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South African National Energy
Development Institute (SOCI) Ltd.



Harnessing Digital Technology For Energy Efficiency

By

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SANEDI AND IT'S MANDATE



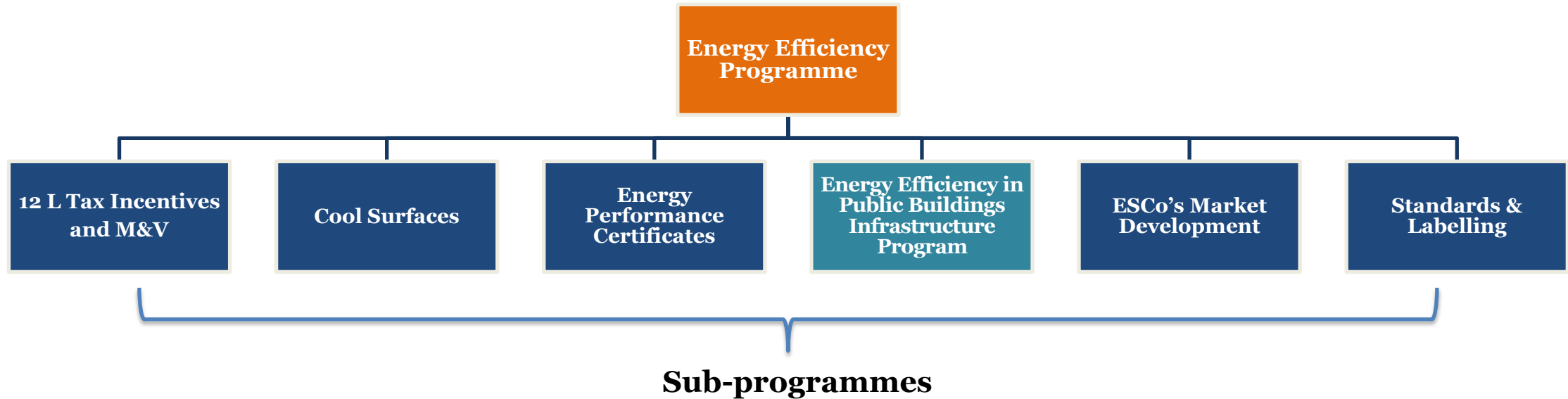
The National Energy Act, 2008 (Act No. 34 of 2008), Section 7 (2) gave effect to SANEDI's existence and provides for its primary mandate and specific responsibilities.

The South African National Energy Development Institute (SANEDI) is an agency of the Department of Mineral Resources and Energy



-  Undertake measures to promote energy efficiency throughout the economy
 -  To promote energy research and technology innovation
 -  To direct, monitor and conduct energy research and development
- A Schedule 3A Entity**

PROGRAMME INTRODUCTION



Undertaken EE Measures throughout the economy, increase the GDP per unit of energy consumed and optimise the utilisation of our energy resources

Regulations
Standards
Energy Data
SMME Development
Collaborations & Partnerships
Active Public Participation

THE BALANCING ACT

Digitalisation – Increasing interaction and convergence between the digital (electronic technologies) and physical world (business & people)

Three fundamentals



Data digital information



Analytics for information and insights

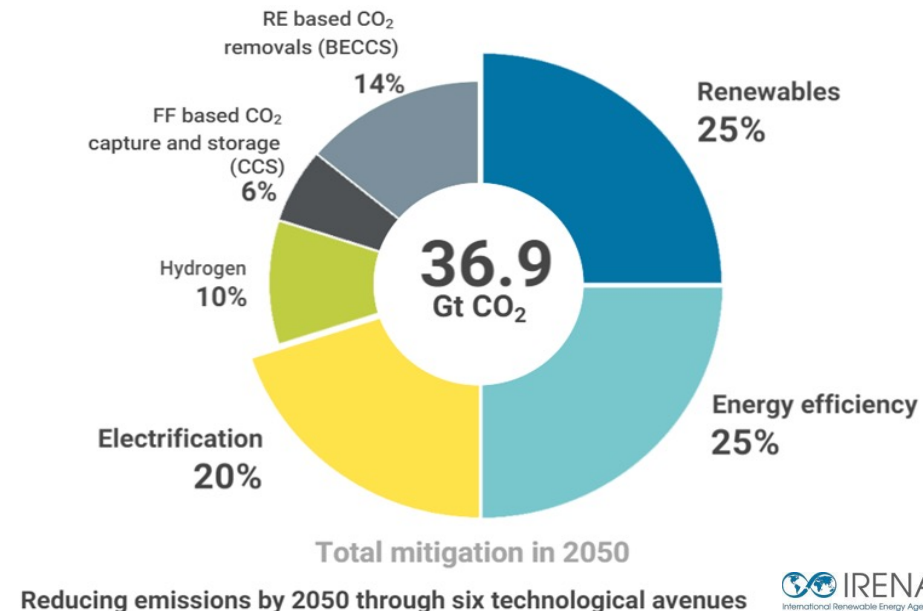


Connectivity exchange data through digital comms network

Our Planet → Society → Economy = **Energy Ability to do work**

Our energy systems must transition to cleaner and more sustainable sources of energy

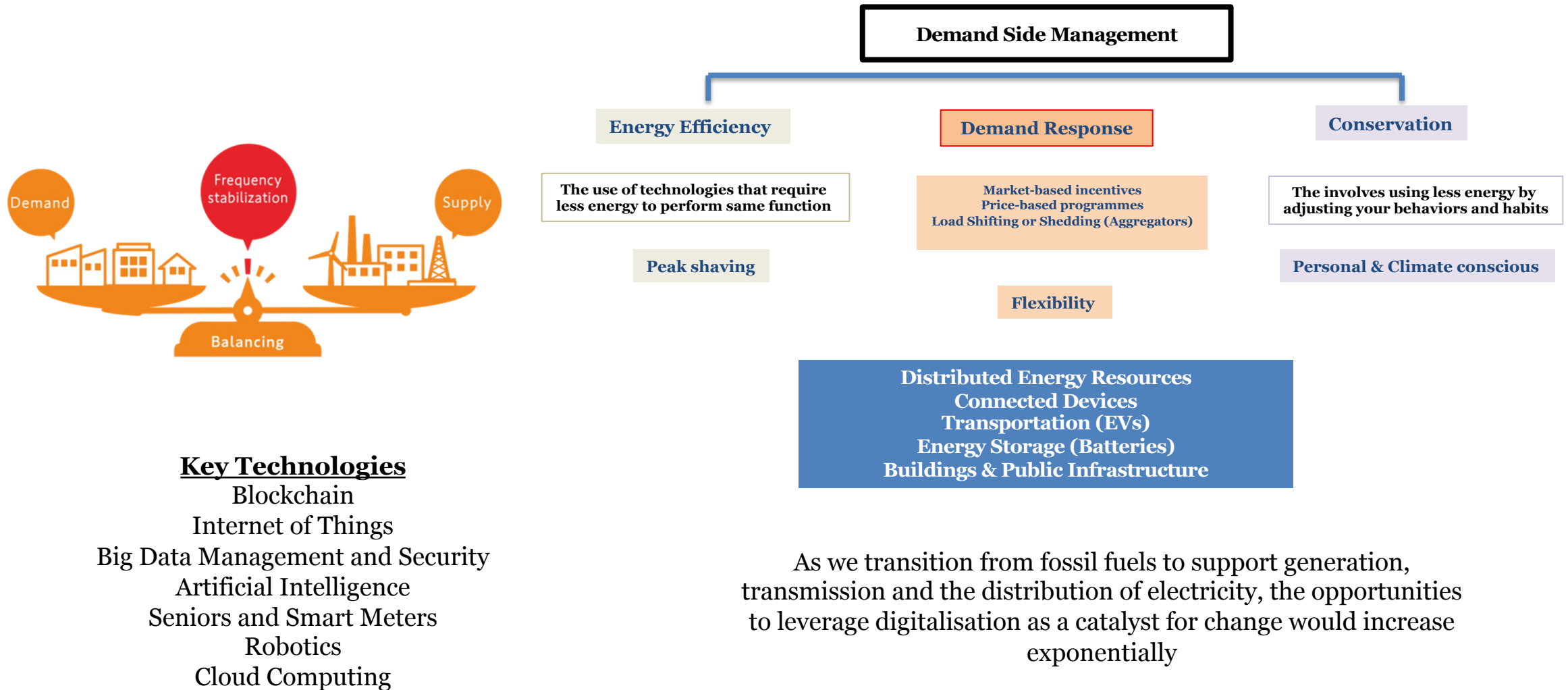
Drivers of Change



Digitalisation of our Energy Systems

Connected
Intelligent
Efficient
Reliable
Sustainable

THE GREATEST TRANSFORMATION POTENTIAL – ELECTRICITY SECTOR



KEY TAKEAWAYS FOR LIKEMINDS....

- **We need to build the right expertise and skills for the future** of our continent and energy systems. Adequate educational policies and technical training to ensure we have a constant pool of relevant competencies with both private and public institutions.
- **Access to data for energy statistics is crucial**, sharing and protecting data within your domain between all parties across the value chain.
- **We must focus on overall system benefits**, thinking beyond the component or individual level, but rather in terms of security sustainability and affordability of the system as a whole.
- **Develop flexible policies** that account for the lifespan of both energy infrastructure and ICT hardware, software and applications.
- We must **provide a level playing field for all** technologies, systems, applications, brands, etc., be technology-neutral, platform-neutral, race-neutral and always think of the bigger picture.
- We must **learn, experiment, participate, partner and collaborate** on all fronts, Africa cannot remain a **continent of consumers**, we must start manufacturing and innovating digital technologies for the rest of the world.



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**THANK
YOU**



CONTACTS

THE SOUTH AFRICAN NATIONAL ENERGY DEVELOPMENT INSTITUTE

SANEDI Website

www.sanedi.org.za

SANEDI Smart Grids Page

<https://sanedi.org.za/smart-grids/index.htm>