

IEEJ e-NEWSLETTER

No. 20

(Based on Japanese No. 119)

Published: August 30, 2013

The Institute of Energy Economics, Japan

IEEJ e-Newsletter Editor: Yukari Yamashita, Director

IEEJ Newsletter Editor: Ken Koyama, Managing Director

Inui Bldg. Kachidoki, 13-1 Kachidoki 1-chome, Chuo-ku, Tokyo 104-0054

Tel: +81-3-5547-0211 Fax: +81-3-5547-0223

Contents

Summary

【Global Watch】

1. **China Watching: Propping Up the Struggling Solar Power Industry**
2. **ME Watching: Growing Backlash against the Muslim Brotherhood in the Region**
3. **Russia Watching: Putin's Impatience with the Development of the Russian Far East and Rosneft's Growing Presence**
4. **US Watching: Steady Progress in Formulating the CO₂ emission standard for Power Plants**
5. **EU Watching: France's New Efforts to Develop Shale Gas**

Summary

【Global Watch】

1. China Watching: Propping Up the Struggling Solar Power Industry

In July, in an effort to prop up the struggling solar power industry, the government announced plans to rehabilitate the industry and its decision to impose anti-dumping duties on American and South Korean polysilicon.

2. ME Watching: Growing Backlash against the Muslim Brotherhood in the Region

The alleged use of neurotoxic agents in Syria is putting the region on higher alert. In Egypt, the crackdown on supporters of the Muslim Brotherhood following the military coup is intensifying. Israel's motives for restarting the peace process remain unclear.

3. Russia Watching: Putin's Impatience with the Development of the Russian Far East and Rosneft's Growing Presence

Despite the wishes of President Putin, the Russian Far East is not developing as expected while Rosneft is strengthening its presence. Japan needs to create a comprehensive natural gas strategy towards Russia.

4. US Watching: Steady Progress in Formulating the CO₂ Regulatory Requirements for Power Stations

With the CO₂ emission standard for power plants due to be announced shortly, the Obama administration is being criticized for surreptitiously raising the "social cost of carbon", which serves as the basis for calculating the impact of the standard, by 56%.

5. EU Watching: France's New Efforts to Develop Shale Gas

The development of shale gas is facing various obstacles in Europe, but new attempts are emerging in countries such as France where a state-run firm, and not private companies, is keen to develop shale gas.

1. China Watching: Propping Up the Struggling Solar Power Industry

Li Zhidong, Visiting Researcher

Professor at Nagaoka University of Technology

The Chinese solar power facility industry is facing an unprecedented crisis with more than 80% of the companies in the red. This was caused by China's rapid growth in panel production capacity which exceeded the global demand and reached 45 GW (result for 2012 estimated by the Energy Research Institute, China) due to excessive investment, the ratio of imported polysilicon in the domestic market which surged from 45% in 2011 to 59.4% in the first half of 2013, the imposition of anti-dumping and countervailing duties on Chinese solar panels in the US, and the rapidly worsening export environment due to the EU's preliminary decision to impose anti-dumping duties.

In response, on July 15, the State Council issued a detailed guideline intended to assist the development of the solar product industry, and on July 18, the Ministry of Commerce announced its preliminary decision to impose anti-dumping taxes on American and South Korean polysilicon. The government has thus begun to prop up China's solar power industry both domestically and in international trade.

The State Council's guideline pledges to promote the healthy development of the industry in terms of both supply and demand by expanding the domestic market while accelerating the closure of obsolete facilities, restructuring of the industry, and technological development. It aims to install 10 GW of additional solar capacity annually between 2013 and 2015, and raises the target installed capacity for 2015 from 20 GW to 35 GW. Regarding new investments, it sets a power consumption target of up to 100 kWh/kg for polysilicon production, as well as a target for the effective conversion efficiency of solar cells (efficiency for the area of the entire cell) of at least 20% for monocrystalline silicon cells, 18% for polysilicon cells, and 12% for thin film cells. The guideline expressly refers to specific measures such as promoting distributed solar power, revising the FIT system, ensuring the electricity surcharge¹ and distributing it promptly and fully to electricity producers, and utilizing financial, taxation, land utilization and monetary policies.

Meanwhile, the preliminary decision by the Ministry of Commerce recognized that the US and South Korea are inflicting substantial damage on Chinese companies by exporting unreasonably cheap polysilicon, and imposes anti-dumping duties of 53.3% to 57% on the US and 2.4% to 48.7% on South Korea starting July 24. This is the first time for China to impose punitive tariffs, which are commonly used by Europe and the US, on the solar power industry.

Will these measures resurrect the Chinese solar power industry? Punitive tariffs are a strong medicine that should immediately improve the competitiveness of domestic companies within the country. However, they could also cause side effects such as inhibiting the expansion of both domestic and overseas markets due to higher panel and power generation costs and a long punitive tariff battle. Ultimately, the royal road to solution is to boost domestic demand and improve competitiveness through one's own efforts. To achieve the above targets, the State Council's guideline must be implemented, and detailed and specific measures must be set out immediately. The key point is whether or not China can set a reasonable purchase price that suits the situation in China while considering the experience of Germany. Steady progress is awaited.

¹ China is adopting a system in which the rise in costs due to renewable energies is absorbed by a surcharge imposed on all electricity users except for the agricultural sector. The surcharge per 1MWh has been raised from 1 yuan in 2006 to the current 8 yuan, although the total amount of surcharge has not been sufficient to cover the rise in electricity cost due to renewables, and the payment to electricity producers is being delayed.

2. ME Watching: Growing Backlash against the Muslim Brotherhood in the Region

Koichiro Tanaka, Managing Director &
Head of JIME Center

The emerging crisis surrounding Syria is likely to develop into another military confrontation in the region. Although power was transferred calmly in Qatar, in Egypt, Libya and Palestine, there has been a change in the position and activities of the Muslim Brotherhood and its affiliates which had previously maintained good relations with those countries.

The civil war in Syria, which has claimed more than 100,000 lives and has forced nearly 3 million people to flee the country in the past 2 years, has now found a regional face. The alleged chemical weapons attack in a city in the outskirts of Damascus has caught the attention of Western countries. While Russia casting grave doubt over the intelligence assessment of the U.S. and others, as well as the legitimacy for launching a physical punishment, the U.S and its allies are in full preparation of a limited military strike from the seas of Eastern Mediterranean. The regional implication of such an attack will possibly reach Lebanon, Iraq and even Iran.

Recently, Ahmad al-Jarba, who is reportedly close to Saudi Arabia, took over as head of the Syrian National Coalition, which suffers constant infighting, thus defeating the dominant rival Muslim Brotherhood. The Coalition, however, is far from taking control of the rebel forces, and so Europe and the US remain wary of providing weapons to the anti-Assad regime, fearing the rise of jihadists.

Following the coup, Egypt has begun to draft a roadmap under the provisional Mansour administration for reverting to a democratic government and democratization. In constant fear of the spread of Islamism since Algeria's general election in 1991, Europe and the US are withholding criticism of the Egyptian military. Meanwhile, in uncontrolled anger over the dismissal of the former President Morsi, members of the Muslim Brotherhood are repeatedly clashing with the "rebel" citizens who welcomed the coup while calling for democracy, as well as the military and security authorities which do not hesitate to use force. Calls from Defense Minister Sisi to organize demonstrations to counter the Muslim Brotherhood in itself reveal who is actually in control.

US Secretary of State John Kerry announced that Israel and Palestine have agreed to resume direct peace talks, bringing renewed hope for the defunct Middle East Peace Process. While some Palestinian prisoners have been freed, the chance of peaceful co-existence for Israel and Palestine remains slim as the Netanyahu administration retains its hard-line stance toward expanding the settlements, and is considering putting the peace agreement itself to an unpredictable referendum. Meanwhile, Palestine's Hamas, which fell out with Iran over the Syrian issue, is losing influence and its activities are waning following the coup in Egypt and the transition of power in Qatar. In Tunisia, a second opposition leader was shot dead, increasing uncertainty over the way forward.

3. Russia Watching: Putin's Impatience with the Development of the Russian Far East and Rosneft's Growing Presence

Shoichi Itoh, Manager, Senior Analyst
Global Energy Group 2, Strategy Research Unit

On July 16, in a meeting on the economic development of the Sakhalin Province held during his visit there, President Putin strongly criticized the Minister for the Development of the Russian Far East, Victor Ishaev and Sakhalin Mayor Horoshavin, questioning their commitment to the economic development of the Russian Far East. The Sakhalin Province, having the Sakhalin-1 and the Sakhalin-2, is the outpost for Russia's advance into the Asia Pacific region, accounting for 70% of production in the Russian Far East and 80% of investment in the region. However, 80% of the plans ordered by the President last December for upgrading energy and transportation infrastructure and attracting investment still remain on the drawing board.

President Putin did not hide his frustration at the fact that his orders are being ignored even in Sakhalin province, which he considers to be strategically crucial in the Far East. His criticisms targeted the indifference and irresponsibility of the cabinet members and ministries of both the federal government and local governments for the development of the Far East. The original deadline for revising the national plan for the social and economic development of the Russian Far East was summer 2012, but progress was very slow and the Medvedev cabinet did not finally announce the revised plan until March 2013. However, the plan lacks learning effect from the past experiences without specific measures for financial assistance and attracting investment.

While the federal government remains slow to act, Rosneft is playing a growing role in Far East development. At the meeting in Sakhalin, Rosneft announced plans to invest 52 billion roubles (1.6 billion USD) in projects in the Far East in 2013, spending over 1 trillion roubles (30 billion USD) over the next 5 years (including Eastern Siberia). President Putin publicly agreed with Rosneft CEO Sechin that government plans for development of the Far East remain unclear, with no solution in sight.

Currently, Rosneft is considering constructing an LNG terminal with ExxonMobil based on Sakhalin-1. This plan is rivaled by Gazprom's plan to build an LNG terminal in Vladivostok. Considering the expected increase in the supply of non-Russian LNG to Northeast Asia up to 2020 and hence increased competition for market share, both Rosneft's and Gazprom's LNG plans are unlikely to materialize at the same time. At the meeting in Sakhalin, Energy Minister Novak once again announced plans to submit to the lower house a bill for allowing LNG exports, currently monopolized by Gazprom, to other companies including Rosneft, while expressing his hope that the Vladivostok plan will go ahead. This put pressure on Gazprom to decide quickly whether the Vladivostok plan is feasible.

Both the public and private sectors of Japan have been involved with both the Vladivostok plan and Sakhalin-1. Japan should carefully consider Russia's position in its national strategy from a long-term, comprehensive perspective, including possible installation of the third train of Sakhalin-2, while keeping economic and diplomatic interests in balance without being affected by competing interests within Russia.

4. US Watching: Steady Progress in Formulating the CO₂ Regulatory Requirements for Power Stations

Ayako Sugino, Senior Researcher
Coal & Gas Subunit

In his speech on climate change on June 25, President Obama instructed the Environmental Protection Agency (EPA) to accelerate the formulation of the CO₂ requirements emission standard for power plants. The EPA completed drafting the standard for new power stations by July 1, with the details undisclosed, and is currently offering the draft requirements for comments by other departments and agencies. Back in April 2012, the EPA issued draft standard requiring the same CO₂ emissions level as the most advanced commercialized combined cycle gas-fired power plant. This was strongly opposed by those claiming that the standard is a de facto ban on the use of coal, as there is no prospect for commercializing CCS technology. After one year of review, attention is increasing on how the standard has been changed.

When formulating a new requirement, federal agencies are basically required to analyze the economic impact of the requirement and to demonstrate that the social benefits justify the cost. For the CO₂ emission standard for power plants, costs such as additional investment by the power company, the resulting rise in electricity tariffs, and the loss of jobs in the coal industry are compared with the social benefit of the reduction in carbon emissions. In this comparison, the Social Cost of Carbon (SCC) is used as a scale for measurement. The Obama administration caused a stir when it unilaterally changed the SCC in May 2013 and tipped the scales in favor of the social benefits of reducing carbon emissions.

There are numerous cases of SCC calculations, and they have reportedly been used politically in the past, such as under former President Bush when the administration ordered a downward revision of the figure that the EPA had selected from among various calculations to use for analyzing economic impacts. In 2009, the Obama administration established a working group on SCC analysis for eliminating any selectivity from the requirements and to apply it based on scientific grounds. In February 2010, the working group issued an interim report giving 41.7 USD/tonne as the cumulative social cost of carbon as of 2020 if it remains in the atmosphere for 100 years.

In May 2013, the working group revised the SCC analysis, changing carbon's lifetime in the atmosphere to 300 years and raising the social cost by 56% to 65 USD/tonne. This revised SCC analysis was adopted for microwave ovens efficiency standard that the DOE released in June 2013. The standard was based on the old SCC analysis in 2012 when it was offered for public comment, but the scale of measurement was quietly replaced after the end of the public comment period.

The CO₂ regulatory requirements on power stations have been facing strong opposition mainly from the Republican members of Congress, and at least 51 bills have been proposed during the 2 years from 2009 to 2010 alone to invalidate the regulatory authority of the EPA. However, what sets the recent revision apart from others is that it is being criticized not only by the members of Congress opposing the requirements, but also by the pro-environment Congress members.

The CO₂ emission standard that the EPA is currently developing could be easily discontinued or withdrawn if the Republicans win the election in 2016. To protect the CO₂ regulatory framework from the election result, they must be finalized and put into effect under the Obama administration, and so there is no time for a court battle over the legitimacy of the procedure. Pro-environment Congress members consider that the procedure for rulemaking should be free of any doubts whatsoever.

5. Watching: France's New Efforts to Develop Shale Gas

Wataru Fujisaki, Senior Researcher
Global Energy Group 1
Strategic Research Unit

According to a recent report from the US EIA on global shale gas and oil, there are technically recoverable shale oil and gas resources in Europe, in countries such as the UK, France, Germany and Poland, though not as much as in Russia, China and South America. However, the stances toward shale gas development vary significantly among the countries of the EU, from those banning the use of hydraulic fracking in exploring reserves to those that actively promote exploration.

Reserves of shale gas and oil in France, in the areas around Paris and in the south, are estimated to be 137 trillion cubic feet (almost equal to the proven reserves of conventional gas in Australia). Total and other independent drillers are planning to develop the reserves. However, in response to environmental groups' claims that hydraulic fracking could cause water contamination, in 2011, the then President Nicolas Sarkozy banned the use of the hydraulic fracking for exploring shale gas in France. The incumbent President Francois Hollande also announced in July that the ban will not be lifted while he is president.

However, it is the use of hydraulic fracking for developing shale gas which is banned in France; if there are alternative means for development that do not contaminate ground water, then shale gas development might be permitted. While the ban on the technology is considered as a de facto ban on development as there is currently no alternative means for exploration, industry has begun calling for the ban to be lifted by improving the application of hydraulic fracking technology. Economy and Industry Minister Arnaud Montebourg recently proposed the possibility of developing shale gas by a state-run company under the control of the government instead of private companies. Involvement of the state in shale gas development would prevent uncontrolled development and contamination of the environment, and some of the profit earned could be returned to the national treasury and used to promote renewable energies, thereby protecting the environment and reducing greenhouse gases. Furthermore, cheap domestic shale gas would help boost the competitiveness of domestic industries, as gas prices have recently soared in France in keeping with oil prices.

The idea of a state-run company replacing private companies to spur and lead the development of shale gas is characteristic of France, where the state has a strong influence on industry. However, as this proposal was immediately rejected by Prime Minister Jean-Marc Ayrault, France is unlikely to change its policy soon. In Europe, more countries are starting to change their policy and lean towards lifting the ban, including Germany where the success of the shale gas revolution in the US has encouraged the coalition government (Christian Democratic Union and Free Democratic Party) to prepare a bill to lift the current ban on shale gas development. The development of this issue should be closely monitored.

More information on IEEJ can be found by clicking below.

[IEEJ Calendar of Events](#)

[Energy Indicators of Japan](#)

[IEEJ Homepage Top](#)

[Back Numbers of *IEEJ e-Newsletter*](#)