



The eThekweni Municipality plans to transition to a more renewable supply of imported electricity, the municipality also has an ambition to reduce the costs of energy for residents and businesses through the generation of renewable power such as solar and on-site wind energy. Picture: EPA

Ethekwini's bold new plan to generate its own power and get off Eskom grid

By Lyse Comins

Durban - THE eThekweni Municipality has drafted a new energy policy that aims to lower the cost of electricity for consumers by generating its own power and buying from independent power producers (IPPs) to drastically reduce its reliance on Eskom.

The eThekweni Renewable Energy Roadmap technical report builds on findings of the Energy Strategic Roadmap (ESR), a study commissioned under the C40 Cities Clean Energy Technical Assistance Programme, to support the municipality in achieving its climate action targets for 2030 and 2050.

The municipality's chief financial officer, Krish Kumar, said the aim of the policy, which is expected to be released soon for public comment, was to increase the city's renewable energy use and to get it off the Eskom grid as far as possible.

Kumar said the city had welcomed the long-awaited amendments to Electricity Regulations on New Generation Capacity in terms of the Electricity Regulation Act, 2006, which Minister of Mineral Resources and Energy Gwede Mantashe published on Friday.

The amendment includes the ability of a municipality to “apply to the (Mineral Resources and Energy) minister to procure or buy new generation capacity in accordance with the Integrated Resource Plan” subject to a feasibility study and compliance with provisions of the Municipal Finance Management Act, 2003, and Municipal Public-Private Partnership Regulations. “This is welcomed for the city to be able to purchase directly from IPPs and I think it helps to get us off the grid,” Kumar said.

“The important thing for the city is price, and is it going to be heavily regulated and supplied at a rate that makes it unaffordable?”

Kumar said the city had finalised the report, which was tabled and approved at the last council meeting.

“We have just arrived at a 2050 plan in terms of getting ourselves off the grid. What we will be doing in the next few years is an evolving strategy in moving to renewable energy and drawing power from IPPs,” Kumar said.

According to the policy document, Eskom's renewable energy targets are not high enough to enable the eThekweni municipality to realise its own internal targets to achieve 40% renewable generation by 2030 and 100% by 2050.

“Costs of purchasing power from Eskom have been rising and are predicted to continue doing so. Increased costs of power are being passed on to residents and businesses within the municipality. Until recently, legislation did not permit eThekweni Municipality to purchase power privately from Independent Power Producers. Now that this is possible, the municipality has the opportunity to transition its energy supply to one that is both renewable and lower cost. This will help ensure renewable generation targets are met whilst additionally reducing the costs of electricity for the municipality and, in turn, residents and businesses within its jurisdiction,” the report reads.

“In addition to transitioning to a more renewable supply of imported electricity, the municipality also has an ambition to reduce the costs of energy for residents and businesses through the generation of renewable power.”

The study found that the most viable technologies for use within the municipality were solar photovoltaic (PV) panels; biomass (including local forestry and bagasse resources); small-scale hydro power; gas extraction from landfill and wastewater

treatment sites and on-site wind energy. However, it recommended that biomass generation be excluded from the mix as it was costly.

Energy extraction from landfill and wastewater treatment sites was found to be limited due to the low yields expected from these systems, while wind energy generation was found to be limited due to environmental sensitivities and scattered dwellings, which reduced land availability for turbine installations.

“The resulting energy generation share of the recommended scenario implies around 79% of power to be imported into the municipality, with the rest generated within it; around 20% by solar PV and the remaining by wind, wastewater, landfill gas and hydropower,” the report said.

Mluleki Mtungwa, spokesperson for eThekweni mayor Mxolisi Kaunda, who is also the C40 Cities Climate Leadership Group vice-chairperson for Africa, said the mayor had noted the amendments to the regulations.

“We will be able to give a detailed response once we have studied them,” he said.

GroundWork researcher David Hallows welcomed the policy which he said indicated “a profound change in direction, opening a new path” for the municipality.

“In many ways, it looks like the kind of system we have been advocating. They should look to maximise the city’s own generation and community-based generation,” he said.

“The use of biogas from sewage is to be welcomed but implies that their waste-water plants must all be maintained and working properly - which is not the case at present. We do not favour landfill gas as it is contaminated by all the other rubbish,” Hallows said.

He said the initiative should be accompanied by a parallel revolution in waste management with organic waste separated at source and fed to biogas digesters.

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