

## Innovation, Shale Gas and Fukushima Reshaping the Energy Landscape

11 September 2012

Fon Mathuros, Director, Media, Communications Department, Tel.: +86  
15122018229; [fmathuro@weforum.org](mailto:fmathuro@weforum.org)

[Chinese Version I](#) □□

- Innovation in renewable energy has gone global but still represents a small slice of the energy pie.
- The sluggish global economy may dampen an oil price spike, but may choke investment in renewables.
- Shale gas has changed the energy picture in North America, but poses challenges in other geographies.
- For more information about the Annual Meeting of the New Champions 2012, please visit: <http://www.weforum.org/newchampions>

**Tianjin, People's Republic of China, 11 September 2012** – Innovation in renewables and energy storage, the emergence of shale gas as a major energy source and the uncertain future of nuclear energy in the wake of the 2011 Fukushima crisis are reshaping the energy landscape, said a panel of experts at the World Economic Forum's Annual Meeting of the New Champions 2012, which opened today in Tianjin.

While warning that energy transitions never take place quickly, Daniel Yergin, Chairman, IHS CERA, USA, nevertheless struck a positive note, suggesting that the world has witnessed “a globalization of energy innovation” and pointing in particular to advances in battery and electrical storage technologies.

“There’s no question that we’ve had a rebirth of renewables. Wind is not ‘alternative’ anymore,” said Yergin. However, he noted that renewables are still a small fraction of the overall energy mix. Yergin, who recently authored a book on the future of coal in China, pointed out that, despite the impressive growth of renewable energy in China, since 2010, coal is still the largest incremental contributor to China’s energy mix, with 10 times the growth of renewables.

Lin Boqiang, Director, China Center for Energy Economics Research, Xiamen University, People’s Republic of China, said that the Chinese government’s efforts to discourage investment in coal-fired power plants, which now provide about 80% of China’s electric power, have resulted in decreasing investment for six consecutive years. “We’re now worried that it might be too much,” said Lin. “So-called new energy’s incremental contribution has not been enough to offset the decline,” he said, adding that he is concerned that China will face a huge energy shortfall in three years. Trade-related issues and regulation have stymied the Chinese solar and wind industries, Lin said.

The shale gas revolution, a phenomenon limited for the time being to North America, was held up as an example of innovation that has had a marked impact on the energy mix – but only after two decades of research and another five years of implementation. Shale gas has been a factor in declining CO<sub>2</sub> emissions, said Yergin, adding, “There is a political debate in the US now that would have been unthinkable a few years ago: How much should the US be an exporter of energy?”

Asked about the future of shale gas in China, Lin said, "The technology is a problem right now, but can be addressed very quickly. But there's a problem with shale gas – the water. If you ask me what the most scarce resource is in China, it's not fossil fuel, it's water."

Yorihiko Kojima, Chairman of the Board, Mitsubishi Corporation, Japan, said that the slowdown in the global economy, with global growth hovering at or near 3% in coming years, will preclude strong growth in energy demand. Barring any major geopolitical disruption, fossil fuel prices are unlikely to spike, said Kojima.

But the global slowdown may also choke the investment required to stimulate innovation, said Yergin. Innovation, he said, is "going to be tough during an age of austerity."

The slowdown may also impact commitments by governments to greenhouse gas reductions. "I have the impression that CO<sub>2</sub> reduction has gone down in the list of priorities for governments these days, and I hear some people arguing that the scientific basis for global warming should be scrutinized more closely," said Kojima.

Speaking of Japan's energy future in the aftermath of the Fukushima disaster, Kojima said, "It's not so easy to forget nuclear power. It will be reduced in the energy mix, and in the long term it will be covered by renewables. But now it is time for Japan to recover, to be reborn, and to reconsider."

## Notes to Editors

- Follow the World Economic Forum Annual Meeting of the New Champions at <http://wef.ch/amnc12>
- View **photos** from the event at <http://wef.ch/amnc12pix>
- Watch **live webcasts** of sessions at <http://wef.ch/live>
- Follow the Forum on **Twitter** at <http://wef.ch/twitter> and <http://wef.ch/livetweet> (hashtag #WEF)
- Follow **tweets** from participants on our **twitter list** at <http://twitter.com/davos/WEFChina>
- Read the **Forum Blog** at <http://wef.ch/blog>
- Read our MicroBlog in Chinese: <http://t.qq.com/davos>
- Become a fan of the Forum on **Facebook** at <http://wef.ch/facebook>
- Follow the forum on **Google+** at <http://wef.ch/gplus>
- Follow the meeting on **iPhone** at <http://wef.ch/iPhone>
- Join the Summer Davos Debates in China: <http://davosdebates.youku.com>
- The Forum's video space in Chinese: <http://www.youku.com/worldeconomicforum>
- The Forum's Chinese Sina Microblog: <http://t.sina.com.cn/davos>
- The Forum's QQ Microblog: <http://t.qq.com/davos>

---

The World Economic Forum is an independent international organization committed to improving the state of the world by engaging leaders in partnerships to shape global, regional and industry agendas.

Incorporated as a foundation in 1971 and headquartered in Geneva, Switzerland, the World Economic Forum is impartial and not-for-profit; it is tied to no political, partisan or national interests (<http://www.weforum.org>).



World Economic Forum, 91-93 route de la Capite, CH-1223 Cologny/Geneva  
Tel. +41 (0)22 869 1212, Fax +41 (0)22 786 2744, <http://www.weforum.org>