ATTAINING UNIVERSAL ACCESS: THE ELECTRIFICATION ROADMAP INITIATIVE

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ABSTRACT

Today, 19 percent of the world's population of seven billion have no access to electricity. In other words, 1.3 billion people are quite literally living in the Dark Ages. 2.7 billion still rely on traditional biomass fuels for cooking and heating and this number is currently forecasted to grow to 2.8 billion by 2030.

Access to electricity is a critical element in economic and social development. It is fundamental to basic activities – lighting, refrigeration, appliances – and cannot be replaced easily by other forms of energy. Likewise, energy is inextricably linked to the major global challenges of our time: poverty, food security, access to clean water, public health, education, economic growth and climate change. Access to electricity is one of the clearest and purest indications of a country's energy poverty status. As Mary Robinson, President of the Mary Robinson Foundation and member of the Advisory Board of the Sustainable Energy for All initiative, pointed out at the Vienna Energy Forum, electrification targets those;

- Who spend four hours each day securing firewood for household and cooking needs
- Who have their education, and their ambitions, curtailed by the fall of night
- Who go through childbirth in darkness

The challenge rests in that market-based solutions alone will not enable achievement universal access to modern energy services. More action is needed to ensure fairness in the distribution of resources, technologies and knowledge.

To boost global access, the United Nations has launched the Sustainable Energy for All (SE4All) initiative led by Secretary General Ban Ki-moon. Its 2030 objectives are to provide universal access to modern energy services, double the global rate of energy efficiency improvement, and double the share of renewable energy in the global energy mix.

One of the vehicles to accelerate delivery of these objectives is the Electrification Roadmap Initiative. Led by Eskom and Duke Energy, this Initiative sets out to harness the collective experience of SE4ALL and the Global Sustainable Electricity Partnership (GSEP) by developing national electrification roadmaps, consolidating those that exist already, and helping to finalise electrification plans; developing new electrification projects (i.e., feasibility studies); securing the financial and technical resources to accelerate these plans; and building the local skills to deliver them.

Eskom and Duke Energy are also seeking to coordinate the efforts of a broad range of organisations beyond SE4All and GSEP that can contribute financial and/or other types of support to achieve the Initiative's objectives.

The Initiative will target countries with less than 75 percent electrification, starting with those in the Southern African Development Community (SADC) where the goal is to establish at least 35 million new connections. Over the next 10 years, the Electrification Roadmap Initiative will expand rapidly to increase the rate of electrification across the rest of Africa and all developing countries. Bold aspirations

The goal of the Electrification Roadmap Initiative is to accelerate the rate of electrification by establishing 100 million new connections to modern energy services by 2025. This would give 500 million additional people access to electricity, thereby resolving one-third of the global challenge. Each one of those people will be transformed from living in the dark to, at a minimum, having lighting and cooking and heating that are safer and more energy efficient (than biomass fuels).

This is a huge and ambitious undertaking. An initiative of this scale has never been done before. By comparison, South Africa increased its electrification rate to 84% percent by effecting 4.2 million connections in 17 years. The Initiative aspires to increase connections by at least eight times this amount – 35 million connections in 13 years in SADC alone.