carbon emissions.

For both of these policies, private and public companies need to be engaged, and the Ministry of Energy, Industry, and Mineral Resources needs to increase its investments into the renewable energy and green technology fields. The Kingdom has already established Saudi Energy Efficiency Centre (SEEC) at the King Abdulaziz City for Science and Technology (KACST) to upgrade its building codes and regulations and implement an ambitious green building and construction technology. This program should be expanded to include old buildings and future construction projects as well.

### **Activity Ranking: \*\*\*\* Moving Forward**

The proposed policies should be doable given the large financial and technical resources and capacity readily available. Saudi Arabia is a rich country and has developed the requisite technology needed to develop several reputable renewable energy research centers and institutions. These centers can cooperate with the Ministry of Energy,



Industry, and Mineral Resources, to scale up the construction of more solar mega projects which will generate a much larger amount than 10% from renewable energies

#### **Take Action:**

Please send the following message to the policymaker(s) below.

Dear Minister Khalid A. Al-Falih

We recommend that your Ministry update the greenhouse gas emissions pledge of Saudi Arabia to the Paris Agreement before November 2030. Your updated pledge should be aimed at reaching a target of 376 MTCO2 per year by 2030. We recommend that you implement the following policies to reach this target: increasing renewable energy generating capacity and expanding energy efficiency programs.

#### **Contact Information:**

Khalid A. Al-Falih Minister of Energy, Industry, and Mineral Resources webmaster@meim.gov.sa

This Post was submitted by Climate Scorecard Saudi Arabia Country Managers, Abeer Abdulkareem and Amgad Ellaboudy: Contact <u>Abeer@climatescorecard.org</u> or <u>Amgad@climatescorecard.org</u>

#### Saudi Arabia (Arabic)

نشاط تحت الأضواء: سياسات موصى بها للمملكة العربية السعودية لخفض انبعاثات الكربون

من المتوقع أن تصل المملكة العربية السعودية حاليًا إلى 1105 مليون طن من انبعاثات الكربون سنويًا بحلول عام 2030 إذا التزمت بمساهمتها الوطني المتحدد وفقاً لمؤتمر المناخ بباريس. من أجل الحد من ظاهرة الاحتباس الحراري إلى 1.5 درجة مئوية، تحتاج البلاد إلى خفض انبعاثاتها من الكربون إلى 376 مليون طن سنويًا بحلول عام 2030. من أجل بلوغ هذا الهدف، نوصي بأن تعتمد الحكومة السياسات التالية:

زيادة قدرة الطاقة المتجددة: هناك إمكانات هائلة للبلاد لخفض انبعاثاتها من خلال تطوير مشاريع الطاقة الشمسية وطاقة الرياح، لأنها تحصل حاليًا على جميع احتياجاتها من الطاقة تقريبًا من حرق كميات كبيرة من النفط و الغاز الطبيعي كجزء من "رؤية السعودية 2030"، تخطط الحكومة لتوليد 10٪ من احتياجاتها من الطاقة من الطاقات المتجددة بحلول عام 2030. إذا كانت المملكة العربية السعودية قد تابعت بالفعل بإعلانها الأخير لبناء العديد من مشاريع الطاقة الشمسية الضخمة، فإن لديها القدرة توليد كمية أكبر بكثير من 10٪ من الطاقات المتجددة، وبالتالي تقليل اعتمادها على الوقود الأحفوري، وبالتالي تقليل انبعاثات الكربون.

توسيع بر امج كفاءة الطاقة: يجب تنفيذ تقنية المباني الخضراء في جميع الهياكل الأساسية الجديدة واستخدامها في تحديث المباني القديمة أيضًا سيؤدي ذلك إلى تقليل كمية الطاقة اللازمة لتزويد مدن المملكة العربية السعودية بالكهرباء، وبالتالي تقليل كمية الوقود الأحفوري اللازمة لحرق الطاقة، وبالتالي تقليل انبعاثات الكربون.







في كل من هذه السياسات، يتعين إشر اك الشركات الخاصة والعامة، وتحتاج وزارة الطاقة والصناعة والموارد المعدنية إلى زيادة استثمار اتها في مجالات الطاقة المتجددة والتكنولوجيا الخضراء وأنشأت المملكة بالفعل المركز السعودي لكفاءة استخدام الطاقة في مدينة الملك عبد العزيز للعلوم والتقنية لتحديث قوانين ولوائح البناء وتطبيق تقنية طموحة للبناء الأخضر وتكنولوجيا البناء ويجب توسيع هذا البرنامج ليشمل المباني القديمة ومشاريع البناء المستقبلية أيضًا.

### تقييم النشاط: \*\*\*\*

من الممكن تنفيذ السياسات المقترحة نظر ا لآن المصادر والطاقات المالية والتقنية متوفرة بسهولة. المملكة العربية السعودية بلد غني وطور التكنولوجيا الضرورية المطلوبة لتأسيس العديد من المراكز ومؤسسات بحوث الطاقة المتجددة المرموقة و هذه المراكز يمكنها التعاون مع وزارة الطاقة والصناعة والموارد المعدنية لتوسيع انشاء المزيد من مشاريع الطاقة الشمسية العملاقة التي سننتج كمية أكبر من 10% من الطاقة المتجددة.

### رسالة تتبيه الإجراء) المملكة العربية السعودية):

السيد معالى الوزير خالد الفالح

نوصي أن وزارتكم تحدث تعهد المملكة العربية السعودية بشان انبعاثات الغازات الدفيئة قبل نوفمبر 2030 ويجب أن يهدف تعهدكم المحدث إلى الوصول إلى 376 مليون طن من انبعاثات الكربون سنويًا بحلول عام 2030. ونوصي بتنفيذ السياسات التالية للوصول إلى هذا الهدف: زيادة قدرة الطاقة المتجددة وتوسيع برامج كفاءة الطاقة.

إرسال رسالة تنبيه العمل إلى:

خالد الفالح وزير الطاقة و الصناعة و الموارد المعدنية webmaster@meim.gov.sa





### South Africa

South Africa aims to limit emissions and adapt to climate change through measures included in its Nationally Determined Contribution (NDC) to the Paris conference. With regard to the Paris Agreement, South Africa has to ensure temperature increases are kept well below 2°C above pre-industrial levels, and to pursue strong efforts to limit the increase to 1.5°C. However, South Africa's NDC is currently 2°C compatible. This means South Africa's climate commitment in 2030 is not consistent with holding warming to below 2°C, let alone limiting it to 1.5°C in accordance with the Paris Agreement, and is instead consistent with warming between 3°C and 4°C. In other words, South Africa's climate commitment is not in line with the Paris Agreement's 1.5°C limit.

South Africa's Nationally Determined Contribution (NDC) contains a target to limit greenhouse gas (GHG) emissions including land use, land use change and forestry (LULUCF) to between 398 and 614 MtCO2e over the period 2025–2030. This target is equivalent to a 19–82% increase on 1990 levels excluding LULUCF. In its 2020 emission reduction pledge, South Africa aims for a 34% reduction below 'business as usual (BAU)' by 2020 and 42% below BAU by 2025. As a consequence of committing to below BAU levels, NDC targets are found to be "Highly Insufficient".

### **Policy Recommendations**

Climate Scorecard supports the following recommendations for South Africa to become 1.5 degrees Celsius compliant and increase its pledge to the Paris Agreement:

### 1) Expanding renewable energy capacity

An expansion of renewable energy will ensure that South Africa significantly contributes to the global effort for a low-carbon and climate resilient world. Within eight years of the implementation of Renewable Energy Independent Power Producer Procurement Programme (REIPPP), the REIPPP has already attracted R209.4 billion in committed private sector investment, resulting in much-needed alleviation of fiscal pressure. This Programme supports the commitments made by the Country under the Paris Agreement thus far having contributed substantially to climate change objectives i.e. reduction of 22.5 million tonnes of carbon dioxide (CO2) and saving 26.6 million kilolitres of water.

### 2) Management of Carbon Sink

Carbon sink is a forest, ocean, or other natural environment viewed in terms of its ability to absorb carbon dioxide from the atmosphere. In simple terms, it is anything that absorbs and stores more carbon from the atmosphere than it releases as carbon dioxide. In order to avoid future catastrophic climate change we need to urgently and significantly reduce



our emissions of greenhouse gases. One of the ways to do this is to manage ecosystems and habitats that act as critical natural carbon sinks to ensure that they retain as much of the carbon trapped in the system as possible and don't tend to become sources to the atmosphere. We have two perfect sites for carbon capture and storage in South Africa, in the Eastern Cape and KwaZulu-Natal province. However, the progress of these sites seems to have ceased. South Africa does not currently have a legal and regulatory framework dedicated to carbon sink and it seems like this has been placed on hold for a number of years.

Carbon sink can be feasible given the right political, legal and financial mandate which can be effectively implemented. It is also important to understand that carbon sink is a technology that will complement our climate policies and will be used in conjunction with renewable energy and other clean technologies. While protection and management of carbon sinks is important, it is equally important to continue reducing our emissions of greenhouse gases through reducing fossil fuel emissions to zero.

#### 3) Just Transition Plan

It is in the face of severe health impacts of coal and potentially catastrophic climate change that the urgency of delivering a "just transition" in South Africa has fundamentally increased. To fulfill its climate change commitments, South Africa will have to phase out coal-fired power. South Africa has to adopt a vibrant energy mix, not only to save money, but also to meet the country's carbon-emission targets. Phasing out coal in the power sector by 2040 would also allow the country to fulfil its commitment to the Paris Agreement, which includes a goal of limiting warming to well below 2° C, without major impact on the economy. Research has revealed that it is economically and technologically feasible over the next 10 to 20 years to close down and phase out coal and replace this with renewable energy.

### **Activity Rating:\*\*\* Moving Forward**

The proposed policies make sense but its implementation is contingent on a variety of factors. As per the analysis under the current implemented policies and continued low economic growth, South Africa will reach the less ambitious end of its emission reduction targets in 2020 and 2025, but will not meet its mitigation target in 2030. Emissions projections for 2030 are 16 MtCO2e higher than the upper end of the target for 2030. The Climate Action Tracker's projections show South Africa's emissions trajectory under its implemented policies in 2020 and 2030 are expected to increase by 68% and 82%, respectively, on 1990 levels excluding LULUCF. If South Africa experiences stronger economic growth rates leading up to 2030, emissions levels under its current policy trajectory are likely to increase.



#### Take Action:

Dear Honourable Minister Barbara Creecy

We recommend that your Ministry update the greenhouse gas emissions pledge of South Africa to the Paris Agreement before November 2030. Your updated pledge should be aimed at reaching a target of 360 MtCO2. We recommend that the following policies should be implemented:

- Expanding Renewable Energy Capacity
- Just Transition Plan
- Management of Carbon Sink

#### **Contact Information:**

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#### Learn More:

- https://climateactiontracker.org/countries/south-africa
- https://www.environment.gov.za/sites/default/files/legislations/national\_climatec hange response whitepaper.pdf
- https://climatereality.co.za/what-are-carbon-sinks-and-why-are-they-important-i
- https://www.environment.gov.za/sites/default/files/docs/sanational\_determinedc ontribution.pdf







### South Korea

South Korea accounts for approximately 1.4% of global greenhouse gas emissions (including LULUCF), according to World Resources Institute (2006)'s Climate Analysis Indicators Tool (CAIT) 3.0. In its Paris Agreement INDC pledge, South Korea plans to reduce its greenhouse gas emissions by 37% from the business-as-usual (BAU, 850.6 MtCO2eq) level by 2030 across all economic sectors. In accordance with the Framework Act on Low Carbon, Green Growth, South Korea has pledged to make continued efforts to address climate change across all economic sectors and will strengthen its efforts to achieve the 2030 Paris Agreementmitigation target. (See my earlier posts released in May 2017 and June 2018.)

In July 2018, almost one year after the current Moon Jae-in administration inaugurated, the South Korean Government announced a new plan to comply with its international pledge, 37% reduction from its BAU level. According to this new plan, South Korea will increase the share of domestic mitigation up to 32.5% (equivalent to 96 million ton), which was 25.7% previously.

In the sector of energy conversion (power generation, collective energy), the reduction of about 24 million tons will be confirmed by measuring the policy of conversion to fine dust-reducing and environment-friendly energy. The government is planning to scale up this target to approximately 34 million tons when setting the 3<sup>rd</sup> energy basic plan, and it will support reaching this goal with energy tax reform. The government will provide further details on this effort when it submits the revised National Decision Contribution (NDC) to the United Nations in 2020.

The industrial sector is expected to cut about 98 million tons of emissions through improvements in industrial processes, energy savings and the spread of excellent reduction technologies. In the building sector, it will reduce 65 million tons through strengthening energy standards for new buildings and revitalizing existing buildings. In the transport sector, by the year 2030, 3 million electric vehicles will be supplied and 31 million tons of emissions will be reduced by means of eco-friendly public transportation. In addition, it plans to reduce 11 million tons of carbon dioxide by using CO2 capture, storage and utilization technology (CCUS) reducing waste, revitalizing recycling, strengthening public sector greenhouse gas and energy target management system.

## **Policy Recommendations**

In order to ensure its strengthened commitment to the UNFCCC, South Korea's main tackling areas and plans should be:

#### 1. Reduce Coal Use for Power Generation



South Korea's power generation is too dependent on coal. As of 2016, 30% of its total installed electricity generating capacity is occupied by coal-fired power plants, and 40% of actual power generation is from coal-fired power plants, which means coal-fired power plants are fully or even overly operated. This is one of the major concerns South Korea has to deal with, however, and in the 2019 plan introduced above, it is not clearly mentioned. The South Korean government should interrelate this new plan with its 8<sup>th</sup> basic plan for electricity supply and the upcoming 5<sup>th</sup> basic plan for energy.

### 2. Encourage EV and Discouraging Diesel Vehicles

South Korea is becoming more road-connected than rail-connected, and the number of diesel vehicles has been rising. In 2017, the total number of diesel vehicle was 9,576,395, which is almost 50% increase compared to 6,483,423 in 2010. Diesel vehicles are a major culprit of air pollution and greenhouse gas emission. The government needs to make efforts to transfer diesel vehicle owners to more eco-friendly vehicles like EV.

#### **Activity Rating:** \*\*\* Right Direction

Increasing domestic emission instead of relying on the international market is a good direction, however, the government needs to synthesize sporadic targets and guidelines and direct specific targets and assignments to responsible players.

### **Take Action:**

Please send the following message to the policymaker(s) below.

Dear Minister Cho Myung-rae (New Minister of Environment)

We recommend that your Ministry update the greenhouse gas emissions pledge of South Korea to the Paris Agreement before November 2020. Your updated pledge should be aimed at reaching a target your ministry presented last year. We recommend that you implement the following policies in order to reach this target: Reducing Coal Use for Power Generation and Encouraging EV and Discouraging Diesel Vehicles mentioned above.

#### **Contact Information:**

Ministry of Environment Government Complex-Sejong, 11, Doum 6-Ro, Sejong-si, 30103, Republic of Korea mepr@korea.kr



This Post was submitted by Climate Scorecard South Korea Country Manager, Eunjung Lim





# **Spain**

All countries need to strengthen their NDC pledges to the Paris Agreement by 2020 so that the world can become 1.5 degrees Celsius compliant by 2030 and avoid the dangerous effects of global warming. Climate Scorecard suggests that the following policies will help Spain strengthen its Paris Agreement pledge.

### **Policy Recommendations**

#### 1. Mandate that 100% of electricity be from renewable sources by 2050

The Spanish government announced in mid-2018 that it would be gearing up to work toward making 100% of its electrical power from renewable sources. Spain has enough solar and wind resources to be able to reach this goal, and while the sunny and windy climate of the country lends well to a natural collection of energy, the climate also has some pretty significant downfalls. For example, a recent drought caused hydroelectricity to be replaced by coal-powered plants, effectively reversing the direction in which Spain is trying to go.

Additionally, although the current government is behind the goal of 100% renewable energy, there is no guarantee that future governments will continue to support this goal. Over the last 2 years, while emissions dropped by 23.5% in Europe, they rose by 17.9% in Spain. For these reasons, it is of extremely high importance that the private sector is involved with making this goal happen. Private electric companies should work together with NGOs to guarantee that progress will continue on these goals, regardless of the current government's environmental position. If large, successful companies begin to announce and market the change, setting an example for the rest, smaller companies will be more likely to replicate their plans, creating a domino effect of clean energy.

Although feasible, this plan cannot happen without continued support from some of the leading Spanish companies in the fight against climate change: Acciona, Bankia, CaixaBank, Ferrovial, IAG, Mapfre, OHL, Red Eléctrica y Telefónica.

#### 2. Increase subsidies for the purchase of electric vehicles

As do many European countries, Spain suffers from heavy vehicular traffic, causing high levels of air pollution. While Spain is making many plans to become 100% renewable energy powered, many gaps remain in the current plans, especially in vehicular traffic plans, where Spain's capital city continually suffers. The ban on new cars with petroleum or diesel engines was unfortunately delayed until 2040, possibly signaling empty promises on the climate change front. To effectively reverse the current trend, Spain should increase subsidies for those who purchase electric cars. Each household should be allotted only one subsidy to incentivize carpooling, reducing the number of total cars in Spain, and taking advantage of public transportation. This rule







will also ensure that more families have access to the offer.

Cash rebates have been proven effective in incentivizing car shoppers to go green. In Canada, for example, rebates take up to \$5,000 off electrical vehicles up to around \$45,000 in value. Various brands and models are included in the program, and this model has effectively helped Canada reduce their vehicular emissions, thereby being a strong leading example for other developed countries such as Spain. The EU mandate on charging more for high carbon-emitting cars helps, but we believe going a step further would help even more.

#### 3. Reduce Spain's reliance on imported petroleum

Although Spain has a large field of wind and solar energy sources, it is surprisingly still heavily reliant on imported petroleum. With a few sweeping changes though, Spain could potentially be 0% dependent on imported petroleum by the year 2040, as currently projected by the government. This would be in line with the 100% renewable energy goal, and would significantly help both previous goals, especially in relation to vehicles. While Spaniards are heavily reliant on their cars, they don't need to necessarily rely on petroleum. Other sources of energy, such as bio-diesel, ethanol and renewable natural gas are some of the options that would allow Spaniards to continue using their current vehicles while simultaneously decreasing the use of carbon-emitting fuels, albeit not by 100%. With the new EU labeling system as of October 2018, users can now be aware of the different fuel options offered and should be able to differentiate which are carbon-emitting, and which are clean. Spain, however, has been slow to implement the new labels.

The recommendation to limit traditional petroleum and switch to alternative fuels (other than electric) is to be taken only in the short run, as many of the alternative fuels still rely partially on greenhouse gas emissions, but at lower percentages. While electrical power is the long-term goal for all, it is not feasible to expect all Spaniards to switch to electric vehicles over the next 10 years, but is hopefully feasible for the next 20 years, and absolutely feasible for the next 30 years (in the case of falling behind with the original goal) as we near 2050 and need to hit the 100% mark. In the meantime, though, Spain does have fuel options and just because they cannot switch to 100% electrical power immediately, these short-term changes are still bound to make a significant impact, hopefully slowing the current changes both in Spain and its surrounding regions.

#### **Take Action:**

Please send the following message to the policymaker(s) below.

Dear Ms. Ribera,

Spain's pledge to be carbon-neutral is a huge step that should not be taken lightly. Spain's pledge to be solely powered by renewable energy in 2050 is fantastic, but at the current pace, highly likely to be unattainable. I recommend that the government support their citizens in these three main ways: Mandate that 100% of electricity be from renewable sources by 2050, increase subsidies for the purchase of electric vehicles, and reduce Spain's reliance on imported petroleum in the short-run. If these three objectives can be attained, Spain will be much closer to meeting the goals to which it has pledged.

Thank you for your consideration,

(Insert your name here)

#### **Contact Information:**

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This Post was submitted by Climate Scorecard Spain Country Manager, Samantha Pettigrew.





### **Thailand**

Thailand's NDC targets have been recognized as un-ambitious and the country still has a long way to go in order to achieve the 1.5°C below target by 2030. To achieve the 1.5°C below target by 2030 Thailand needs to take the following steps.

### **Policy Recommendations**

### 1. The development and implementation of a well-developed renewable energy and coal phase-out plan

Thailand's "4.0" model, which was developed by the Thailand Government in 2016, will be essential for phasing out Thailand's coal-based power. The Thailand "4.0" model aims to transform "Thailand into a high-income country through an economy centered around knowledge, innovation, and value addition". The Thailand "4.0" model is based on the principles of energy efficiency and environmental sustainability. At present, the Thailand "4.0" model is already being implemented in the country through "approximately 10 GW of renewable energy capacity, a mature framework on energy efficiency, a supportive environment for distributed power generation, pilot programmes on smart grids and digital platforms, and funding for research and development in energy storage".

To achieve the Thailand "4.0" model, an integrated energy roadmap is in place, "which combines ambitious long-term goals on renewable energy, energy efficiency, smart grids, and the broader power, natural gas, and oil sectors".

The Asian Development Bank (ADB) has been instrumental in helping Thailand to implement the "4.0" model. Under the Thailand "4.0" model, the government has also proposed plans to restrict the financing of coal-based projects. Here, the Thai government will work hand-in-hand with the Asian Development Bank to restrict financing on coal-based projects and at the same time boost investments in renewable energy projects.

To enhance the growth of renewable energy in Thailand, the ADB has financed the country's first solar and wind generation plants. Similarly, ADB has recently invested around 5 billion Thai Baht (around \$155 million in US currency) for the certification of climate bonds in Thailand. Finally, by investing in certified climate bonds, the ADB has paved the way "for attracting new sources of financing, including pension funds and climate finance, to support power sector infrastructure needs".

### 2. Stronger International Climate Change Partnerships

Thailand's partnership with other countries will in turn help achieve the 1.5°C below target by 2030 by bringing in more investments, innovations and advanced technologies







through which greenhouse gas emissions reduction can be achieved more efficiently at a larger-scale.

#### 3. Expand Thailand's Clean Transportation System

The transportation sector contributes around 19.2% of total greenhouse gas emissions in Thailand. Different projects are being put in place to build a clean transportation system in Thailand. In this regard, Thailand plans to expand its train and metro rail connectivity across the Bangkok metropolitan region. Expansion of metro rail will in turn decrease the number of vehicles on roads as more commuters will travel by metro on a daily basis. Thailand is also the first country in the region to implement a  ${\rm CO}_2$  based motor vehicle excise tax.

### 4. Enhance Energy Efficiency

The new Power Development Plan (PDP) was formulated in Thailand in 2018 and will be effective from the second quarter of 2019. Under the Plan the majority of Thailand's power will be generated by non-fossil fuel sources by 2037 and only 12% of power will be generated by coal-based power plants.

Once the new PDP is implemented, four other plans, which are proposed, will be implemented and integrated under the new PDP. These plans include oil management, natural gas supply, alternative energy development, and energy savings and efficiency. The new PDP, along with these four proposed plans will be integrated under Thailand's energy reform plan.

### **Activity Rating: \*\* Standing Still**

To meet the new IPCC 1.5°C 2030 target, much more needs to be done. A strong roadmap needs to be in place that revises Thailand's INDC targets and make necessary amendments to it. Finally, the roadmap should also formulate measures for phasing out coal-based sources and promote the growth of renewable energy sources.

#### **Take Action:**

Please send the following message to the policymaker(s) below.

To help Thailand in successfully achieving its INDC targets by 2030, you can contact the members of the Department of Alternative Energy Development and Efficiency, Ministry of Energy, Thailand with the following Action Alert message:

We thank the Government of Thailand for taking steps to curb greenhouse gas emissions in the country. The new Power Development Plan will be a significant step in this regard and will greatly help in achieving Thailand's INDC commitments. To successfully achieve Thailand's INDC targets, much more still remains to be done. Here, your role will be vital.





As a prominent member of the Department of Alternative Energy Development and Efficiency, Ministry of Energy, I request you kindly to consider some recommendations. My first recommendation is that you make necessary amendments to the INDC targets established by Thailand. Another recommendation will be to facilitate new feed-in tariff schemes for promoting the growth of renewable energy across the country and developing measures for phasing out coal-based sources. Finally, emission reduction projects should be implemented at national and regional-levels for facilitating the creation of a clean transportation system and for enhancing energy efficiency under the new PDP.

#### **Contact Information:**

Mr. YongyutJantararotai
Director General
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#### Learn More:

- For more information about the Thailand "4.0" model, please visit https://moderndiplomacy.eu/2019/02/04/thailand-in-need-of-energy-4-0/
- For more information about Thailand's climate change performance in 2019, please view the report by the Climate Change Performance Index at:https://www.climate-change-performance-index.org/country/thailand-2019
- For more information about Thailand's INDC targets please visit Thailand's INDC report at https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Thailand%20First/Thailand INDC.pdf
- For more information about Thailand's proposed projects under the transportation plan, please visit https://www.thai-german-cooperation.info/en\_US/as-tcc-closes-its-doors/
- For more information about Thailand's energy efficiency under the new Power
  Development Plan, please visit
  <a href="https://www.bangkokpost.com/business/news/1617382/national-power-plan-expands-private-output">https://www.bangkokpost.com/business/news/1617382/national-power-plan-expands-private-output</a>

For more information please contact Climate Scorecard Thailand Country Manager, Neebir Banerjee: Neebir@climatescorecard.org or neebirban@yahoo.com



# **Turkey**

Climate Action Tracker (CAT) has updated the climate action profile of Turkey and classified Turkey's INDC targets as "Critically Insufficient". The 1.5 degree Celsius compliant target emission level Turkey needs to pledge to the Paris Agreement by November 2030 is to be 357 MT while it is 905 MT at the moment. Turkey's current policies scenario shows 836 Mt of CO2 emissions in 2030. However, this is still way too much higher than 357 MT.

Turkey is investing in coal in parallel to these commitments which creates a contrast with its climate targets. Climate Action Tracker points out this dilemma and makes a remark on the renewable energy potential of the country; The ongoing decline in renewable energy technology and storage costs shows that reliable energy sources can be achieved with effective cost without resorting to coal-fired power plants.

### **Policy Recommendations**

#### 1. Fully Implement the National Energy Efficiency Action Plan

Turkish government committed to an investment \$11 billion for energy efficiency measures under the National Energy Efficiency Action Plan. If the investment is fully implemented, Turkey's emissions forecasts until 2030 under current policies are expected to decline between 7-11% rates.

#### 2. Stop Investment in Coal-Fired Power Plants and phase-out Existing Plants

Turkey still heavily depends on coal for its main source of energy. For example it imported nearly 37 million mt of hard v=coal in 2017. Coal emits a third of the country's electricity, and emits a third of the country's greenhouse gases. Turkey needs to turn away from its plan to double domestic coal-burning plants in 5 years. On the contrary Turkey urgently needs to develop and implement a coal phase-out plan.

#### 3. Strengthen Investments in Renewable Energy

Turkey is investing in coal in parallel to these commitments which creates a contrast with its climate targets. Climate Action Tracker points out this dilemma and makes a remark on the renewable energy potential of the country; The ongoing decline in renewable energy technology and storage costs shows that reliable energy sources can be achieved with effective cost without resorting to coal-fired power plants.

**Activity Rating: \*\*\*\* Moving Ahead** 



National Energy Efficiency Plan should be implemented without any delay and Turkey should reconsider investments on coal-fired power plants due to the low calorific value of coal reserves in Turkey. Besides, Turkey has renewable energy potential for various renewable sources which has not been benefited properly.

#### Take Action:

Please send the following message to the policymaker(s) below.

We recommend that Ministry updates the greenhouse gas emissions pledge of Turkey to the Paris Agreement before November 2030. The updated pledge should be aimed at reaching a target of 357MTCO2. We recommend that you implement the following policies in order to reach this target:

- National Energy Efficiency Plan commitment should proceed.
- Investments into coal-fired power plants should be reconsidered.
- Renewable energy potential of Turkey should be assessed and make use of these various sources and opportunities.

#### **Contact Information:**

Ministry of Energy and Natural Resources

Address: Nasuh Akar Mah. Türkocağı Cad. No:2, 06520 Çankaya/Ankara, Türkiye

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This Post was submitted by Climate Scorecard Turkey Country Manager, Ozlem Duyan



# **United Kingdom**

Under the EU commitment to reduce emissions 40% by 2050 from 1990 levels, the earth's temperature has been estimated to increase by 2 degrees Celsius. Recently discussions around a 1.5 degrees Celsius tipping point have created an urgent need for enhanced action, following an IPCC report released in October. The Report highlights the unexpected impacts that we are already observing from Climate Change and suggests future predictions underestimated the extent Climate Change will impact human and environmental systems.

Under the 40% reduction, the EU is currently projected to have emitted 3420 MT (Metric Tonnes) CO2 by 2030. However, if we emit over 758 MTCO2, the 1.5 degrees ceiling is to be met. 758 MTCO2 is on track to a net-0 emissions scenario by 2030, which will make a 1.5 degree's Celsius temperature increase more likely. The UK Climate Change Committee has recently outlined a plan to reach net-0 by 2050, with the UK parliament voting for a non-binding agreement that acknowledges we are in the middle of a climate emergency. The Scottish Parliament has already pledged to reach net-0 by 2045. Further action is necessary to reach net-0 by 2030 instead.

UK environmental policies are currently focussed on agriculture, forestry, land use and fishing, in regards to improving efficiency and reducing waste, and technological innovation of renewable energies to cut emissions by 80% by 2050. In order to reach net-0 by 2030, the Climate Scorecard team proposes 3 additional policy objectives the UK should undertake:

### **Policy Recommendations**

#### 1. Reduce International Offsets

The net-0 proposal by the UK Climate Change Committee only accounts for UK generation of CO2, and emissions from international aviation and international shipping. For the UK to truly help reduce global temperatures by 1.5 degrees, there needs to be a re-assessment of the UK's impact to include its international offsets. With an increasing demand for Chinese imports, the UK needs to reduce its supply chain emissions to contribute to a net global reduction. However, the issue will be maintaining trade partnerships in a globalising world, and will require international trade partnerships that work on climate change with developing countries to build cooperative proactive strategies.

#### 2. Phase Out Fossil Fuel Energy Subsidies by 2025



The UK currently maintains extensive subsidies for fossil fuels, at £10.5 billion per annum, that fosters a low price for gas and oil. This is the largest fossil fuel subsidy in the EU. The G20 agreed to phase-out subsidies by 2020 in 2017, which has not occurred. The steady increase in energy intensity is therefore not a true reflection of efficiency improvements because the government is hiding the true cost of energy and effectively paying for the damage costs to natural capital that would otherwise increase the price for fossil fuel energies. These subsidies have been labelled 'perverse subsidies' due to the global damage they cause.

#### 3. Improve GHG Removal Techniques

To meet a 1.5 degrees ceiling, a negative emissions target will be necessary that goes beyond decarbonisation. Carbon capture and storage (CCS) technologies have largely failed to fulfill the intended impact within the UK energy sector, and promote the continued use of carbon intensive energies. In contrast, GHG removal techniques can facilitate progress in sectors that are struggling to decarbonise. Techniques that are ready to deploy include reforestation and soil carbonisation sequestration. However, more investment is needed for techniques such as ocean fertilisation, mineral carbonation and direct air capture technologies. The government needs to provide incentives for the research and development of these technologies such as tax breaks and conditional subsidies that express the benefits of environmentally friendly corporate strategies.

### **Activity Rating: \*\*\* Right Direction**

The policies proposed above make sense but their implementation is contingent on a variety of critical factors; A recognition of responsibility for international emissions, the devaluing of short-term political objectives that favour energy lobbying groups, and the employment of economic incentives for negative emissions.

#### **Take Action:**

Please send the following message to the policymaker(s) below.

Dear Liam Fox.

After the release of the IPCCC report in October of last year, and the subsequent endorsement by the UKCCC, it is clear more needs to be done on the issue of GHG abatement if we are to help restrict the global temperature to 1.5 degrees Celsius by 2030.

As the UK is a global player in international trade, the true extent of our global emissions needs to be acknowledged. Taking into account international supply chains and the extent of our increasing imports as we move to a service industry economy, our Paris Agreement pledge should address our total domestic and international emissions.



Climate Scorecard proposes addressing these critical issues by forming international environmental trade partnerships with our three main trading partners, the US, the EU and China. The UK can play an important role in setting international environmental standards for imports from countries that are not currently on track to meet Paris Agreement pledges.

This could be done in a similar fashion to the Cartagena Protocol on biosafety, igniting the precautionary principle against imports with a high GHG emissions rating. This would create a positive dialogue for future trade in a time of uncertainty for EU-UK relations. To ensure it does not create a barrier to trade, the import restrictions could come into force at a date set in the future, whilst positive plans are formulated to reach sustainable trade and mutual benefits for all parties.

I acknowledge these proposals may seem radical. Yet, in light of the consequences of inaction I hope at least they spark inspiration on the future trade agreements we build with our global trading partners at this critical juncture, and promote the possibility of international sustainable development.

Kind Regards, Zara Holden

#### **Contact Information:**

Department for International Trade Secretary - Liam Fox

The Rt Hon Dr Liam Fox MP, House of Commons, London, SW1A 0AA

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Telephone: +44 (0) 20 7215 5000

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This Post was submitted by Climate Scorecard Country Manager, Zara Holden: Contact zaraholden@hotmail.com



### **United States**

In order to be compliant with a 1.5 degrees Celsius target, the United States needs to reduce its emissions by half by 2030, with the goal of achieving net-zero by 2050. Currently, the U.S. has indicated its intention to withdraw from the Paris Agreement as soon as possible, and has rolled back all federal policy to meet its original targets, therefore leaving its rating at "Critically Insufficient" to meet Paris Agreement pledges.

### **Policy Recommendations**

#### 1. End Fossil Fuel Subsidies

The U.S. spends more than \$26 billion per year in fossil fuel subsidies, which hides the true costs of fossil fuels and fails to account for the negative climate externalities associated with producing, distributing, and burning them for energy. By reducing these subsidies, the market will more accurately reflect these costs, and both producers and consumers will be incentivized to switch to clean energy sources. The money originally reserved for fossil fuel subsidies could then be invested in subsidies for clean energy technology development and distribution, specifically solar PV, CSP, onshore and offshore wind, and geothermal energy. Additionally, the funds could be applied to research and development of carbon sequestration technology and/or reforestation.

This policy would require an overhaul of the federal budget with bipartisan cooperation throughout the executive and legislative branches. Congress and the President would need to sign legislation designating the end of fossil fuel subsidies and the subsequent redirection of the funds to clean energy initiatives.

#### **Activity Rating:** \*\*\* Right Direction

This would be an extremely difficult policy to enact as the fossil fuel lobby is powerful and well-funded. While technologically it is the easiest of all the recommended policies to enact, the well-organized opposition from fossil fuel lobbyists reduces political will as members of Congress fear losing campaign contributions or future elections if they do not support the continuation of existing subsidies.

#### 2. Reinstate the Clean Power Plan

The United States should reinstate the Clean Power Plan, which required the power sector in the U.S. to reduce its emissions by 32 percent by 2030. Under the new 1.5 degrees C target, the U.S. should expand the Clean Power Plan to require a 50 percent reduction by 2030 and a 100 percent reduction by 2050. The goal of this policy is to federally encourage a shift from coal, oil, and natural gas for energy production to clean



energy technology.

This regulation would be enacted by the U.S. Environmental Protection Agency, and would require support from the EPA Administrator as well as the President. The administration should rescind the proposed Affordable Clean Energy Rule (which incentivizes the production of energy from coal and is therefore neither "affordable" nor "clean") and replace it with a reinstatement of the Clean Power Plan, with the increased targets.

### **Activity Rating \*\*\*\* Moving Forward**

The U.S. Environmental Protection Agency previously enacted the Clean Power Plan in 2015 with the knowledge that it was possible under modern technological limitations. With the falling costs of renewable energy and increasing scale of its implementation, this policy would be technologically feasible and politically strong.

#### **Reduce Federal Emission Standards**

The U.S. Environmental Protection Agency should reduce the federal emissions standards for on-road vehicles to require zero emissions by 2050 for all light-duty passenger vehicles. To aid with the transition to electric vehicles, the policy should include subsidies and/or increased tax credits for electric vehicles. This regulation would be enacted by the U.S. Environmental Protection Agency and the National Highway Traffic Safety Administration, both of which are responsible for setting vehicular emissions targets.

### **Activity Rating:** \*\*\* Right Direction

Although sales of electric vehicles are rapidly increasing in the U.S., they remain expensive and hold a relatively small market share. With moderately low gas prices, the current incentives for electric vehicles are not strong enough to achieve market saturation. Government and technological intervention is necessary to expand the market, increased demand for EVs, and make them accessible to all income levels.

#### **Take Action:**

Please send the following message to the policymaker(s) below.

Dear Environmental Protection Agency Administrator Andrew Wheeler:

We recommend that the Environmental Protection Agency, in cooperation with Congress and the Executive Branch, update the greenhouse gas emission pledge of the United States to the Paris Agreement before November 2030. The updated pledge should be aimed at reaching a target of 1761 MT CO2. We recommend that you implement the following policies in order to reach this target:







- 1) End Fossil Fuel Subsidies by 2030
- 2) Reinstate the Clean Power Plan with heightened emissions reduction requirements
- 3) Require net zero emissions from personal vehicles by 2050.

#### **Contact Information:**

Administrator Andrew Wheeler Email: Wheeler.andrew@Epa.gov Phone: 202-564-4700 Mailing Address: USEPA Headquarters William Jefferson Clinton Building 1200 Pennsylvania Avenue, N. W. Mail Code: 1101A

Washington, DC 20460

This Post was submitted by Climate Scorecard US Country Manager, Stephanie Gagnon.



