CLIMATE ACTION TRACKER

South Africa

History: 2017 | 2015 | 2014 | 2013 | 2012 | 2011

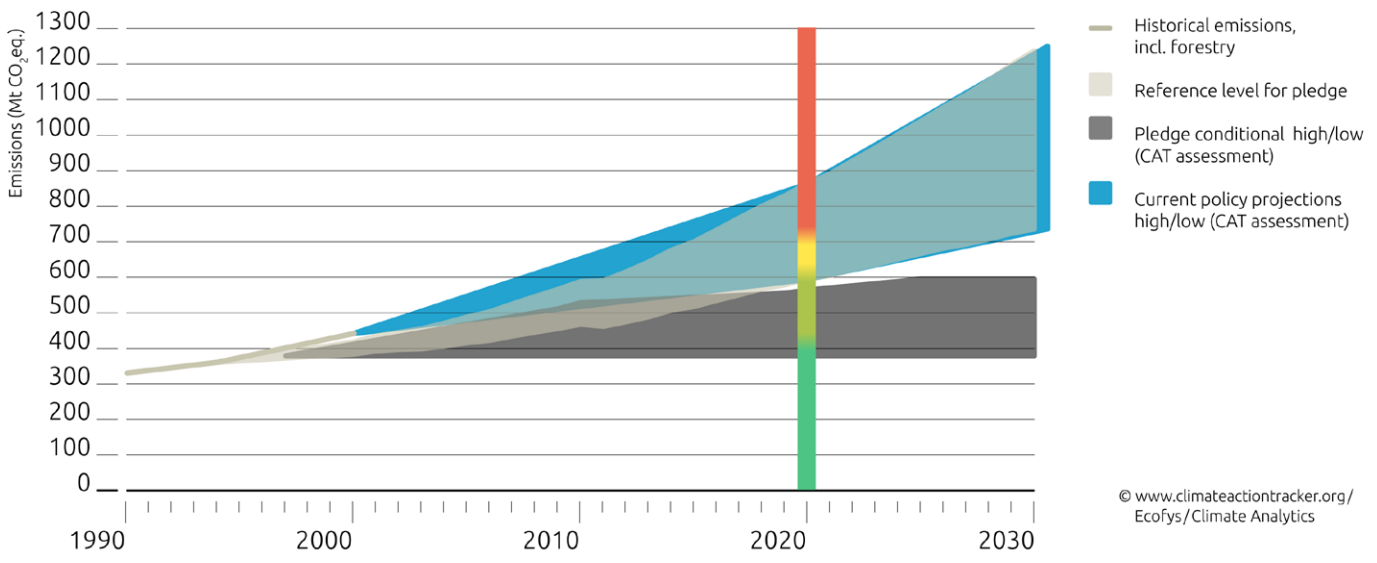
Page last updated: 20th November 2013

Rating



Assessment

South Africa proposes mitigation actions which will result in a deviation below the baseline emissions of 34% by 2020 and by 40% by 2025. A full assessment is not possible at this point. The range of the current trends scenario overlaps with the range of the projected BAU reference levels. The additional reduction effect of currently implemented policies is marginal.



Pledge description

South Africa pledged to undertake mitigation actions which will result in a deviation below the current emissions baseline of 34% by 2020, and by 42% by 2025. The target was proposed during the Copenhagen negotiations and submitted to the Copenhagen Accord on 29 January 2010.

Based on this, South Africa's emissions should peak between 2020 and 2025, plateau for approximately a decade and then decline in absolute terms thereafter. This characterizes a peak-plateau-decline (PPD) trajectory. This undertaking is conditional on a fair, ambitious and effective agreement in the international climate change negotiations under the Climate Change convention and the Kyoto Protocol and the provision of support from the international community.

In October 2011, South Africa provided an explanatory note with further details on their "business-as-usual" trajectory, and on the lower and upper limits of their PPD trajectories. The pathways start in 1994 and are consistent with data submitted in the 2nd National Communication for that year. In the year 2000, which is the most recent data point, historic data given in the National Communication is higher than the reference scenario. The quantification of expected pledge levels based on national BAU result in a range of 453 $MtCO_2e$ to 730 $MtCO_2e$ in 2020 including LULUCF.

Current trend description

Currently implemented policies have so far had little effect on the emission trend. Current policy-based projections are estimated to lead to an emission level of 596 to 864 $MtCO_2e$ in 2020 including LULUCF, which is equal to the range of BAUs. For 2030, the current trend analysis suggests a small reduction compared to BAUs, ranging from 736 to 1236 $MtCO_2e$ including LULUCF. Emissions from land use change reduced emissions by 20 $MtCO_2e$ in 2011 and are historically stable.

The large resulting range is mainly based on the range of BAUs that are used for this analysis, however it also highlights the very uncertain future development of South Africa.

Historically, South Africa's emissions have steadily increased throughout the time frame where data is available. South Africa's economy relies heavily on mining and heavy industry. Energy consumption in the industrial and buildings sectors relies largely on electricity as an energy source, which is produced with high carbon intensity using domestic coal. A large share of industrial-process emissions is due to coal use and a high share of transport fuels are domestically produced by coal-to-liquid processes. Overall it is estimated that 75% of South Africa's emissions result from coal use.

The effectiveness of South African climate policy is strongly influenced by barriers to implementation. For example, in 2009, South Africa implemented a promising feed-in-tariff, with rates for wind energy that were higher than those offered in Germany and those proposed in Ontario, Canada. However, the tariff has had no impact on renewable deployment so far.

The government has instead introduced in 2012 a bidding process to replace the feed-in scheme. The total capacity that should be funded by the bidding process is 3,725 MW in a timeframe of 20 years (2010 – 2030). In the first bidding round, 1,043 MW was approved and is currently under construction (Department of Energy (DOE) 2012).

The Integrated Resource Electricity Plan 2010 – 2030 sets a new installed renewable capacity target of 17.8 GW for 2030. But due of lack of supporting policies this target is not quantified further here.

The National Climate Change Response Paper identified key policy areas and packages (flagship programmes) that are planned for future implementation. It focuses mainly on adaption activities, but also addresses mitigation options such as the Energy Efficiency and Demand Management flagship programmes that will cover development and facilitation of an aggressive energy efficiency programme in industry.

Date of pledge: January 2010

Assumptions

Pledge

For historic emissions, we use the 2nd National Communication. For baseline projections and the pledge we use data provided by the South African government in their White Paper on Climate Change in 2011 (Department of Environmental Affairs, 2011)

Current trend

The current trend analysis is based on the national greenhouse gas inventory submitted to the UNFCCC (Department of Environmental Affairs, 2011); projections for the BAU are based on national data. The assessment of the main policy is based on own assumptions and national data.

Sources

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