

Green and Smart Energy Pave the Way for China's Dream

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Abstract: The strategic background of "dual carbon" will promote the green transformation of China's energy, promote economic stability and progress, and is of great significance to ensure energy security. A new pattern of development for the global digital economy has been established by the digital era, e-commerce innovation and development. The energy sector's digitalization, the regular image of new technologies and solutions, the innovation and modernization of new energy systems, the use of green and smart energy to stay on top of the times, these measures have made great contributions to China's leadership in global energy development.

Keywords: Green civilization, Smart energy, Beautiful China.

1. Introduction

A quarter of the world's population suffers from hunger and poverty, and there is a connection between the global energy crisis, inflation, food crisis, and climate change.

2. The "Dual Carbon" Strategy's Historical Context Will Support China's Transition to Green Energy

In keeping with the general direction of China's economic development in 2022, which is to pursue stability and progress, energy should also pursue stability and progress. First establishing itself before breaking it. "Safe carbon reduction" the decline of traditional energy, should be based on the safe and reliable replacement of new energy, such as wind, solar, and biomass energy, which can play a special role in energy conservation and environmental protection.

Energy is the basis for both social and economic growth, and energy security includes both supply security and climatic security. We are a community with a shared future for humanity, and one of our ambitions is to use our own fossil fuel energy wisely while also promoting green energy transformations. Solar energy, wind energy, and hydrogen energy are the future forms of energy that will not be impacted by geopolitics or war and will be reliable for the nation. Only within this direction will be immediate and long-term energy security.

3. Hydrogen Fuel Cells and "Green Hydrogen" Equipment

The Beijing Winter Olympics used hydrogen as flare fuel on February 4, 2022. hydrogen. The energy is a pure, efficient, and reliable secondary energy source. It is the best choice for deep decarbonization in transportation, industry, and buildings. It also serves as a vital carrier for the green transformation and development of energy [2].

The possibilities for the development of hydrogen fuel cells look optimistic under the "dual carbon" concept. Technology using hydrogen fuel cells has always been seen as a potential solution to the world's energy issues.

4. Additional Green Energy

The new energy industry revolution is based on energy storage technology. And the rapid growth of the wind and photovoltaic power industry will stimulate the expansion of the large-capacity energy storage industry.

One of the most essential energy sources for changing the energy structure and achieving emission reductions is photovoltaics. A need that has grown even more urgent, particularly in view of the current energy crisis. One of the desert governance models is "Ecology + Economy + People's livelihood," which not only successfully makes a good desert control, enhances the natural environment, but also helps to conserve standard coal, allowing the people to live wealthy and fulfilled lives.

Wind energy is a form of solar energy conversion and is the kinetic energy produced by air movement. "Green electricity," created by converting clean energy and wind energy, illuminates millions of homes. China has established an entire, developed, and competitive wind power industrial chain, combined solar and wind hydrogen storage, and supported the high-quality growth of the "wind power" hydrogen production business.

Nuclear energy is safe and dependable. The process of nuclear heating involves only heat exchange; there is no medium exchange. This will prevent the negative effects of climate change, as well as reducing environmental pollution and carbon dioxide emissions, and improving the use efficiency of nuclear energy, while also providing energy for cooling.⁴

5. How Chinese "Photovoltaic" Businesses Are Organized Abroad

The Alcazar 800MW photovoltaic power station, the first solar power plant in Qatar, is a classic example of Chinese "photovoltaic" firms expanding abroad in 2022. The project utilizes Hi-MO 4 bifacial modules. Additionally, solar power has a greater power generation, is adaptable to double-sided construction and intelligent tracking system, and offers a full suite of 1500V inverter solutions [3]. The power plant is anticipated to eliminate carbon dioxide emissions by around 900,000 tons annually, fulfill the yearly electrical needs of

about 300,000 families, and supply Qatar with about 1.8 billion kilowatt-hours of clean electricity each year.

The World Cup in Qatar is a "symphony" of the Middle East's energy transformation and the photovoltaic age in China. Chinese photovoltaic lights up the World Cup in Qatar, contributing to the global "carbon balance" of the event.

6. The Advantages of The Maritime Environment, The Phrase "Going Out" Has Gained Popularity

The first "wind and solar field" integration project in Shandong Province and the first deep-sea landscape "floating photovoltaic" demonstration project in the world both successfully generated power on October 31.

To advance smart energy, international wind power, wind-solar hydrogen storage integration, creative technology, and eco-friendly development, we need to seize the growth prospects provided by economic globalization.

7. Exports of New Energy Vehicles Will Set A Record in 2022

China is anticipated to export around 3 million cars this year, with new energy vehicle shipments reaching a record high. China is also anticipated to surpass the United States as the second-largest auto exporter in the world. The supply chain for new energy vehicles is maturing, and indigenous technology, as represented by lithium batteries, offers clear competitive advantages globally.

The today's global world of new energy cars has been accelerated by some existing regulations, and cross-border e-commerce has emerged as a new route for Chinese automakers to expand internationally.

8. The Digital Revolution and E-commerce

The fast growth of cross-border e-commerce has significantly decreased the impact of the pandemic on global trade, according to the vice minister of commerce. Digital service trade has grown to be a significant force in the recovery of the global service trade.

E-commerce improves digital quotient, data drives innovation, and will eventually set up a group of high-quality digital quotients to aid in the growth of data exchanges and the entire data element circulation market. From "e-commerce" to "digital quotient," "digital trader cloud port" will rely on the strong foundation of the development of the Internet industry to guide the development of e-commerce platforms, industrial Internet platforms, and industrial chain platforms.

A new engine of global commerce and economic growth, digitalization has the potential to bring about significant changes in the global industrial chain, supply chain, value chain, and innovation chain. The digital economy is a significant force behind the rise of the global economy.

8. A new era of smart energy is brought forth by "digitalization"

Smart energy is the integration of human wisdom into the entire process and all links of energy development, utilization, production, and consumption. Smart energy is also the creation and advancement of energy systems and methods that fulfill the needs of an ecological civilization and sustainable development. Smart energy is achieved through technological innovation and institutional change. It is a methodical, secure, environmentally friendly, and cost-effective source of energy.

New industries like "Yunzhi Thing data" actively embrace the new energy and promote high-quality energy transformation, technological innovation, integrated innovation, and integrated development of business model innovation. These factors all contribute to the frequent emergence of new technologies and solutions, the digitalization of the energy industry, and the innovation as well as upgrading of new power systems and energy systems.

The new energy industry chain is enhanced by digitization, which speeds up the organization of all connections.

Focus on four forms of urban energy construction, such as high-quality ecosystems, large-scale energy bases, smart towns, cluster buildings, and industrial parks, and fully exploit the benefits of the entire industry chain.

Offer complete and efficient energy services using creative methods.

We will reach the perfect state of knowledge and intelligence by using standard menu-based services and a range of energy optimization combinations.

9. Energy Supply Side: New Energy Has Gradually Taken Over the Energy System

We believe that the green energy era will add more vitality to the growth and progress of civilization. Smart Energy must bear the mission of the times under the flag of "Dual Carbon" and concentrates on the development of green and smart energy. Clean and environmentally friendly energy are now more accessible thanks to sustainable and well-coordinated economic growth.

Green and smart energy conveys the light of dreams, brightens a better life, and combines ancient culture with modern civilization. Green and smart energy advances civilization, enters in a new age of green growth, and opens a bright new chapter for China to take the helm of world energy development.

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