



Keynote, China Wind 2012  
"Danish Vision of Energy Development:  
50 % wind power penetration by 2020 in  
Denmark".

## **Intro**

Your Excellencies, distinguished  
colleagues.

On behalf of my Minister I want to  
thank the organizers of China Wind  
2012 for this opportunity to share our  
perspective on the future of wind  
energy in Denmark, in China and  
across the globe.

## **Kinas målsætninger**

Expansion of clean energy sources  
will be an important part of the global  
transition to a green future – a future  
marked by a clean, safe and secure  
energy supply.

With the 12<sup>th</sup> 5-year plan China has become a global leader in this vital global transition process – with an aim to increase the use of non-fossil fuels to 11.4 pct. of total energy use in 2015 and 15 pct in 2020.

We hope and expect an important part of this to be met with wind power

Wind is associated with great opportunity, but also with challenges. But as our experience shows, these challenges can be overcome successfully with the right mix of technological and regulatory means.

## **Danske målsætninger**

The key to the future is green and sustainable growth.

In the last 40 years wind energy has changed Denmark.

And it will continue to do so in the future.



Over the years we have proven that investing in renewables can go hand in hand with economic growth.

Since 1980, the Danish economy has grown significantly, while our energy consumption has remained more or less constant - and CO<sub>2</sub>-emissions have been reduced.

In Denmark, wind power already makes up 25 percent of our electricity consumption.

By 2020 we will reach 50 percent consumption.

But most significantly, our government has set as a milestone for 2035, that all electricity and heat consumption in Denmark must be renewable based.

So it is indeed possible to embrace wind energy as a core supplier of reliable energy.



But what makes wind such a powerful energy source?

Three things, I believe:

First: From being an emerging energy source 20 years ago, wind energy has mushroomed into a mature and booming global business.

Generation costs have fallen dramatically over the last 15 years, moving wind closer to the cost of conventional energy sources. And at the same time, modern wind turbines have improved in their power rating, efficiency and reliability.

And let's not forget the huge and growing global demand for emission-free wind power, which can be installed virtually anywhere in the world.

Over the past ten years, global wind



power production has grown at an average rate close to 30 percent a year.

In other words, wind energy has become an important player of rising importance in the world's energy markets.

Second: Experts consider wind energy to have significant potential to contribute to the necessary cuts in carbon dioxide in the critical period from now up to 2020, when greenhouse gases must peak and begin to decline if we are to reach the global 2 degree scenario.

And finally: The wind industry creates jobs - manufacturing jobs and high tech engineering jobs.

More than 400.000 people are now employed in this industry globally; a number that continues to rise.

## **Dansk-kinesisk samarbejde**



Now, wind is not a simple plug and play solution.

Not many years ago, skeptical voices even claimed that large shares of fluctuating electricity production could not be integrated in the power system in Denmark.

We proved them wrong - and our experience so far is that it is indeed feasible.

We are confident that also our future target of 50 pct. wind power in electricity consumption is feasible.

The key is an integrated approach that includes careful planning and tendering, a focus on quality components to ensure reliability, smart grids, strong interconnectors, good forecasting and flexibility in the remaining system.



Over past decades we have attained valuable experience in Denmark that can now serve the world. Our ambition is to make this experience available to countries, who wish to pursue green growth and the transition to a low carbon future.

We are extremely pleased to have established a strong cooperation with China on renewable energy - with China National Renewable Energy Center and the National Energy Administration as our main partners.

This friendship is a powerful example of the potential that can be tapped, when experts cooperate and share experiences – in this case on integration of renewable energy, long term scenarios for the Chinese energy sector and research and development of new promising technology.

The cooperation between our two countries was sealed when President



Hu Jintao visited Denmark in June this year and witnessed the signing of several energy and climate related agreements between Denmark and China.

This morning, I will have the pleasure to participate in a dialogue on testing and certification of wind turbines. This is key: To ensure high quality components and turbines!

Why? Because if we are to harvest our wind resources cost effectively, we need to demonstrate that wind power also can serve as a reliable source of energy.

Quality matters – and that is why tender procedures in Denmark give a long horizon for the investor.

Investors are provided with an incentive to focus on reducing risks and avoiding unforeseeable cost and





production losses; to focus on high quality in the turbine procurement.

Denmark is the cradle of Wind Power. Our small island state has fostered a unique cluster of expertise and knowledge.

We wish to share our knowledge and know-how with you. We invite Chinese companies, research institutions and policy makers to come and play with us in the Danish energy development sandbox.

We cherish the good cooperation we have with China – and look forward to broadening and deepening it further in years to come.

And we wholeheartedly welcome Chinese investments in Denmark.

## **Outro**

By sharing our thoughts – techniques - cutting edge technology - and well

proven know-how we can becoming  
smart movers of and for the future.

Thank you for your attention.