**Keynote speech**

Thank you for your introduction. It’s my honor to have this chance to give this report here. The topic of my presentation is” Different types of renewable energy”.

My presentation will include two parts: first, the background of renewable energy; Second, overview of different types of renewable energy.

In the 21st century, mankind faces major challenges in achieving sustainable economic and social development. Developing the economy under the dual constraints of limited resources and strict environmental protection has become a global hot issue. The energy issue will be more prominent, mainly including energy shortages, environmental pollution, and the greenhouse effect. Therefore, the development and utilization of traditional fossil energy is severely constrained, and the development and utilization of renewable energy has become the focus of national research. Common renewable energy sources include solar energy, wind energy, geothermal energy, ocean energy and so on. Next, I will introduce the following renewable energy sources in detail.

Firstly, solar energy refers to the thermal radiant energy of the sun. The main manifestation is the solar light that is often said. It is generally used in modern times to generate electricity or to provide energy for water heaters. The use of solar energy has two methods: photothermal conversion and photoelectric conversion. It is the most widely used and widely used renewable energy source.

Secondly, wind energy is the use of wind turbines to convert wind energy into various forms of energy such as electricity, heat, and mechanical energy for power generation, water lifting, navigation, refrigeration, and heating. Wind power generation is the main development and utilization method.

Thirdly, geothermal refers to thermal energy resources from the underground. The Earth of Life is a huge geothermal reservoir, only 10 km underground, with a heat storage of 1.05 Joules, equivalent to the heat released by 9.95 standard coal. Geothermal energy can be used for heating or for generating electricity. The application depends on the temperature range of the resource, and the economic development of the resource depends on the resource characteristics and geographic location of the geothermal field.

Lastly, ocean energy usually refers to renewable energy contained in the ocean, including tidal energy, wave energy, ocean current energy, sea water temperature difference energy, sea salt salt difference energy and so on. The ocean can be rich in resources, widely distributed, clean and pollution-free, but with low energy density and strong regionality, which makes development difficult and has certain limitations. The way of development and utilization is mainly power generation, in which tidal power generation and small wave power generation technology have been put into practical use, using the kinetic energy of the up and down movement of the sea surface waves.

That’s all. Thank you for your attention.