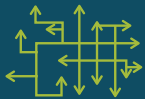


Background



Improving the energy efficiency of municipal infrastructure and buildings offers both budgetary savings on electricity bills and a wide range of environmental and socio-economic benefits. **Energy cost savings can also make funding available for other much needed municipal functions.**



Municipal Energy Management Systems (MEMS) provide a systematic approach to understanding and managing energy use. The MEMS philosophy considers energy systems holistically for improvement opportunities.



This allows it to introduce a structured process of energy management, which is embedded throughout the municipality. It thus **enables integration within policy, budgets, organisational structures, training, awareness campaigns, communication plans and energy management action plans.**



This systemic integration facilitates engagement across departments and levels of authority and this approach clearly identifies aspects of energy management that can be enhanced, even in municipalities that have explored energy efficiency opportunities before.

Field of Intervention:

Municipal Energy Management Systems

Energy Management Systems empower municipalities to reduce costs and keep the lights on in buildings and streets.



Challenges



Energy security concerns and rising electricity prices are among the many challenges threatening the financial sustainability of municipalities in South Africa.

Municipalities were struggling with managing their own electricity usage, saving energy and reducing costs.

Above this, there was no differentiation between metros and municipalities, making it challenging to differentiate between substantial differences in capacity, resources and the management thereof. **Over and above the skills required to efficiently manage the above. Municipalities have a critical role to play in addressing energy security concerns, a good starting point would be improved energy management within their operations.**

Activities



A Municipal Energy Management Support Toolkit that was developed to provide practical support in establishing the groundwork to embed energy management within a municipality. It guides the integration of MEMS across seven components, from the development of an energy policy through finance and budgeting, creating supportive organisational structures, skills development and project implementation, to name a few.



Six municipalities in five provinces established a framework for energy management within the municipal structures, (i) **introducing an energy management policy**, (ii) **launching an energy management committee** and (iii) **creating Municipal Energy Management Action Plans (MEMAPS)**.



Five additional municipalities joined the MEMS programme in 2023. The new municipalities have embarked on the MEMS journey focusing largely on the consolidation of consumption data, establishment of organizational structures and the development of MEMAPS.

Results

The MEMS initiative has demonstrated significant energy and cost savings:

+R3.5m

ANNUALLY
from administrative measures alone.



It has also driven the shift away from project-based energy efficiency interventions to a more programmatic energy management approach.



The implementation process has also helped identify the next tier of challenges for improved energy management. Many of these relate to metering, billing and asset management.



We hosted exchange workshops with participating municipalities. This facilitated networking; sharing of experiences, lessons and resources for policy development, energy monitoring and navigating various challenges.

Thereby helping to catalyse collaboration and exchanges among the municipalities, leading to more ambitious progress than originally foreseen and has also already resulted in tangible energy and cost savings.

A community of practice has been created among participating and interested municipalities. Lessons drawn from the implementation of MEMS in the 11 municipalities are disseminated to a broader group of municipalities through capacity building workshops, the MEMS resource portal and a direct messaging tool.



The resource portal and the SAGEN website host the MEMS support toolkit which comprises of guidelines, templates and tools on the components of MEMS.

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