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#### **Summary**

#### 1. Climate Change Policy & Energy Conservation Trends: UN Climate Summit 2014

The UN Climate Summit on September 23 confirmed that the member countries will work to reach an agreement in COP21. It also reconfirmed the considerable influence of the US and China in the negotiations.

#### 2. New Excitement and Demand Generated by EVs

EVs are starting to generate new demand with their unique strengths. High-end EVs with a completely new driving feeling and ultra-small EVs designed to meet the demand for "driving around town" are such examples.

#### 3. China Watching: Response to the Next International Framework Nearing Finalization

At the Climate Summit in September, China declared that it will participate in the next framework and aim for reducing the total volume of emissions. The draft voluntary commitment is likely to be submitted by March next year, as agreed in COP19.

# 4. US Watching: Using Presidential Authority to Execute Policies Will Remain Important beyond the Mid-term Election

The balance of power in the Senate after the mid-term election is attracting attention, but Congress will remain deadlocked regardless of the result. Policy execution by executive order, such as the recent energy conservation regulations, will remain important.

## 5. EU Watching: New Organization of the European Commission and the Energy Union

The new organization of the European Commission seems to be shifting its focus to energy security, as indicated by the new "Energy Union" initiative which attempts to strengthen energy security with the joint efforts of the EU.

# 1. Climate Change Policy & Energy Conservation Trends: UN Climate Summit 2014

**Hiroki Kudo**, Senior Research Fellow Global Environment and Sustainable Development Unit

On September 23, the United Nations Climate Summit was held at the UN Headquarters in New York, chaired by the UN Secretary-General. The Summit was scheduled in time for the UN General Assembly, and there was intense interest in the comments of the global leaders in the run-up to COP21 in 2015 where the world will aim to agree on framework beyond 2020. The Summit itself did not venture further than confirming that the international community will work to reach an agreement in 2015, following the tone of past UNFCCC negotiations and G7 statements. However, it was again quite clear that the success or failure of the upcoming international negotiations will depend on the US and China.

In his address, China's First-ranked Vice Premier Zhang Gaoli declared that China will strive to achieve the peak total carbon dioxide emissions at an early date. This is the first time that China has indicated it may shift to a total volume-based target from the current intensity-based one. Meanwhile, President Obama emphasized the importance for the US and China to lead the effort to set the framework beyond 2020. The implication is that the extent of the US's commitment to the framework will depend on just how willing China is to make substantial efforts.

The US and China share the common position and premise that climate change must be tackled jointly by the entire international community. The Summit reconfirmed that the negotiations heading toward agreement will be affected significantly by the actions of the two countries and their relationship. The UN Secretary-General concluded that the member countries have agreed to work to reach agreement on the first draft in COP20 at the end of the year and on the framework in COP21. However, will the US and China head in the same direction and jointly lead the international negotiations?

In Japan, the future energy mix, which will affect the GHG emissions target beyond 2020, is being studied, and the Energy Efficiency and Conservation Subcommittee, Committee on Energy Efficiency and Renewable Energy, Advisory Committee for Natural Resources and Energy is clarifying the issues in order to draw up specific energy conservation policies. The fourth meeting held on September 2 discussed the status of development of energy conservation technologies and implementation of the Energy Conservation Law (measures pertaining to factories), and the future agenda.

IEEJ CEO and Chairman Masakazu Toyoda suggested that the use of IT for energy conservation should not be limited merely to "visualization" but should be expanded to include automatic control together with the energy price policy. And also he suggested that it should enable users to make adjustments considering various factors such as lower facility utilization rate as improvements in emission intensity by industry approach the limit, in order to motivate operators.

## 2. New Excitement and Demand Generated by EVs

**Hisashi Hoshi**, Board Member, Director New and Renewable Energy & International Cooperation Unit

Deliveries of the Model S, a high-end electric vehicle (EV), of Tesla Motors of the US began in September. The vehicle costs at least 8.23 million yen, which is not cheap. However, the cars are not being bought only by curious, wealthy consumers. Since it went into production in the second half of 2012, Tesla has sold about 40,000 units worldwide. This is a considerable achievement given that it took Nissan more than three years to sell 100,000 of its EV "Leaf" since its launch in December 2010, even though the Tesla costs two or three times more than the Leaf.

What makes Tesla so appealing? EVs are often characterized by powerful acceleration, and the Model S is no exception: it accelerates from rest to 100 km/h in just 5.6 seconds. According to a test ride report, the car accelerates "without any noise or vibration whatsoever, as though it was gliding, leaving a whizzing sound. Nothing like I have ever experienced" (Nikkei Digital Edition). Furthermore, it features both the classic and the innovative, with the styling of a luxury European car, yet most issues can be resolved by software updates. Tesla is offering not a vehicle that rivals its internal-combustion engine counterpart, but the excitement of a new driving feeling and experience not found in existing vehicles.

At the other end of the scale is the ultra-small EV ("Mobility"). Mobility overcomes the disadvantages of EVs—high price, short cruising distance and a lack of charging infrastructure—by making the body small to carry only one or two people, and focusing on driving around town for shopping, small parcel delivery, and transportation for the elderly. Its smallness will also help ease urban traffic. The transport ministry of Japan is supporting ultra-small EVs: it launched a licensing system in January last year for driving them in public, and in August this year, started publicly seeking assistance for projects that introduce Mobilities on a trial basis.

What Tesla and ultra-small EVs have in common is that they do not compete head-on against existing engine vehicles or try to steal their market. Tesla's sales point is the unique driving feeling of EVs not found in conventional vehicles, while the ultra-small Mobility seeks to generate new demand not met by conventional vehicles by limiting their use to driving around town.

Offering subsidies to compensate for the disadvantages and help newcomers compete is an effective policy which is being used not only for EVs but also for renewable energies. However, newcomers should try to develop in unique areas so that they can support themselves without depending on subsidies. As newcomers become independent, it will also help reduce the social cost associated with the subsidies, and so assisting newcomers to develop their own area is rewarding for policy-makers as well. The success of Tesla Motors and ultra-small EVs is a good example of such efforts.

# 3. China Watching: Response to the Next International Framework Nearing Finalization

**Li Zhidong**, Visiting Researcher Professor at Graduate School, Nagaoka University of Technology

President Xi Jinping missed the UN Climate Summit on September 23 and instead sent First-ranked Vice Premier Zhang Gaoli as his special envoy. Five years ago, the Summit was attended by the then President Hu Jintao, who pledged to aim to reduce per-GDP CO<sub>2</sub> emissions (or emission intensity) as a voluntary action target for 2020. Sending a special envoy caused some skepticism about China's commitment to preventing global warming, but such concerns appear to have been unfounded.

In his address, Vice Premier Zhang presented the stance of President Xi that "tackling climate change is the intrinsic requirement of China's sustainable development as well as the international obligation of a responsible major country. This is not at the request of others but on our own initiative." Then, he announced that China has already reduced its emissions intensity by 28.5% from 2005 levels, and has recently released China's National Climate Change Program 2014-2020, which guarantees that the voluntary action target of a 40–45% reduction by 2020 will be met, emphasizing the country's post-Kyoto achievements and determination. Regarding the long-term framework, he stated that "China will set the post-2020 action target for tackling climate change as soon as possible, to reduce greatly the carbon emission intensity, increase the proportion of non-fossil fuels, and increase forest coverage, and will strive to achieve the peak of its total CO<sub>2</sub> emissions as early as possible." This was China's first commitment to the international community to participate in the next framework and to aim to reduce total emissions. It means that China is starting to participate in the new framework.

The international community is already focusing on two points. First, when will the peak of total  $CO_2$  emissions be reached? According to a white paper, "China's Policies and Actions for Addressing Climate Change" released in November 2013, the government initiated in 2012 a national project for developing a roadmap for a low carbon society targeting 2020, 2030 and 2050, and has achieved initial results. The final report of this project will serve as the basis for the draft voluntary commitment to be submitted to the UN, and its rough outline should be almost complete. For example, He Jiankun, Deputy Director of the National Expert Committee on Climate Change, has said that China should aim to achieve the peak of emissions by 2025 in the industrial sector, and by 2030 nationwide. Zou Ji, Deputy Director General of the National Center for Climate Change Strategy and International Cooperation, estimates that the peak will be achieved around 2030, or between 2025 and 2035. According to our study, the peak should be achieved by 2020 for coal consumption, which is the largest emitter, and by around 2025 at the earliest or 2030 at the latest for  $CO_2$  emissions.

The second focus is when the draft voluntary target will be submitted. While both Vice Premier Zhang and Xie Zhenhua, Viceministern of the National Development and Reform Commission (NDRC) and responsible for the framework negotiations, have only said "as soon as possible", Kyodo News has reported that the Special Representative for Climate Change Negotiations of the Foreign Ministry, Gao Feng, is preparing the document to be ready by the end of March next year. China is expected to finalize the voluntary target for submission after COP20 at the end of this year and the US-China Climate Change Working Group planned for early next year, within the time frame agreed in COP19.

# 4. US Watching: Using Presidential Authority to Execute Policies Will Remain Important beyond the Mid-term Election

**Ayako Sugino**, Senior Researcher
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The Climate Summit held in New York on September 23 attracted global attention, also due to the demonstrations of environmental groups on the eve of the event demanding that world leaders take climate change seriously. On the day of the Summit, several countries, mostly European, announced their GHG emissions reduction target or the amount of economic assistance for developing countries.

Meanwhile, the US announced several efforts, including stricter energy-saving standards for air conditioners and refrigerators by the Department of Energy, more rigorous CFC emission reduction efforts by the State Department, and an executive order requiring federal government offices to adapt to climate change. However, no specific amount of assistance for the low income bracket was announced, perhaps because Congress will not approve additional government spending.

The US Congress is heading toward the mid-term election on November 4. As the Republicans are likely to retain their majority in the House of Representatives, the major issue is the Senate races. Currently, Democrats have 55 seats and Republicans 45 in the Senate, and the consensus is that the Democrats will probably lose seats in next congress. Can the Democrats keep their majority in the Senate with a slimmer margin than now, or will GOP only just win the majority? Ballot counting of the close states is being reported daily. There are occasional reports on industry groups and others ramping up their efforts to lobby Republicans, just in case they gain the majority in both Houses. While the election is of interest, how much will its outcome affect US government policy? Probably not that much.

According to a Gallup poll dated September 24, American satisfaction with the US government remains low at 27%. Support for President Obama is also low at 44%, but figures are even lower for Congress. The President and Democrat lawmakers are holding the GOP responsible for stalling Congress by opposing everything, but it is also said that Senate Majority Leader Harry Reid (D-Nevada), who is responsible for the Senate proceedings, has been postponing votes on important legislation that could test the stance of lawmakers, to protect those Democrat lawmakers representing borderline states who will be fighting a close battle in the mid-term election. Of course, this is because the Democrats, though they have a majority, do not have the 60 votes required to bring a bill to a vote by overcoming opposition filibusters, and therefore are forced to compromise with Republican lawmakers (at least the moderate ones). A narrow victory by the Republicans in the mid-term election, even if achieved, will only put them in the position currently held by Democrats in the Senate proceedings.

In fact, President Obama said at a party meeting on September 23 that he "cannot expect this government to function any better", and will likely continue to depend on administrative authority in executing government policies. The stricter energy-saving standards for refrigerators and air-conditioners (by agency rules) mentioned earlier, if finalized and implemented, are designed to cut the power used by household fridges and air-conditioners by 25% and 50%, respectively. Though it is difficult to compare the toughness of standards between countries, the new standards should considerably reduce the power consumed in homes. Implementing policies through federal standards is one way to achieve steady results without spending too much money.

# **5. EU Watching: New Organization of the European Commission and the Energy Union**

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

On September 10, President-designate of the European Commission Jean-Claude Juncker released a list of European Commissioners who will serve in the next Cabinet. The new European Commission, which is due to be launched in November upon approval by the European Parliament, differs in structure from the conventional one in several ways. The conventional cabinet consists of one High Representative of the Union for Foreign Affairs and Security Policy (foreign minister) and respective commissioners in charge of one department, all under the President of the European Commission. The new organization has seven additional Vice-President positions that support President-designate Juncker and are placed above the commissioners in charge of each department, and each lead a project team. The Vice-Presidents plan to tackle cross-departmental tasks, and it is hoped they will overcome the sectionalism of the Commission. The seven Vice-Presidents include the Foreign Minister of the Netherlands Frans Timmermans, the First Vice-President (watchdog, basic human rights, and rule by law) who oversees the overall organization and has strong authority to manage the EU's legislation system, and Italy's Foreign Minister Federica Mogherini as the High Representative of the Union for Foreign Affairs and Security Policy, who are considered to be the leaders among the Vice-Presidents. Regarding energy, Slovenia's former Prime Minister Alanka Bratusek will be in charge of the "energy union" as a Vice-President, and Spain's Agriculture, Food and Environmental Affairs Minister Miguel Canete will lead two departments, Climate Action and Energy.

The highlight of the energy policy is the Energy Union, which Vice-President Bratusek will be in charge of. The Energy Union is an initiative proposed by Prime Minister Donald Tusk of Poland and is a joint effort of the EU to strengthen its energy security. The initiative is intended to enable the EU to gradually take over the energy negotiations with Russia, which are currently handled by each member country, so that crises such as gas supply cuts can be tackled collectively by the EU. The EU will also consider providing direct economic assistance to member countries for improving storage capacities and pipeline networks, in order to strengthen energy security. The purpose of the Energy Union is to stop energy supply from being used as a tool for diplomatic negotiations, since dependence on Russian energy has affected the EU's stance toward Russia over the Ukraine crisis. To boost the energy self-sufficiency rate, each member can import environment-unfriendly coal and shale gas at its own discretion and use it flexibly with due consideration to sustainability. The Energy Union will also promote energy cooperation with countries outside the EU, with a view to importing American shale gas.

Team Juncker has a solid lineup that includes five former prime ministers, showing the President's focus on getting things done. The Commission will continue to head toward strengthening the EU, unifying the energy policies of member countries. However, it seems to be shifting its focus from climate change to energy security. The Ukraine crisis showed that energy security cannot be achieved in a day, but requires continuous efforts. This move of the EU is important for Japan, as the EU is also highly dependent on other countries for energy. In both Asia and the EU, it is essential to steadily promote cooperation between energy consumers, and to continue efforts to improve the energy self-sufficiency rate.

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