



Media Release

IMMEDIATE

Report investigates climate change science and technology

As the effects of climate change continue to be felt around the world, particularly in Africa, ongoing research has become critical to mitigate its impacts. In response, the Department of Science and Technology (DST) has committed to produce two reports on climate change for Cabinet as part of "Outcome 10: Protect and Enhance our Environmental Assets and Natural Resources" of the Medium-Term Strategic Framework.

Government's five-year Medium-Term Strategic Framework incorporates an outcomes-based approach to complement the National Development Plan's vision and trajectory that by 2030 South Africa's transition to an environmentally sustainable, climate change resilient, low-carbon economy and just society will be well under way.

The first report, *The State of Climate Change Science and Technology in South Africa* undertaken by the Academy of Science of South Africa (ASSAf) on behalf of the DST, has been completed and endorsed by Cabinet. The second report is due in March 2019.

The report assesses the climate change science and technology landscape and highlights the key challenges and impacts in South Africa over the next 30 years. While the country is set to face challenges brought about by climate change, our science research community, which is focusing on this global threat, is productive, well respected and growing.

The report affirms that over the next 30 years the western parts of South Africa are expected to be hotter and drier than the rest of the country. More extreme weather, droughts and

floods can be expected. The country will also face increased pressure to move the energy mix away from its current high dependence on fossil fuels, especially coal.

Climate change research outputs have increased by 16% p.a. from 131 p.a. in 2005 to 596 p.a. in 2015, compared with a 5% p.a. growth in all research topics. This assessment is based on a bibliometric survey of peer-reviewed journal articles and book chapters between 2005 and 2015.

The report also revealed strong international research linkages as the number of research collaborating countries increased from 40 in 2006 to 135 in 2015, with many South African scientists serving in leadership positions in international climate change research and assessment bodies.

The climate change research community in South Africa is spread across more than 30 institutions, with five research-intensive higher education institutions (the University of Cape Town, Stellenbosch University, the University of KwaZulu-Natal, the University of the Witwatersrand and the University of Pretoria) dominating research output and the production of graduate students.

There are also strong linkages among climate change researchers in the various higher education institutions and between the university community, science councils and local and national government, but linkages with the private sector are relatively weak.

Climate change-related research and technology development in South Africa is currently funded at around R400 million p.a. This constitutes a growth of about 12% p.a. (nominal, 6% real) over the past decade. Two-thirds of this funding is dedicated to research while the rest goes toward technology development. Climate change research and technology development expenditure amounts to about 1,7% of the total South African research expenditure, which is high for a developing country.

The full report is available on www.assaf.org.za and www.dst.gov.za

This media release is jointly issued by ASSAf and the Department of Science and Technology.

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Academy of Science of South Africa (ASSAf)

ASSAf Research Repository

<http://research.assaf.org.za/>

A. Academy of Science of South Africa (ASSAf) Publications

A. ASSAf Consensus Study Reports

2017

First Biennial Report to Cabinet on the State of Climate Change : Science and Technology in South Africa

Academy of Science of South Africa (ASSAf)

Academy of Science of South Africa

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