



MEDIA ADVISORY & INVITATION

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Anticipated ASSAf Report on Shale Gas Released

Exploitation of South Africa's shale gas resources in the Karoo to counter energy challenges is subject to scrutiny in a comprehensive evidence-based study to be released by the Academy of Science of South Africa (ASSAf) and the South African Academy of Engineering (SAAE) next week.

The study on *South Africa's Technical Readiness to Support the Shale Gas Industry* was commissioned by the Department of Science and Technology (DST) in 2014. It was considered by Cabinet on 28 September 2016.

South Africa's National Development Plan (NDP) has prioritised the need for economic growth to be closely linked to sustainable energy production, skills development and job creation. The South African national government is looking to shale gas development in the Karoo to contribute to these objectives. The report raises a number of issues that require attention to bring the country to the full state of readiness.

In recent years the discovery of large shale gas resources and the exploitation of shale gas (and shale oil) reserves in other countries have transformed the energy market.

South Africa is considered to possess potentially large resources of shale gas and if the decision is taken to exploit these resources it is possible that this may be a 'game

changer' regarding the energy balance. The exploitation of these key energy resources and reserves may present some significant environmental, technical, social and economic challenges requiring thorough analysis.

This report assesses the *status quo* with regard to available information and technologies in South Africa, and links the findings with the needs of the shale gas activities if such an industry were to develop. The report makes several recommendations for future data collection and research to prepare South Africa for a shale gas industry, and suggests important interventions that would need to be considered to enable the development of the industry.

The main focus areas of the study range from international perspectives and experiences related to shale gas; technologies and capabilities related to exploration for shale gas, drilling and extracting shale gas, as well as distribution and exploitation of shale gas; legal, regulatory and governance aspects related to shale gas activities and developments; the potential impacts on water availability, water quality, and sand, air and greenhouse gas emissions; potential impacts on activities of astronomy research and on the local and regional socio-economic activities; the national availability of the necessary skills and human capacity; and, also the availability of baseline information on the local environment prior to the commencement of any exploitation of shale gas.

The recommendations emanating from this study have been clustered into two groupings, viz. those which are directly for the attention of the DST and those for which the responsibility is located in other departments. This latter group is clustered for the purposes of this report as being for the attention of the Inter-Ministerial Hydraulic Fracturing Monitoring Committee (IMHFMC).

The study panel under the chairmanship of Prof Cyril O'Connor from the University of Cape Town consisted of Mr Stefanus de Lange University of the Free State; Prof Maarten de Wit, Nelson Mandela Metropolitan University; Mr Stefan de Nagy Kóves Hrabar, Mirllem (Pty) Limited; Prof Meagan Mauter, Carnegie Mellon University; Dr Mike

Shand, Aurecon South Africa (Pty) Ltd; and Mr Mthozami Xiphu, South African Oil and Gas Alliance.

The report will be launched and handed over to a representative of the Department of Science and Technology at the Crystal Garnet Room at the CSIR International Convention Centre on 12 October 2016 at 13:00.

Members of the Media are invited to attend. RSVP to Patsy Scholtz @

patsy@assaf.org.za

NOTE TO EDITORS:

The report *South Africa's Technical Readiness to Support the Shale Gas Industry* is embargoed until 12 October 2016 at 14:00.

The full report will be available on www.assaf.org.za on 12 October 2016.

Advance embargoed copies of the report are available upon request from Patricia Scholtz at patsy@assaf.org.za

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ENDS

Academy of Science of South Africa (ASSAf)

The Academy of Science of South Africa (ASSAf) celebrates its 20th year as official academy of South Africa this year.

ASSAf was inaugurated in May 1996. It was formed in response to the need for an Academy of Science consonant with the dawn of democracy in South Africa: activist in its mission of using science and scholarship for the benefit of society, with a mandate encompassing all scholarly disciplines that use an open-minded and evidence-based approach to build knowledge.

ASSAf thus adopted in its name the term 'science' in the singular as reflecting a common way of enquiring rather than an aggregation of different disciplines. Its Members are elected on the basis of a combination of two principal criteria, academic excellence and significant contributions to society.

The Parliament of South Africa passed the Academy of Science of South Africa Act (Act 67 of 2001), which came into force on 15 May 2002. This made ASSAf the only academy of science in South Africa officially recognised by government and

representing the country in the international community of science academies and elsewhere.

For more on the [history of ASSAf](#)

South African Academy of Engineering (SAAE)

The South African Academy of Engineering (SAAE) was established on 1 March 1995 as an autonomous entity operating under its own Constitution along the lines of Academies of Engineering in other countries. In 2008 SAAE applied for membership of CAETS (the Council of Academies of Engineering and Technological Sciences) and in 2009 it became a member of CAETS.

The aims and objectives of the Academy are to promote excellence in the science and application of engineering for the benefit of all members of the public in South Africa, and for that purpose to promote the application of engineering in South Africa to improve the quality of life of its people.

The Academy comprises 193 eminent engineers of all disciplines and related professionals with proven ability and achievement. It is able to harness their wealth of knowledge and experience which, with the interdisciplinary character of the membership, provides a unique resource for independent, evidence-based advice

For more information: www.saae.co.za

Patricia Scholtz

Communication Manager
Academy of Science of South Africa (ASSAf)

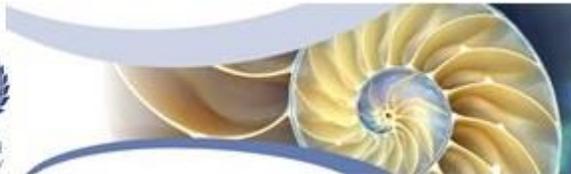
Switchboard: +27 12 349 6600

Tel: +27 12 349 6618

Cell: +27 82 550 0757

Fax: +27 (0) 86 576 9520

Email: patsy@assaf.org.za



1st Floor Block A, The Woods, 41 De Havilland Crescent, Persequor Park
Meiring Naudé Road, Lynnwood 0020, Pretoria, South Africa.

PO Box 72135, Lynnwood Ridge 0040, Pretoria, South Africa.

Website: www.assaf.org.za