Mobile application cost calculator for major household appliances to reduce greenhouse gas emissions

Johannesburg, 08 June 2018: The Department of Energy has implemented a programme to remove the highest energy-consuming appliances from the South African market. The programme is aimed at introducing appliances that are less energy consuming and compliant with the new Minimum Energy Performance Standards (MEPS).

The Minister of Energy, Hon. Jeff Radebe conducted a Walkabout at the Hirsch's Homestore in Fourways to officially introduce the programme to the market as well as launch the Appliance Energy Calculator mobile application (App). The application has been designed to assist consumers to estimate the running costs of various appliances before making a purchase.

The Standards and Labelling (S&L) programme implemented by the department places energy labels on appliances that provide consumers with accurate and comparable information on their energy efficiency. The project forms part of an integral part of the measures geared towards reducing electricity consumption and the carbon footprint of the residential sector in South Africa.

Following the successful launch of the saving energy website, the Appliance Energy Calculator mobile App is the next innovation, and allows consumers to make in-store comparisons of different models. The app allows for consumers to enter the relevant information, easily sourced from the mandatory energy label on the appliance, into the app, which calculates the estimated running cost of the appliances of their choice. Over a 1 and 10 year period – showing which appliance uses the least electricity. Using Eskom's published grid emission factor of 0.9958 tCO2/MWh, the app also estimates CO2 emissions of the appliance.

Access to electricity in South Africa has more than doubled from 36% of the population in 1994 to over 86% in 2013. However, electricity tariffs have increased significantly since 2008 and this programme aims to protect all, but more especially lower income households, from high energy consuming appliances.

Appliances for which the display and use of the South African Energy Efficiency Label is compulsory include:

- 1 Washer-Dryer Combinations
- 2 Washing Machines
- 3 Tumble Dryers
- 4 Electric Ovens
- 5 Fridge-Freezer Combinations
- 6 Freezers
- 7 Electric Water Heaters (geysers)
- 8 Fridges
- 9 Dishwashers and
- 10 Air-Conditioners
- TV and audio-visual equipment including decoders and set-top boxes do not need to display a label but must have a standby power usage of less than 1 Watt, and 3 Watts for set top boxes.

"Access to electricity for all South Africans remains a core objective of government and so is the efficient and effective use of this resource. Because we cannot always control how citizens choose to use their electricity, it was imperative for us to implement measures that ensure that appliances sold in South Africa are regulated and energy efficient. We equally introduced instruments that assist consumers to make the right choices when purchasing appliances", said Minister Radebe.

The minister encourages retail sales staff and consumers to download and use the Appliance Energy Calculator when making an appliance purchase. This easy-to-use app gives power to both to make informed decisions related to energy efficiency when purchasing appliances. The user need only input the appliance purchase price, the estimated annual consumption in kWh found on the energy efficiency label of the selected appliance and the app will then calculate the total and produce the estimated running cost of the appliance.

The Appliance Energy Calculator app is currently available on Google Playstore for Andoroid and Apple Istore.