CLIMATE ACTION TRACKER

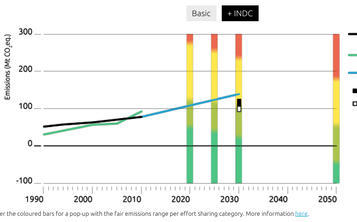
Peru

History: 2017 2015 2014

Page last updated: 29th October 2015

Rating





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

Assessment

Haga click aqui para ver el análisis en español (Click here for this analysis in Spanish).

On 28 September 2015, Peru submitted its Intended Nationally Determined Contribution (INDC), including an unconditional target and a target conditional on international assistance. Both targets aim to reduce greenhouse gas (GHG) emissions including those from land use, land use change and forestry (LULUCF). The unconditional target is a reduction by 20% below business-as-usual (BAU) by 2030, while the conditional target is a 30% reduction relative to BAU levels by 2030. We estimate the unconditional target translates to 114-132% above 1990 levels and 43-56% above 2010 levels excluding LULUCF. The conditional target translates to 88-115% above 1990 levels and 25-43% above 2010 levels excluding LULUCF.[1] Based on these targets, taking into account the effect of forestry and other land use accounting, we rate Peru "medium."

Based on our assessment, Peru will need to implement additional policies to reach its proposed targets. The "medium" rating indicates that Peru's climate plans are at the less ambitious end of what would be a fair contribution. This means it is not consistent with limiting warming to below 2°C unless other countries make much deeper reductions and comparably greater effort. The reduction target could therefore be strengthened to reflect Peru's additional potentials, identified in its draft INDC.[2]

The Climate Action Tracker uses the INDC's LULUCF baseline for years 2010 and 2030, which projects an increase of LULUCF emissions of 66.4 MtCO2e, from 92.6 to 159 MtCO2e. For Peru to fall within a 2°C pathway, LULUCF emissions will need to decrease towards 2030.

Peru hosts about 260,000 square miles of forested area, the largest area of the Amazon rainforest after Brazil. The Amazon is poised to become one of the 11 regions in the world to have more deforestation and forest degradation than anywhere else in 2030 (WWF, 2015b), and Peru's contribution is not insignificant. Deforestation has been growing, particularly in the Andean-Amazon countries like Peru – due to expansion of palm oil, agriculture, illegal logging and informal mining (WWF, 2015a; Swenson et al., 2011). Emissions from Peruvian deforestation are projected to soar from 92.6 MtCO2e in 2010 to 159 MtCO2e in 2030, a growth rate not seen before in Peru's history. This appears to be at odds with Peru's Copenhagen pledge of reducing deforestation to zero by 2021.

Even though we assume that 70% of the emission reductions will be obtained from measures in the LULUCF sector (particularly to increase enabling conditions for forest management), the Peruvian Government would still need to work further to address the significant emissions in this sector. The INDC's 2030 BAU scenario presents a 34% increase in LULUCF emissions from previous estimates by CIFOR (CIFOR, 2014). CAT could not determine the underlying assumptions for the projected increase in LULUCF emissions.

The INDC does improve transparency from the draft INDC as it distinguishes emissions from LULUCF. However, the INDC does not provide a sectoral split of mitigation efforts nor the details on accounting methodologies compared to the draft INDC. The INDC also does not consider emissions from international aviation, international freight nor national rail and national maritime. It is important to consider that the assessment of Peru's INDC follows the same split presented in Peru's draft INDC, which indicates that nearly 70% of the reductions will be realised in forestry.

INDC and Pledges

INDC

In its INDC, the government of Peru proposes two targets: an unconditional reduction by 20% below a BAU scenario in 2030 and a conditional (on international finance) reduction of 30% below BAU scenario in the same year, both include LULUCF.

For the unconditional target we estimate this translates to 114-132%above 1990 levels and for the conditional target this translates to 88-115% above 1990 levels, with both estimates excluding LULUCF. We calculated the ranges using the indication from the draft INDC that 70% of the total mitigation efforts would be in the forestry sector. The remaining 30% of mitigation efforts were applied to emissions from the energy, transport, industrial and waste sectors, the resulting emission reductions were used to calculate the emission ranges excluding LULUCF.

The INDC projects an increase of LULUCF emissions of 66.4 MtCO2e, from 92.6 to 159 MtCO2e. World LULUCF emissions are to decrease towards 2030 to fall in the 2°C scenario emissions pathway, therefore Peru needs to address - and prevent - this significant projected increase.

The transparency of the INDC could be further improved by adding a sectoral split (e.g. industry, transport, waste) of mitigation efforts.

Copenhagen pledge	
Target	Net zero forestry emissions: 2021
	Share of renewables in power generation: 33% in 2021
Conditions	None
NAMAs pledge	
Net zero net LULUCF emissions by 2021	
40% share of renewables in energy mix by 2021	
Reduction of emissions from waste by 7MtCO2e in 2021	
Draft INDC	
2030 target	
Coverage	CO2, N2O and CH4, incl. LULUCF
LULUCF	Unknown
INDC	
2030 target	
Unconditional	-20% below BAU [114-132% above 1990 levels by 2030]
Conditional	-30 % below BAU by 2030 [to 88-115% above 1990 levels by 2030]
Coverage	economy wide, CO2, N2O and CH4, incl. LULUCF
LULUCF	Unknown

Copenhagen pledge

Peru submitted the following three pledges under the Copenhagen accord in June 2010 (Peru, 2010) later refined in the Peru's communication to the UNFCCC in November 2011 (Gamarra, 2011) in the shape of the following three NAMAs (Nationally Appropriate Mitigation Actions)[3][4]:

- To reduce net LULUCF emissions to zero by 2021
- To increase the share of renewables in the energy mix to at least 40% by 2021
- To reduce emissions in the waste sector by 7 MtCO$_2$e in 2021 (compared to the year 2000).

In particular, the LULUCF NAMA pledge could have a substantial impact, as the LULUCF sector currently accounts for approximately one third of Peru's total GHG emissions. Prior to the announcement of this pledge, Peru's Second National Communication (2010) projected a strong growth in emissions from the LULUCF sector. Peru pledged to reduce net emissions in this sector to zero by 2021, however, despite a list of 10 actions in the forestry sector listed in the draft INDC that amount to 57.5 MtCO2e emission reductions from BAU, the emissions path presented in the INDC is not in line with the zeroing of net emissions pledge.

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It was not possible to quantify the impact of these NAMAs, as the baselines for these pledges were not available. These NAMAs were not mentioned in the INDC, however in the draft INDC, the government of Peru indicates that a different LULUCF accounting methodology will be used and the viability of the NAMA on LULUCF still has to be investigated. It is, however, not clear what the baseline is for LULUCF emissions and what the projected LULUCF emissions are.

Fair share

We rate Peru's unconditional and the conditional INDC target for 2030 as "medium". The targets are in line with effort sharing approaches that focus on equal cumulative and equal per capita emissions. Approaches that focus on responsibility and capability would require more stringent reductions. The "medium" rating indicates that Peru's 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 unless other countries make much deeper reductions and comparably greater effort. For the INDC target to be labelled "sufficient", emissions levels, excluding LULUCF, should be kept below 109 MtCO$_2$e by 2030, which is 10 % lower than the unconditional INDC.

Current policy projections

Historical emissions, excluding LULUCF, have increased by 50% from approximately 52 MtCO$_2$e in 1990 to 78 MtCO$_2$e in 2010[4]. The current policy projections shown here are based on the INDC (Government of Peru, 2015) BAU scenario, however, the INDC does not provide details on what policies are included. In the BAU scenario emissions will increase to 139 MtCO$_2$e in 2030 (169% above 1990 levels), excluding LULUCF.

Peru has adopted several policies and planned projects to lower its GHG emissions. However, their impact on emissions development is unclear, as they do not appear to be associated with (additional) quantitative targets. The most detailed overview of climate policies can be found in the draft INDC, which includes a list of policies per sector and their estimated emission reductions by 2030. The draft INDC also mentions that more than 50% of the projects needed to achieve the draft INDC pledges are already 'underway'. It is difficult to assess which of the policies in the draft INDC were included in the BAU of the INDC, therefore we assume the policy projections to be the same as in the BAU.

Peru's National Strategy on Climate Change establishes 11 strategic national priorities to reduce the adverse impacts of climate change the country faces, including management of ecosystems, mitigation, adaptation and scientific research. The aim of the strategy is to identify potential vulnerabilities where adaptation projects should be implemented, and to define the guidelines for action on mitigation through energy efficiency and renewable energy programmes.

The policy for 'promotion of investment for the generation of electricity from renewable energies' builds on this strategy and prioritises renewable energy generation as a matter of national interest and public necessity. It mandates the setting of renewable energy targets as a share of electricity consumption in five-year intervals 'up to 5%'. In addition, the law to promote a market for biofuels (Law no. 28054) establishes the general framework to promote the development of biofuels with the aim of diversifying the fuel market.

Peru also has a law to promote an efficient use of energy. Law no. 27345 mandates the Ministry of Energy and Mines to carry out activities aimed at encouraging a culture of improving energy efficiency, in coordination with other public institutions and the private sector. It also defines sectoral programmes for the efficient use of energy.

Finally Peru has a law and an executive decree aimed at compensation for services to Ecosystems (Law No. 30215) and the commercialisation of fees by ecosystem conservation (Executive Decree No 26-2014-SERNANP). Even though these policies are aimed at ecosystem conservation they will likely have some impact on reducing LULUCF emissions (to be assessed).

Assumptions

Pledge

Peru's NAMAs pledges were obtained from the Ministry of Environment's letter to the UNFCCC (Gamarra, 2011). Historical data for 1994, 2000 and 2010 was obtained from the UNFCCC GHG Inventory, 1990 emissions are based on figures from IEA, EDGAR and USEPA (IEA, 2014; JRC/PBL, 2012; US EPA, 2012). The pledge for 2030 is based on the draft INDC published on 7 June by the Ministry of Environment. The pledge covers CO_2, N_2O and CH_4. The contribution of other GHGs is most likely small, so including only the three main gases introduces only a very small error.

Assumptions

The assessment of Peru's INDC considers the same split presented in Peru's draft INDC, which indicates that nearly 70% of the reductions will be realised in forestry.

The contributions in 2020 and 2025 are obtained by linear interpolation between 2010 and 2030.

Current policy projections

The current policy projection is the same as the BAU scenario in the INDC. Given the lack of clarity on which policies are included in the INDC, the Climate Action Tracker cannot estimate a reliable policy projection. Under the assumption that the policy projection is the same as BAU, Peru will not achieve the INDC targets. Absolute emission levels resulting from current policy trajectory is 139.3 MtCO2e in 2030 a 169% change relative to 1990, excluding LULUCF.

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Footnotes

[1] 1990 figures are CAT estimates, based on IEA, EDGAR and USEPA data (IEA, 2014; JRC/PBL, 2012; US EPA, 2012). The ranges reflect uncertainty in the distribution of mitigation efforts over LULUCF and other emissions.

[2] In the draft INDC one scenario is presented with further reductions: 42% below BAU. If this reduction would be pledged, Peru would still have a "medium" rating.

[3] Nationally Appropriate Mitigation Actions (NAMAs) are voluntary measures undertaken by developing countries to contribute to greenhouse gas emission mitigation. The concept was introduced 2007 at the 13th session of the Conference of the Parties (COP) in Bali, Indonesia.

[4] Emissions (including LULUCF) in 2010 reported to the UNFCCC and according to the draft INDC differ substantially. In this analysis, this difference was assumed to come from differences in LULUCF accounting. Total emissions in 2010 according to the draft INDC exceeds 150 MtCO$_2$e, while emissions reported to the UNFCCC totalled 124 MtCO$_2$e.

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