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21st Century Coal: Securing China's Sustainable Energy Future

Gregory H. Boyce Chairman and Chief Executive Officer Peabody Energy

<u>Introduction</u>

Thank you Dr. Xia. Members of the China Development Forum Secretariat, other distinguished guests, ladies and gentleman. My name is Greg Boyce and I am Chairman and Chief Executive Officer of Peabody Energy. Our company is 130 years old and we are a leader in sustainable mining and clean coal solutions.

I am honored to be with you in Beijing, and express my gratitude to the Government of China for the privilege of exchanging views in this setting regarding issues meaningful to the future of China and the world.

Securing energy access in the face of unprecedented global demand is a vital concern for China and all developing and developed nations across the globe.

China currently stands at a defining moment. As unprecedented urbanization continues, the leaders of this great nation recognize that continued development must be matched by care in air and water quality.

I applaud China for taking a holistic approach to energy policy – one that advances energy access, economic growth and environmental protection.

Some have suggested that, to meet its environmental goals, China should limit coal consumption... but this is the wrong approach.

Coal is not the problem – it provides the solution.

The concept of 21st century coal was introduced by the governments of China and the United States in 2009 to advance the development of clean energy solutions from coal. And 21st century coal is the holistic path that China seeks to advance the nation's energy, economic and environmental objectives.

Today I will make three recommendations:

One...China should continue to assert its right to drive economic and social development, and the betterment of the lives of its people, through the use of the country's abundant coal resources.

Two... China should follow the model proven in the U.S. for solving urban air quality challenges, by increasing the intensity of efforts to deploy modern emissions control technology in its coalfueled generation fleet.

And three... China should adopt the principles of 21st Century Coal by implementing the highest standards for worker safety, resource recovery, land restoration and water use in its mining sector.

Greater Coal Use Puts People First While Driving Economic Development

Energy is a human right... and a rapidly rising need. More than half the world's population – 3.6 billion people – lack proper energy access... and 1.3 billion people have no electricity access at all.

It is estimated we lose 1.5 million people to the effects of energy poverty each year. Energy is not a luxury... and it is fully within our power to end global energy poverty.

China has lifted more than 650 million people from poverty in the last three decades – and coal has provided the cornerstone of this extraordinary accomplishment.

There is also a strong correlation between expanding coal use and growing economies. Since 1970, global coal use has increased approximately 300 percent. The rapid rise in coal-fueled electricity matches the global rise in GDP.

This <u>is</u> the economic miracle powered by coal.

And there is a profound correlation between electrification and improvement in the UN Human Development Index. Every tenfold increase in electricity is linked to a ten-year increase in longevity, with a better standard of living, higher literacy and a much healthier population.

Through greater use of 21st century coal, China can continue to put people first and drive economic development while protecting the quality of urban life.

The U.S. Model: Technology Drives Major Environmental Progress

The International Energy Agency has forecast a 60% increase in global coal use by 2035... and Asian economies are expected to account for about 90 percent of demand growth.

As China seeks to improve air quality, the United States has shown that society can use more coal to produce more electricity while reducing emissions.

Major technologies have allowed the U.S. to significantly reduce sulfur dioxide, nitrogen oxides, particulates and mercury.

U.S. coal-fueled electricity has nearly tripled since 1970, as regulated emissions per megawatt hour have decreased 87 percent... and GDP grew 103% per capita.

China currently has two and a half times the coal plant capacity of the Unites States. The major difference between the two fleets is the use of modern emissions controls.

The U.S. has nitrous oxide control on 98% of its coal plant capacity... versus just 21% in China. And the U.S. has particulate controls on 99% of its coal capacity... versus 69% here in China.

China can achieve green growth with clean air and water. It could achieve this within as little as five years by continuing its program of building advanced supercritical coal plants... while decommissioning the nation's oldest plants and intensifying deployment of modern emissions control technology on its existing plants.

Upgrading the world's coal fleet with advanced supercritical technologies... available today... would deliver a 90 percent improvement in sulfur dioxide... 93 percent less nitrogen oxide... and virtually zero particulates.

There are some 450 gigawatts of these plants in operation or under construction worldwide.

China leads the world in this effort, representing a remarkable 55 percent of the global supercritical generation that is expected to come online by 2017.

Twenty First Century Coal: World's Best Practices in Coal Mining

To fully embrace the production of 21st century coal, progress in China's coal industry should accelerate in the critical areas of safety, efficiency, resource recovery and conservation.

China's increasing emphasis on win-win international partnerships through greater cooperation with overseas companies will allow China to leverage the world's best practices in coal mining.

Peabody Energy is a global leader in sustainable mining and clean coal solutions and we are pleased to play an ongoing role in China on both fronts.

As China develops the nation's first ever large-scale coal mines in its western energy bases, partnerships with companies like Peabody will introduce global best practices in advanced mining techniques.

This will result in vastly improved resource recovery rates, as well as best practices in land restoration, water resource management and environmental monitoring.

It will also increase the welfare of China's coal industry workers through the application of worldclass safety and health management systems.

Conclusion:

Going forward we will need all forms of energy to meet enormous global demand.

But 21st century coal provides the best path to abundant, affordable energy that drives social and economic progress while meeting our environmental goals.

China has led the world in taking this path and it must continue to put people first and drive economic growth by increasing access to affordable energy through greater use of coal.

China is the global leader in deployment of advanced coal generation and it can make dramatic improvements in air quality by continuing this program... while intensifying efforts to deploy modern emissions controls technology on its existing fleet.

And China's mining industry can also accelerate improvements in the key areas of safety, resource recovery, water management and land restoration.

In the decades ahead, China is positioned to once again lead the world in providing the global blueprint for building a sustainable energy future built on 21st century coal.