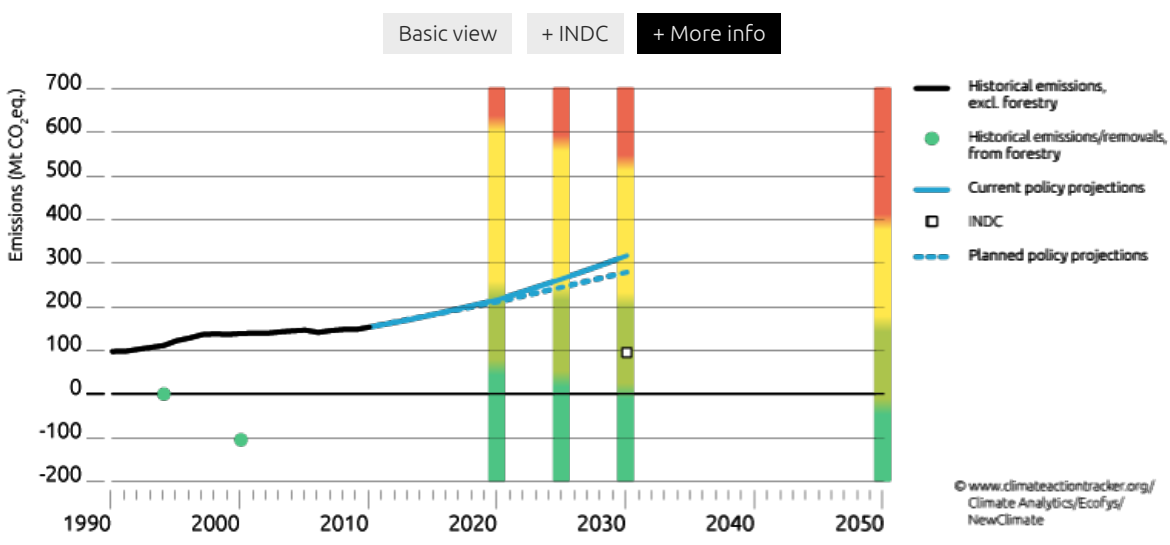
Philippines

Page last updated: 2nd November 2016

Rating





Note: Hover over the coloured bars for a pop-up with the fair emissions range per effort sharing category. More information here.

Assessment

The Philippines' emissions pathway towards 2030, as proposed in its Intended Nationally Determined Contribution (INDC), could be rated "sufficient," however the high uncertainty in its envisioned emissions pathway leads to a "medium" rating. The Philippines' reference—or business as usual (BAU)—scenario, against which the target is measured, has not yet been published and the government has shared no details explaining how the NDC target relates to the LULUCF sector, nor how this will be quantified. Recent statements from the President of the Philippines regarding his country's position on the Paris Agreement (King, 2016b), as well as previous announcements on increasing coal-fired power capacity, add significantly to the uncertainty as to whether the government intends to take substantial action in adopting the policy changes required to meet its INDC target. This lack of details on how the target will be achieved and the role that the LULUCF sector will play in it, leaves the option open for achieving the target by increasing carbon sinks (LULUCF) which is not compatible with what is needed—or fair—to keep global warming below 2°C. Current policies indicate a rapid and ongoing increase in greenhouse gas emissions, which appear inconsistent with meeting the INDC goals

In its INDC, submitted on 1 October 2015, the Philippines included a conditional greenhouse gas reduction target of 70% below business as usual (BAU) levels by 2030. The INDC states that the target is conditional on "the extent of financial resources, including technology development & transfer, and capacity building, that will be made available to the Philippines." The target covers all emissions from all sectors, including land use, land use change and forestry (LULUCF) (Government of The Philippines, 2015).

The INDC does not report its BAU emissions projections, nor does it quantify future LULUCF emissions. This introduces substantial uncertainty in interpreting the INDC targets and makes quantifying emissions levels excluding LULUCF difficult. When assuming that industrial, energy and agricultural emissions (emissions excluding LULUCF), were also to be reduced by 70% below a BAU—which we assume to be similar to our current policy projections—the CAT estimates that this would result in emissions reverting to 1990 levels by 2030 (excluding LULUCF).

If the target were (partly) unconditional, and directed at energy, industrial and agricultural emissions we would rate it "sufficient." However, given the Philippines has not put this forward and, the large uncertainty around how much mitigation is planned for LULUCF emissions and how much for emissions excluding LULUCF, we have given the Philippines the lower rating of "medium." The "medium" rating indicates that the Philippines' climate plans are at the least ambitious end of what would be a fair contribution. This means it is not consistent with limiting warming to below 2°C, let alone with the Paris Agreement's stronger 1.5°C limit, unless other countries make much deeper reductions and comparably greater effort.

According to our analysis, and in common with most countries, the Philippines will need to implement additional policies to reach its conditional INDC. Full implementation of the planned 'National Renewable Energy Program and The Energy Efficiency and Conservation Roadmap' would lower emissions by 12% compared to current policy projections. However, the INDC target is unlikely to be met if The Philippines builds all the announced coal-fired power plant capacity (more than 10 GW).

Pledges and targets

On 1 October, The Philippines submitted its Intended Nationally Determined Contribution (INDC), including the conditional target of a 70% reduction in GHG emissions below BAU projections by 2030.

Because the INDC target does not distinguish LULUCF emissions reductions from emissions reductions in energy, industry and agriculture, and lacks a quantification of the BAU, the emission reductions are difficult to estimate. Assuming the current policy projection (see the next section) is in line with BAU projections and the 70% emissions reductions are applied to non-LULUCF emissions, the INDC could result in emissions decreasing to 1990 levels (excl. LULUCF).onal target of a 70% reduction in GHG emissions below BAU projections by 2030.

Copenhagen pledge	
2020 target	None
Paris Agreement target	
Ratified	No
2030 target	Conditional: 70% below BAU by 2030 [around 1990 levels by 2030 excl. LULUCF]
Coverage	Economy-wide, incl. LULUCF
Long term goal(s)	
Long-term goal(s)	None

In 2015, the Department of Energy (DOE) announced that more than 10 GW of coal-fired power plant capacity would be constructed in the Philippines by 2025. If all these power plants were built, it would be difficult for the government to achieve its INDC target (excluding LULUCF), especially because the recent upswing of development in the coal industry has encouraged increased interest in coal exploration (DOE, 2016).

However, the current INDC pledge leaves the option open for The Philippines to achieve its target by increasing carbon sinks (LULUCF) to absorb about 250 $MtCO_2$ per year by 2030,[1] meaning most sectors in the Philippines would not decarbonise.[2] A lower emissions reductions target (i.e. higher emissions) was hinted at in the Philippines' draft INDC (Republic of the Philippines, 2015), with only a 10-20% reduction in GHG emissions from BAU in the energy sector. However, achieving its INDC targets by focussing mitigation efforts in LULUCF sectors (e.g. forestry) would lock the Philippines into a high carbon pathway for other sectors, which is not compatible with what is needed—or fair—to keep global warming below 2°C.

The need for a transformation in all sectors is also recognised in the INDC as it states that the Philippines "views the need to peak its emissions as an opportunity to transition as early as it can to an efficient, resilient, adaptive, sustainable clean energy-driven economy, and it is determined to do so with partners from the global community." A disentanglement in the commitment of LULUCF emissions from other emissions (from energy, industry and agriculture) would be in line with the mentioned transformation and peaking.

Footnotes

[1] This assumes LULUCF emissions in the BAU scenario are near zero, in line with FAOstat ("FAOSTAT Emissions Database," 2015) estimates for 2012. Since the BAU is not provided in the INDC there is large uncertainty around the projected emissions.

[2] While creating carbon sinks can contribute to global GHG emissions reductions, the decarbonisation of energy consumption and industry is pivotal to achieve long term climate mitigation targets.

Fair share

We rated the Philippines "medium." Since the INDC does not provide a quantified BAU and does not distinguish between LULUCF and other emissions, there is large uncertainty on what the impact on emissions could be.

However, current policy projections on emissions are heading towards levels that fall in the "medium" rates and these levels are in line with effort-sharing approaches that focus on equality and equal cumulative per capita emissions. Approaches that focus on responsibility would require more stringent reductions.

The "medium" rating indicates that the Philippines' climate plans are at the least ambitious end of what would be a fair contribution. This means it is not consistent with limiting warming to below 2°C, let alone with the Paris Agreement's stronger 1.5°C limit, unless other countries make much deeper reductions and comparably greater effort. An unconditional reduction target could therefore be proposed to reflect the Philippines' responsibility.

A (partly) unconditional reduction target, specific for emissions excluding LULUCF, and the inclusion of the BAU, could move the Philippines to a "sufficient" rating, meaning climate plans are at the most ambitious end of its fair contribution. This means it is consistent with limiting warming to below 2°C without requiring other countries to make much deeper reductions and comparably greater effort.

Current policy projections

Neither implemented nor planned policies are sufficient to achieve The Philippines' INDC target.

Emissions growth will be predominantly driven by increased emissions from transport and coal-fired electricity generation. Without the renewable energy target and energy efficiency targets (see "planned policy projections" below), emissions under current policies (excluding LULUCF) are expected to increase up to about 215 $MtCO_2e$ in 2020 and 315 $MtCO_2e$ in 2030. However, if the current upswing of development in coal power plants were to continue, this would represent a significant emissions contribution that would strongly limit the country's capacity to achieve its target.

The National Climate Change Action Plan (NCCAP) offers a framework to implement mitigation and adaptation strategies and involves institutional changes and capacity building to facilitate climate change policies. However, the NCCAP in itself does not enforce quantifiable measures, and the targets from the NCCAP are not included in current policy projections.

GHG emissions in the Philippines were 153 $MtCO_2e$ in 2010, excluding LULUCF. Net emissions from LULUCF decreased from nearly zero in 1994 to -105 $MtCO_2$ in 2000 (UNFCCC, 2015), but this change is partly attributed to changes in accounting (UNFCCC, 2014). A logging ban in the 1990s may also have contributed to the net removal of GHG emissions. The Philippines' plans to improve monitoring and assessment and implement the national REDD+ strategy, which could contribute to reforestation. There are no BAU projections on LULUCF provided in the INDC, resulting in large uncertainties on future emissions.

Planned policy projections

Measures related to energy efficiency and renewable energy are proposed in a roadmap (Department of Energy, 2016), but these targets have not yet been translated into actual implemented policies. Therefore, we show these targets in a planned policy projection. These include 'The National Renewable Energy Programme', which seeks to increase the renewable energy-based capacity of the country to an estimated 15,304 MW by the year 2030, almost triple its 2010 level; and 'The Energy Efficiency and Conservation Roadmap,' which mandates energy savings equivalent to 10% across energy demand sectors in 2030, compared to the reference energy demand outlook.

If The Philippines fully implements its current policies and proposed targets, most notably the tripling in renewable power capacity by 2030, compared to 2010, and achieves its 10% energy efficiency target, total GHG emissions in 2030 could decrease to approximately 280 $MtCO_2e$ ('Planned policy projections in the graph). This would be a reduction of 12% in 2030 compared to our current policy projections.

Assumptions

Historical emissions

The historical dataset is based on CO_2 from fuel combustion from the IEA (IEA, 2015), other CO_2 and non-CO_2 emissions are taken from EDGAR (JRC/PBL, 2012).

LULUCF emissions are taken from UNFCCC database as officially reported by the country for years 1994 and 2000 (UNFCCC, 2015).

INDC

Because the INDC does not specify the BAU pathway, we applied the reduction target to current policy projections as estimated by CAT (see the next section). Further, given that the target covers all emissions from all sectors and that the INDC does not quantify future LULUCF emissions, we assumed emissions excluding LULUCF were also to be reduced by 70% below a BAU.

Current policy projections

The current policy projections for total energy-related CO_2 emissions are based on the BAU scenario from the 6th edition of the APEC Energy Demand and Supply Outlook (APERC, 2016). The BAU scenario of APERC (2016) 'reflects current policies and trends with in the country's energy sector; thus, its projections largely extend the past into the future.' We therefore assume that all of the current country policies for the energy sector are included. This contains a growth in electricity demand of 6% per year between 2010 and 2030 and a growth in renewable electricity generation of 1.8% over the same period. The APERC scenarios use historical energy and CO_2 data derived or estimated from Energy Balances of non-OECD Countries and CO_2 Emissions from Fuel Combustion.

To estimate non-energy CO_2 emission projections we used the composition of CO_2 emissions by sector from the 2013 APERC report (APERC, 2013). Non-CO_2 emissions are based on EDGAR (JRC/PBL, 2012) and projected growth rates from US EPA (2012) are applied to estimate the growth in non-CO_2 emissions.

Planned policy projections

The impact of the 'The National Renewable Energy Program' and 'The Energy Efficiency and Conservation Roadmap' were quantified and subtracted from the APEC reference scenario. This shows the minimum level of expected emissions if these planned policies are implemented ('Planned policy projections including EE and RE roadmaps).

Sources

APERC. (2013). APEC Energy Demand and Supply Outlook 5th Edition.

APERC. (2016). APEC Energy Demand and Supply Outlook 6th Edition: Economic Reviews.

Department of Energy. (2016). Philippine energy efficiency roadmap 2014-30 and action plan 2016-20.

DOE. (2016). Coal in the Philippines.

FAOSTAT Emissions Database. (2015).

Government of The Philippines. (2015). Intended Nationally Determined Contributions of the Republic of The Philippines.

IEA. (2015). World Energy Outlook 2015. Paris, France: International Energy Agency.

JRC/PBL. (2012). Edgar Version 4.2 FT2010.

King, E. (2016a). Philippines now likely to back UN climate deal. Climate Home.

King, E. (2016b). Philippines won't honour UN climate deal, says president. Climate Home.

Republic of the Philippines. (2015). Philippines - INDC Draft Version 10 for Circulation.

UNFCCC. (2014). Second National Communication to the United Nations Framework Convention on Climate Change.

UNFCCC. (2015). Greenhouse Gas Inventory Data. Greenhouse Gas Inventory Data.

US EPA (2012). Global Mitigation of Non-CO_2 Greenhouse Gases, Washington, D.C., USA.

Copyright 2018 Climate Action Tracker Partners | Disclaimer