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Contents

Summary

【Energy Market and Policy Trends】

1. **Trends in the Global Natural Gas and LNG Markets**
2. **Moves to Review the FIT System and a Change of Main Players in the Renewables Market**

【Global Watch】

3. **China Watching: Attention on Peak Coal**
4. **ME Watching: A String of Elections and Important Personnel Assignments**
5. **US Watching: Pre-Election Domestic Politics and Funds for Roads**

【Energy Market and Policy Trends】

1. Trends in the Global Natural Gas and LNG Markets

The global demand for LNG for 2013 was 236.91 million tonnes, roughly unchanged from the previous year. While demand is growing in Asia, it is falling in Europe. For supply, exporters such as Qatar and Russia did well.

2. Moves to Review the FIT System and a Change of Main Players in the Renewables Market

Europe is shifting from the Feed-in Tariff (FIT) system to the market-linked Feed-in Premium (FIP) system. The solar PV market has shrunk considerably in Europe, but is rapidly expanding in China and Japan.

【Global Watch】

3. China Watching: Attention on Peak Coal

In China, both the supply and demand for coal are slowing. As the GDP growth rate slows and measures to control coal consumption are fully implemented, the demand for coal could peak at approximately 3.9 billion tonnes around 2015 to 2017.

4. ME Watching: A String of Elections and Important Personnel Assignments

Elections are taking place in Turkey, Egypt, Algeria, Syria, Iraq and Lebanon. Saudi Arabia had a controversial reshuffling of major officials. A solution has been proposed for resolving the dispute between Qatar and the Gulf countries.

5. US Watching: Pre-Election Domestic Politics and Funds for Roads

Heading toward the political slowdown prior to the midterm elections, various issues including the Keystone XL Pipeline and financing of the funds for roads are coming up.

1. Trends in the Global Natural Gas and LNG Markets

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In April, the International Group of Liquefied Natural Gas Importers (GIIGNL) released The LNG Industry, a report on global LNG statistics for 2013. The following is a summary of the global LNG market in 2013 in terms of demand, energy and short-term transactions.

The global demand for LNG for 2013 was 236.91 million tonnes, which is almost unchanged from the previous year, with annual growth of 0.3%. By region, the demands were 181.18 million tonnes for Asia and the Middle East (up 6% Y-o-Y), 33.93 million tonnes for Europe (down 29%), and 21.81 million tonnes (up 17%) for the Americas. In Asia, the demand remained almost unchanged for Japan at 87.98 million tonnes, but soared for China and South East Asia at 23.89 million tonnes (up 46%), pushing up the overall demand of the region. On the other hand, in Europe, demand fell for all importing countries. Although this drop was caused by the slow demand for natural gas itself and the decline in competitiveness of gas for electricity generation, the decline in demand shows no sign of stopping. In the Americas, the increase in Latin America made up for the decrease in the US and Canada.

On the supply side, African countries did particularly poorly due partly to the decline in demand in Europe, in addition to issues on the supply side. In particular, exports from Egypt plunged 44% to 2.66 million tonnes due to a serious shortage of feed gas. Supply also decreased to 16.47 million tonnes, down 16% from last year, for Nigeria, where the export of LNG was disrupted for a month following the destruction of a pipeline. In contrast, the world’s largest exporters—Qatar, Yemen and Russia—all achieved more exports than the rated capacities of their liquefaction plants.

The volume of short-term (up to four years) and spot transactions was 64.98 million tonnes, up 10% from 2012 levels. Like last year, a sizable chunk of short-term transactions came from Qatar, which exported 25.10 million tonnes or 39% of the world’s entire short-term and spot export transactions. Re-exports from Europe increased by 10% to 3.99 million tonnes, providing further evidence of the gravity of the decline of demand in Europe. Japan was the largest importer through short-term transactions, buying 21.69 million tonnes or 25% of national imports through short-term and spot transactions.

The current trend for the LNG market is likely to continue in principle in 2014, but the degree of decline in demand in Europe and the launch of new projects in Asia and Oceania should be watched.

2. Moves to Review the FIT System and a Change of Main Players in the Renewables Market

Hisashi Hoshi, Board Member, Director
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To date, the renewables market has been driven by the mass introduction of solar PV and wind power generation by Europe through a powerful policy, the Feed-in Tariff (FIT) System, but the tide appears to be turning.

First, due to the social burden of the soaring capacities of renewables, the policy for introducing renewables is being reconsidered, with the situation becoming increasingly tough for the FIT system in Europe in particular. On April 9, the European Commission (Directorate General for Competition) released a guideline on the aid for introduction of renewables, which advocates phasing out the FIT system and from 2017, switching all projects above 1 MW to the Feed-in Premium (or FIP) system, which is a purchase system based on bidding at market-linked prices (with premium). The FIP system had already been proposed in a European Commission communique last November, and Germany is also considering shifting entirely to the FIP system starting 2017 in its revised renewables bill.

What is the situation in Japan? Since the launch of the FIT system in July 2012, the cumulative licensed capacity of solar PV has reached 31 GW as of January this year. However, METI has decided to revoke the licenses of those projects that have been authorized but not implemented, for being dishonest. With the limited capacity for installing facilities, continued accumulation of the licensed capacity will not be sustainable. Hopefully, the reduction in the purchase price to 32 yen/kWh (without tax) starting in April will keep the total licensed capacity within a certain limit. Since the Japanese electricity market is less liquid than those of Europe and the US, it would be extremely difficult for Japan to introduce the FIP system. However, if the licensed capacity continues to build up excessively, it will be necessary to take complementary measures such as setting a limit on new capacity added per year or on the total amount of surcharge. For reference, the purchase price of electricity of the Chinese FIT system is 1 yuan (16 yen)/kWh, only half that of Japan.

Regarding the introduction of renewables by country, there has been a notable change of the main players in the solar PV market. In 2013, 37 GW of new capacity was added, up 24% from 30 GW in 2012 (cumulative total 137 GW). The most notable countries were China, which ranked first by adding 11.3 GW of new capacity, triple that of the previous year (3.5 GW), and Japan, which ranked second with 6.9 GW. Both countries became main players by leveraging the FIT system, which is no longer popular in Europe. Meanwhile, the decline of the European market, the world leader until two years ago, looks set to continue, adding only 10 GW in 2013 for the whole of Europe, down 42% year-on-year and half the peak level of 2011.

It is also notable that in 2013, the amount of new geothermal capacity reached 530 MW. This increase accounts for 4% of the cumulative capacity of 12 GW, and although modest compared to solar PV, it is the largest amount for geothermal energy since 1997. According to the Japan Geothermal Association, there are projects worth 12 GW currently ongoing, including those at the construction stage. Here again, east Africa, Indonesia and the Philippines are making great progress, while the US, the leader in this area, remains inactive.

3. China Watching: Attention on Peak Coal

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According to preliminary statistics, China's coal output for 2013 was 3.68 billion tonnes, up 0.8% from the previous year, while its coal consumption was 3.74 billion tonnes, up 1.9%. Though still accounting for half of the global market in both production and consumption, the growth rates shrank to the lowest levels since 2001. Accordingly, the ratio of coal in primary energy consumption dropped by 0.4 points to 76.1% for production, and by 0.9 points to 65.7% for consumption.

The reasons for the decline in demand are: (1) the slowdown in the economic growth rate, which remained at 7.7% in 2013 following 2012; (2) the effects of structural adjustments, including controlling energy-intensive industries and promoting the development of tertiary industry, are starting to appear; and (3) controls on coal consumption by strengthening measures to prevent air pollution and global warming. Further, the reasons for the slowdown in domestic production, in addition to the decline in demand, are: (1) the increase in net imports (gross imports minus gross exports) to 320 million tonnes, up 40 million tonnes from last year, due to the declining competitiveness of domestic coal in the market resulted from a drop in coal prices in the international market and the continuous revaluation of the Yuan, and due to the widespread use of imported coal particularly in the southeast coastal area, and (2) the progress in replacing coal with natural gas and non-fossil fuels.

As this year's policy targets, the National Energy Administration announced keeping both the production and consumption of coal below 3.8 billion tonnes, and reducing the ratio of coal in primary energy consumption to below 65%. Further, the "Twelfth 5-year Plan on Coal Industry Development" sets a target for the production and consumption of coal at 3.9 billion tonnes by 2015. If all these targets are fulfilled, net imports should become zero, but in reality, this is not likely. Even with the ban on the production, import and use of low-quality coal, which the government is currently considering and which will reduce the imports by 80 million tonnes if implemented, net imports are likely to remain above 200 million tonnes, with little hope for a rapid change in domestic and international market structures.

In the longer term, the "Peak Coal Theory" requires attention. The Chinese Academy of Engineering, a think tank directly under the State Council, estimated the peak coal production at 3.8 billion tonnes based on the restrictions on resources, protection of water resources and arable land, and the allowable amount of pollutants, in its report on the medium- to long-term energy development strategy released in February 2011. The report stated that demand for coal will peak at 3.7 to 4.0 billion tonnes around 2030 due to the change in industrial structure, wider use of coal alternatives, and tougher environmental protection and global warming prevention measures. In March this year, the Planning and Design Research Institute of Coal Industry and the Coal Section of the China Energy Research Society held a joint forum on the outlook and response to Peak Coal, in which Li Ruifeng, general manager of the Institute, predicted that China's coal demand will peak in 2020 at 4.1 billion tonnes, and thereafter fall to 3.9 billion tonnes in 2030.

Meanwhile, in January, the China National Coal Association estimated the demand, production, and net import of coal in 2020 at 4.8 billion tonnes, 4.0 billion tonnes, and 0.8 billion tonnes, respectively. However, this is a pro-industry forecast. Since it is impossible to alleviate air pollution and start reducing carbon dioxide emissions until coal consumption has peaked, and considering the need to achieve stable economic growth and the fact that measures to control consumption will be fully introduced, the peak could be around 3.9 billion tonnes as early as in 2015, and around 2017 at the latest.

4. ME Watching: A String of Elections and Important Personnel Assignments

Koichiro Tanaka, Managing Director &
President of JIME Center

This spring was marked by a flurry of elections and personnel assignments in the countries of the Middle East and Northern Africa. In Turkey, the overwhelming victory of the ruling party AKP, against the odds, in the local elections in March strengthened the prospects that the increasingly assertive Prime Minister Erdogan will be elected as the next president. In Egypt, Abdel Fattah el-Sisi, who formally resigned as defense minister at the end of March, is running for president in the election in late May, and is considered highly likely to win, backed by overwhelming public support. In Algeria, President Abdelaziz Bouteflika, who stood in the election from his sick bed, was elected for the fourth consecutive term.

With the civil war entering its fourth year in Syria, the schedule for the presidential election held upon the expiration of President Assad’s term has been announced. Though the election itself is constitutional, the international community, particularly the UN and the West, is demanding that the election be postponed, denouncing it as a violation of the 2012 Geneva Agreement advocating the establishment of a neutral transitional government. The UN has removed 80 percent of the Syrian government’s chemical weapon stockpiles now under UN control. Meanwhile, the Syrian government and the rebel forces are blaming each other for the latest attacks using chlorine gas. In Lebanon, Syria’s neighbor, the selection of the next president by the parliament has again been delayed. In Iraq, to which the turmoil in Syria could spread, the preliminary result of the parliamentary elections at the end of April shows that Prime Minister Maliki’s party has gained most seats. It will take time for the next administration to be established, yet it is most likely that Maliki will retain his position. The Afghanistan presidential runoff election initially due at the end of May, has been postponed to mid-June.

While the contacts between Iran and the US has gained frequency, the negotiations may be hampered by the US decision not to issue a visa to Iran’s next UN ambassador, citing involvement in the US embassy hostage ordeal of 1979. Iran is seeking to advance the nuclear negotiations at Vienna by proposing to modify the design of the heavy-water reactor in question. However, the drafting of a long-term agreement to replace the tentative one is facing difficulties on key issues, including the scale of enrichment.

Qatar resolved its dispute with its Gulf neighbors, particularly Saudi Arabia, by accepting the mediation by Kuwait and signing a Riyadh declaration that vows “not to harm the interests, security or stability of other member states”. However, there are doubts as to whether Qatar will curtail the activities of Muslim Brotherhood members it has received against the will of other countries, and the treatment of preacher Yusuf al-Qaradawi, who has a strong influence on the Brotherhood sympathizers abroad.

In Saudi Arabia, intelligence chief Bandar and health minister Rabeeah were dismissed, apparently held responsible for the Syria policy and the MERS virus outbreak. Libya’s Prime Minister al-Thani resigned five days after being elected by parliament, citing attacks on his family by armed groups. President Abbas, who aspires to make Palestine a member of international organizations, managed to reconcile the warring Fatah and Hamas, angering Israel which reacted immediately by suspending the peace talks. The string of elections and personnel shuffling is unlikely to stabilize the region; rather, there is a risk of new contention and further turmoil.

5. US Watching: Pre-Election Domestic Politics and Funds for Roads

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The Japan-US TPP negotiations failed to reach an agreement during President Obama's visit to Japan. Although both parties failed to find a middle ground, in the US Congress, neither the Democrats, who are wary of free trade agreements, nor the Republicans, who basically advocate free trade, support the current TPP negotiations. Further, Japan has known that the TPP is headed toward zero tariffs in principle ever since it joined the negotiations, so the uncompromising attitude of the US in the negotiations is hardly a surprise.

On April 24 (US time) when President Obama was in Japan, Rolling Stone reported that "the President has already decided not to license the construction of the Keystone XL Pipeline". The report came after the State Department's decision to suspend the reviews and postpone the decision until after the midterm election in November, due to a lawsuit filed in Nebraska on the procedure for authorizing the pipeline to pass through the state. Amid concerns that the Democrats may lose both houses of Congress, this issue could affect the outcome of the election.

Heading toward the usual slowdown of domestic politics from summer to fall every election year, on April 29, President Obama sent a budget bill to Congress that allocates a total of 302 billion dollars to the infrastructure funding over four years.

Between 1956 and 2009, land transportation infrastructure such as roads, bridges and railroads had always been built and maintained on five- to six-year budgets. Roads belonging to the federal authority are built and maintained with the Highway Trust Fund, which is financed by the federal gasoline tax. The federal gasoline tax is 18.4 cents/gallon as of April, unchanged since 1993 without any adjustment for inflation. Combined with the sluggish growth in gasoline consumption due to better fuel economy, and rising maintenance costs as the roads age, the Highway Trust Fund has been overspending since 2001.

Due to the difficulty of making political decisions on how to finance this fund, since 2009 the transportation budget had been covered by as many as nine interim bills with a three- to six-month life-span until a two-year budget bill was passed in June 2012 (valid till September 2014). As the Highway Trust Fund is due to run out in August 2014, the government must deliberate on this large budget item even as politics enter the sluggish period toward the midterm elections.

Possible solutions for a stable source of road funds have been discussed for the last two years. First is raising the federal gasoline tax, then with adjustment for inflation. Second is switching from the gasoline tax to tolls for financing the road funds. Third is setting up a public bank or fund that provides loans and invests in infrastructure upgrading, and promoting the use of public-private partnerships. Considering the recent events such as the federal government lockout, the fiscally-conservative Republicans and the Democrats representing conservative states who are on the verge of being unseated are unlikely to support these reforms; however, if the transportation budget runs out without a succeeding bill, the federal gasoline tax will cease to be collected from the next day, causing the unprecedented situation of the roads not being maintained.

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IEEJ Homepage Top

Back Numbers of *IEEJ e-Newsletter*