



Climate

Annex

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Annex

See the [Energy](#) theme for details of the parameters used for the Current Path adjustments, Africa Energy Policy and Sustainable Africa scenarios.

Carbon Tax Scenarios

Name	Description	Country or Group	Adjustment in IFs 8.17	Remarks
Wealthy Pay scenario				
carbtax	Carbon tax in US\$ per ton.	WB high income countries	Interpolate from 0 to 75 over 10 years for WB High income countries Interpolate from 0 to 75 over 15 years for China	Increases costs of energy and depresses demand. Inline with IMF CPF
Polluters Pay scenario				
carbtax	Carbon tax in US\$ per ton.	Tax applied to 2023 top 20 highest carbon emitters	Interpolate from 0 to 75 over 10 years for High polluters group consisting of Australia, Brazil, Canada, China, Egypt, Germany, India, Indonesia, Iran, Italy, Japan, South Korea, Mexico, Poland, Russia, Saudi Arabia, South Africa, Turkey, UK and USA	Increases costs of energy and depresses demand. Inline with IMF CPF
Everyone Pays scenario				
carbtax	Carbon tax in US\$ per ton.	Tax applied to world covering all countries	Interpolate from 0 to 25 over 10 years for world	Increases costs of energy and depresses demand.

				Inline with IMF CPF
Differentiated Pay scenario				
carbtax	Carbon tax in US\$ per ton.	WB High Income WB Upper Middle Income WB Low Income WB Low Middle Income	Interpolate from 0 to 100 over 10 years for high income Interpolate from 0 to 75 over 10 years for upper middle income Interpolate from 0 to 50 over 15 years for upper middle income Interpolate from 0 to 25 over 15 years for upper middle income	Increases costs of energy and depresses demand. Inline with IMF CPF

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About the authors

Ms Alize le Roux joined the AFI in May 2021 as a senior researcher. Before joining the ISS, she worked as a principal geo-informatics researcher at the CSIR, supporting various local and national policy- and decision-makers with long-term planning support. Alize has 14 years of experience in spatial data analysis, disaster risk reduction and urban and regional modelling. She has a master's degree in geographical sciences from the University of Utrecht, specialising in multi-hazard risk assessments and spatial decision support systems.

Dr Jakkie Cilliers is the ISS's founder and former executive director of the ISS. He currently serves as chair of the ISS Board of Trustees and head of the African Futures and Innovation (AFI) programme at the Pretoria office of the ISS. His 2017 best-seller *Fate of the Nation* addresses South Africa's futures from political, economic and social perspectives. His three most recent books, *Africa First! Igniting a Growth Revolution* (March 2020), *The Future of Africa: Challenges and Opportunities* (April 2021), and *Africa Tomorrow: Pathways to Prosperity* (June 2022) take a rigorous look at the continent as a whole.

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