

What is renewable energy?

Bermuda's first energy plan, also referred to as the IRP (Integrated Resource Plan), is a forecast of the island's long-term electricity needs for the next 25 years. Up to 85% of the island's renewable energy sources will come from solar energy, wind energy and biomass technology. This will help to stabilize the cost of fossil fuels and inflation, and provide opportunities for jobs and training to support the renewable infrastructure. It will deliver safe and reliable energy for our children and future generations. Because of this, the IRP will periodically be updated through review processes and will take future renewable technologies into consideration as they are developed.

What is Renewable Energy? Renewable Energy comes from resources that are naturally replenished, usually in a fairly short period of time. Producing energy from renewable sources is generally less expensive than energy that is produced by engines burning fossil fuels such as coal, diesel and gas, and renewables are much safer for the environment. Sunlight, wind and biomass technologies are three examples of renewable energy resources included in the IRP that will generate electricity to power our homes and businesses.

- ✓ **Solar Energy:** The sun is the world's most powerful source of energy. Sunlight (solar energy) uses mirrors and other reflective materials to capture and convert sunlight into electricity. Solar panels can be installed on our homes, on top of commercial buildings, or in vacant patches of land.
- ✓ **Wind Energy:** Wind is the movement of air and has been used for centuries to sail ships and drive windmills. Today's wind energy is being captured by large turbines and is used to generate electricity.
- ✓ **Biomass Energy:** Biomass involves burning organic materials to produce energy and has been used for cooking and heating since the beginning of civilization. Sources of biomass energy include wood, food crops, grass, plants, agricultural and industrial waste. Biomass can produce electricity and fuel for transportation that is less harmful than using fossil fuels.

Click [here](#) to learn more about the IRP and its positive impact on Bermuda.

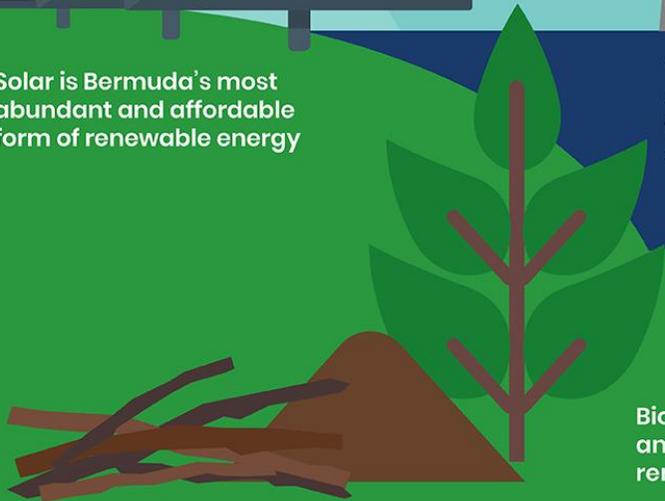
BERMUDA'S RENEWABLE ENERGY SOURCES



Solar is Bermuda's most abundant and affordable form of renewable energy



Wind turbines provide offshore solutions to generate energy from the natural resources surrounding our island



Biomass provides stable and reliable supplies of renewable energy

NON-RENEWABLE ENERGY SOURCES



Burning fossil fuels to produce energy releases airborne pollutants that affect the quality of air we breathe and is harmful to the environment.

Reference: United States Environmental Protection Agency
www.epa.gov/nutrientpollution/sources-and-solutions-fossil-fuels

Natural gas is an unsustainable source of fuel because it is a non-renewable resource, which means once the supply of natural gas runs out, it is gone forever.

Reference: Conservation Institute
www.conservationinstitute.org/pros-and-cons-of-natural-gas/