



Department of Energy

Progress on the implementation of the
National Energy Efficiency Strategy

24 August 2010



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Presentation outline

- Introduction
- Progress on implementation
 - Cumulative EE savings to date
 - General awareness campaign
 - Public building programme
 - Municipal programme
 - Policy process
 - Review of the EE strategy
 - EEDSM regulations
 - EE Standards
- Conclusion



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Introduction

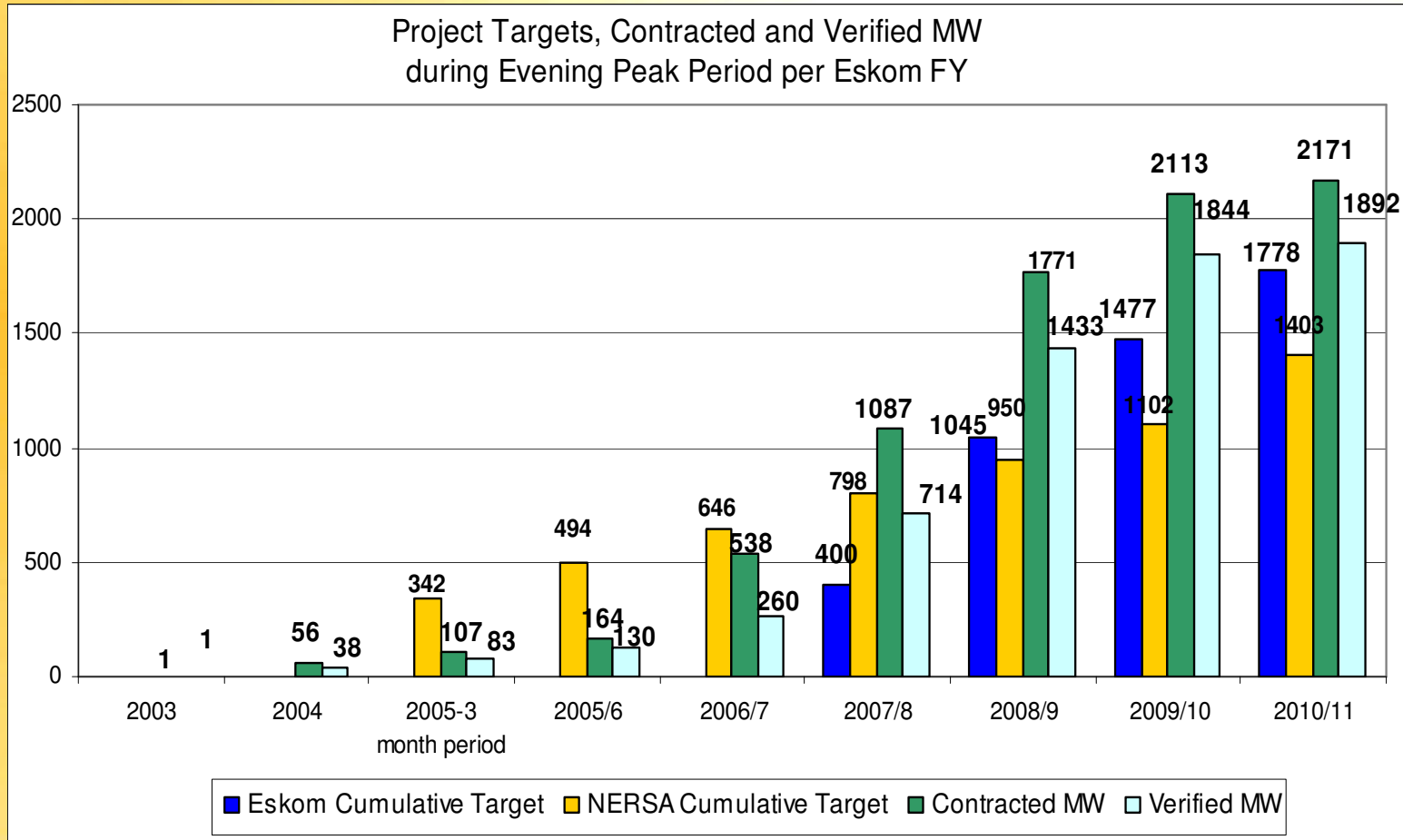
- Energy efficiency is the world's most preferred intervention designed to reduce carbon emissions coming out of the burning of fossil fuels.
- The DME published the Energy Efficiency Strategy approved in May of 2005, which sets a 12% energy savings target by 2015
- The targets are ambitious but achievable if all stakeholders were to work together in pursuing the implementation of the strategy
- The current and future electricity supply shortages further requires an intensified and consolidated implementation of energy efficiency and Demand side management programme.
- Following adoption of the Strategy a number of progressive companies voluntarily signed an Energy Efficiency Accord with the Minister of the DME pledging their commitment to the implementation of EE strategy.
- The signing of the accord was facilitated by National Business Initiative (NBI) and Dept of Energy.
- To convene the business of the Accord and its link with Government, an Energy Efficiency Technical Committee (EETC) was formed with NBI playing the management and secretariat roles.



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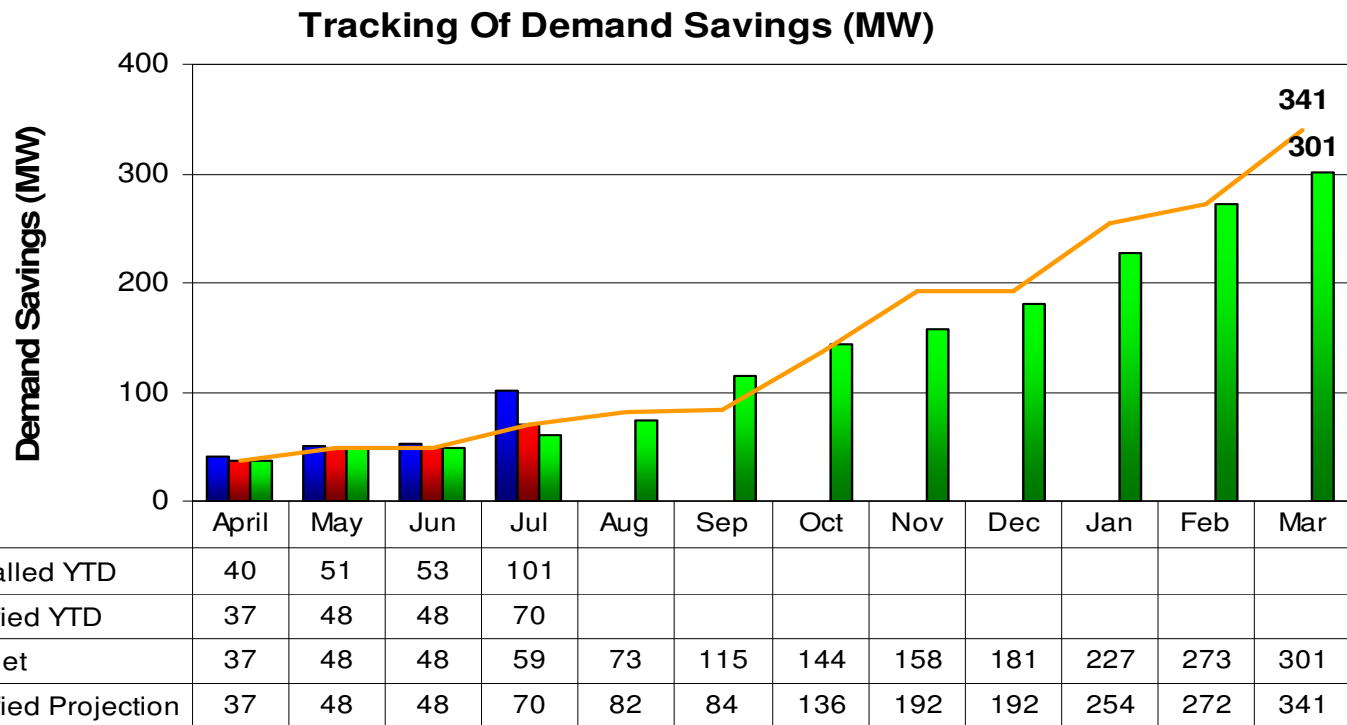
Cumulative Targets & Verified MW as at 30 June 2010



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Outline



As at end of July the verified savings achieved is 70MW.



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2010/09/08

Energy Efficiency Campaign Roadmap

2008/
2009

• R15m

2009/
2010

• R10m

2010/
2011

• R10m



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But... working together we can do more

Energy Efficiency Campaign Roadmap

2008/
2009

- Create national awareness (advertising – Nomkita ads)
- Start establishing a social movement on Savelt!
 - PR
 - Advertising
 - Activations
- Start the process of establishing key partnerships
- Identify key stakeholders
- Engage Energy Champions
- Start an Internal Programme
- Develop a Digital Programme (website & MXit Game)

2009/
2010

Advertising

- 6 x Internal newsletters
- Stings run on TV & radio
- 15 x billboards, 5 x building wraps

Public Relations

- Media relations: interviews & placements (ETV, SAFM, RSG, SABC TV & radio)
- Media partnerships with Weekender, Caxton, Primedia and Kaya FM yielded free airtime and print space.

Activations

- 19 x Corporate & 24 x school activations
- Lessons plan developed and used by some schools, Expo for Young Scientist Alignment;

Digital Programme

- Webpage live, Digital Game launched by Minister in July, 4 x online stories

2010/
2011

Achievements to date:

- Electronic newsletter (ENERGY MATTERS)
- E-TV series on Energy produced
- Supported the Presidential launch of Solar WH
- Issued energy saving tips on VUK Magazine – govt magazine (May & Aug issue)
- Next key activities:
- Roll-out stakeholders & media roundtables programme on EEC
- Roll-out e-TV series on Energy
- Roll-out national advertising
- Handover Energy Efficiency Campaign to the Dept of Energy

Achievements: Advertising

- ◆ The teaser & reveal went live on 23 March 2009 and 6 April 2009 respectively and was concluded at the end of June 2009.
- ◆ Creative was displayed nationally as follows:
 - Durban – 3 billboards, 1 building wrap
 - Gauteng – 6 billboards, 2 building wraps
 - Cape Town – 4 billboards, 1 building wrap
 - Port Elizabeth – 2 billboards, 1 building wrap
- ◆ Teaser stings on media for the direct markets ran from 23 March 2009 until 5 April 2009
- ◆ The reveal stings ran from 6 April 2009 to 27 April 2009



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Achievements: Advertising



*my addiction is draining my energy
energy addicts, join the road to recovery*

The National Energy Efficiency Campaign

save it!
www.savingenergy.co.za



*my addiction is costing me millions
energy addicts, join the road to recovery*

The National Energy Efficiency Campaign

save it!
www.savingenergy.co.za



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Activations, Energy Miners

OUR “ENERGY MINERS” PROVIDES
A PLATFORM, FROM WHICH
ENERGY

EFFICIENCY CONTENT CAN BE
TAILOURED PER AUDIENCE

- ◆ An ambush marketing “hit squad” with great theatre & guerilla marketing skills, armed with promotional stickers, screen savers and guerilla theatre sketches, who “ambush” corporations to raise awareness around energy efficiency
- ◆ Core idea behind “energy miners” is that the real gold that any economy is based on is energy
- ◆ While we pre-book visits with relevant people in the corporations, the style of activation is “ambush” marketing, fun, high visibility, generating maximum buzz



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School Activations

- A number of EE awareness campaign activations were done in 40 schools in the Gauteng Province.
- The team partnered with WESSA who works with Eskom aimed at educating learners about electricity consumption and savings. The approved 24 lessons plans content is now part of the school curriculum for learners.
- Some examples of the completed activations... pto



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The Energy Miners launched the School Activation Programme displaying enthusiasm and Energy Towards our Energy Efficiency Campaign



"to educate,"
(from



I want to be part of saving our planet!!

Our planet is so precious ...

How can we help??

Save It!!





Our children are responsive, eager and receptive towards Energy Conservation and Energy Efficiency. They have influencing power with their parents...



Visual posters & pamphlets have been printed to be utilised in schools to reinforce the awareness..



Save it! game has been developed and was launched by Ministry of Energy in Aug 2009.



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Micro Site

www.savingenergy.co.za

- ◆ **We have developed a website that aims to become the central information portal for energy efficiency information. The new site includes:**
 - Explanation on why we should save energy and how
 - Outlining the road to recovery with energy saving tips and a 'green' glossary
 - Information on the energy role players and a host of information on energy
 - An online pledge page where website visitors are encouraged to commit themselves to the road to recovery
 - A press link with published editorials in the media
 - An energy quiz whereby visitors can access their own energy consumption
 - And more...



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The Impact



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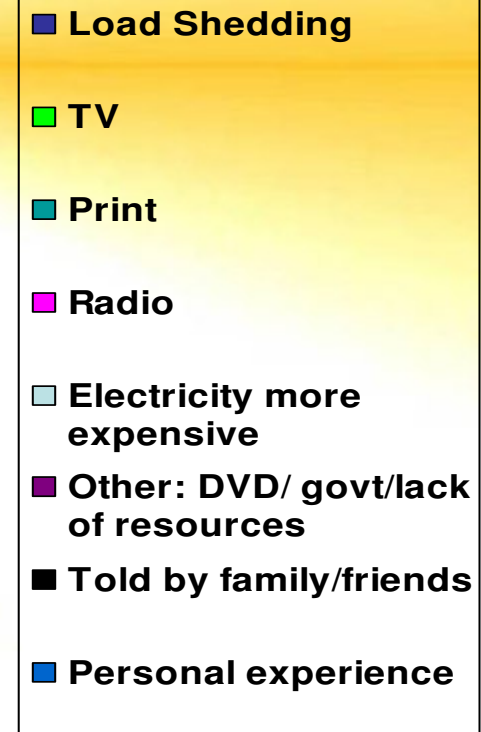
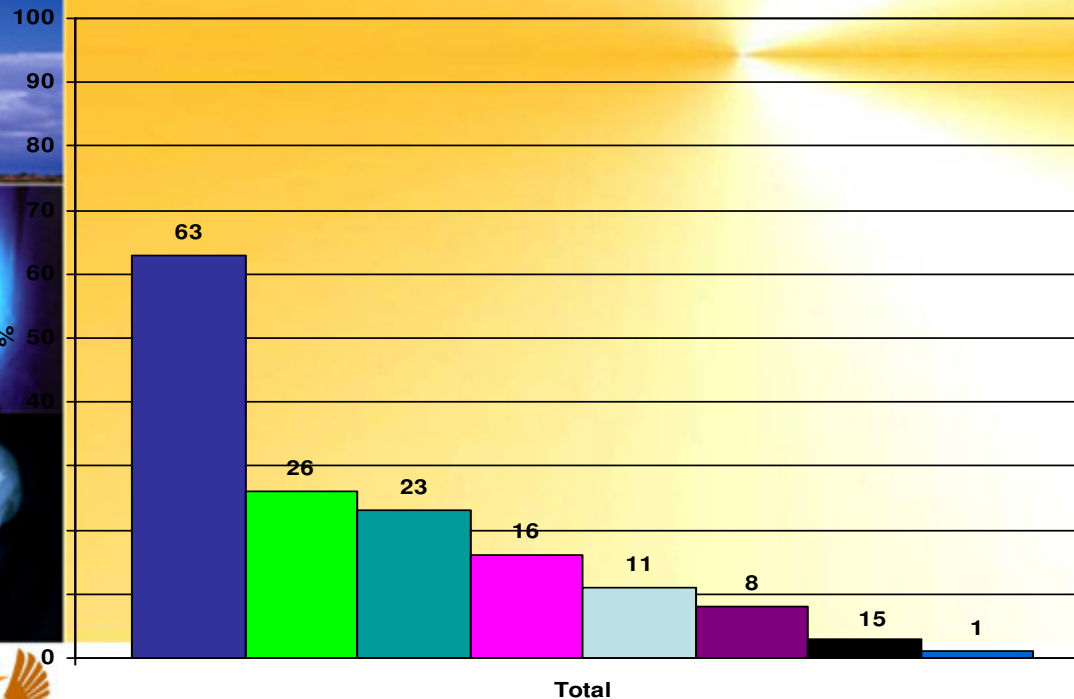
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Topline Energy Efficiency Baseline Study

HOW DID YOU BECOME AWARE OF THE ENERGY CRISIS

Base: All respondents answered yes SA is facing energy crisis: 140

Multiple Mentions Possible



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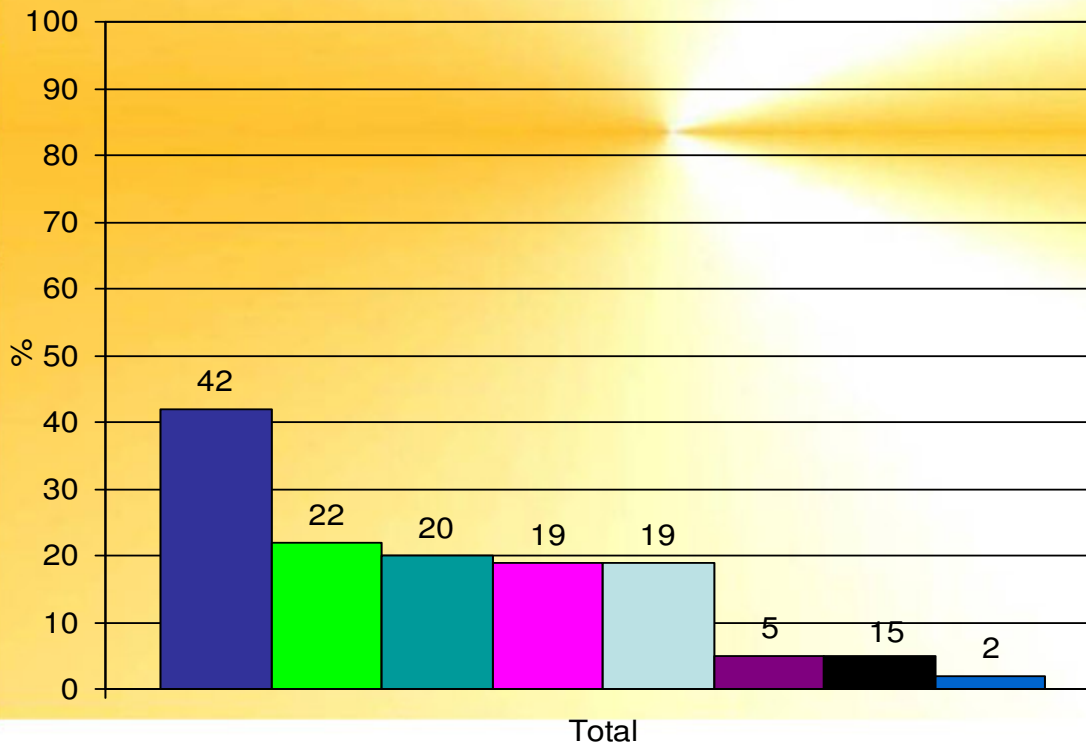
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Topline Energy Efficiency Baseline Study

AWARENESS OF CURRENT EFFORTS MADE TO DEAL WITH ENERGY CRISIS

Base: All respondents

Multiple Mentions Possible



- Constant reminders to save electricity
- *Handing out of energy saving bulbs
- Buliding of new power stations
- Educating consumers
- Don't know
- Solar powered traffic lights/panels
- Other: Increase in tariffs/switching off /earth hour/wind power
- Obtaining electricity from other countries

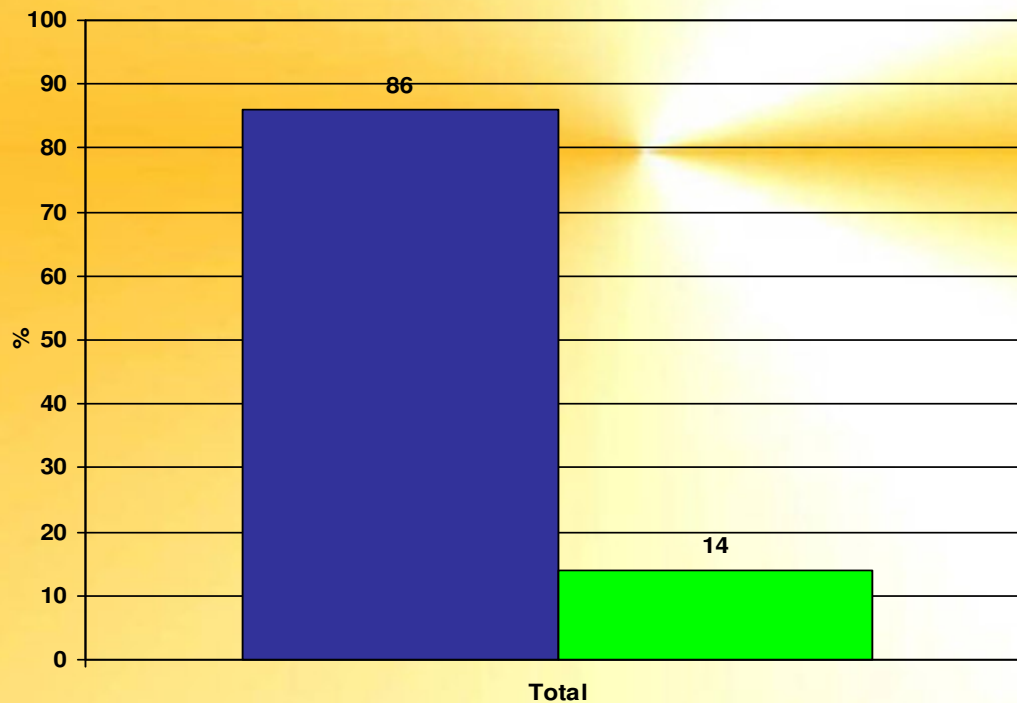


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Topline Energy Efficiency Baseline Study

HAVE MESSAGES/ADVERTISING ON THE ENERGY CRISIS INFLUENCED CONSUMPTION BEHAVIOUR?

Base: All respondents



■ Yes ■ No



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CFL disposal awareness campaign

- CFL's contain small amount of mercury which is hazardous if accumulated in large amounts in ground water. Failed CFL's should therefore not be discarded in the general household waste stream.
- All Eskom mass rollout programme include a safe disposal component as part of the programme mechanism and the mercury content is restricted to a maximum of 5mg per lamp (RoHs compliant lamps)
- Although the legislative framework remains outstanding, **DEA** requested the lighting industry to develop an **industry waste management plan** based on section 28 of waste Act.
- Retailer lamp collection bins, for safe disposal, are provided to the public at **Woollworths, Pick 'n Pay and Makro** stores nation wide
- Failed lamps can also be delivered to existing **electronic waste (eWaste)** disposal sites
- Some Municipalities provide an **annual or periodic hazardous waste collection day** or event. Typically, CFLs along with any other household hazardous waste such as batteries, oil-based paint or motor oil can be taken to these collection days



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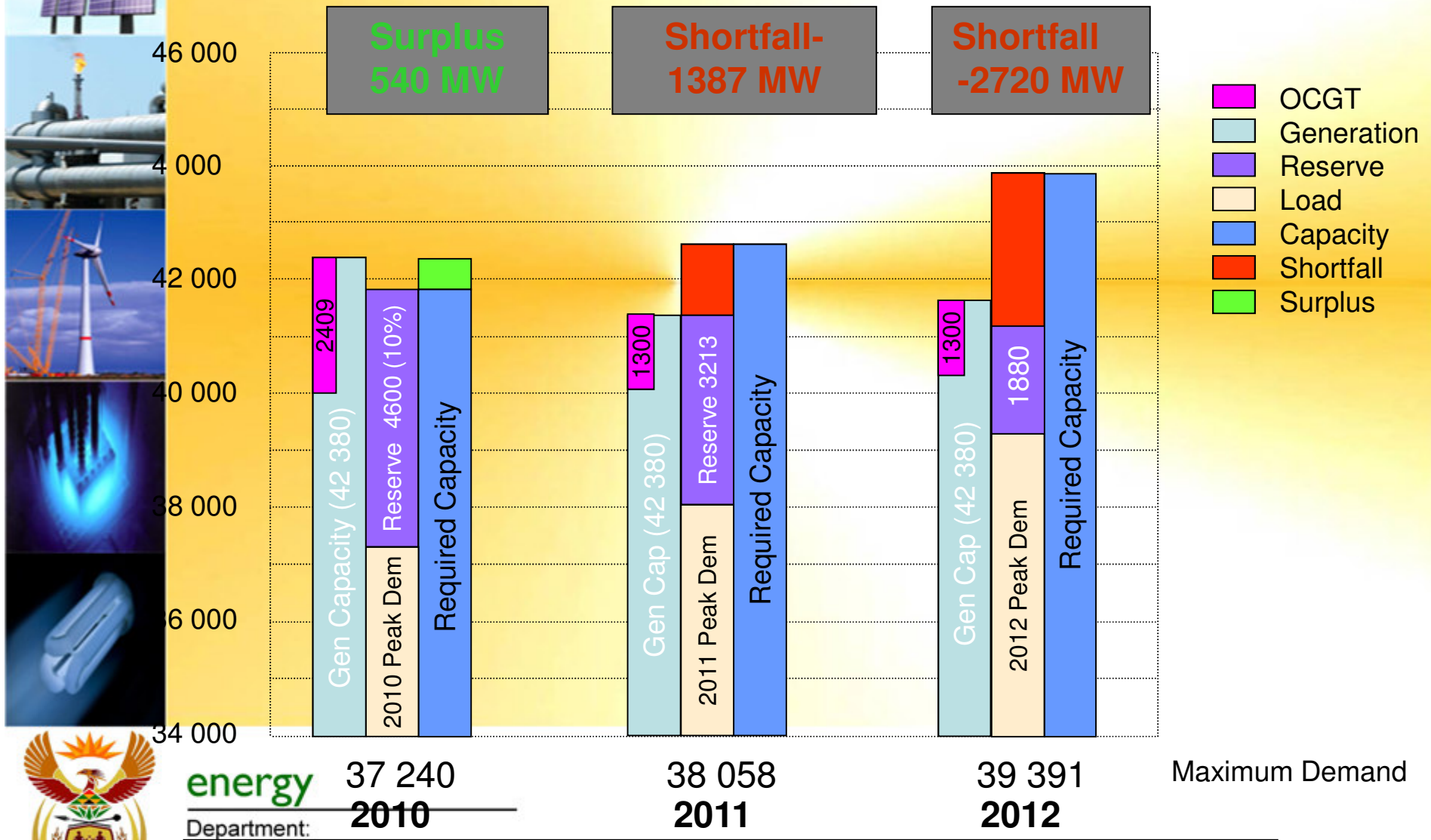
So do we still need communications?



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Peak load forecast and shortfall 2010 - 2012



There is a shortfall in meeting peak demand requirements in 2011 and 2012



Task at hand

Supply Side

Profile what government is doing to ensure that energy policy, infrastructure, processes and systems are in place to deliver continuous energy to all South Africa

Conscious of Environmental impact

Cost implications –

Engage stakeholders

Towards these ambitions.



Demand Side

A comprehensive and strong campaign to engage stakeholders (including the public) to promote saving power and a behaviour change towards responsible use of energy to avoid resource shortage and ensure sustainable energy supply



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Preparations for 2011/12

- GCIS met with Treasury team on IMC on Energy on funding options
- Workshop held with Municipalities, SANERI, DoE, DSM workgroup members, Eskom and tertiary institutions
- Agreement reached on the need for ONE co-ordinated and integrated campaign for the country with clear definitions of roles and responsibilities.
- Agreed on the proposed institutional arrangements



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EE in public works Buildings.....1

- The Department implemented shared energy contracts (i.e. power factor correction and rippling control) from 1997 in 4 DPW Regions with shared ratio as follows (i.e. Pretoria 50:50, Cape Town 60:40, Johannesburg 60:40, Bloemfontein 60:40).
- The Pretoria Regional Office second round of the energy audit and retrofit started in 2003 and showed a savings of R8.3million from 2003/04 to 2007/08.
- Johannesburg Regional Office started energy audits from 1999 on 19 sites comprising of 600 buildings with subsequent energy saving of R 12, 858,423.00 and 10,180,834.59 KW/h from 1999/2000 to 2008/09.
- Bloemfontein Regional Office started energy audits from 1999 on 14 sites comprising of 375 buildings with the subsequent energy savings of R 16,178,228 and KW/h 40,239,750 from 2003/04 to 2008/09.



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EE in public works Buildings....2

- DPW Formed Energy task team to ensure a coordinated EE programme in state-owned buildings and leased buildings used by national departments
- The Department further formulated Energy Code of Conduct on 14th February 2008 for all buildings under the custodianship of National Department of Public Works (NDPW) for implementation by National Government Departments using state owned and leased buildings for occupants to contribute to conservation of energy.
- An amount of R20m was allocated by National Treasury (NT) to DPW for EE implementation in 2008/9. The allocation was used for lighting retrofits of 53,026 luminaries (T5) in 21 sites comprising of 1,981 buildings in the Pretoria area which saved 3,177.66KW/h and 13.88 GW/h of electricity. Project was implemented by Pretoria Regional office and was completed in March 2009 with total expenditure of R22, 621,494.99 (VAT inclusive) and annual saving of R4.9m.



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EE in public works Buildings....3

- An allocation of R35m for 2009/10 was used to retrofit 17 sites comprising of 1206 Buildings with 43,856 luminaries including Union Building in Pretoria, with total power saving of 3,020.25KW, annual saving of 1,747Gw/h and annual savings of R6, 292,161.64.
- Prepared tender documentation for appointment of shared energy contractors and the roll out of shared energy contracts to 8 Regions for 2010/11 financial year with budget allocation of R75m.
- The tender was advertised on 30th April 2010 and closed 2nd June 2010. Adjudication to select service providers was done in June 2010. Appointed EE service providers to audit energy/electricity consumption for Prestige properties from July 2010.
- The audit of the rest of buildings will take place in August to October 2010. Implementation of EE on Prestige properties from August to October 2010. Implementation of EE on the rest of buildings from November 2010 to November 2020 (10 year contract). The DOE and DPW have signed the MOU to cooperate on Monitoring & Evaluation of the EE implementation from July 2010 to November 2020.



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Schedule 6,7 EEDSM allocations

- This programme involves about 19 Municipalities over a three years programme.
- An amount of R220m has been allocated for 2009/10
- R175m was allocated to 19 municipalities for the implementation of efficient lighting technologies.
- About 153608 street, building and traffic lights have been replaced to date.
- The remaining R75m was allocated to Eskom to implement the SWH programme
- EEDSM Fiscal allocation of R328m and R398m for 2010/11 and 2011/12 respectively is being made available.



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Initiatives to support the implementation of EE strategy

- The Review of the EE strategy to take in to account the current developments within the energy sector
- The Energy Efficiency Accord with industry through NBI is being revised. A draft document is being consulted upon with industry representatives. However, this may not be necessary once the EE legislations are enforced
- Also a technical committee comprising DOE and large companies representatives has proven a fruitful forum for debate on technical issues.
- In addition to this, a Standard Advisory Body on Energy has been formed at the SABS to advise on standard issues particularly on EE and renewable energy.
- A number of EE standards on various technologies are under development - electric motors, household appliances (stoves, washers, fridges, TVs and other audio-visual appliances, etc) buildings, energy management and M&V.
- The **dti** has gazetted the amended National Building Regulation for public comments. These amendments are aimed at enforcing the EE standard (SANS 204) within the building sector.



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Other initiatives supporting the implementation

- The appliance labelling programme funded by Global Environment Facility (GEF) aimed at market transformation of the domestic appliances has just commenced. This project would intensify governments effort to remove or discourage the sales of inefficient appliances from entering the country.
- An amount of R70m is allocated through UNIDO for the Industrial Energy Efficiency Project designed to train and create capacity in industry on energy management practices. This programme is a collaboration between DTI and DOE. Industry faces a challenge in meeting the energy savings target because the sector is energy intensive; hence new technology alone may be insufficient to reduce energy consumption.
- Incentives regulations for energy efficiency such as the tax incentive and the EEDSM Standard Offer policy are thus appropriate.
- Other clean energy initiatives include the roll out of solar water heaters, green building rating system for commercial and public buildings.



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Conclusion

- Implementing EE Strategy requires an infrastructure (incentives, legislation, all departments and stakeholders, a monitoring system etc) to be successful in the short-term. Our coal economy, low electricity prices and energy-intensive economy have worked against quick-win solutions.
- The introduction of carbon tax in the transport sector will help in transforming the sector. However, our vehicle technology largely follows international standards and the implementation of a carbon tax will require careful implementation and stakeholder consultation.
- Monitoring progress has been the biggest challenge in measuring the progress of the Strategy's implementation efforts since 2005. This requires a monitoring system and access to data for all sectors.
- The Minister has signed an agreement with the Swiss Development Cooperation to fund the development of a EE monitoring system within the DOE. A parallel project will be undertaken to capacitate municipalities to monitor electricity sales data on a regular basis.
- A continued financial support for municipalities; awareness campaign, and other governments led EEDSM is essential.
- Draft EE regulations aimed at mandating efficient practices and the supply of energy consumption data by consumers is being prepared for gazetting.



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THE END



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