

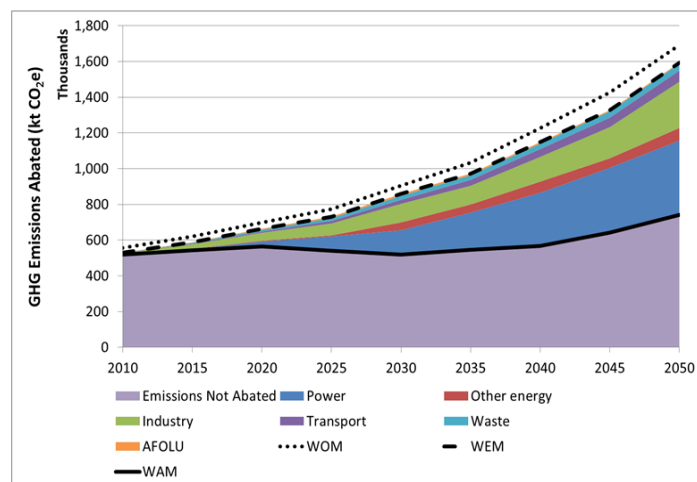
Analysis of South Africa's Greenhouse Gas Mitigation Potential



Under the United Nations Framework Convention on Climate Change, South Africa is committed to contributing its fair share to global Greenhouse Gas (GHG) mitigation efforts in order to keep the temperature increase below 2°C. In order to meet this obligation and in developing a comprehensive policy framework for responding to climate change, Government has developed the National Climate Change Response Policy, which required defining desired emission reduction outcomes for each significant sector and sub-sector of the economy based on an in-depth assessment of the mitigation potential, best available mitigation options, science, evidence and a full assessment of the costs and benefits.

The analysis was conducted by Camco Clean Energy, in partnership with Ricardo-AEA, PDG and Conningarth Economists. The project involved the projection of national GHG emissions into the future, identification and analysis of mitigation opportunities in key sectors of the economy, and a socio-economic and environmental assessment of the identified mitigation options. The key sectors are Energy, Industry, Transport, Waste and Agriculture, Forestry and Other Land Use.

Once the mitigation options had been identified and analysed and combined to construct Marginal Abatement Cost Curves for key sectors and subsectors, PDG was responsible for assessing the potential socio-economic and environmental impacts of the identified options using a Multi-Criteria Analysis (MCA) framework. The MCA model allowed a range of evaluation criteria to be combined and the resulting ranking of measures was thus based on more than merely the consideration of abatement potential and marginal abatement cost.



The results showed that the energy sector dominates mitigation potential but building and transport measures are also significant. The findings from the project served as informants to the Mitigation Technology Plan and the revised Integrated Resources Plan. They were also instrumental in defining Desired Emission Reduction Outcomes which form a crucial component of South Africa's new Carbon Tax Act.

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GHGM PROJECT:

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