CLIMATE ACTION TRACKER

South Africa

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

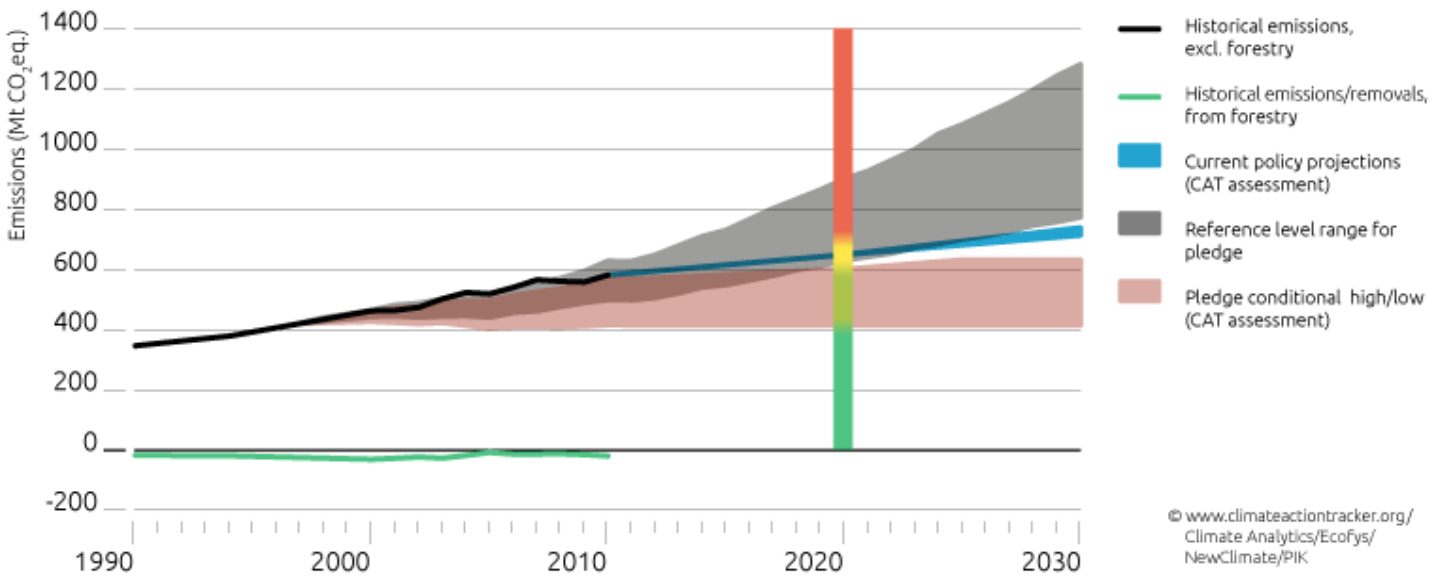
Page last updated: 6th December 2014

Rating



Assessment

South Africa proposes an emissions reduction below business-as-usual (BAU) of 34% by 2020 and by 40% by 2025. South Africa's pledge is relative to a large BAU range, which consequently results in a large pledge range. Thus, an accurate assessment of this pledge is not possible at this point.



Pledge

South Africa pledged to undertake mitigation actions with the aim of reducing emissions below baseline by 34% in 2020, and by 42% in 2025. The emission level derived from South Africa's pledge is 417–602 $MtCO_2e$ in 2020 excluding LULUCF. 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 characterises 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.

Convention	
Copenhagen pledge	-34% by 2020
	-42% by 2025
Reference for pledge	BAU
Conditions	
	A fair, ambitious and effective agreement under the Climate Change convention and the Kyoto Protocol and the provision of support from the international community.
National goals	
Long term goal(s)	40% below BAU in 2025
	Stabilisation at this level

Current policy projections

Currently implemented policies have so far had little effect on the emissions trend compared to BAU. Current policy-based projections are estimated to lead to an emissions level of 650 $MtCO_2e$ in 2020 excluding LULUCF. For 2030, the current policy analysis suggests a small reduction compared to BAU, with emissions ranging from 715 to 740 $MtCO_2e$ excluding LULUCF. The LULUCF sector represents a small net carbon sink, with emissions from this sector reported to be -19 $MtCO_2e$ in 2010. Currently implemented policies have so far had little effect on the emissions trend compared to BAU. Current policy-based projections are estimated to lead to an emissions level of 650 $MtCO_2e$ in 2020 excluding LULUCF. For 2030, the current policy analysis suggests a small reduction compared to BAU, with emissions ranging from 715 to 740 $MtCO_2e$ excluding LULUCF. The LULUCF sector represents a small net carbon sink, with emissions from this sector reported to be -19 $MtCO_2e$ in 2010.

Historically, South Africa's emissions have steadily increased throughout the time frame where data are 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 94% of South Africa's electricity is generated from coal (IEA, 2013).

In 2012, the government replaced its feed-in-tariff scheme with the Renewable Energy Independent Power Producer Programme (REIPP). This was originally intended to fund the procurement of 3,725 MW of renewable capacity up to 2016 through a bidding process. However, at the end of 2012, the REIPP was extended to fund a further 3,200 MW of capacity (DOE, 2013). As of 2014, three bidding rounds have been completed, with 3,800 MW of renewable projects approved under the REIPP (DOE, 2013). The REIPP has been successful in generating interest in renewable energy project development, with all bidding rounds significantly over-subscribed.

The Integrated Resource Electricity Plan 2010–2030 sets a new installed renewable capacity target of 17.8 GW for 2030. However, due to lack of supporting policies, consistent with the CAT methodology, this plan is excluded from the current policy projection analysis.

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 baseline projections and the pledge we use data provided by the South African government in their White Paper on Climate Change in 2011 (DEA, 2011a).

Current policy projections

For historic emissions, we use the 2000 – 2010 GHG Inventory for South Africa (DEA, 2013). The current trend analysis consists of the range compiled by considering the 'Current Policies Scenario' for South Africa of the World Energy Outlook 2014 (IEA, 2014), and calculations of the impact of South Africa's REIPPP.

Sources

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