

SUSTAINABLE AVIATION FUEL PRODUCTION IN SOUTH AFRICA: POTENTIAL AND OPPORTUNITIES

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ABSTRACT

Sustainable aviation fuels (SAF) are key for the decarbonisation of the aviation industry to meet the climate goals under the Paris Agreement. Given its wide feedstock base, South Africa is well placed to produce significant amounts of SAF, both for domestic use and the export market. However, the price competitiveness of the SAF and its potential to meet rigorous sustainability criteria needs to be assessed. The presentation will provide the main findings from a techno-economic assessment and logistics optimisation study that identify the SAF production potential in South Africa and associated production costs for locally produced SAF that would meet strict sustainability criteria. Additionally, we present an assessment of socio-economic benefits of a domestic SAF industry based on localisation and employment creation potential, as well as the possibility for fuel import substitution. The presentation will also include some key recommendations for establishing a SAF industry in South Africa.