

Review of Morocco and Ethiopia's INDC

Summary

In preparation of COP 21, countries have agreed to publicly outline their post-2020 climate action plan, known as their Intended Nationally Determined Contributions (INDCs). In this brief review, the INDCs submitted by Morocco and Ethiopia's INDC are analyzed from the transport sector perspective.

Morocco's INDC

In 2010, Morocco's transport sector emitted about **10.6 MT of CO₂ i.e. about 11% of its total GHG emissions**. In the Post-2020 plan, Morocco has committed for an unconditional target of **13 % reduction** in GHG emissions by 2030 compared to a business as usual (BAU) scenario. Morocco has also pledged an **additional 19% reduction (combined total of 32%)** by 2030 compared to business-as-usual (BAU) projected emissions. This additional target of 19% is contingent upon gaining access to new sources of finance such as **Green Climate Fund (GCF) and enhanced international support**. This conditional target translates into a cumulative **reduction of 401 MT** carbon dioxide equivalent (Mt CO₂eq) over the period 2020-2030.

Within their national energy strategy, the transport sector is specifically addressed with an intention to reduce energy consumption by 23 % below BAU by 2030. Transport is one of the fastest growing sectors in Morocco with an annual increase of **6.2%** between 1990 to 2012. IEA in its [special report on World Energy outlook](#) has suggested that under the BRIDGE scenario (i.e. to deliver a peak in global energy-related emissions by 2020), Africa needs to reduce its transport energy and CO₂ emissions by half i.e. from 4% in 1990-2013 to 2% in 2013 to 2030. Clearly, 23% reduction in transport sector proposed by Morocco falls short of African transport target of 50% reduction in growth under the Bridge Scenario.

Under its action plan, Morocco has proposed significant reduction of fossil fuel subsidies and increasing the use of natural gas. Recently, IEA in its [special report on World Energy outlook](#) has suggested that fuel subsidy reform could significantly reduce GHG emissions. Further, Morocco has also proposed to develop a national plan to combat short-lived climate pollutants (SLCPs), with support from the Climate and Clean Air Coalition. With Transport sector being a significant contributor to Black carbon emissions (about 19% globally¹), Morocco may propose additional actions on reducing diesel consumption in transport sector.

According to the INDC submission, meeting the conditional target will require an investment of approximately US\$45 billion, of which US\$35 billion is conditional upon international support through new climate finance mechanisms, such as the Green Climate Fund (GCF).

¹ An estimated 19 percent of black carbon emissions in the world come from the transportation sector, with a relatively large share coming from diesel vehicles. - See more at: <http://www.unep.org/ccac/Initiatives/ReducingEmissionsFromHeavyDutyDiesel/tabid/133573/Default.aspx#sthash.FfbIAAmD.dpuf>

Ethiopia's INDC

In 2010, Ethiopia's transport sector emitted about **5 MT** of CO₂ i.e. 3% of its total national GHG emissions. In the Post-2020 plan, Ethiopia has committed for a conditional target of **64 % reduction in GHG emissions by 2030** compared to a business as usual (BAU) scenario. This conditional target is contingent upon international support and gaining access to finance. Under this conditional target, Ethiopia intends to limit its **net GHG emissions in 2030 to 145 Mt CO₂eq** or lower (at about 2010 GHG emissions). This constitutes a **255 Mt CO₂e reduction** from the projected BAU emissions in 2030 or a 64% reduction from the BAU scenario in 2030.

Under the national target, transport sector share in total mitigation is about 10 Mt CO₂e i.e. 3.9% of targeted emission reduction of 255 Mt CO₂e. This could be a significant reduction for transport sector as CO₂ emissions increased at 5.8% annually between 1990 to 2012². Transport sector BAU projections is not clear in the INDC but assuming the same trend as 1990-2012 and projecting over 2030 would indicate that transport emissions could reach 16 MT by 2030. A 10 MT reduction means that transport sector emissions by 2030 would remain at around 2012 range i.e. no increase from 2012. This massive reduction would require a significant effort within transport sector to **completely eliminate any future growth** (after 2012). Ethiopia has not revealed its transport sector action plan to undertake this mitigation. However, it has indicated that the entire full and effective implementation of Green Economy Strategy for national mitigation would entail an estimated expenditure of more than USD 150 billion by 2030.

² SLoCaT analysis of Transport Emission Trends @ <http://www.ppmc-cop21.org/kp1.html>