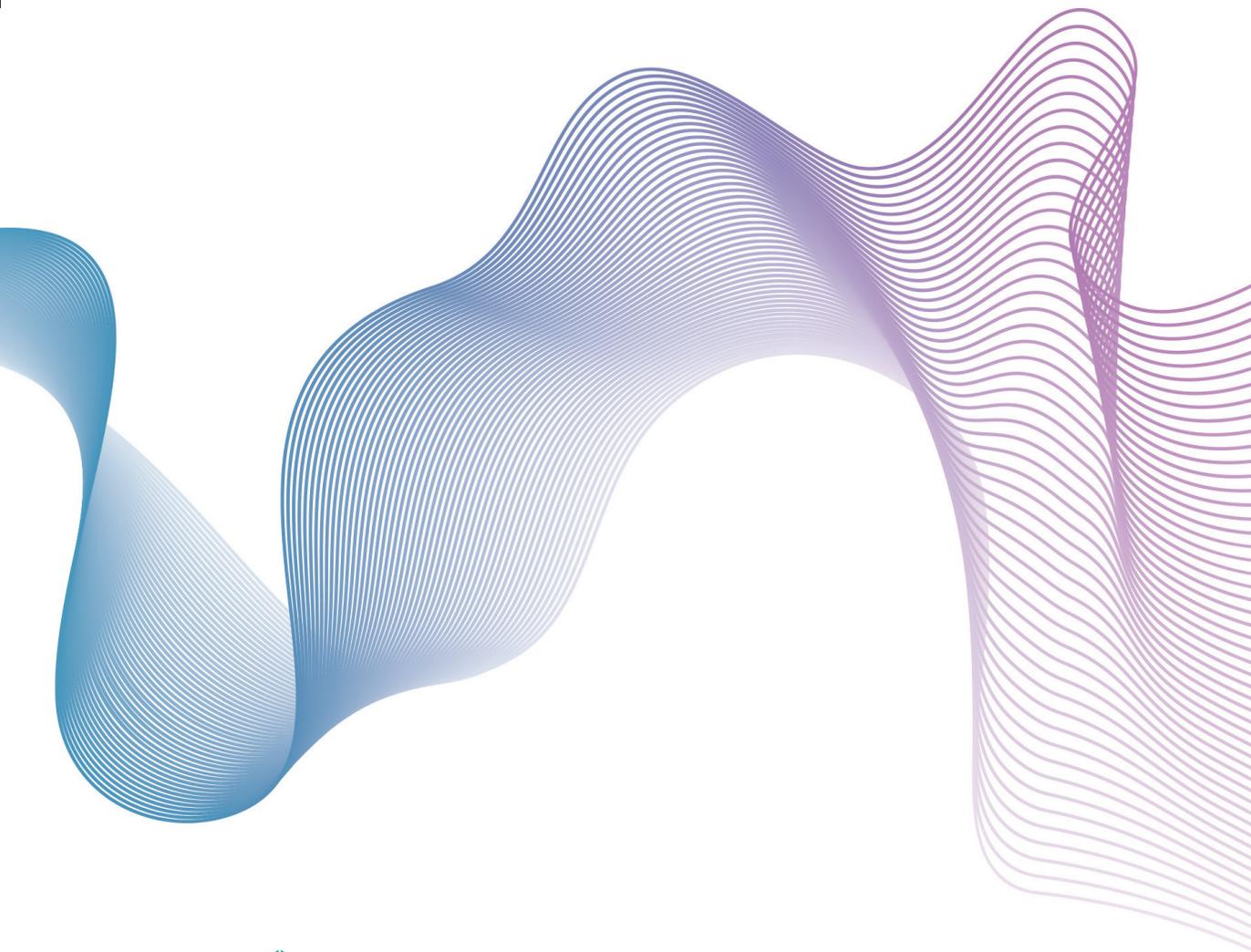


GGGI ENERGY FORUM 2018

Tuesday, October 30, 2018 |
The Plaza Hotel, Seoul



Background

The outlook for renewable energy is “very positive” with more new investments in renewables than fossil fuels but further efforts and money are needed to tackle climate change, this is according to Dr. Frank Rijsberman, Director-General of the Global Green Growth Institute (GGGI).



Back in 2015, more money was invested in renewables than fossil fuels for the first time and since then prospects keep getting better and better to the stage where renewable resources have become competitive against coal and natural gas. In fact, it's now cheaper to build a new wind farm than to keep a coal plant running. This is according to an analysis by the investment bank Lazard. The Lazard report highlighted that the cost of building a new utility-scale solar or wind farm has dropped below the cost of operating an existing coal plant. Both the wind and solar industries are driving down cost and improving technology performance, and the technologies are now better positioned to compete than ever before. The Lazard report found that wind is the cheapest source of new power generation in many U.S. markets. Furthermore, wind is rapidly becoming competitive with existing conventional power plants, continuing to show growth in an era of relatively flat electricity demand. With cost reductions expected, the outlook for wind energy remains bright.

Renewable energy will keep growing out to 2023 led by growth in bioenergy consumption as countries seek to reduce greenhouse gas emissions as a way to keep the planet from getting warmer, according to the latest report by the International Energy Agency. Renewables will continue their expansion in the next five years, covering 40% of global energy consumption growth, according to the IEA's Renewables 2018 market analysis and forecast report.

The IRENA report stated that the cost of renewable energy is rapidly falling that it should be a consistently cheaper source of electricity generation than traditional fossil fuels within just a few years. The report found that the cost of generating power from onshore wind has fallen by around 23% since 2010 while the cost of solar photovoltaic (PV) electricity has fallen by 73% in that time. With further price falls expected for these and other green energy options, all renewable energy technologies should be competitive on price with fossil fuels by 2020.

Further, new solar photovoltaic (PV) and wind energy plants are more profitable than fossil and nuclear plants in a fast-growing number of regions all around the world. The shares of renewable energy supplies are growing in many countries. An increasing number of countries, regions and cities have set a 100% renewable energy target between 2020 and 2050. It is a known fact that a significant shift is under way in the energy sector. The cost declines across technologies are unprecedented and representative of the degree to which renewable energy is disrupting the global energy system.

Overview

After successfully organizing the first GGGI Energy Forum in Seoul in 2017, the Global Green Growth Institute (GGGI) and Hanwha Q CELLS jointly organized the GGGI Energy Forum 2018 on October 30 in Seoul, Republic of Korea.



Under the theme of “Renewable Energy Potential on the Korean Peninsula,” the GGGI Energy Forum served as a platform for sharing energy transformation experience from different governments, including the GGGI’s Member countries and discussing the renewable energy potential in Korea. The aim was to bring together the GGGI’s Members, leading energy experts, and policy makers from both the private and public sectors to discuss the importance of shifting towards a renewable energy-driven economy and sustainable future.

14 speakers and discussants from GGGI’s Member countries, including Denmark, Norway, Mongolia, and the UK and energy experts in Korea took part in this event to share their countries’ journey to a renewable energy future. The Forum started with keynote speeches, followed by an interactive discussion among the discussants who shared how their countries are making the transition to sustainable economies.

In Korea, the supply of renewable energy and energy storage systems more than doubled in the first quarter of this year compared to the same period last year due to the easing of regulations. Due to the expansion of incentives for renewable energy investment and the easing of regulations with the aim of reaching the “Renewable Energy 3020” goal, investment in renewable energy in the private sector has significantly increased. The “Renewable Energy 3020” goal was set during a strategy meeting presided over by President Moon Jae-in in November last year. It aims to increase the proportion of generation quantity made up of renewable energy to 20 percent by 2030 from the current 7 percent. Private-sector projects utilizing renewable energy are also under way throughout Korea.

The Korean producers of cleantech, storage and e-mobility technologies are leading worldwide. A 100% RE-based system will help North Korea to achieve energy security, to attain an independent political position by not relying on energy imports and to boost economic growth by creating new jobs. Such a plan can turn the Korean peninsula into a flagship region for an ecologic, nuclear-free and green economy worldwide. It will also make a significant contribution to achieving the Paris Agreement targets, which aim to limit the global temperature rise between 1.5 and 2.0 °C.

Keynote Speech by

Dr. Frank Rijsberman,

Director-General of GGGI



In his opening remarks, Dr. Frank Rijsberman said “GGGI is on track to help mobilize more than \$1 billion in green and climate finance to support developing countries achieve their green growth plans in 2017-18.” GGGI is supporting its Member and partner countries to achieve their Nationally Determined Contributions (NDCs) for the Paris Agreement through support for NDC Action Plans, Low Emission Development Strategies, design of Monitoring, Reporting and Verification systems (MRVs) as well as the design, structuring and financing of investment projects on renewable energy, green cities, sustainable landscapes, water and sanitation.

He noted that we should bust the myth that Green Growth is an expensive option. Solar energy, even with battery storage, is already commercially attractive where diesel energy is the alternative such as in small islands and off the grid. The World Bank stopped funding coal projects because renewable energy is now cheaper than coal generated electricity. Rwanda’s new Bugesera Airport became cheaper when the design was “greened”. Green growth is the only viable option for a sustainable future – and it is already commercially attractive in many cases.



GGGI is an intergovernmental organization that supports developing country governments transition to a model of economic growth that is environmentally sustainable and socially inclusive. GGGI has 30 Members with operations in 30 countries. GGGI delivers programs in countries by providing technical support, capacity building, policy planning and implementation support, and helps them to build a pipeline of bankable green investment projects.

The key theme for the GGGI Energy Forum 2018 is looking at Korea’s current renewable energy target - is it indeed ambitious or is it actually quite moderate? As is evident in the recent IPCC report, there is a need to call upon the global community to take concerted action now if we are to overcome the threat of climate change, eradicate poverty, and preserve the sustainable development achievements of the last 25 years.

Keynote Speech by

Mr. Joo Yoon,

Senior Vice President of Global Sales Planning and Strategy, Hanwha Q CELLS



In his keynote speech, Vice President Joo Yoon said that Korea is a country with four seasons, and autumn in the country used to be a season when the sky is high and blue. However, recently, Koreans have to listen to the forecast of fine dust, even in autumn. Not only that, we suffered from unprecedented heat waves this summer. He added that such climate change is not only a problem for Korea but also for the rest of the world.

“In today’s world, the pollution we make today will certainly harm future generations to come. I want to call this an environmental debt.”

Vice President Joo Yoon ended his speech by saying that “ I look forward to in-depth discussions on how new renewable energy can help solve this issue of an “environmental debt”. Hanwha Q CELLS, a world leader in the solar energy will also contribute to energy conversion via solar energy, a clean energy source, and will strive to overcome future challenges ahead.

Presentation by

Hans-Josef Fell,

President of the Energy Watch Group



“Peace and prosperity on the Korean Peninsula can be achieved through renewable energy.”

President Hans-Josef Fell said that “Europe’s shift toward 100% renewable energy can be realized on the Korean Peninsula. The challenge is to respond to air pollution, climate change, and nuclear disasters, and it is possible to solve problems by transitioning to a 100% renewable energy future.”

The World Peace Index shows that most oil producing countries have wars because crude oil is scarce. In comparison, there is no such thing as solar war, because solar energy is abundant. Moreover, it has been recently revealed that renewable energy investment and development tend to create more jobs than fossil fuel energy. The Korean Peninsula can expect peace and prosperity through the expansion of renewable energy and cooperation with GGGI.

“In addition to many countries, such as Denmark and Sweden, cities such as San Francisco and Copenhagen and corporations like Coca-Cola have also set ambitious goals for 100% renewable energy conversion,” said Mr. Fell during his talk. “In Republic of Korea, there should be an institutional strategy and government support on R&D to make ‘100% renewable energy transition’ a reality.”

Presentation by

Izumi Kaizuka,

Director of RTS Corporation



“The amount of renewable energy production in Japan greatly increased after the Great East Japan Earthquake in 2011 that triggered the Fukushima Nuclear Disaster. Japan rapidly increased its share of renewable energy in its mix from only 1% in 2010 to 7% in 2016, as the country abandoned nuclear power,” said Ms. Izumi Kaizuka, Director of RTS Corporation. “Japan could only achieve this rapid renewable energy growth because the government set up a long-term specific goal that has been carried out step-by-step.”

In order for renewable energy to become a key energy source in the future, it is crucial to continue developing technological systems and approaches, enhancing institutional capacity and practices and raising public consciousness about the impacts of climate change.

“It’s important for people to be aware of the importance of renewable energy in order to make it the primary energy source of the future,” she added. “In Japan, the government, businesses, and the people have all come together to become better informed and are driving the country’s conversion towards renewable energy forward.”

Presentation by

Kyung-ho Lee,

Director of the New and Renewable Energy Policy Division, Ministry of Trade, Industry and Energy



Mr. Kyung-ho Lee, Director of the New and Renewable Energy Policy Division at the Korean Ministry of Trade, Industry, and Energy, spoke of the energy transition issues Korea faces and steps that the government plans to take in the future. These include the eventual phase-out of nuclear power plants and the reduction of carbon emissions from coal-fired power plants.

“We must focus on creating a sustainable environment for future generations rather than thinking of short-term financial gains and losses,” said Mr. Lee. “We will continue our policy of developing a competitive renewable energy industry and work towards becoming a net exporter of energy through ministerial cooperation, increasing the number of joint projects, and obtaining the necessary strategic technologies.”

Mr. Lee also announced plans to implement nationwide smart energy management to minimize the demand on existing power plants as well as plans to accelerate Korea’s adoption of renewable energy in the Fourth Industrial Revolution, to spur development of new local industries and creation of new jobs. He added that energy issues should focus on creating a conducive sustainable environment for future generations rather than securing the economy. The Ministry of

Trade, Industry and Energy will push ahead with implementing its policies to ensure competitiveness in the renewable energy sector as a leading export industry in Korea.

With regard to the government’s “Renewable Energy 3020” policy, the Ministry is expanding the supply of solar power by promoting ‘Farming Solar Energy’. It helps farmers to make profits through not only agriculture but also solar energy. The government plans to analyze the problems from this year through pilot project and to start from next year.

Discussion Summary:

Accelerating the energy transition in countries

The UK's low carbon journey

The UK is a world-leader on clean growth and green finance and is pioneering efforts to build greater resilience to climate change. It has cut emissions by more than 40% since 1990 - more than any other G7 country on a per person basis - and its legally-binding targets will see emissions fall by an average of 57% over the period 2028 to 2032 and at least 80% by 2050 from 1990 levels. The UK is committed to sharing its expertise and help developing countries in the global challenge of tackling climate change. The government has committed at least £5.8 billion of funding between 2016 and 2020 to help developing countries both reduce emissions and build resilience to the impacts of climate change.

The country was at the forefront of the Industrial Revolution back in the 19th century. The UK was the first country to use coal for electricity. In 2006, the UK published a strategy for the energy sector, which talked about new coal in the country. But by 2008, the context had completely changed when the Climate Change Act was introduced, which focused on decarbonization, cutting carbon budgets, and reducing 80% of the UK's greenhouse gas emissions by 2050. In the UK today, it only has 8 coal power stations left. The country has also seen no new coal. The reason for this is mainly due to policy choices made by the UK government.

In 2012, the UK still had 40% of coal in its energy mix and by 2016, this reduced to less than 10%. In the second quarter of this year, coal's share in the energy mix was 1.3%. The increase in competition of the wholesale market for renewable developments, particularly offshore wind led to a decrease in the share of coal in the energy mix. Also, the UK government announced last year that the country would phase out coal completely by 2025. In October 2025, the country is expected to set an annual limit of CO₂ equivalent to 450g/kWh. This will make coal completely financially or economically uncompetitive by 2025.



Electric cars in Norway

Norway is a world leader when it comes to renewable energy. It has one of the most aggressive electric car policies in the world. Norway has set a new record for the number of electric and hybrid cars sold in the country. The new electric vehicles are also setting impressive records for their low CO₂ emissions.



Norway is the country with the highest penetration of electric vehicles in the new car market. In October 2018, the sales of electric vehicles accounted for 60% of all new car sales. The country actively promotes carbon taxes. A carbon tax makes renewable energies more competitive. Also, Norway has a system where if you buy an electric vehicle in the country, you do not have to pay registration tax and only pay half of the road tax. User experience is another reason why electric cars have been booming in the country. In addition, it is also cheaper to charge electric cars than buying gas or diesel. Norway has set a goal determined by its parliament. By 2025, every new private car should be zero emission. To stimulate the market and promote electric vehicles to the public, it is important to have an infrastructure for charging electric cars. Having adequate infrastructure facilities will be required to offer a viable path to zero emission transport.

Mongolia's energy transition

Mongolia is one of the countries most vulnerable to global warming. In the last 70 years, its temperatures have climbed three times faster than the world's average, rising more than 2 degrees centigrade and surpassing the global threshold.

In the freezing winter, many in ger districts burn coal, the cheapest way to keep warm. This contributes to 80 percent of Ulaanbaatar's winter emissions, giving it some of the worst air pollution on earth, exceeding 60 times the World Health Organization's safe limit in one district during the week of 18-24 December 2017, according to Mongolia Meteorological Agency (NAMEM).



Mongolia is a very cold country with a small population - only 3 million people living in the country. Half of the population lives in Ulaanbaatar, the capital city. Among them, half of them live in ger tents, and the other half in district heating apartments. Due to

the 9-month-long winter and very cold climate, there is a tremendous need for heating supplies. As Mongolia is rich in coal, it is very cheap. Also, burning coal does not require any sophisticated technologies. So, a quarter of the population living in ger uses low-grade coal for heating. This leads to the biggest problem – making Ulaanbaatar the most polluted city in the world where air pollution level is 80 times higher than the recommended safety level set by World Health Organization. To deal with this, the government is trying to increase the share of renewable energy in its energy mix. Mongolia has set a target to achieve the goal of renewable energy accounting for 20% of all power by 2020, and 30% by 2030.

Back in 2007, Mongolia adopted its renewable energy law, but it took the country some time to start a renewable energy project. As of now, because of the conducive legal environment, the private sector is offering a lot of renewable energy projects. Today, about 7% of the total energy comes from renewables and by the end of next year, Mongolia expects that number to be doubled. The country aims to reach the 20% target within the next two years. However, it is difficult for renewable energy to compete with coal for heating purposes because at the moment, Mongolia does not have viable or at least affordable technology for heating supplies based on renewable energy. Unfortunately, the country still relies heavily on coal. If more companies or other countries can propose viable technologies, Mongolia would be very happy to adopt them. However, a big issue is that cities in Mongolia do not have geothermal energy resources. As a short-term measure to solve the air pollution issues, the government is proposing to use electricity for heating supplies and to provide a subsidized price for consumers at night time. In a long-term solution, Mongolia envisions to introduce renewable energy technologies for consumers and households.

Denmark's district heating

Denmark offers the best conditions for utilizing geothermal heat because of the country's well-developed district heating. In Denmark, boilers provide heat for entire districts through a network of heating pipes – district heating. The cheaper and sustainable district heating is the most economically effective method for a city to reduce carbon emissions.



Denmark is well-known for heating in a very efficient way. It is true that Denmark has been moving away from fossil fuels and replacing them with renewable energy sources. In parallel, Denmark has changed a lot of individual households from burning gas or oil to using district

heating. Copenhagen has been the first mover in this phenomenon. One of the advantages with district heating is that it gives an opportunity to utilize the surplus heat in Copenhagen's energy production and lower the cost. The city has been using fossil fuels for district heating, but now it is adapting to sustainable biomass, waste energy, and other elements. This has worked very well, and the city will continue to test new technologies that can come into district heating such as new thermo and heat pumps. In the long-term, the city plans to change the source of district heating from biomass to heat pumps and new thermo. If Copenhagen starts using them, it will be easy to convert them to a district heating system. In 2019, Copenhagen will have new district heating plants that will reduce 80% of carbon dioxide emissions.

Korea's transition to renewable energy

In Korea, renewable energy currently accounts for just 2 per cent of the country's electricity production, with coal-fired and nuclear plants generating 40 per cent and 30 per cent, respectively. However, Korea's new Moon Jae-in government has increased the target for the share of renewables in power generation to 20 per cent by 2030. The Korean government plans to set up a renewable energy coordination center in every region; secure a solar system in each village; adopt projects led by local authorities, including offshore wind turbines; and secure economic feasibility of renewable energy through utility-scale renewable energy projects.



In the Republic of Korea, the combined share of coal and nuclear power account for nearly 70 to 80 percent of the total, while the renewable energy share was around 1 percent. Only recently has it increased to 4%. Korea is just beginning its journey to energy transition and needs to urgently tackle two issues: fine dust and electricity supplies in Seoul and Gyeonggi Province. The transition to renewable energy requires active participation by the private sector. One of the biggest tasks of the Moon Jae-in government is to bring up and raise the maximum participation of the private sector. Energy transition in Korea is not easy due to a lack of public consciousness. Even though more than 70% of the public support the expansion of renewable energies, they are still opposed to building solar and wind power plants near where they live – showing Not In My Back Yard attitudes.

<http://www.ipsnews.net/2018/11/158477/>

South Korea Looks at How to Accelerate its Transition to Renewable Energy

By Ahn Mi Young



A night market in South Korea. The country plans to ensure that 20 percent of all electricity generated is renewable by 2030. Credit: Yeong-Nam/CC BY 2.0

SEOUL, Nov 1 2018 (IPS)

While major countries have pledged to be powered entirely by renewable energies in order to stop greenhouse gas emissions by 2050, there are a number of states that are investigating ways to implement this transition quickly in order to achieve their goals ahead of this deadline.

At the Global Green Growth Institute (GGGI) Energy Forum held in South Korea's capital, Seoul, on Oct. 30, GGGI council members, leading energy experts, and policy makers from both the private and public sectors asked precisely that question.

They gathered to share their energy transformation experiences from the United Kingdom, Norway, Japan, Denmark, and Mongolia and discussed how South Korea can emulate them as it transitions from a coal and nuclear-centric energy dependence to renewables.

How to accelerate the transition to Renewable Energy?

"As there is a big global shift towards renewable energy (RE), we may ask questions: How can we accelerate the clean energy transition? Is the Korean target ambitious? How fast can it be transitional?" said Frank Rijsberman, director-general of GGGI in his keynote speech.

Although global decarbonisation on its own isn't adequate to meet the ambitions of the Paris Agreement, the forum shared renewable transition cases and experiences of how they have accelerated the transition to RE.

The UK is leading the low-carbon transition and has implemented a drastic cut of emissions in the past 18 years while also continuing its rapid economic growth. Norway built the world's electric car capital, and made the transition from oil to a renewable model. In Denmark, Copenhagen has become the world's green city, as it uses district heating pipelines to heat houses and aims to become the world's first carbon neutral city by 2025.

The most drastic turnaround comes from South Korea and Japan, which have been among the world's major producers of nuclear power in the past. But both countries have joined the global renewable energy transition club in recent years.

100 Percent Renewables South Korea

The forum heard from Hans-Josef Fell, president of Energy Watch Group, an independent global network of scientists and parliamentarians that was founded in 2006 under the direction of Fell while he was still a member of the German parliament. “It is possible to be 100 percent renewable and we can work together with South Korea to reach the 100 percent goal,” he told participants.

Fell forecast that Solar photovoltaic (PV) and wind power will be the cheapest energy in G20 states by 2030, noting that RE has created 10.3 million jobs worldwide in 2017, with most jobs being in Asia.

The renewable breakdown of the global energy system in 2050 is forecast as:

- Solar PV: 69 percent,
- Wind power: 18 percent,
- Hydro: 8 percent,
- and bioenergy: 20 percent.

Fell also noted political will should be strong enough to fully embrace the RE transition, as he suggested the need for direct private investment in RE and zero-emission technology, for tenders to be granted only for capacity above 40MW, and the need to phase out all state subsidies on fossil fuels.

Japan transitions to PV

Japan is one of the countries that has shown the will to embrace RE. After committing to reducing its dependence on nuclear energy by 2030, Japan has set targets for becoming an economically independent and carbon-free mainstream power by 2050. Japan has reduced its nuclear power generation following the Fukushima nuclear power plant explosion in 2011.

Izumi Kaizuka, Director of RTS Corporation, a PV consulting company, who presented on the RE policy transition in Japan and the current status and outlook of the country’s PV market, said: “There has been an explosive growth of approved PV projects.”

But Japan has concerns about the future burden of surcharges, installation quality, environmental damage from natural disasters, and the lack of hosting capacity.



Hans-Josef Fell, president of Energy Watch Group delivers paper at the 2018 GGGI Energy Forum in Seoul. Credit: Ahn Mi Young/IPS

“There is a significant cost gap of the PV system between domestic and overseas [prices]. Prices are further decreasing due to global competition. Some emphasise the importance of how installation costs in Japan (not under global competition) will be further reduced,” Kaizuka said.

Japan has tried to address these concerns and introduced a new approval system to deal with delayed or unrealistic projects, to increase transparency for grid connections with disclosure of connection capacity and the price of work, as well as the exemption of surcharge for energy sufficiency efforts.

With these actions taken, Kaizuka had a strong growth forecast for PV-installed capacity in Japan. “Despite these concerns, PV is growing, since PV is stable and affordable,” Kaizuka said.

South Korea to move from coal-nuclear to renewables

Under its Renewable Energy 2030 Implementation Plan to achieve a 20 percent goal of renewable share of total electricity generation by 2030, South Korea is investing in clean energy.

This is a drastic reversal of the country's previous nuclear-centric energy policy. In 2016, 25 reactors generated one-third of the country's electricity and made South Korea the world's fifth-largest producer of nuclear energy, according to the World Nuclear Association.

To reverse its energy mix, Seoul is driving a renewable boom under a private-public partnership.

"Active private investment is supporting the renewable energy transition. More than 95 percent of new capacity is PV and wind, which creates the largest number of jobs," said Kyong-Ho Lee, Director of the New and Renewable Energy Policy Division, at South Korea's Ministry of Trade, Industry and Energy (MOTIE).

The local government-led, large-scale projects, where local governments play a key role in selecting sites and choosing business operators, are cited as a major driving force of the on-going RE transition in South Korea.

"To encourage citizen participation, the government gives monetary incentives for both urban and rural renewable energy installed, as well as state loans for rural RE installed. Thus farmers can make a double income from both farming and PV power installed," said Lee from MOTIE.

Seoul has said that by 2030, out of a forecast total 63.8GW to be installed, its RE mix will be:

- 57 percent PV,
- 17.7 percent wind power,
- 5 percent bio, and
- 6 percent waste.

"It is a transitional moment as we continue to improve conditions through deregulation of RE, installing and collecting PV modules," Lee said.

In Norway, financial incentive was strong enough to drive the electric car boom. About 45 percent of new cars sold in Norway in recent months were all-electric cars. People who buy electric cars pay no import taxes, tolls, parking or ferry costs, and are exempt from a 25 percent sales tax at purchase.

"Nationwide infrastructure is necessary to spread the EV [electric vehicle] boom from cities to rural areas," said Atle Hamar, Vice Minister, Ministry of Climate and Environment, Norway. "In cities, there are enough charging stations but in rural areas, we need public support [to build more]."

District heating in Denmark

Denmark offers the best conditions for using geothermal heat because of the country's well-developed district heating. In Denmark, boilers provide heat for entire districts through a network of heating pipes.

"We will be testing new technology to find a cost efficient and easier way of heating houses. For example, we are replacing biomass with geothermal heat pumps, which is easier to heat houses," Jacob Rasmussen, counsellor, energy & environment, Embassy of Denmark.

How fast can it go from nuclear to renewable?

These countries offer great examples for South Korea. And while the forum generally saw a consensus formed on the country's need to transition to renewables, it debated how fast the transition should be.

South Korea's transition may be too fast, according to some experts.

"We must respect the role of the nuclear power source [that has driven our economy as the cheapest energy source]," said Sang-hyup Kim, visiting professor from the Korea Advanced Institute of Science and Technology and chairman of the Coalition for Our Common Future.

"In fact, nuclear is a reality [in South Korea] based on its [60 years of] science and technology. Why should we give it up so rapidly?"

To others, the transition may be a bit slow.

"Some would say the 20 percent goal is not ambitious enough. But we should manage our satisfaction by setting a reasonable target," said Sun-Jin Yun, professor of environmental and energy policy at the Graduate School of Environmental Studies, Seoul National University (SNU).

Panelists agreed on the need to increase inter-Korean energy cooperation to bring peace to Northeast Asia. "Increasing energy interdependence is a way to secure peace for the whole of Northeast Asia. For example, a renewable energy-based grid connecting Mongolia and both Koreas and others can be the way to increase interdependence," said YangYi Won Young, executive director, Energy Transition Forum, a private energy think-tank.



<http://www.techholic.co.kr/news/articleView.html?idxno=178999>

Energy experts and representatives of GGGI's Member countries took part in the GGGI Energy Forum 2018, which was held at The Plaza Hotel in Seoul on October 30th.



<http://www.greendaily.co.kr/news/article.html?id=20181031130001>

Hans-Josef Fell, President of the Energy Watch Group gave a presentation at the GGGI Energy Forum 2018.

The panel discussion of the GGGI Energy Forum 2018 held at The Plaza Hotel in Seoul on October 30th, hosted by Hanwha Q CELLS and the Global Green Growth Institute (GGGI).
[Source: Hanwha Q CELLS]



http://www.ohmynews.com/NWS_Web/View/at_pg.aspx?CNTN_CD=A0002483974&CMPT_CD=P0010&utm_source=naver&utm_medium=newsearch&utm_campaign=naver_news

The GGGI Energy Forum 2018 hosted by Hanwha Q CELLS and the Global Green Growth Institute (GGGI) was held at The Plaza Hotel in Jung-gu, Seoul on October 30th.

<http://www.viva100.com/main/view.php?key=20181031010011116>

Officials at the GGGI Energy Forum 2018, which was held at The Plaza Hotel in Seoul on Oct 30th, are taking pictures.



<http://www.kukinews.com/news/article.html?no=599425>

Frank Rijsberman, Director-General of the Global Green Growth Institute, and other key figures in the energy sector are responding to questions.
(Dr. Frank Rijsberman, Director-General in the center of the photo)



<http://www.electimes.com/article.php?aid=1540943980167526097>

Energy experts gathered at the GGGI Energy Forum 2018 are discussing.
Hans-Josef Fell, President of the Energy Watch Group, emphasized that renewable energy can bring about social problem resolution and peace.
Izumi Kaizuku, Director of RTS (Resource Total System) Corporation, introduced Japan's renewable energy policy.



<http://www.electimes.com/article.php?aid=1540943866167523097>

At the GGGI Energy Forum 2018 held at The Plaza Hotel on October 30th, experts from home and abroad gathered to discuss energy conversion. Frank Rijsberman, Director-General of the Global Green Growth Institute, is giving a welcoming speech. (Picture provided by: Hanhwa Q CELLS)



<http://www.asiatime.co.kr/news/articleView.html?idxno=208433>

GGGI Energy Forum 2018 panel discussion.



<http://www.ebn.co.kr/news/view/960102>

Frank Rijsberman, Director-General of the Global Green Growth Institute, is giving welcoming remarks.



<http://www.inews24.com/view/1136814?rrf=nv>

GGGI Energy Forum 2018 held on October 30th.



<http://news1.kr/articles/?3464231>

GGGI and Hanwha Q CELLS held the GGGI Energy Forum 2018 at The Plaza Hotel in Seoul. © News1



<http://www.asiatoday.co.kr/view.php?key=20181031010017840>

Joo Yoon, Senior Vice President of Global Sales Planning and Strategy, Hanwha Q CELLS is giving welcoming remarks at the 'GGGI Energy Forum 2018' held at The Plaza Hotel in Seoul on October 30th.

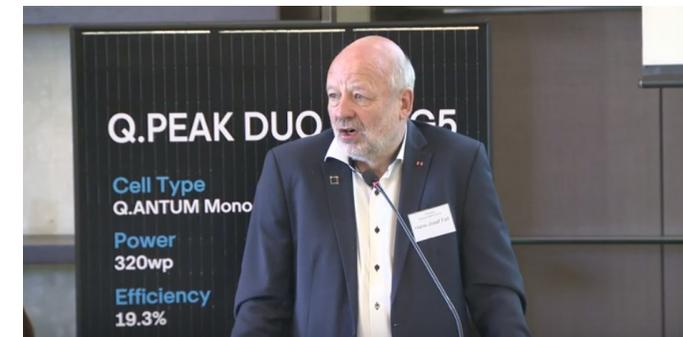


<http://www.dailian.co.kr/news/view/748539/?sc=naver>

Frank Rijsberman, Director-General of the Global Green Growth Institute, is giving a welcoming speech at the 'GGGI Energy Forum 2018' held at The Plaza Hotel in Jung-gu, Seoul on October 30.

Highlight Video of the GGGI Energy Forum

<https://www.youtube.com/watch?v=Mt0OxvoeT4M&feature=youtu.be>



**GGGI
ENERGY
FORUM
2018**

