



Background Information

SUSTAINABLE ENERGY

Sustainable energy refers to renewable energy, energy conservation and advanced transportation technologies that enable us to create electricity, heat and movement while minimizing the impact to the environment and providing good economic value.

Benefits of Sustainable Energy

Sustainable energy projects located within a community provide the following benefits:

- Help to improve air quality by reducing greenhouse gases
- Reduce the amount of energy lost when it is transmitted or transported over long distances
- Increase the security of the energy supply
- Create economic development and jobs

Criteria for Sustainable Energy

To be considered “sustainable,” an energy source must:

- Have minimal or no negative environmental or social impact
- Not deplete natural resources
- Protect air, land and water
- Have little or no net carbon or other greenhouse gas emissions
- Meet the needs of today without compromising the ability of future generations to meet their needs
- Be safe today and not burden future generations with unnecessary risk
- Be economically viable

Types of Sustainable Energy

Sustainable energy encompasses:

- Renewable energy from natural resources
 - Solar
 - Wind
 - Hydro
 - Tidal and Wave
 - Bioenergy (biomass and biogas)
 - Geothermal
- Energy conservation technologies that improve energy efficiency
 - Cogeneration - Combined heat and power
 - District energy
 - Geothermal heating and cooling
 - Green buildings
- Low-carbon modes of transportation
 - Plug-in hybrids
 - Plug-in electric vehicles