Renewable Energy in Our Community

Renewable energy is generally defined as energy that comes from resources which are naturally replenished on a human timescale such as sunlight, wind, rain, tides, waves and geothermal heat. Renewable energy replaces conventional fuels in four distinct areas: electricity generation air and water heating/cooling, motor fuels and rural energy services.

Personally, It's more practical to use energy that comes from resources because it's infinite unlike other sources of energy that are finite and will someday be depleted. Renewable energy will not run out. Here in the Philippines we have wind turbines, to be specific in region 1 llocos Norte. Utility-scale wind turbines range from around 600 kW to 5 MW of rated power, although turbines with rated output of 1.5 - 3 MW have become the most common for commercial use; the power available from the wind is a function of the cube of the wind speed, so as wind speed increases, power output increases up to the maximum output for the particular turbine. Areas where winds are stronger and more constant, such as offshore and high altitude sites, are preferred locations for wind farms. Typical capacity factors are 20 - 40 %, with values at the upper end of the range in particularly favourable sites.

Maria Christina Falls, In Iligan City, Philippines is an example of Hydro power where Misamis Occidental depend there electric power source. Hydroelectric energy is a term usually reserved for large-scale hydroelectric dams. We also have micro hydro systems are hydroelectric power installations that typically produce up to 100 kW of power. They are often used in water rich areas as a remote area power supply. The incentive to use 100 % renewable energy, for electricity, transport, or even total primary energy supply globally, has been motivated by global warming and other ecological as well as economic concerns. The Intergovernmental Panel on Climate Change has said that there are few fundamental technological limits to integrating a portfolio of renewable energy technologies to meet most of total global energy demand. Renewable energy use has grown much faster than even advocates anticipated. This energy cannot be exhausted and is constantly renewed that can help the planet last longer. Geothermal power and marine energy is useful. These technologies are not yet widely demonstrated or have limited commercialization. Many are on the horizon and may have potential comparable to other renewable energy technologies, but still depend on attracting sufficient attention and research, development and demonstration (RD&D) funding.

Ralph Ryan Sanchez, University of San Carlos, Cebu City, Cebu, Philippines