**Keynote Speech**

By Gaopeng

Good morning, ladies and gentlemen, my name is xx. I am honored to have the chance to join this conference.

The outline of my presentation is listed as follows. Firstly, I’d like to introduce the background of Energy Internet. Next, I want to introduce the structure of the energy internet. Finally, I will compare the information internet with energy internet.

Well, let’s move onto the first part.

**I.Background introduction**

Under the situations of energy crisis around the world, various types of renewable energy have emerged. Different forms of energy networks tend to be tight coupled, the  
combination of renewable energy technology and information technology promotes eneygy internet come into being. Energy Internet is a new form of energy industry development that integrates the Internet with energy production, transmission, consumption, and energy market.

**II. Structure of energy Internet**

Now, let’s turn to the next part.

The structure of energy internet is shown in this picture, we can see that Energy Internet consists of resource subnet and transmission subnet.

Energy transmission subnet is electric transmission network, consist by a variety of voltage level.

Resource subnet can be divided into power generation and consumption subnet.

Compared with the traditional energy network, Energy Internet is the use of information technology and power grid new technologies to achieve wide-area transmission and sharing of energy. Energy Internet has the characteristics of openness, interconnection, reciprocity, sharing, etc.

**III. Comparison of Energy Internet and Information Internet**

At last I will give you a comparison between Energy Internet and Information Internet.

Energy Internet and Information Internet have similar characteristics in network configuration, but there are also many differences in network function, structure, equipment, protocol, service, security and service object. Table I compares the differences of Energy Internet and Information Internet from the transmission process, network partition and so on.From table 1, we can know that Energy Internet transmits energy,but Information Internet transmits information,and there is no loss in the transmission process.

With the gradual depletion of traditional fossil fuels, *clean* *alternative* and *electric alternative* have become the inevitable trend of energy development. Energy Internet will certainly have a good development prospect.

So much for my speech. Thank you.

**Question:**

Thank you, professor. Do you think artificial intelligence will be used in the energy Internet?

Oh, it’s an interesting question. I think artificial intelligence will be used in energy internet. For example, in wind generation, we know that wind energy has strong volatility and randomness, so we can use artificial intelligence technology to predict the wind speed, through which we can make the best of wind energy and increase the efficiency of electricity generation.So I think artificial intelligence will be widely used in energy internet in the future.