# CLIMATE ACTION TRACKER

History: 2017 2016 2015 2014 2013 2012 Argentina Page last updated: 29th October 2015 Rating Medium Sufficient Role Model Inadequate INDC 700 Historical emissions, Emissions (Mt CO,eq.) excl. forestry 600 Historical emissions/removals, from forestry 500 Current policy projections (CAT assessment) 400 Reference for INDC INDC unconditional 300 \_ INDC conditional 200 100 0 -100 © www.climateactiontracker.org/ Climate Analytics/Ecofys/ NewClimate/PIK 2010 2020 2030 1990 2000 2040 2050

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

## Assessment

#### Haga <u>click aquí</u> para ver el análisis en español (<u>Click here</u> for this analysis in Spanish).

On October 1<sup>st</sup>, 2015, Argentina submitted its <u>Intended Nationally Determined Contribution</u> (INDC), including an unconditional target to reduce GHG emissions including land use, land use change and forestry (LULUCF) by 15% below its BAU scenario by 2030 (equivalent to 60% above 2010 levels or 128% above 1990 levels excluding LULUCF). Argentina has also put forward a conditional target to reduce its emissions by 30% below BAU by 2030 including LULUCF (equivalent to 30% above 2010 levels or 85% above 1990 levels excluding LULUCF).

The CAT rates Argentina "inadequate" based on its unconditional target. Argentina's commitment is not in line with interpretations of a "fair" approach to reach a 2°C pathway. This means it is not consistent with limiting warming to below 2°C: if all countries adopted this level of ambition, global warming would likely exceed 3-4°C in the 21<sup>st</sup> century.

Argentina is likely to meet its proposed targets with currently implemented policies. Considering the wide range of estimates, it is fair to say that the Argentinian INDC represents little - if any - effort beyond what it's doing today. More importantly, under Argentina's current plan of action to achieve its unconditional INDC, emissions from all sectors are still projected to grow significantly by more than 25% in the period 2012-2030. The energy, agriculture and cattle-ranching sectors will account for more than 87% of the country's total emissions by 2030.

For the energy sector, the mitigation impact estimated by the Argentinian government for 2030, even assuming deeper implementation and execution, will still be modest, translating into an increase of around 60% of these emissions in the same period. In the agriculture and cattle-ranching sector, emissions are projected to grow around 35% to 2030, and will continue to account for a third of the total GHG emissions.

The LULUCF sector represents 21% of the total GHG emissions for 2012 (Project of Third National Communication, 2015). The current inventory projects a net increase in LULUCF emissions while this sector has historically been a net sink. This is partly due to a change in LULUCF accounting

methodology, but also to a real increase in "forest extraction" or deforestation (Project of Third National Communication, 2015).

More ambitious and updated policies, particularly in these three sectors, are needed for the country to tap its potential and get closer to what it would be a fair contribution in emissions reduction, given its potentials and capabilities.

# INDC and Pledge description

## <u>INDC</u>

Argentina's INDC includes two emission reduction targets against a BAU scenario for 2030 provided in the INDC (670 MtCO<sub>2</sub> incl. LULUCF and 633 MtCO<sub>2</sub> excl. LULUCF by 2030). The unconditional target is a reduction in GHG emissions including LULUCF of 15% by 2030 below BAU, which is equivalent to 60% above 2010 levels and 128% above 1990 levels excluding LULUCF. The conditional target is a 30 % GHG emission reduction including LULUCF by 2030, which is equivalent to 30% above 2010 levels and 85% above 1990 levels excluding LULUCF.

The main mitigation actions mentioned in the INDC are in the energy, transport and AFOLU (Agriculture, Forestry and Other Land Use) sectors. In particular, the INDC foresees a diversification of the energy mix and energy efficiency measures; modal shift towards rail transport; and forest conservation and protection.

CAT ratings are based on emissions excluding the LULUCF sector. To obtain the INDC emissions level for the sectors excl. LULUCF, the CAT uses LULUCF projections as reported in the latest GHG inventory of the country, Argentina's Project of third National Communication (P3NC).

An important aspect of the Argentinian INDC is that Argentina reserves the right to adjust its target. This adds an unusually high level of uncertainty to Argentina's contribution to the 2015 global agreement at this point.

## Copenhagen Pledge

Argentina submitted a list of unilateral and supported mitigation actions currently being undertaken across the sectors energy efficiency, renewable energy, biofuels, forest

management and waste management. According to the submission "these initiatives have a direct and positive consequence in the emission reduction of GHG, contributing to the ultimate objective of the Convention" (Government of Argentina, 2010).

# Fair share

Argentina's current targets are in the "inadequate" range. The projected emissions levels are not in line with any interpretation of a "fair" approach to reach a 2°C pathway. Most categories lead to similar levels of emissions allowances with the upper end of "medium" category being defined by approaches focusing on equal cumulative per capita emissions and staged approaches. If most other countries followed Argentina's approach, global warming would exceed 3–4°C.

# **Current policy projections**

According to our assessment, the Argentinian INDC represents little, if any, effort beyond what it's doing today. Our analysis of current policy scenarios in Argentina leads to very different outcomes in 2030. We do not choose one, but show both outcomes as a range (see graphic).

- The upper bound of our "current policy projections" results from applying the expected abatement from policies in place to BAU emissions included in the INDC in 2030; this leads to roughly 600MtCO<sub>2</sub>e in 2030, 14% above the unconditional INDC.
- The lower bound is based on growth rates from the World Energy Outlook 2014 and leads to about 430MtCO<sub>2</sub>e by 2030 much lower and at the level of the conditional INDC, meaning that without further effort, Argentina could meet its conditional INDC. This discrepancy points to a possible overestimation of BAU emissions in Argentina.

The INDC emissions levels are consistent with the Project of Third National Communication's "hypothesis to 2030" scenario, a scenario resulting from a series of policies the government plans to implement between now and 2030. Although not explicitly stated, we assume that this scenario and policies constitute the plan of action of Argentina to meet its INDC.

Under this scenario, emissions from all sectors (excl. LULUCF) are projected to grow significantly by 54% above 2010 levels by 2030. The energy,

Convention	
Copenhagen pledge	List of NAMAs
Reference for pledge	not needed
Conditions	International financing
INDC	

**Unconditional:** 15 % below BAU by 2030 (128% above 1990 levels and 60% above 2010 levels excl. LULUCF).

**Conditional:** 30 % GHG emission reduction below BAU by 2030 (85% above 1990 levels and 30% above 2010 levels excl. LULUCF)

Conditional to: a) adequate and predictable international financing; b) support for transfer, innovation and technology development; c) support for capacity building.

Long term goal(s)

none

agriculture and cattle-ranching sectors will account for more than 80% of Argentina's total emissions, with energy-related emissions increasing to about 62% between 2010 and 2030 and agriculture and cattle-ranching sector emissions rising by about 34% in the same period. More ambitious policies, especially in these two sectors, are needed for the country to get closer to what it would be a fair contribution in emissions reduction, given its potentials and capabilities.

Argentina's policy legislation is mostly from 2006-2007, reflecting a shift in the political environment, which, until then, was mostly focused on solving Argentina's economic crisis (1998-2002, repayment to IMF in 2005). Despite public awareness in Argentina remaining low and its defending its stance denying responsibility of the climate crisis (KAS, 2014), in 2011 Argentina developed a National Strategy on Climate Change. The strategy has 14 main objectives and specific actions on mitigation and adaptation defined by the Committee on Climate Change (ENECC, 2011). The strategy's implementation is currently under review (International Partnership on Mitigation and MRV, 2014). Implemented so far—and leading to a modest abatement of 26MtCO<sub>2</sub>e— are only a law establishing biofuel quota and various support mechanisms for biofuel producers (El Senado y Cámara de Diputados de la Nación Argentina, 2006; Ken, 2011) and the National Program for Rational and Efficient Use of Energy (PRONUREE - Decree 140/2007) launched in 2007 (Project of Third National Communication, 2015).

Among planned policies, Argentina supports renewable energy installation through law 26,190, which will increase renewable energy generation to 15% by 2030 from the current target of 8% by 2016 (KAS, 2014). The inventory also assumes distributed renewable energy generation to be 30MW of photovoltaic and 43 MW of wind and participation of alternative fuels of 1,325 MWe (Project of Third National Communication, 2015).

In the industrial sector Argentina also plans to increase efficiency in electrical motors (from 88% or 91% to 93% efficiency), cogeneration from fossil fuels (1,736 MWe) and more energy efficiency in industrial small and medium size enterprises (6.25 GWh saved and 500 million m<sup>3</sup> of natural gas), to account for emission reductions of 8.2 MtCO<sub>2</sub>e per year from 2012-2030 (Project of Third National Communication, 2015).

In the transport sector, law 27.132 aims to promote shifts in transport mode towards rail, with the modernization of the Belgrano cargas freight rail infrastructure (International Partnership on Mitigation and MRV, 2014). Incentives to replace old vehicles and improve the efficiency of road freight are also in place (Argentina Third National Communication, 2015). Furthermore, there have been efforts to improve mode shift and congestion in Buenos Aries with the Ciudad Verde programme (KAS, 2014).

For the agriculture and cattle-ranching sector, planned policies include crop rotation, improvements in technology, efficiency of fertilizer use and increase in the slaughter weight and the weaning rate. Emissions from this sector are projected to still account for 32% of the total GHG emissions in 2030, with 12% coming directly from cattle. Considering the high level of methane emissions, combined with the increasing deforestation this activity is causing, the agriculture and cattle-ranching sector offers great potential for Argentina to constrain its emissions.

LULUCF emissions in the current inventory projects a net increase in LULUCF when historically LULUCF was a net sink. This is due in part to a change on LULUCF accounting methodology but also this difference is a real increase in "forest extraction" or deforestation (Project of Third National Communication, 2015). According to the inventory, Argentinian LULUCF emissions peaked in 2010 at 115 MtCO<sub>2</sub> being responsible for about 26% of Argentina's total emissions in that year. These emissions are projected to decrease more than threefold to 37MtCO<sub>2</sub>e, about 7% of total emissions, by 2030. Measures targeting specifically the LULUCF sector are the Environmental Protection of the Native Forests and the National Fond for the Enrichment and Conservation of Native Forests as conservation measures to conserve, restore and promote the sustainable management of native forests.

The most recently reported emissions for the LULUCF sector (Project of Third National Communication, 2015) are significantly higher than the ones presented in previous submissions. For 2010 emissions in the inventory were 118 MtCO<sub>2</sub>e higher than previous estimates. According to the most recent inventory, this increase in emissions is the real increase in the extraction of forest products (native and planted forest) from 2000 onwards, with a slowdown in the planted area. This means that deforestation, especially in the Andean Patagonian Forest region, increased significantly after 2000. The main drivers of this forest clearing are logging, the expansion of agriculture (soy, sugar cane, citrus crops, tea, yerba mate, tobacco) and extensive cattle-ranching.

## Assumptions

### **Historical emissions**

Historical emissions for 1990-2012 were taken from the national GHG inventory Project of Third National Communication (P3NC) (Argentina Third National Communication, 2015). The INDC document also provides a historical series of GHG emissions which is similar to the projections from the GHG Inventory in P3NC under the scenario 'hypothesis 2030'. There remains, however, an average difference in emissions for 2005-2030 between the 'hypothesis 2030' from the inventory and the INDC's unconditional target pathway is approximately 40 MtCO<sub>2</sub>e per year, including LULUCF, and the reasons for that discrepancies are not clarified in the INDC document. Under the assumption that the 'hypothesis 2030' of the P3NC reflects the emission trajectory that the country is likely to follow under current policies, Argentina will be ca. 20 MtCO<sub>2</sub>e below the unconditional target in 2030.

It is important to note that the above-mentioned new inventory (P3NV) represents significant changes in some sectors compared to former data submitted to the UNFCCC due to the updated methodology and information with which it was constructed. The most significant change can be observed in the LULUCF sector, which passed from being net sink of around -40 MtCO<sub>2</sub> to a net source of emissions of 56.3 MtCO<sub>2</sub> for the year 2000 (around 20% of total GHG emissions). This fact changes significantly the emissions profile of the country and it is worth to be mentioned

despite the fact that CAT ratings do not take into account the LULUCF sector, mainly due to the large uncertainties related to it in national data.

## Pledge

INDC pledges levels including LULUCF are provided directly in the INDC. However, to distinguish LULUCF emissions from the total GHG emissions and calculate its ratings, the CAT assumes the same LULUCF projections than the ones from the latest GHG inventory of the country: Argentina's Project of third National Communication (P3NC).

## **Current Policies**

The CAT considers two scenarios for current policies projections in Argentina. The upper bound results from applying the expected abatement from policies in place reported in the Project for the National Communication of 26MtCO<sub>2</sub>e to BAU emissions (excl. LULUCF) included in the INDC. For the lower bound, we use growth rates from the World Energy Outlook 2014 for Latin America excluding Brazil for CO<sub>2</sub> emissions (IEA, 2014) and US EPA projections for non-CO<sub>2</sub> emissions until 2030 (US EPA, 2012).

# **BAU Emissions**

The BAU scenario as well as the unconditional and conditional pathways are taken from the INDC (Government of Argentina, 2015).

# Sources

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