

2016 Budget Speech by the Minister of Energy

Ms Tina Joemat-Pettersson, MP

National Assembly

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Honourable Chairperson

Honourable Ministers and Deputy Ministers

Chairperson and Members of the Portfolio Committee on Energy

Members of National Assembly

Sibingelela uMama Wesizwe uMaKhumalo

Invited Guests

Ladies and Gentlemen

[Introduction]

The energy sector has enormous potential to contribute to the growth stimulus that our country desperately needs. Economic growth through re-industrialisation, skills development and the creation of employment opportunities for our communities can all be enabled by the energy sector.

This year we will continue to focus on our chosen path towards a diversified energy mix, especially as it relates to renewable energy, regional energy integration, gas development and the Independent Power Producers Programme. We believe that these initiatives will support our economic growth strategy outlined in the 9 Point Plan, the 2014 and 2016 ANC Elections Manifestos and the National Development Plan.

Over the recent period, the global community reached two milestone commitments towards a broad-based transformation of the world's energy systems and building a more prosperous, healthier, cleaner and safer world for this and future generations.

In September 2015 the new, post-2015 sustainable development agenda was adopted by 193 United Nations member countries. In addition, the Paris Agreement reached at the COP 21 Climate Change Conference in December 2015 signifies a second critical milestone, where the world agreed to chart a pathway to a low carbon energy system to mitigate against the impacts of climate change.

[Integrated Energy Plan]

The Integrated Energy Plan (or IEP) represents our overarching energy policy and strategy statement that has been under development since 2012, when Cabinet approved the commencement of the public consultation process.

I would like to thank the Ministerial Advisory Council, chaired by Dr Zav Rustomjee, for their detailed and comprehensive comments on the document. We will ensure that their comments are given serious consideration. A final version will then be tabled for further consultation. The 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.

[Integrated Resource Plan (IRP) and the Gas Infrastructure Plan]

Arising out of the process for developing the IEP will be the infrastructure plans in respect of the electricity, gas and liquid fuels sectors in more detail as recommended by the IEP. The updated IRP process is well underway, and will be submitted to the economic sector and infrastructure development cluster in the second quarter of this financial year.

Similarly the Gas Infrastructure Plan will take its lead from the IEP, in regard to the gas pipelines, storage and other infrastructure that is necessary for meeting the energy demand through gas supply.

Going forward it is becoming more and more apparent that future energy demand will be a mix of electricity, gas and liquid fuels and, depending on the relative cost competitiveness of each of these an equilibrium between the three will be established.

[Renewable Energy IPPP]

As part of the Youth Month commemoration this year, we will celebrate the great strides made by the Renewable Energy Independent Power Producers Programme towards the

development and empowerment of the youth. Not only have numerous employment opportunities been created, with 52% of total job opportunities specifically for youth, but they have also benefitted from various education and skills development initiatives preparing them for, hopefully, a bright and successful future.

In October 2015, South Africa became the sixth, and the first country in Africa to host the International Renewable Energy Conference. It is the foremost international conference dedicated to renewable energy, and provided a global platform for government, the private sector and civil society leaders to advance our renewable energy agenda. The conference was a huge success, drawing participation from more than 80 countries and, notably, most of the international organisations active in this space.

Our Renewable Energy Independent Power Producer Procurement Programme has become one of the world's most progressive and successful alternative energy programmes, a fact that is recognised globally.

Since their introduction, solar, wind, biomass, small hydro and landfill gas power plants have been going up across the country, feeding increasing numbers of clean energy into the national grid.

As at December 2015, the department had procured 6 377 MW of renewable energy and has already connected 44 projects with a capacity of 2 021 MW to the national grid, with many more under construction. The energy contribution of independent power producers is expected to grow to approximately 7 000 MW with the first 47 renewable energy independent power producers fully operational by mid-2016. Private investment in the programme currently exceeds R194 billion.

Bids in terms of the Bid Window 4 Expedited Round, totaling an additional 1800 megawatt are currently under evaluation, and we will announce preferred bidders in the second quarter of the financial year. Bid Window 4, including the investments made through the small projects programme, will increase the investment amount to more than R 255 Billion.

We remain on track to meet our national commitment to transition to a low carbon economy with the target of 17 800 MW of renewable energy power by 2030.

The current renewable energy operational portfolio is contributing an increasing percentage of the buffer between the available supply and projected demand for electricity. Already a 16% contribution is made to the total energy produced during the morning and evening system peak periods in a 24 hour period. As the energy mix diversifies with the inclusion of concentrated solar power, which includes a storage element, biomass and landfill gas, the share of energy available during peak periods will increase.

The department has procured private peaker stations to the capacity of nearly 1 000 MW that can be used when there is a larger demand than what the Eskom generators can produce. The Avon plant in Eastern Cape was completed in September 2015 and can produce 330 MW. The Dedisa plant in Kwa-Zulu Natal, when completed by the end of this year, will produce 630 MW. Total projects costs were R8 Billion, while 210 permanent jobs and 6190 temporary jobs were created at both plants.

Last year we initiated a process of redesigning the RFP for Bid Window 5 with attention to early, efficient and equitable benefits to communities and greater localised industrialisation. We are pleased to indicate that a new RFP for Bid Window 5 will be released during the second quarter of this financial year. This will further fast-track investment in the sector.

To further boost renewable energy development in South Africa, we have determined, with the concurrence of NERSA, that 1 500 MW will be generated from new solar technologies in a Northern Cape Solar Park.

The Solar Park will stimulate investment in new and expanding industrial and manufacturing facilities, the development of local supply chains and entrepreneurial and employment opportunities for South Africans in general and for the people of the Northern Cape in particular.

The Solar Park will be developed in a clustered fashion, sharing common infrastructure and services such as access to land, water supply, feeder lines to electricity transmission system, roads and support industries. Since 2010, significant development work has taken place including improvements to the grid infrastructure around the Upington transmission station which has been augmented to enable the integration of the Solar Park. The area has been included in one of the newly promulgated Renewable Energy Development Zones.

We have now made provision for the DoE IPP Office to lead the processes with regard to the structuring and procurement of the intended additional solar park capacity. We have directed further that the IPP Office should in its structuring of the proposed projects or programmes ensure the involvement of one or more state owned companies, taking into account the constrained economic and fiscal environment of the country. The intention remains the transfer of skills and the strengthening of balance sheets of the participating SOC's, whilst leveraging private sector experience and financial strength through the participation of Strategic Equity Partners.

I am glad to announce that earlier today, the IPP Office published a Call for Expressions of Interest from potential Strategic Equity Partners for the Solar Park. We urge the participation of qualifying private sector and public sector stakeholders in this massive undertaking.

[Coal]

The Department is expected to announce the preferred bidders from the first bid submission for **domestic coal projects** in July 2016. Bids with a combined capacity of 900 MW were received and are currently in evaluation. The projected investment commitment from these coal projects is in the region of R45 billion, and will be rolled out over the next 4 years.

An additional 3750 MW of power will be generated utilising coal technology, through cross border projects that will augment the local Coal IPP procurement programme. The rationale behind the cross-border coal programme is that it facilitates the construction of the transmission interconnectors between South Africa and our neighbours. Transmission interconnectors are critical if we are to import power from the hydropower projects in the DRC, the Grand Inga, and in Zambia and Mozambique such as Cahora Bassa North Bank and Mpanda Nkuwa. This also gives the respective transit countries the necessary comfort that the interconnections are in their national interest and not just for the benefit of South Africa.

[Biofuel strategy]

Chairperson, as you are aware, the South African Cabinet approved the national Biofuels Industrial Strategy in December 2007. The regulations for mandatory blending of biofuels with petrol and diesel were promulgated in August 2012 and came into effect in October last year.

The Biofuels Regulatory Framework will be submitted to Cabinet during this year. It will outline how the nascent biofuels industry will be financially supported and how the projects would be selected and supported.

The blending of biofuels reduces the impact of fuel emissions on our people. In addition the benefits arising from biofuels include:

- the potential for a biofuels manufacturing industry to create a captive market for the agricultural sector, especially for new black or small farmers;
- the opportunity of a biofuels industry to create jobs in rural areas; and
- the reduction in imports of refined liquid transport fuel, which is good for the country's balance of payments savings.

The production of 460 million litres of biofuels, as approved by Cabinet in 2007, can create 15 000 new permanent direct jobs in the biofuels manufacturing plants and agriculture; plus over 3 000 temporary jobs during the 24 months of construction.

A 460 million litres per annum biofuels industry can immediately improve the country's annual balance of payments by over R2.5 billion at the current crude oil prices and exchange rate.

The Department of Agriculture, Forestry and Fisheries ("**DAFF**") played a key role in designing the biofuels feedstock protocol for mitigating the possible impact of biofuels production on food security. This will prevent the use of staple food crops and land currently used for these crops from being used for biofuels production other than as a result of crop rotation.

[Nuclear Energy]

The nuclear energy expansion programme is a central feature of our future energy mix, given the need to provide base load electricity and also meet the significant greenhouse gas emissions reduction target we have set for our country. We must re-iterate that our vision around this programme is centred on processes that will create a nuclear industry, with the objective of catapulting South Africa into the top echelons of the knowledge economy. We are confident that our nuclear programme would respond to job creation needs, by creating employment and fighting poverty. It will also provide assurance to the investors for security of supply for industrial purposes.

Our country once again stands at a cross-roads of a nuclear new build programme procurement process having done significant preparatory work for the deployment of at least 9 600 MW of nuclear power fleet by 2030, in line with Integrated Resource Plan for 2010 which will ensure that the South African socio-economic vision defined in the National Development Plan (NDP) up to 2030 is in part realised.

The NDP implored Government to undertake detailed investigations prior to making a final decision on whether to deploy the nuclear new build programme. These detailed technical investigations culminated in various studies and strategies. These were considered by Cabinet which has decided to allow the Department of Energy to, issue a Request for Proposal (RFP) to confirm the market appetite for the nuclear programme.

The RFP phase would ensure that our country secures binding commercial and financial information to fully appraise the Cabinet to be able to take a final decision on the best arrangement to implement the nuclear new build programme. This would inform the price, affordability, pace and scale of this programme. And, we will only implement what our country can afford.

We will ensure that the process is above board and free of any potential for corruption. We will not rush the process and will meet all the necessary national and international requirements for the new build process, led by the guidance, in the main, of the International Atomic Energy Agency.

Applications to license sites where these nuclear power reactor plants might be constructed are on the coast of the Eastern and Western Cape have been submitted to the National Nuclear Regulator in March 2016.

The Department of Energy is in the process of ratifying the amendments on the Convention on the Physical Protection of nuclear material. The Cabinet approval process has been initiated in this regard and ratification of this amendment by South Africa is an important step and will have major effect in strengthening measures for nuclear security in South Africa as well as contribute to the global effort of strengthening nuclear security.

[Gas]

During the second quarter of the 2015/16 financial year, the Department solicited market information to help in the design of the **gas-to-power programme** and in development of documentation required to procure gas fired power. There was an overwhelming interest in the programme. We hosted a successful international gas options conference at the end of September 2015 to solicit inputs from the market in developing the SA gas-to-power programme.

The exploitation of our indigenous gas (coal bed methane and shale gas) as well as the regional natural gas resources must be seen in the broader context of regional integration. The trade-off between South Africa and our neighbours in a synergistic manner will improve our ability to secure those clean energy resources we do not currently possess, due to the lack of adequate exploration, in the case of shale gas, or those that we do not possess at all like hydropower. We believe that the trade-off can be achieved by supporting and collaborating on the interconnection projects including transmission lines and gas pipelines. Mozambique and the DRC are strategic partner countries 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.

I have directed my Department to undertake more upfront development work for the procurement of imported gas to ensure bankability of the gas-to-power 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 will also, through the IPP Office, tomorrow release 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.

[Inga Hydropower Project]

Since the treaty for the development of the Grand Inga Hydropower project entered into force in March 2014, the DRC commenced the process of selecting the concessionaire. We will

continue to work with our neighbours in Southern Africa to conclude power transmission transit arrangements. The Department of Energy with the Department of water Affairs are in partnership to identify other strategic sources for hydro power to address the regional challenges that affect neighboring countries

We are accelerating implementation of our bilateral and regional agreements to realise the benefits of energy cooperation in the areas of hydro-electricity, coal, gas and renewable energy. The Grand Inga Treaty between SA and the DRC obliges SA to negotiate an off-take agreement for 2 500 MW of hydroelectricity from the Inga Hydro Project. We are also providing capacity support to the DRC for the project's management.

[Solar Water Heater Programme]

The solar water heater programme has finally taken off, with contracts placed for the supply of baseline systems under the social programme. Approximately 9 000 systems have been secured through this programme, in terms of which the local content of these products exceeds 75 percent. The next step is to commence with the training of local communities in the installation of the solar water systems, with clear objectives set for skills and enterprise development, job creation and the targeting of the youth, women and other designated groups.

Another priority for the Department of Energy is to address defective installations from the initial SWH rollout programme to ensure continued operation of the installed systems and service delivery to the recipients.

This corrective SWH programme has been identified to serve as incubator for suitably skilled and experienced SWH installers and installation businesses. It provides a platform for technical training at different skills levels and an opportunity for work-based experience with respect to all aspects of SWH installation; from identifying installation and system defects, to repairs and doing new, replacement installations. In this initiative we see an ideal opportunity for youth development and the establishment of an industry that can support the delivery of the larger national SWH target.

[Integrated Electrification Programme (INEP)]

INEP and its implementing agencies Eskom, municipalities and non-grid service providers have made remarkable progress in increasing access to electricity in South Africa and

connected over 6.7 million households between 1994 and March 2016, as of February 2016 access to electricity is at 88% since 1994. It is important to note that, with every house electrified and more especially rural areas, this has a ripple effect, with security and increasing developmental opportunities to the residents.

R5.6 billion has been appropriated by 2015/16 financial year on the electrification programme, to delivering 260 000 connections utilising both grid and non-grid technologies. To the end of March 2016 INEP achieved 256 000 new connections as part of the 2015/2016 financial year allocations which were implemented by Municipalities, Eskom and non-grid Service Providers. The final figure will only be determined as soon as all the verification of the new connections have been completed, which will be by the end of May 2016, however the department is confident that the target of 260 000 new connections will have been achieved.

The non-grid programme has progressed well in the last financial year and has overachieved its target by over 5 000 in achieving 25 076 modern solar energy connections. Since the inception of Non-Grid Programme INEP achieved more than 123 379 installations of Non-Grid systems mainly in EC, KZN, Northern Cape and Limpopo. Non-grid systems consisting of solar cells converting sun energy into electrical energy, which are now also being considered to be implemented in urban areas of the country with a view of increasing the basic electricity services in the informal settlement. The EU is also assisting the Department to develop sustainable delivery model and sustainable non-grid entities around the country.

The Department has developed the first draft of the electrification master plan to ensure better co-operation between the different implementing entities, as well as different technologies, grid and non-grid roll-out in un-serviced areas, to ensure that universal access is reached by 2025/26.

The INEP programme will be appropriated with R5.5 billion in the 2016/17 financial year to deliver 235 000 connections for both grid and non-grid. Over the MTEF 2016/17 to 2018/19 an estimated amount of R17.6 billion will be appropriated.

[Petroleum and Petroleum Products Regulation]

We attach great importance to the quality of fuel sold to motorists and other users. In this regard, we have strengthened our capacity to monitor adherence to fuel specifications. We

will conduct unannounced visits to service stations across the country to collect petrol and diesel samples for analysis. Non-Compliant operators will be issued with relevant enforcement notices and those repeat offenders risk losing their licenses.

The year 2016 marks the tenth year anniversary of the enactment of the licensing of persons involved in the manufacturing or sale of petroleum products petroleum products. For this, the department prides itself in having given Historically Disadvantaged South Africans an opportunity to participate meaningfully across the value chain, the number and quality of licensees to date bears to this.

We continue to monitor compliance to the Liquid Fuels Charter commitment which requires that Historically Disadvantaged South Africans own, in total, 25% of the aggregate value of the equity of the entity that holds the operating assets in the South African Oil Industry. To effectively monitor compliance with transformation initiatives, I instructed that the Department establish a Chief Directorate to drive radical economic transformation and this has now been done.

We can report to South Africans that Sasol Oil joined Total SA in fulfilment and compliance to the ownership element. Effective from 1 July 2006, Sasol Oil sold 25% of its shares to Tshwarisano LFB (Pty) Ltd, a broad based black economic empowerment consortium comprising of 150,000 direct shareholders and 2,8 million beneficiaries. The value of this transaction amounted to nearly R1.5 Billion, making it a significant BEE transaction in the liquid fuels industry. The demographics of this empowerment group include 54% women ownership, substantial rural representation, 3% youth and 2% disabled. In keeping with our strategic drive since 1994 and as implored by the Freedom charter, we would be facilitating other initiatives for economic freedom and empowerment.

We have always indicated that the refineries in the country can no-longer meet the national demand for petroleum products. In 2015, we saw a steep increase in the amounts of diesel and petrol imported into the country. In line with the National Development Plan, Government, in the next 12 months, will make recommendations and firm proposals regarding refining capacity in South Africa. We would need to consider a public private partnership model given the need to manage the demand on the public resources.

In respect of LPG, Mozambique became the number one source of imports, again helping to bolster regional integration in the energy trade. However to better develop LPG industry in our country, there are still bottleneck issues that need to be taken care of.

[Skills]

The challenges of technical skills required in the Energy Sector have continued to be of concern to the DoE. In response to these challenges; the DoE has developed a Workplace Skills Development Plan (WSP), based on the training needs of individual employees and their managers.

As part of the implementation of the WSP, a number of training and development interventions have been identified for implementation. The DoE has also offered thirty two (32) new bursaries to serving employees of the Department.

We will also contribute with the implementation of youth development intervention programmes such as the provision of bursaries to external applicants. Eleven external applicants within the youth programme were offered bursaries sponsored by the Chemical Industries Education and Training Authority (CHIETA) including four integrated learners, 32 interns and 15 people on learnership programmes.

In preparation for the rollout the nuclear build programme, the Nuclear Skills Development and Training programme is under way with various countries including China, the Russian Federation and South Korea.

[2016/2017 Budget]

Turning to the nuts and bolts of this year's budget: The total appropriation to the Department for 2016/17 is R7.5 Billion. 90.2% is earmarked for transfer to municipalities and state owned entities while the remaining 9.8% is to be utilised for the Department's operational and capital expenditure.

- The spending focus over the medium term will remain on transfer payments to Eskom and Municipalities for expanding the electrification programme to increase the number of households with connections to the grid and providing substation infrastructure. We also focus on the implementation of the National Solar Water Heater programme with

the objective of promoting energy efficiency. Spending of R1.2 Billion over the medium term on more than 130 000 solar water heaters is projected.

- Transfers to municipalities are expected to increase from R1.9 Billion in 2016/17 to R2.2 Billion in 2018/19, and transfers to Eskom from R3.5 Billion in 2016/17 to R4 Billion in 2018/19.
- Non-grid electrification projects, mainly solar energy, will be extended countrywide. The projects will be implemented in any areas where extending the grid would not be cost-effective. 70 000 non-grid connections to households are expected to be achieved over the medium term, with spending on non-grid electrification projects expected to increase from R166.4 million in 2016/17 to R201.6 million in 2018/19.
- Funding of R10.9 million was also allocated over the medium term within the Integrated National Electrification Programme for the oversight, monitoring and evaluation of non-grid electrification projects.
- Funding for state owned entities such as the South African Nuclear Energy Corporation, National Nuclear Regulator and the South African National Energy Development Institute were maintained at existing funding levels. NECSA will receive R599.34 million in 2016/17 while the NNR and SANEDI will receive R16.64 million and R20.63 million respectively. I have requested the Chairperson of NECSA to ensure that all the points of contention between NECSA and the Auditor-General must be addressed and resolved urgently, and, in an amicable manner.
- The New Nuclear Build Programme is part of the security of electricity supply. Additional funding of R200 million in the Nuclear Energy programme is made available in 2016/17 for a transactional advisors and consulting services for the New Nuclear Build Programme.

[CEF/SFF]

In line with the Presidential Review Commission on State Owned Entities, we have been working towards the review of the composition of the CEF Group of companies. Our work in this area includes the strengthening of the entities in the oil and gas sector and the stated policy objective of the creation of a stand-alone National oil Company, using PetroSA as a nucleus. Working with the Boards of the affected State owned Companies (SoCs), we will finalise this work by October 2016, and will revert back to Parliament on our views and strategies for a revised energy sector SoC framework.

Furthermore, the Department together with our state owned entities has been focusing on leveraging the current low oil price environment towards ensuring that our country benefits optimally.

Accordingly, in 2015, we issued a ministerial directive for the rotation of strategic stocks by the Strategic Fuel Fund and this has resulted in the increased revenue base for SFF, whilst at the same time maintaining stocks within our storage tanks for security of supply. This is in place through long term lease and contractual agreements with the buyers. The estimated revenue to accrue from this process is around R 170 million per annum, significantly boosting the balance sheet of the SFF.

Through the rotation of strategic stocks and trading initiatives the SFF has further consolidated its ability to be self- sustainable. This has also allowed us to replace the unsuitable stock that we have been storing in our tanks which has been both uneconomical and did not contribute to security of supply. The SFF will continue to ensure that it is able to respond to any shock in the market, whilst optimally making use of the opportunities presented in an evolving oil sector.

In addition the ROMPCO pipeline from Mozambique in which iGAS has a 25% stake is continuing to earn considerable income for iGAS.

[Legislative Programme]

The department has submitted a programme to the leader of government business regarding the following legislation for consideration by parliament and which will either be introduced or concluded in the financial year.

- *Amendment of the National Energy Regulation Act:* A new proposed structure will create a two-tier energy regulatory structure, to enable the appeal of regulatory decisions through a body that is not conflicted by having participated in making the regulatory decision in the first instance. The Review Board will create such a body.
- *Gas Amendment Bill:* The 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.

- *Upstream Gas Bill*: The Gas Amendment Upstream elements of the gas values chain, including the exploration and concessioning of conventional and unconventional gas will fall under the purview of the Upstream Gas Bill, the legislation which will be derived from the MPRDA separation process.
- *Petroleum Agency of South Africa Establishment Bill*: seeks to establish the upstream gas regulator separately from its incumbent CEF SOC location. This will conclude the regulatory and institutional arrangements that are necessary to facilitate the concessioning, licensing and exploitation of the shale gas resource that offers so much potential for our country
- *Petroleum Products Amendment Bill* seeks to improve the enforcement elements in the licensing framework for wholesalers and retailers in the liquid fuels sector. Over the past few years shortcomings have been identified in relation to the extent to which the law does not adequately punish malevolent behavior by licensees, given the weak penalty regime that is applicable under the Act.
- *IPP Office Establishment Bill*: The IPP Office Establishment Bill will formally create the Independent Power Producer Office and define its role and mandate in regard to private-public sector programmes in the power sector. This has become necessary due to the lapse in the agreement that gave effect to the creation of the project office responsible for the procurement and contract management of the 15 to 20 year IPP projects that the Department of Energy has entered into. It has become incumbent that the department must manage its obligations under these contracts in a more structured manner.

The President implored us to work together to solve our current problems. If we are individually inward looking we will not succeed. It cannot just be a case of doing what is “good for me”. We must put aside individual preferences and gripes and pull together to achieve the collective goals that will ensure that we get our country firing on all cylinders again.

In conclusion I would like to thank the Deputy Minister, the Chairperson and Members of the very engaged Portfolio Committee on Energy, the Director-General, Ministry Officials, Department Officials and all our state owned entities for ensuring that their eyes are focused on our mandate all the time.

I thank you