



Minister Tina Joemat-Pettersson

South Africa – Gas Statement

Oil and Gas Council

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Ladies and Gentlemen

As Minister of Energy my responsibility is to ensure that South Africa has sufficient, diverse and secure energy available to its citizens and the economy of the country – not only now, but also in the future. Since I have taken on this position in May of 2014, it has become increasingly evident that, in the short to medium term, South Africa requires flexibility as well as reliability in terms of energy, and specifically electricity.

As we continue to expand our already world class IPP programme around renewable energy, complimentary electrical energy sources will be required. This will assist South Africa in its journey towards achieving our commitments to a lower carbon and carbon resilient future – not only as a participating member of the United Nations Framework Convention on Climate Change, but also for our children’s children.

Natural gas will provide the country with a measured step in the direction of a lower carbon future and improved energy security. South Africa has the possibility that a variety of sources of natural gas could be economically available within a 25 year planning horizon to 2040. Natural gas is found in the ground as opposed to being produced from oil refineries or synthetically from coal mining. Sources could include extensive potential expansion in natural gas from shale, production from deep-water offshore fields and development of a regional natural gas pipeline network.

A number of national policy documents including the White Paper on the Energy Policy of South Africa 1998, the National Development Plan (NDP), the draft Integrated Energy Plan (IEP) and the Integrated Resources Plan 2010-2030 (IRP 2010) argue or acknowledge the case for natural gas as having a significant role to play in South Africa's energy mix.

The NDP identifies natural gas as a viable alternative to coal. The NDP offers the view that substituting gas for coal will help cut South Africa's carbon intensity and greenhouse gas (GHG) emissions. Gas supply options that have been mooted include coal bed methane (CBM), shale gas and imports of Liquefied Natural Gas (LNG). The NDP anticipates that by 2020, LNG infrastructure will be in place that will be able to power the first combined cycle gas turbines (CCGTs).

In the interim period, the Department of Energy is undertaking a natural gas-to-power programme. This natural gas IPP Programme will not only establish the delivery of the 3,726MW of electricity capacity set out in the Ministerial Determinations but will also serve as a catalyst for the development of a gas industry in South Africa.

In addition to the benefits to the economy from the increase in power generation, such a development of the gas industry would significantly boost GDP growth in the medium to longer term. Twenty years into the future the positive benefits of a gas industry on annual GDP growth is conservatively estimated to be in excess of 1% point more than would otherwise be the case. Employment opportunities associated directly and indirectly with this industry development will amount to 1,25 million full time equivalent job opportunities over a 25 year period (on average 50 000 per annum and at the peak of construction up to 106 000 per year). To provide scale for context – this is equivalent to the current employees of Transnet and Eskom combined. Furthermore, in the shorter term the gas-to-power programme will also contribute to buffer economic output decreases and help prevent job losses.

Natural gas will provide for more than just electrical power, it will also provide direct heat and chemical feedstock for industrial processes, commercial and residential cooking and heating applications as well as an alternative fuel source for transport. In addition, natural gas-to-power projects at coastal locations also offer water desalination capability. Furthermore, such an opportunity to diversify from coal fired

generation brings the future benefit of greater access to international sources of financing which are already closed to conventional coal fired generation.

In this way, a gas programme will contribute significantly to the vision of a re-industrialised economy, a higher and inclusive growth path and job creation in the South African economy, while simultaneously ensuring that we meet our energy source diversity, security and climate change obligations.

Introducing natural gas in the South African energy mix and economy requires strategizing and planning for both the short and long-term. Early up-front investment is required to demonstrate national commitment and to instil confidence with investors – not only in the natural gas-to-power programme, but also in upstream natural gas exploration and extraction, downstream natural gas transportation and distribution infrastructure and market development for the use of natural gas in the rest of the economy.

The initial natural gas-to-power procurement programme will demonstrate national commitment to further the development of a natural gas industry for South Africa. The programme will be based on similar principles as South Africa's revolutionary IPP renewables programme. Key guiding principles that will be followed include procurement transparency, competitive bidding, economic and socio-economic development and localisation requirements while minimising the burden on the fiscus.

In order to ensure the realisation of the vision of a re-industrialised economy, a higher and inclusive growth path and job creation in the South African economy, I have taken the decision to develop a comprehensive Gas Policy for South Africa. A well-defined gas policy is a key requirement to guide developments towards a sustainable natural gas economy.

A key strategic focus for the Gas Policy will be to enable the deliberate short-term development of initial supply of and demand for gas, much of which is latent and unserved at present, in parallel with the actions aimed at expediting the development of longer term supply.

The Gas Policy will facilitate the development of the South African natural gas industry and market through ensuring the establishment of anchor demand from gas-to-power through the IPP programme. It will provide context for our new Integrated Resource Plan as well as the future Gas Industrialisation Policy under development,

as the Gas Policy will enable and fast-track the development of non-gas-to-power gas demand. Initial gas-to-power together with future non-gas-to-power will ensure that upstream investment in both regional and indigenous sources (through exploration and production) will be encouraged.

Through this policy we will enact integration of the various required gas industry building blocks, from gas extraction to final demand, to make a significant contribution to ensuring that South Africa has sufficient, secure and diverse yet cleaner and greener energy in future.

In the development of a Gas Policy, the Department of Energy is closely cooperating with key stakeholders on relevant legal, regulatory, infrastructure, environmental, societal, industrial, water and energy related aspects. Co-operation and alignment between national departments and their agencies, e.g. the Department of Mineral Resources (DMR), Department of Trade and Industry (the dti), National Energy Regulator of South Africa (NERSA), Department of Public Enterprise (DPE) and its SOEs, particularly Eskom and Transnet, Transnet National Ports Authority (TNPA), the Ports Regulator of South Africa (PRSA), Department of Environmental Affairs (DEA), Department of Water and Sanitation (DWS) and National Treasury is critical for development of a comprehensive and integrated natural gas policy and realisation of the long-term vision. At the local level cooperation with provincial and local governments, where relevant, will also be critical.

We are already well on our way with putting the building blocks in place. For example, with regard to:

1. Legislation

- **The Gas Amendment Bill** will largely introduce a mechanism that allows the Minister of Energy to direct the development of new gas infrastructure including pipelines, storage and regasification technology for imported liquefied nation gas (LNG). The Bill will encompass the midstream elements of the gas value chain, whereas the upstream will be covered under amendments to the Mineral and Petroleum Development Act. The plan involves separating from the mineral regulatory framework those elements that relate to the petroleum value chain.
- **The Upstream Gas Bill** will legislate upstream elements of the gas values chain, including the exploration and concessioning of conventional and unconventional gas. This legislation will be derived from the MPRDA separation process.

2. Planning

- **The revised Integrated Energy Plan (IEP)** will provide answers to various questions our country has been grappling with regarding our energy future, including the development of our Energy Master Plan. Arising out of the process IEP revision will be the infrastructure plans in respect of the electricity, gas and liquid fuels sectors in more detail as recommended by the IEP.
- **We are coordinating and integrating planning with the DTI** around the gas industrialisation policy and strategy for the country. The Department of Energy and the DTI have set out to conduct a cohesive review of the gas industry potential in South African, end-to-end from upstream to utilisation. This review offers a coherent and integrated view of the components needed for the development of the gas industry in South Africa which are distributed across the responsibilities of a number of Government spheres and State Owned Companies (SOCs). Yesterday, the dti launched its Gas Industrialisation Unit here in Cape Town.

3. Procurement

- My Department is hard at work to ensure bankability of the natural gas-to-power procurement programme for investors, affordability for gas users and the minimum fiscal exposure for government.

We will make a **preliminary information memorandum on the 3125 MW gas-to-power programme** available to the market in the second quarter of the 2016/17 financial year, prior to commencing with the formal procurement process later in the year. This will be an important development to stimulate our economy and promote investor confidence.

We envisage release to the market of a Request for Qualification for the supply of a Floating Storage and Regasification Unit vessel or FSRU-based bundled natural gas-to-power solution of up to 3126 MW in the third quarter of financial year 2016/17. Currently three potential ports are considered, namely the port of Ngqura (Coega), Richards Bay and Saldanha Bay.

The full scope of the solution will include not only the FSRU, but also LNG supply, development of jetty and associated infrastructure, and the construction of pipeline infrastructure to deliver gas from the FSRU to an initial gas IPP and

potential desalination facility. Surplus capacity on the FSRU and associated pipeline infrastructure will be available to serve additional gas offtakers.

The release of a Request for Proposals to the market is scheduled for quarter 4 of financial year 2016/17. The bid submission and evaluation process is envisaged to start in quarter 3 of financial year 2017/18.

- Through the IPP Office, we have also released a further Call for Expressions of Interest from the private sector to partner with our State Owned Entities with the development of a **600MW Additional Gas Determination**.

To summarise:

Our “Vision” for Gas for South Africa focuses on the “bigger” picture of the broader economic benefits of a gas-based economy. The Gas Policy and initial gas-to-power IPP programme will:

- Contribute to certainty in terms of energy security, diversity and stability;
- Contribute to (re-)industrialisation of the South African manufacturing economy;
- Contribute to a higher and inclusive growth path and job creation in the South African economy; and
- Assist South Africa in its journey towards achieving our commitments to a lower carbon and carbon resilient future (not only as a participating member of the United Nations Framework Convention on Climate Change, but also for our children’s children).

The Gas Policy and initial gas-to-power IPP programme also represent a pro-active rather than a reactive approach - we are planning and shaping the path towards future “big-gas” in South Africa rather than waiting for it to happen.

Furthermore, we are viewing the exploitation of our indigenous gas (coal bed methane and shale gas) as well as regional natural gas resources in the broader context of regional integration. Neighbouring countries such as Mozambique are strategic partners that possess complimentary clean energy resources that fit our energy strategy. Therefore there is logic for supporting the development of gas pipeline infrastructure from Mozambique into South Africa.

Ms Karen Breytenbach from the IPP Office is part of the next panel where she will share more information on the gas-to-power programme.

I thank you and wish you fruitful deliberations during the next sessions.