



energy

Department:
Energy
REPUBLIC OF SOUTH AFRICA

KEY NOTE ADDRESS DELIVERED BY MR OMPI APHANE (DDG: ENERGY POLICY AND PLANNING) ON BEHALF OF MINISTER OF ENERGY, HONOURABLE MS TINA JOEMAT-PETTERSSON, MP AT THE PRIVATE SECTOR ENERGY EFFICIENCY CONFERENCE

DATE: 12 OCTOBER 2015

Programme Director,

Ms. Joanne Yawitch from the National Business Initiative;

Mr. John Warburton from DFID;

Business Executives from our partner organizations

Distinguished Guests,

Ladies and Gentlemen,

Good Morning,

This conference takes place at a time when there are serious challenges facing the energy and minerals sectors around the world. I am encouraged by the diversity of stakeholders that I see in this conference. I am equally impressed by the extent of response that the private sector has shown in this event. This is evidence of the great capacity of industry to respond when called upon to address national challenges.

The challenge for a gathering like this one is to package solutions that are saleable, sustainable and affordable for decision makers to adopt. We need more occasions like these where experts have the opportunity to openly discuss energy issues and learn from the experiences of others.

As you are aware, over the past few months South Africa has seen unprecedented levels of electricity supply disruptions as a result of both a capacity limitation. The questions on the minds of most people is what is the



energy

Department:
Energy
REPUBLIC OF SOUTH AFRICA

problem with our electricity supply industry which we have known to be world class, how long this problem is likely to persist and whether authorities are doing enough to resolve it? It is a pity that when we are affected, so are many of our neighbours who are interconnected with us.

Co-operation and partnerships between all of us will be necessary if we are to succeed as a country. Our energy efficiency programme embraces a holistic approach, with a clear focus as a national programme that enjoins all the stakeholders to work together to achieve nationally set objectives, while removing the non-economic issues such as lack of information and training, lack of awareness campaigns and the tackling of social acceptance issues. We endeavor to effect behavioural change in this sector to avoid the “showstoppers” in many cases.

I am reminded of the theme of the COP 17 gathering in Durban under the United Nations Framework Climate Change Convention (UNFCCC), which was: ‘Working Together: Saving Tomorrow Today’: It is not only governments that have a responsibility to build a sustainable future. The business sector has a key role to play too, alongside other key sectors of society.

We are not oblivious to the global threat that the changing climatic conditions are posing for the energy sector and our continent. The challenge of addressing energy access, supply and security, and the commitment to reduce poverty by 2015 in Africa behoves all of us to ask whether we are doing enough in shaping energy processes in our country. With the deadline for achieving the Millennium Development Goals upon us, and in light of the recent deliberations at the United Nations General Assembly about the new package to address the failure in relation to meeting the Millennium Development Goals, the role of private sector has become even more critical as governments strive to find solutions to pressing energy problems.



energy

Department:
Energy
REPUBLIC OF SOUTH AFRICA

On the eve of the Climate Change Summit held in Copenhagen, President Zuma announced our commitment to reduce our carbon emissions by 34% by 2020 and by 42% by 2025. This was to be done in the context of a comprehensive, fair and effective legal binding multilateral agreement that delivers financial and technology support for our action.

The South African Government is already implementing strategies towards cleaner technology and transition towards a low carbon future, guided by the National Climate Change Response Policy.

Last week we hosted the South African International Renewable Energy Conference in Cape Town, a global event that was staged on African soil for the first time, and we deliberated about the role of renewable energy in the energy mix. The rate at which renewable energy is expected to contribute towards meeting our future energy demand is staggering. Private public partnerships have ensured that the Renewable Energy option has grown exponentially over the recent past. This is a lesson that we need to take seriously in our planning processes, and I am confident that the energy efficiency sector is poised to experience the same explosion as Renewable Energy – simply because it makes sense.

Programme Director,

Energy Efficiency is recognized as one of the most cost effective ways of improving energy security and shifting towards a low-carbon development. In order to create a “pro-energy efficient” environment, the South African National Energy Efficiency Strategy (NEES) enhances energy efficiency through enabling instruments and interventions. These include economic and legislative measures, establishing implementation instruments, setting energy efficiency targets, and establishing an energy efficiency monitoring system.



energy

Department:
Energy
REPUBLIC OF SOUTH AFRICA

In accordance with the 2005 National Energy Efficiency Strategy, a national energy efficiency improvement target of 12% reduction in energy intensity was set to be achieved by 2015. This overall national target is divided into sub-targets for each sector, including the public and commercial building sector of 15%. However, to date the achievements of these targets have not been monitored by a recognized energy efficiency monitoring system, although a Monitoring Methodology was developed in 2005.

The Department of Energy collaborated with the Department of Public Works to collect energy data in public buildings as part of the pilot phase of the Energy Efficiency Target Monitoring System. Meters were installed to measure and collect electricity consumption data, and to conduct detailed audits of building occupancy, size, electrical appliances used, and potential energy efficiency and renewable energy measures that can be introduced to reduce the energy consumption.

It would surely be incorrect of me not to reflect on some of the initiatives we have embarked upon to intensify the energy efficiency momentum. Extensive work has been done on various programmes:

- (1) **Industrial Energy Efficiency programme** - This is an initiative between the South African government represented by the Department of Trade and Industry and the Department of Energy, Business Unity South Africa and the United Nations Industrial Development Organization focusing on skills transfer and technical support in the intensive roll out of energy systems optimization in industry and the implementation of sound energy management practices.
- (2) **Energy Efficiency in Buildings** - energy efficiency in the building sector which government committed to lead by example.



- (3) The Department has gazetted the **Energy Efficiency Tax Incentives Regulations** to provide a clear regulatory framework and to incentivize proven efforts and results within the energy efficiency sector.
- (4) **Energy Efficiency Target Monitoring System** which ensures that energy efficiency policies are supported by adequate end-use information, by substantially increasing the effort to collect energy data and information across all sectors. This monitoring system will enable the Department to compare energy savings with the sector targets in the energy efficiency strategy.

Of course the Private Sector Energy Efficiency initiative under whose umbrella we are convening over the next two days has created the foundation necessary to mainstream energy efficiency within the private sector. Significant progress has been achieved under this programme, and the momentum that has been created needs to be maintained. We are aware of the funding challenges that beset the programme and we need to continue exploring all the options to sustain it.

Programme Director, it is my strong conviction that going forward, we should not have to wait for the annual “Earth Hour” in order to reflect on our role in making a positive contribution towards climate change.

The International Energy Agency (IEA) has documented the impact of energy saving campaigns through case studies, collated under *Saving Electricity in a Hurry (2005)*, of countries that mitigated the negative impacts of electricity shortfalls by implementing emergency energy saving programmes. Based on this experience some quarters believe that a “weekly earth hour” could be one of our own emergency savings programmes, which could replace load shedding in the medium term. This would be a country initiative in the right direction. The programmes in *Saving electricity in a hurry* use a range of tools such as rationing, price signals and information campaigns that stimulated



energy

Department:
Energy
REPUBLIC OF SOUTH AFRICA

and enabled consumers to curb wasteful energy practices, delay electricity-consuming activities to non-peak times, and replace old technologies with more energy efficient ones. Countries achieved energy savings ranging from 0.5% (for France) to 20% (for Brazil). This is doable for us too, and our concerted efforts will certainly result in a dramatic improvement in curbing the effect of electricity shortfalls.

Programme Director, it is the responsibility of government, civil society, private sector and the public at large to change how we do things in the implementation of energy-saving programmes. To support the implementation of the energy savings programmes in Public Buildings, the Department of Public Works started implementing the Green Building Programme whilst the Department of Energy has concluded the Energy and Climate Change Strategy for Public Buildings Sector, by way of example.

Achieving this energy saving potential will require a change in behavior, and above all a change in policy direction, and the application of good practices at all levels of the energy value chain. The gazetting of the Energy Efficiency Tax Incentive Regulations in terms of Income Tax Amendment Act, 2013 will allow the private sector to claim tax rebates through the implementation of these energy savings measures. So far extensive work has been done in the development of Energy Management Plans.

In brief, we need to harmonize the instruments that we have at our disposal, including the technical codes and standards relating to processes and equipment. Substantial work relating to these instruments has been done and is still in progress.

As government we have started the process of transforming the appliance market to that of efficient technologies. This initiative is in collaboration with all stakeholders including the Departments of Energy, Trade and Industry, appliance manufacturers, importers and retailers.



For over 20 years South Africa did not make any significant investments in the energy sector. The overcapacity that was created in the 80s was sufficient to carry us into the early 2000s, until around 2006 when it became clear that the demand driven by the commodity boom was outpacing the available capacity and that there was an urgent need to increase supply capacity.

One of the key lessons from the 2008 power crisis was the need to coordinate the planning and alignment of the timing of new investments. In response, government put in place a planning framework for the energy sector, anchored on various plans including the Integrated Energy Plan, the National Energy Efficiency Strategy and Action Plan and the Integrated Resource Plan. Whilst energy policy development continues, the lack of timely investment in infrastructure has created serious challenges, particularly in the power sector, and is receiving the highest priority for urgent resolution. At a national level, partnerships have been established between government, labour, business and civil society to find solutions to our problems.

A 5 Point Plan was adopted by Cabinet as a blueprint for addressing the challenge, with initiatives targeting to increase the reliability of Eskom power plants, accelerating the completion of Medupi and Kusile, reducing demand through energy efficiency and demand response programmes, and increasing supply from non-Eskom sources. Of these interventions, energy efficiency presents the most cost effective option for delivering quick results.

The ability to provide adequate funding required for investments in energy efficiency has become a critical issue in light of the tight economic climate that we find ourselves in. We have to address this issue if we are aiming to keep the costs of providing energy low.

Over the past few months the problems of load shedding have underscored the importance of saving energy. We need to isolate the factors that inhibit efficient energy usage, and provide a framework of incentives, disincentives



energy

Department:
Energy
REPUBLIC OF SOUTH AFRICA

and possible interventions that could be implemented to reduce the energy intensity of the South African economy. This takes into consideration the existing reality that approximately 30% of all energy produced is lost due to wastage across various sectors.

To support the effectiveness of the national energy efficiency strategy, regulations have been published for compulsory Energy Management Plans to be developed and put in place by intensive energy end users whose consumption at a contiguous site is above a certain threshold. Such users are required by law to submit these energy management plans, so as to assist government in the planning and monitoring functions. Without the collaboration of the private sector in providing energy statistics our country will be unable to plan appropriately and the advancement of our energy security agenda will be compromised. Collaboration by all stakeholders is therefore essential in order to make the drive for energy efficiency successful.

In order to stimulate investment in more energy efficient technologies and the adaptation to more energy efficient processes an incentive scheme has been introduced in the form of section 12L of the Income Tax Act. These regulations provide incentives for the retrofitting of capital equipment that will improve energy efficiency in production processes.

Energy Efficiency in the Building Sector

Although the building sector contributes a relatively minor percentage to national energy usage, savings through low-cost and medium-cost technical interventions can exceed 25%. A target Final Energy Demand Reduction of 15% by 2015 has been set. Government is leading by example and has instituted a programme where government buildings are retrofitted to become more energy efficient.



energy

Department:
Energy
REPUBLIC OF SOUTH AFRICA

Increased Energy Efficiency in Industry

The industrial and mining sectors combined are the largest users of energy in South Africa and are highly energy intensive, a legacy of the past. A relatively high theoretical potential for energy saving exists in the magnitude of 25% of current consumption in comparison with international best practice, on a sector-by-sector basis. A Target Final Energy Demand Reduction of 15% by 2015 has been set for this sector.

Regulation and Enforcement of Energy Efficiency Strategy

Energy efficiency standards have been successfully applied overseas and have brought about significant improvements in efficiencies. South Africa has a well-developed system of standards and codes of practice that, in some cases, may be amended to include efficiency aspects without the need to establish completely new standards.

Awareness Raising and Exchange of Information

Information and generic awareness are key elements to achieve success in terms of changing South Africa into a more energy efficient society. Once laws and regulations are established, architects will need guidance from standards, codes of practice, etc. on how to design houses according to the new regulations, and plumbers should also have to be informed about the need to insulate geysers. Various media avenues are currently being used in order to raise the profile of energy efficiency in the minds of the key stakeholders and the public at large.

Solar Water Heaters

The South African Solar Water Heating market has a considerable potential to leverage electricity savings, increase employment opportunities, improve electricity demand management and reduce greenhouse gas emissions. The implementation of Solar Water Heaters programme is underway. The project



energy

Department:
Energy
REPUBLIC OF SOUTH AFRICA

will install high pressure, high local content Solar Water Heaters in the domestic sector. In parallel the project seeks to facilitate standardizing the Solar Water Heaters quality and testing regime, consolidating a widened distribution and maintenance infrastructure, offering attractive financing options and ensuring awareness and involvement on both the supply and the demand-side.

We recognize that there are barriers that hamper the achievement of our energy efficiency targets; you would be aware that one of the barriers is financing for energy efficiency technologies. We have developed a number of policy initiatives and financing options in order to catalyse the South African market.

Tariff Increase

Programme Director, there is a cost associated with all energy interventions. Unfortunately, the bulk of these costs will be borne by the consumers through tariff increases.

Conclusion

As the global economy grows so will the demand for energy grow. We will continue to call upon the private sector to collaborate in finding mutually beneficial solutions.

I am hopeful that for the next two days, concrete proposals can be made to the decision makers. Programme Director, I look forward to some feed-back that will assist us as governments in taking the challenges of the energy sector to new levels. Let me take this moment to also thank our partners for the continuous support and commitment to Energy Efficiency.

I wish you well in your deliberations.

Thank you