



Background Paper

Committee: United Nations Environment Programme

Topic A: Renewable Energy and Future Energy Demand

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Renewable energy is a term used to describe a group of energy technologies; a process to create energy. One example is biomass, a large group of advanced technologies that use living organisms and waste to create energy. Another is hydropower, which uses moving water to generate power. A third is geothermal energy, which uses the internal heat of the Earth. What makes these energy sources renewable is that all of these methods are clean and sustainable. The most promising renewable sources are solar energy, in which the sun is used to produce energy, wind power where the motion of wind is used to create electricity, and tidal power which uses the rise and fall of the tides to create electricity.

Renewable energy is the fastest growing energy supply on the whole planet; it is a clean source that does not produce air pollution or greenhouse gas emissions. Over the years, it has been proven that renewable energy is better for the environment; in addition, since it produces less pollution, the air and the water get cleaner, meaning it helps the environment in many ways.

Overpopulation is an important current concern in many parts of the world and energy demand is increasing every day. The population of the world has so many daily human needs and so little energy demand. The United Nations Environmental Program (UNEP) is a committee in charge of the environment and it is aware of the energy demand population increase in the future can cause. Countries like China have already worked with renewable energy projects and they have had successful results. China is the main country in the production of electricity using sources from renewable energy; in fact, hydropower is the main renewable energy source. Over the past twenty-five years, energy use has changed dramatically; the global energy demand is increasing every day, and this is a very important issue for the world. Carbon dioxide and greenhouse gases are produced by the

burning of fossil fuels, coal, oil, and gas. The production of global climate change is a consequence of this burning. Fossil fuels have negative impacts causing air pollution in its principal way.

As of today, almost 50 countries have agreed to make their energy production 100% renewable by the year 2050 and countries all over the world are actively embracing solar, wind, and geothermal energy. However, there are 12 countries that have been the most proactive in changing their usual methods and trying to implement more renewable energy sources, they are Iceland, Sweden, Costa Rica, Nicaragua, the United Kingdom, Germany, Uruguay, Denmark, China, Morocco, the US, and Kenya. The first country, Iceland, is a country which 100% of its energy come from different types of renewable sources to produce electricity, such as hydroelectric power plants, and geothermal energy. Sweden, is another example of an country that acted on concerns regarding using clean transport, wind power, and it has its own system of solar power. Costa Rica, is a small but special country, its has achieved running on 100% renewable for a few months but still has a small way to go to make this constant.. These are the three most renewable countries where energy supply is concerned, since they are closest are almost reaching the 100% renewable energy, while the rest is working on it.

The UNEP has been working closely with countries to encourage them to use renewable energy as their main source of energy instead of using non-renewable resources. In 2015, UNEP found out that global investments in renewable energies hit a new record high at US\$286 billion and that, for the first time, investments in renewables in developing countries exceeded those of developed countries. Ever since, renewable energy has been growing all over the world. Also, in 2015, it was discovered that coal and gas-fired generation attracted less than half as much capacity investment as renewables, which added more to global energy generation capacity than all other technologies combined. With all of these stated facts, UNEP is concerned about all types of pollution in the planet, and that is why is important to reach a world with fully renewable energy.

In conclusion, it is extremely important to support a solution for the benefit of humans and the planet. Renewable energy is better for the environment than the current energy sources that are constantly polluting and also non-renewable. With this, many resources could be saved for the future, as well as the environment itself. UNEP has shown that the benefits of renewable energy are many and that they only require half the investment compared to non-renewable sources. UNEP strongly believes that a low-carbon world is attainable and that countries should be interested and devoted to change to renewable energy to hopefully reach the objective of a fully renewable energy world. However, the solution of how this can continue is what makes it an important topic to debate with every country involved.

Bibliography

Dillinger Jessica. Countries with the Most Renewable Energy. Worldatlas. 01 October 2018. Web.

Follow the Leader: How 11 Countries are Shifting to Renewable Energy. The Climate Reality Project. 03 February 2016. Web.

Global Shifts in the Energy System. International Energy Agency (IEA). 14 November 2017, Web.

Kosolapova Elena. UNEP Reports World Record in Renewable Energy Investments. International Institute for Sustainable Development (IISD). 29 March 2016. Russia and Netherlands. Web.

Smith Rob. Three Countries are Leading the Renewable energy Revolution. World Economic Forum. 26 February 2018. Web.

Renewable Energy and Electricity. World Nuclear Association. October 2018. Web.

Twelve Countries Leading the Way in Renewable Energy. Click energy: News and Blogs. 10 August 2017. Web.