**Q&A**

Q1 : OK , thank you .I have three main questions. First of all, what are the main renewable energy sources in the world at present? Second, how is the use of these energy sources? Finally, what are the development prospects of these energy sources?

A : Thank you for your questions . Firstly, renewable energy includes wind energy, solar energy, water energy, biomass energy, geothermal energy, marine energy and other non fossil energy. Secondly the global wind energy is about 130 billion kilowatts. At present, the use of solar energy is not very popular, and there are still problems of high cost and low conversion efficiency in the use of solar power. Water energy is mainly used for hydroelectric power generation by transforming the potential energy and kinetic energy of water into electric energy. Finally, since the beginning of the industrial revolution, advanced natural scientists in some western countries have realized the importance of renewable energy and advocated it, especially in power generation. In recent years, due to the warning of climate change to human beings, governments around the world have been thinking about how to reduce carbon and energy conservation. There is more room for the development of renewable energy.

Q1 :Since you say ‘there is more room for the development of renewable energy’, can you cite a example to prove it?

A : Of course. Wind power has grown by 30% every year since 1990. By the end of 2010, the global installed capacity has reached 175 GW. In addition, for some countries: for example, Germany: renewable energy power generation accounted for about 3.1% of the total power generation from 1990 to 17% at the end of 2010, of which 36.5% was wind power; 33.5% was biomass power generation, 19.7% was water power, 12% was solar photovoltaic, and 370000 people were employed.

Anyone else has questions?

Q2 : I'm interested in what you say about geothermal energy. Could you tell me something about it

A ：That is a good question. Most of the geothermal energy comes from the renewable heat energy in the deep of the earth, which originates from the melting magma and the decay of radioactive materials. A small part of the energy comes from the sun, accounting for about 5% of the total geothermal energy, and most of the surface geothermal energy comes from the sun. The deep circulation of groundwater and the intrusion of magma from the deep into the crust bring the heat from the deep to the near surface. Its reserves are much more than the total amount of energy used by people, most of which are concentrated in the edge of tectonic plate, which is also a volcanic and earthquake prone area. It's not only clean and pollution-free energy, but also renewable if the rate of heat extraction does not exceed the rate of replenishment.