

Synthesis Report

Regulatory Framework to Promote Energy Efficiency in Municipalities

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Executive Summary

This is the final part of a project commissioned by the South African Cities Network (SACN) to determine appropriate regulatory framework to promote energy efficiency (EE) in municipalities. This synthesis report summarises key issues emerging from the project. To obtain greater detail emerging from this summary, it must be read alongside other components of the project, which are two case studies of Cape Town and Tshwane, a regulatory and literature review as well as gaps and opportunities analysis.

The project has set a clear legislative agenda around energy efficiency. On the primary question of whether by-laws are necessary to implement energy efficiency, the study established that this is not necessarily the case. Instead, municipalities need to identify their individual needs over and above the provisions of the National Building Regulations for Energy Efficiency SANS 10400-XA (Part-XA), both in terms of content, as well as mechanisms for implementation. Municipalities must also take leadership roles in applying the provisions of the by-laws should they find it necessary to enact it. This should apply to both their own new as well as old infrastructure, the latter which can be progressively retrofitted.

Other important items in the legislative agenda include better intergovernmental coordination, training and support to implement the various laws developed, the use of forums for awareness raising, peer learning and data collection. There is also an important need to revisit the fiscal question of implementing energy efficiency measures at an intergovernmental level.

1. Background

The objectives of the Regulatory Framework to Promote Energy Efficiency in Municipalities project were to investigate and recommend possible legal frameworks to promote EE in the built environment at local government level. The scope of the work included a review of the EE regulatory framework, a case study analysis (expanded to two) and a gap analysis (expanded to a gaps and opportunities analysis) of the EE regulatory framework at city level.

The methodology used was a desktop overview of literature and laws dealing with EE at all spheres of government. It was then followed by two case studies where extensive interviews and analysis of the regulatory issues in the City of Cape Town and City of Tshwane were done. A final extraction of key issues was done in the opportunities and gap analysis. This synthesis report is a broad summary of the project findings. It is advisable to read the other reports, particularly the Gaps and Opportunities Report, to obtain important detail on the conclusion of the project.

2. Important contextual issues

A number of important contextual observations were made in the project, regarding the EE regulatory framework. Firstly, absence of an explicit (rather than implied) municipal energy efficiency regulatory mandate is partly responsible for hindering municipal regulatory making processes. While not all municipalities can handle additional mandates given their capacity constraints, there is a case for many of the larger cities to be provided greater legislative and fiscal authority under EE. Secondly, concrete research work, such as a Regulatory Impact Analysis or full Cost Benefit Analysis needs to be done to determine with finality, whether EE measures actually cause losses in electricity sales revenues and if that is the case, then there is need to establish mitigating factors, especially in the long term. Related to this, more work needs to be done on how to decouple electricity sales from revenue.

Finally, it is felt by many in the cities that the role of local government in assisting with the achievement of energy efficiency targets as detailed in the National Energy Efficiency Strategy and Action Plan (NEES), has been largely neglected. This should be a lobbying point for cities.

3. Regulatory and Literature Review

The regulatory and literature review was an initial desktop analysis of laws, regulations and by-laws dealing with EE, as well as reports and legal opinions. The most important findings of this review were that there are already numerous instruments with legal clout that can be used to ensure EE measures are complied with. Secondly, often the challenges are not the lack of regulations but rather the enactment of these regulations. The inherent conservativeness around regulatory interpretation is a problem. Political support and championing at a municipal level for EE is required and is happening in many instances (for example in

Tshwane, a Unit called City Sustainability that facilitates Green Economy issues in the Mayor's office has been created).

There are many non-regulatory issues as well. A crucial aspect of EE relates to infrastructure built and owned by municipalities. Inadequate maintenance of infrastructure at municipal level has resulted in major maintenance backlogs, which is related to less energy efficiency. Also, the spread of regulatory mandates across spheres of government means that good intergovernmental relations are key. A complex issue, but intricately tied to EE is transforming urban forms in the country. Spatial questions on energy efficiency are not emphasised in literature and these need to be explored extensively. Finally, regulation has to be accompanied by education as many EE driven legislative frameworks are highly technical and require specialised capacity to implement them, which is not always available.

4. City of Tshwane Case Study

The City of Tshwane Case Study was directed at determining the necessity of laws such as the Green Building Development By-Law, a first among large cities in the country. The study concluded that it is not absolutely necessary for such by-laws to entrench EE policy. By-laws exist to ensure that certain kinds of behaviour and acts are encouraged or discouraged through sanctions. This should not be implementable through already existing legal and administrative mechanisms. Many of the matters this by-law was initiated to deal with, are in fact handled fairly substantively in Part XA. This caused the City of Cape Town to shelve its own planned Solar Water Heater By-Law. It is thus arguable, that current laws as well as the numerous existing decision making mechanisms can be usefully used to implement policies without the necessity of creating a new by-law. Because the enforcement mechanisms in the City of Tshwane by-law will not be used in the short term, and instead, the incentives within the policy are considered more important, the necessity of the by-law can be further questioned.

The study also found that in some instances, it is not the law itself but the process that hinders the promotion of EE in cities. The main value of the by-law is the opportunity it created for reflection, capacity building and internal consensus formulation around EE. It also gave prominence to EE issues, which at the time of this by-law's formulation did not have much traction within city policies. As a result of this, departmental officials also have a sense of comfort in having the 'law behind them', an intangible benefit to the by-law. An exception is the City Planning department, which was opposed to many provisions. This hints at insufficient internal consultation, critical for the creation of any by-law.

The case study also showed that there are simple and cost effective measures, such as appropriate orientation, that can be applied for public subsidised housing in order to make a big difference in energy efficiency. Complex measures and regulations are not always necessary.

Finally, the case study concluded that enacting by-laws require that two important principles are adhered to:

1. There must be a legal mandate to create the by-law. Currently, while there is a mandate for EE legislative measures to be implemented at city level, the terrain is often ambiguous.

2. Any by-law must promote the principles of developmental local government as enshrined in the Constitution.

5. City of Cape Town Case Study

A number of important lessons emerged from the City of Cape Town Case Study. City officials are often hesitant to support regulatory directives that reduce commercial and residential electricity consumption because of the perceived negative impacts on city revenue. There is also an institutional culture of caution and resistance against innovation, which means it is not always about restrictive regulations, but also the environment within which these regulations are implemented. Further, implementation of regulatory directives is often placed on 'operational departments'. These departments may experience significant capacity constraints and are hesitant to 'take on' additional projects. The political imperative of service delivery also makes departments wary of the considerable time demands EE projects pose on them since they are not seen to be directly linked to this need.

Further, there are also specific regulatory problems. City officials do in fact confront a wide range of regulatory barriers in the implementation of energy efficiency, renewable energy and demand-side management projects. Regulatory instruments related to energy efficiency and demand-side management are often unclear, unreasonable or conflicting in nature. In many cases, the particular form of roll out envisioned by national 'enabling' regulation is ill-suited to local government contexts. This is further exacerbated by the fact that regulating bodies often do not properly consult with implementing agents. There is also a general lack of clarity and national vision regarding municipal energy efficiency, reflected by many of these regulations. This creates opportunity for divergent interpretations of regulation.

More detail is provided on the individual case study reports.

6. Gaps and Opportunities

An analysis of the gaps and opportunities shows that a clear regulatory agenda on energy efficiency exists, encompassing a number of action areas for local government and other stakeholders.

Firstly, a city that wants to legislate on EE must identify a need over and above the provisions of National Building Regulations for Energy Efficiency SANS 10400-XA (Part-XA), both in terms of content as well as mechanisms for implementation. Indeed, the current legislative framework can accomplish many EE related projects and programmes, and there are numerous points of legislative leverage using powers given under current laws. Apart from Part XA, there are considerable municipal licensing powers, as well as the legally entrenched plans in municipalities such as Integrated Development Plans, Spatial Development Frameworks and Budgets.

The Gaps and Opportunities Report also shows that municipalities must be willing and able to implement any sanctions introduced through a by-law. Municipalities must also take leadership in applying the provisions of the by-law in their own new as well as old infrastructure. Another major finding is that the legislative environment has often been characterised by poor intergovernmental coordination. This finding is recurring across the various reports. This poor coordination has resulted in laws at a national level that have been enacted but proved very difficult to implement at local government level. This means that better coordination through platforms of intergovernmental cooperation incorporating actors at all levels of government is critical. Any further legislation at national level should also have sufficient consultation with all stakeholders, particularly local government who are required to implement them.

Energy efficiency is a complex arena in development, relatively new, highly technical and often lacking in well-established knowledge and technology. Training and support for the various regulatory frameworks developed has happened, but needs to continue even further. Also, a clear need for research and development in EE in South Africa has been identified. Local government can also play a critical role in supporting processes and forums that raise awareness. Finally, more data in the EE field is likewise needed, and local government should take the lead on this.

In the EE arena, local government often complains of unfunded mandates and this study has shown that in many instances, this is true. However, lack of implementation is not always as a result of under-funding, other challenges well within the powers of the municipality exist, such as poor maintenance of current infrastructure.

Another important agenda item going forward is the need for cities to share experiences. Solutions around regulatory problems have been formulated in many cities, and these would make valuable material for sharing. Technology in EE is ever evolving and these rapid developments require peer interaction to navigate what can often be very confusing developments.

7. Conclusion

In conclusion, it is apparent that the current regulatory framework presents challenges in implementing EE at a municipal level. The most important of these is the fact that legislation is often inappropriate to drive EE at local government level. There are many issues that need to be pursued to ensure current regulations function optimally. These have been identified in various case studies and highlighted in the Gaps and Opportunities Report. While creating a by-law is within the mandate of local government, it is not always necessary, given the current fine mesh of regulatory frameworks requiring compliance. Cities need to identify a specific need over and above this, before enacting by-laws.

8. Recommendations

There is a regulatory agenda emerging for municipalities with regards to energy efficiency, which includes by-law formulation, if certain criteria are met. The by-law must be necessary, given the current legislative frameworks. Currently, given Part XA, many aspects of by-laws such as the City of Tshwane Green Building By-Law have been covered. There must be willingness and ability to implement the by-law, and sufficient resources should be prioritised for this. Finally, proper internal inter-departmental consultation is key.

Other regulatory agenda items for cities include pursuing legislative change through intergovernmental forums to push for and clarification of various national laws and regulations already existing. Lobbying for greater fiscal transfers for EE was likewise identified as important. One further recommendation is that local government should effectively use existing laws as well as champion and raise awareness about them among the public and other stakeholders.

At national government level, greater support is necessary to implement the various laws emerging and enforceable at local government level. This is through training as well as facilitating greater research and development. Local government with its partners should also be at the forefront of data collection, critical for useful research as well as monitoring the effectiveness of the laws.

Finally, the SACN and its partners should continue to promote research, knowledge generation and dissemination around this rapidly unfolding industry.

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