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South African National Energy Research Institute  
Pty (Ltd)

# Energy Efficiency Metrics and National Energy Efficiency Assessment in Developing Countries



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*South Africa*



# Current Initiatives



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- **National Business Initiative (NBI) ‘EE Accord’, (B-up Appr).**
- **National DSM-programs:-**
  - Standard Offer;
  - Monitoring and Verification **Standard**;
  - **ISO 50001**, (*International Energy Management Standard*).
- **Long-term Mitigation Scenario (LTMS), Study.**
- **Clean Development Mechanism, (DOE).**
- **SWH Repository.**



# ISO 50001



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## The standard is expected to address issue like:

- 🔥 measuring, reporting, benchmarking energy use improvements.
- 🔥 assess energy improvement projects impact on GHG emissions.
- 🔥 create transparency in the management of energy resources.
- 🔥 evaluate the improvements in implementation of energy efficient technologies.
- 🔥 validate continuous improvement in energy management.
- 🔥 promoting a framework for efficient use of energy in the organization.
- 🔥 helping in procurement practices for energy using equipment and systems.”

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# Problem/ Risk Areas



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- **Confidentiality, eg. Cement Industry.**
- **Current IRP and IEP Processes based purely on MW.**
- **Developing Countries = Developmental Objectives.**
  
- **No clear EE-definitions:-**
  - **Benchmarking?**
  - **Performance Tracking?**
  - **Energy/Capita vs Energy/GDP?**

**NOTHING is standard!**



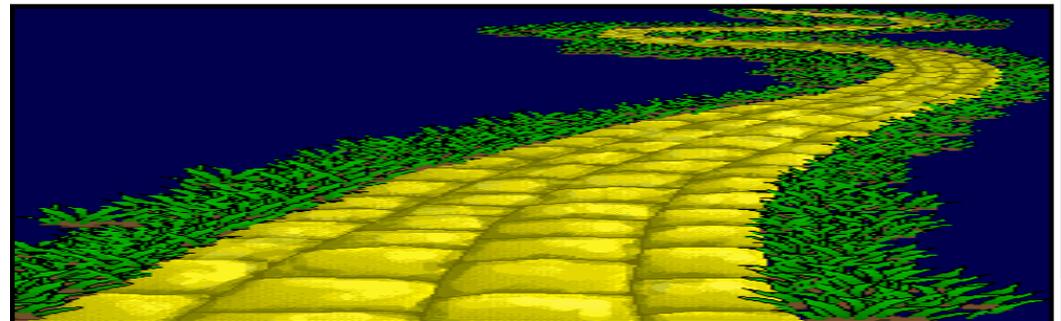
# Opportunities



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- 🔥 Tax Rebates and National *M & V* Standard.
- 🔥 ISO 50001 adoption.
- 🔥 Centre for Energy, (CESAR).
- 🔥 Strong network of 'Industry Associations'.
- 🔥 'EE' Credit Facility with Commercial Banks.
- 🔥 National programs, eg. ***DSM Standard Offer.***

**Roadmap Needed!**



# Needs?



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- 🔥 Skilled Resources;
- 🔥 Clear Definitions;
- 🔥 **Integration** with ‘other’ initiatives;
- 🔥 Communicate/ lobby with ‘influencers’.



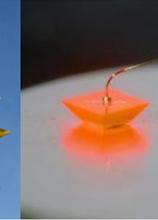
# Conclusion



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- 🔥 **'NOW'** is the time to impact the process.
- 🔥 ***KISS-principle*** should apply, (34-26-34)!





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# Thank You!



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