



M&V FOR ENERGY/ ELECTRICITY SECURITY!

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MEASUREMENT & VERIFICATION COUNCIL AFRICA
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What is M&V and how does it contribute to improved energy/electricity security?

Questions:

1. Why do you think Eskom implemented the Energy Efficiency and Demand Side Management (EEDSM) Programme in 2004?

and,

2. The current Distribution Demand Management Programme (DDMP)?

and,

3. Why implement Effective/Credible M&V with these programmes?

What is M&V?

Measurement and Verification (M&V) is a process used to assess and determine the impacts and the performance of implemented energy conservation and energy management measures.

The primary focus of M&V is on energy and (often) cost savings reporting. It, however, **indirectly contributes to energy security** by reducing energy consumption and dependence on scarce external energy sources.

How does M&V relate to energy security:

1. Energy Efficiency

M&V helps identify areas where energy is being used inefficiently. By implementing energy-efficient technologies and practices, organisations can reduce their overall energy consumption, making them less vulnerable to energy supply disruptions.

How does M&V relate to energy security:

2. Reduced Reliance on External Sources

Energy security often involves reducing reliance on external energy sources that may be subject to geopolitical tensions or supply disruptions. **By optimising energy use and reducing waste by considering M&V reporting results, organisations can decrease their need for external energy sources.**

How does M&V relate to energy security:

3. Resilience

M&V often uncover vulnerabilities in energy systems. By addressing these vulnerabilities and ensuring that energy-efficient systems are in place, organisations can enhance their resilience in the face of energy supply disruptions.

How does M&V relate to energy security:

4. Energy Cost Stability

Additional energy efficiency measures, identified through M&V, can lead to **additional cost savings**. Stable and predictable energy costs are an essential aspect of energy security, as unpredictable price fluctuations can strain budgets and operations.

Cost savings lead to profits, which may be reinvested in improved energy management measures or more efficient and secure energy sources.

How does M&V relate to energy security:

5. Energy Diversification

M&V can highlight opportunities to diversify energy sources, such as incorporating renewable energy or backup power systems. Diversification can enhance energy security by providing for alternative energy sources during supply disruptions.

How does M&V relate to energy security:

6. Regulatory Compliance

Some regulations or policies related to energy security require organisations to implement energy-efficient measures and track energy consumption. **M&V helps ensure compliance with the regulations, e.g. Eskom's Curtailment requirements.**

How does M&V relate to energy security:

7. Environmental Benefits

Many energy-efficiency measures, assessed by M&V, also have environmental benefits, such as reduced greenhouse gas emissions. A cleaner environment contributes to overall societal well-being, stability and sustainability of the business as well as the energy sources in use.



Key takeaways

While M&V primarily focuses on energy and cost savings. Its broader impact on energy security is significant. By identifying and implementing energy-management measures, M&V can enhance organisation's resilience, reduce dependence on external energy sources, and contribute to a more secure and sustainable energy future.

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Thank you

