Porto novo electricity generation

Population: It is based on the de facto definition of population, which counts all residents regardless of legal status or citizenship--except for refugees not permanently settled in the country of asylum, who are generally considered part of the population of their country of origin.

Rural Population (% of total population): It refers to people living in rural areas as defined by national statistical offices. It is calculated as the difference between total population and urban population.

GDP (current US$): It is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources.

Energy Imports Net (% of energy use): It is estimated as energy use less production, both measured in oil equivalents. A negative value indicates that the country is a net exporter. Energy use refers to use of primary energy before transformation to other end-use fuels, which is equal to indigenous production plus imports and stock changes, minus exports and fuels supplied to ships and aircraft engaged in international transport.

Benin"s total energy consumption in 2009 was 3,475 ktoe (World Bank, 2009). The per capita energy consumption in the same year was 0.404 toe. This is about half of the average per capita energy consumption for Sub-Sahara African countries, and less than a quarter of the world average (World Bank, 2009).

Like for most countries in Sub-Saharan Africa, Benin"s energy sector is largely dominated by the use of biomass-based energy sources (59.4%) (Tableau de Bord de l"Energie au B?nin, 2005), followed by petroleum products (38.4%) and, to a lesser degree, electricity (2.2%).

The country is 100% dependent on petroleum imports, making it vulnerable to dollar exchange rates and fluctuations in oil prices. Moreover, fluctuations in fossil fuel prices compromise Benin"s domestic capacity to develop its energy services.

While Benin has a large hydroelectricity potential only one major hydroelectric site currently functions. Development of over 80 pre-identified sites using micro-hydro applications would help Benin increase its energy resilience.

The country has a huge and untapped renewable energy potential. Although with low levels of domestic capital formation and little internal capacity (engineers, technicians etc.) this potential is not being realised. The absence of hazard or siting maps for equipment installation means that Benin"s existing energy infrastructure remains extremely vulnerable to anticipated climate change impacts. While Benin"s National Adaptation Plan of Action notes the necessity of an emergency response plan to deal with the impacts of

metrological extreme events, this plan has yet to be developed.