

Renewable Energy – A Multi-Benefit Venture

Renewable energy is the future of clean and reliable electricity generation. Electricity users have started to realise the side effects of conventional power plants such as coal-fired, natural gas on the environment due to greenhouse gas emission resulting in climate change and global warming. Unfortunately, there are still some misconceptions about renewable energy that they are an expensive and unreliable source of electricity. These misconceptions were true 5-10 years ago but due to technological advancements over the years the cost of renewable projects have significantly lowered especially for wind and solar energy. In addition, battery storage has made renewable electricity generation more reliable. What renewable energy gives to the community? Renewable energy benefits the community with more than just generating electricity. It provides:

- Economic benefits,
- Environment benefits,
- Social benefits.

Economic benefits: One of the key economic benefits are that they create employment. In 2016 in the US alone, the wind energy industry directly employed over 100,000 full-time-equivalent employees in areas including manufacturing, project development, construction and turbine installation, operations and maintenance, transportation and logistics, finance, legal, and consulting services [1]. Some of the other economic benefits include lease payments for the local landowners on which the power plant is set up. The local government bodies are also benefited in form of income tax and incentives for promoting green energy from the federal government. **Environmental benefits:** This could be one of the biggest advantages of opting for renewable energy over the fossil fuel electricity generation. As mentioned before, the greenhouse gas emissions have an adverse effect on our environment resulting in air pollution and eventually affecting the health of the local community. Renewable energy uses sources such as wind and sun to generate electricity which is readily available and is environmental friendly hence community friendly. **Social benefits:** This is in conjunction with the environmental benefits, it brings communities together for a noble cause and that is to save our planet. There are also community energy projects that are developed by the local population. These kinds of projects are getting more and more popular as it connects the community emotionally and financially. Above outlined benefits are some of the very advantages that renewable energy can provide us. We need to change with time and this is the time to act and renewable energy is the only answer for our growing electricity needs.

References

1. American Wind Energy Association (AWEA). 2017. AWEA U.S. Wind Industry Annual Market Report: Year Ending 2016. Washington, D.C.: American Wind Energy Association.

Smitesh Kirtane, Melbourne, Victoria, Australia