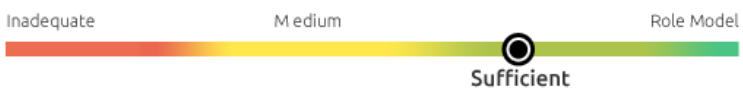
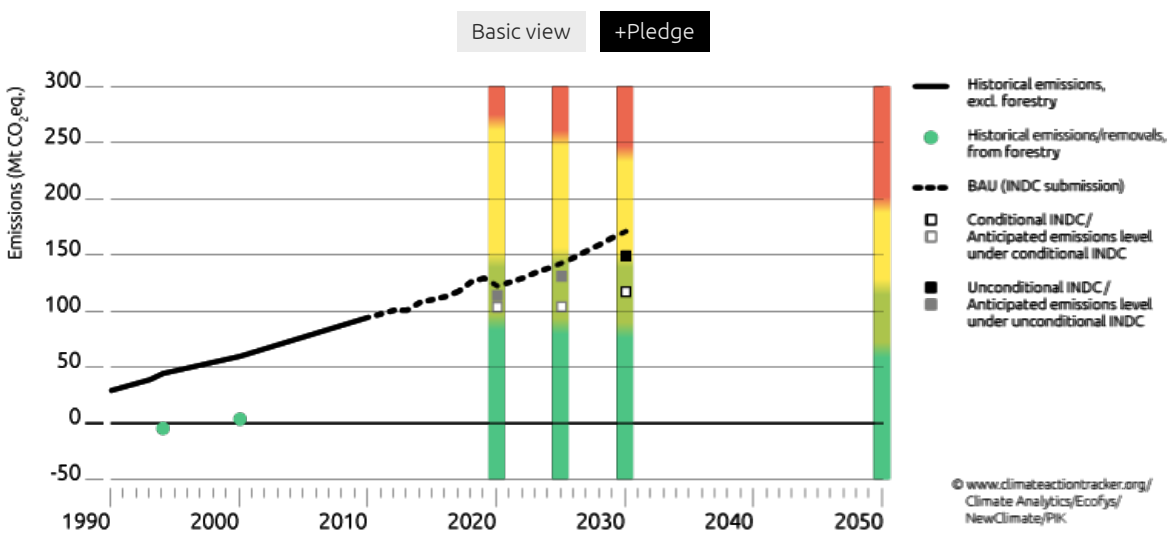
Morocco

Page last updated: 15th June 2015

Rating





Assessment

On 5 June 2015, Morocco submitted its Intended Nationally Determined Contribution (INDC), with a target to reduce GHG emissions including land use, land use change and forestry (LULUCF) by 13% below business as usual (BAU) by 2030. Assuming LULUCF remains very small, the corresponding reductions below BAU for fossil fuel and industrial emissions [1] are close to these levels.

With sufficient international support, Morocco would decrease emissions further, by 32% below BAU by 2030 (or to four times its 1990 levels). Whilst Morocco's unconditional INDC begins to slow the growth of emissions, Morocco proposes to go much further if financial support is provided: to stop its emissions growth and implement an ambitious target of 42% renewable electricity generation by 2020.

Based on these targets, we rate Morocco "Sufficient".

Its INDC submission includes detailed information on activities, most prominently an ambitious target to increase the share of renewable electricity capacity to 42% in 2020. The Climate Action Tracker has not assessed the impact of these measures in detail for Morocco. The INDC reports that these actions are already implemented. We therefore assume that the achievement of the unconditional target is likely.

The "sufficient" rating indicates that both Morocco's unconditional and conditional targets are at the more ambitious end of its fair contribution. This means Morocco is doing its "fair share" of global efforts to hold warming below 2°C.

Morocco has low historic and current per capita emissions (around 3 t/cap in 2010) and expects to continue to grow in terms of absolute GHG emissions in the next decades. While the unconditional target leads to a small change in this trend, the implementation of the conditional target means a significant shift to lower emission levels.

Post-2020 contribution

In June 2015, Morocco submitted its INDC to the UNFCCC (Government of Morocco 2015). It aims to unconditionally reduce GHG emissions including land use, land use change and forestry in 2030 by 13% below business as usual (BAU) projections.

Conditional on international support and a legally binding agreement under the UNFCCC, Morocco would increase its greenhouse gas reductions to 32% below business as usual (BAU) in 2030.

Morocco includes numbers for the BAU and the anticipated emission trajectory from 2010 to 2030 under the INDC in its submission. Analysis of the effect of the INDC on likely fossil fuel and industrial GHG emissions is made difficult by the fact that the BAU projections and INDC target values from the INDC submission are only available including LULUCF. We have adjusted these to exclude LULUCF by subtracting for 2010 and all future years, a LULUCF emission level of 0.4 MtCO2e/a based on the average of the two historic values available. This is not satisfactory and the transparency of the Moroccan INDC would be significantly enhanced by publishing the underlying data in full.

The absolute GHG emissions incl. LULUCF emissions level resulting from the unconditional INDC in 2030 is 148 MtCO2e. The conditional target would lead to additional reductions and a remaining emission level of 117 MtCO2e in 2030 (incl. LULUCF). All numbers in the INDC submission are reported including emissions from land use, land use change and forestry. In historic inventories for 1994 and 2000, this sector had a small impact only. In 1994 it was a small sink, in 2000 a small source of emissions.

In its submission, Morocco includes a detailed list of actions which it expects are necessary to achieve the unconditional target. Many of these actions are already anchored in national legislation, for example the target to increase the share of renewable electric capacity to 42% by 2020.

It further illustrates in which sectors the conditional target would trigger additional reductions, through a total of 54 measures (not further detailed in INDC submission). To implement these actions, Morocco requires an overall investment of 45 billion USD for the time period between 2015 and 2030. Of this, 35 billion USD are expected to come from access to new sources such as "new climate finance mechanisms, such as the Green Climate Fund".

Fair share

We rate Morocco's INDC "Sufficient". The contribution is more ambitious, or in line with most effort sharing approaches. Most approaches allow further increase of absolute emission levels, mostly because Morocco has very low historic and current per capita emissions. Only approaches that focus on the Human Development Indicator as in indication of capability would require more stringent reductions.

Current policy projections

Not available for Morocco.

Assumptions

For historical emissions, we used national GHG inventories which are available for 1994 and 2000. For 2010, we used the number provided in the INDC submission. All values are reporting using Global Warming Potentials (GWP) from the IPCC's second assessment report and including emissions from LULUCF.

All data for the 2010, BAU projections and the INDC emission levels are from the INDC submission and include emissions from LULUCF. As we always show emissions excl. LULUCF, we assume that for the years 2010, 2020, 2025 and 2030, the emissions from this sector remain stable at the average of 1994 and 2000. This assumption has very little impact on the data, as the average is close to 0 (0.4 $MtCO_2e$). This approach can be updated once Morocco publishes the inventory for 2010 or clarifies the contribution of LULUCF in the INDC and BAU scenarios.

For the historic years before 1994, we assume a linear backward extrapolation of the trend. For the years between 1994 and 2000 and 2000 and 2010, we assume a linear interpolation.

Sources

Government of Morocco (2015). Morocco's Intended Nationally Determined Contribution

UNFCCC (2015). Greenhouse Gas Inventory Data - Detailed data by Party

UN Department of Economic and Social Affairs (2012). World Population Prospects: The 2012 Revision

Footnotes

[1] Fossil and industrial GHG emissions' means GHG emissions from the energy, industrial processes, solvent and other product use, agriculture and waste sectors, excluding land sector and forestry. This term is used interchangeably GHG emissions excluding forestry which also is abbreviated as 'GHG emissions excl. LULUCF'.

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