

Renewable Energy: Key Questions

Is renewable energy expensive?

Wind and solar generation plants appear expensive compared to coal, nuclear etc as most of the costs is in the construction and renewable energy plants have no fuel costs as the sun and wind are free. However, the cost of renewable generated electricity is now less than projected from new coal generated electricity (from Medupi and Kusile). These financial cost models do not take into account the health, environmental costs of coal and nuclear energy.

Is renewable energy reliable?

Renewable energy is reliable and renewable investors are confident of making money from wind and solar electricity power plants. However, renewable energy needs to be connected into the grid in a way that enables a mix of energy sources to be used at different times.. wind and solar and salt or biomass. Decentralised energy systems are more flexible than the old centralised systems. This makes it easier to restore power if one power plant is damaged, and the country will lose less power during the outage. for example one wind turbine of 2 MW vs one coal fired turbine of 700MW.

All types of power plants go off line for maintenance and breakdowns. Hence the need for additional power plants that can be called on when there is a shortage. Given that fossil and uranium fuels are non-renewable, renewable energy is a the sustainable reliable long term solution.

South Africa started its renewable energy procurement programme in 2011 and since then, 64 new renewable projects have been initiated, a total of xx MW of solar and wind to date.