

**Solutions for Our Climate statement on the Ministry of Trade,
Industry and Energy's "Strategy to Expand Renewable Energy
Deployment and Strengthen Supply Chains" on May 16**

<Electricity Market & Grid Sector>

- **Relieving burden off the grid: comments on permitting ("flexible access") and securing grid flexibility**

"Biased toward access limitation by the government and the Korea Electric Power Corporation (KEPCO)"

- Disclosure of grid information is desirable, but even if areas where the grid is saturated are disclosed, grid saturation cannot be resolved in the short term. The current proposal only includes temporary measures that limit grid access and provide compensation. It does not contain any fundamental solution for relieving grid congestion such as ensuring a more efficient network operation.
- The proposal does not mention the expansion of energy storage systems (ESS) led by the government or KEPCO. The proposal only mentions improving grid flexibility through solar power producers' installation of ESS.
- Even if limiting access can resolve grid congestion, it is unclear whether the 'orderly' renewable energy deployment strategy will lead to the expansion of renewable energy. Furthermore, it is questionable whether the government's

strategy is in line with its carbon reduction target in the transition sector under the 1st National Basic Plan for Carbon Neutrality and the Nationally Determined Contribution (NDC).

- Furthermore, controversies may arise regarding fairness as access limitation is proposed for renewable energy, compared to the discussion of passing the Special Act on Electricity Network Expansion in response to transmission constraints for coal power plants on the east coast.

- **Mandatory Markets: Comments on government-led RPS system reform**

"Questions Remain on How the Government Will Handle Existing RPS Contracts and Whether It Is Rational for the Government to Provide Market Signals"

- The RPS system reform does not provide any indications regarding how the abolition of the RPS system and existing RPS contracts will be handled. In addition, it is questionable whether the RPS reform is consistent with the plan to "consider granting 'RPS'-linked incentives to facilities that accept flexible terms (p.6)" after the RPS reform.
- Regarding the expression "direct market signaling by the government," it is questionable whether it is inherently consistent with the nature of a market system to have the government act as a direct market signal provider rather than function as a supervisor or rule-maker. In addition, government bidding volumes are calculated by subtracting PPA volumes from solar deployment targets (p.9), making it difficult for renewable energy producers to predict government bidding

volumes in advance.

- Even if the RPS system is reformed, abolishing the RPS and introducing government-led bidding for long-term fixed contracts is not the only alternative. Even under the RPS system, other alternatives are possible, such as abolishing RECs or concurrently using contracts for difference (CfDs).

- **Voluntary market: comments on PPAs**

"The Need for Introducing a Public-Private Collaborative PPA Brokerage Market is Questionable"

- Private renewable energy providers have been conducting PPAs smoothly with RE100 companies as their customers. Hence, there is lack of basis for the government to create a PPA brokerage market that will be designed as a public-private collaborative initiative. It is concerning as this may become a business constraint for private renewable energy businesses.
- It is encouraging to see the discussion for easing of PPA capacity standards and ensuring more predictability in cases of PPA contract defaults. For reference, after Japan fully opened its retail market, the monopoly transmission and distribution company has been required to fulfill the defaulted supply obligations for up to one year upon payment of a guarantee fee by consumers in the event of a small, new power company's failure to supply electricity.

<Renewable Energy Sector>

1. Overall comments

The target for renewable energy expansion is set at 6 GW per year. While plans for solar and offshore wind are included, this 6 GW per year figure is simply calculated to meet the 2030 target under the 10th Basic Electricity Supply and Demand Plan. There are no specific targets set for each energy source, and no detailed plans to address the regulations that are currently in need of urgent improvement.

Government-led zoning is essential for the deployment and industry development of offshore wind, which requires large-scale transmission and infrastructure. The introduction of government-led planning locations was a key policy in the Ministry of Trade, Industry, and Energy's "Plan to Improve Renewable Energy Policy in Response to Changes in the Energy Environment" announced in November 2022. However, it has yet to be implemented with the government only stating that it will enact the law soon, contributing to market confusion.

While "government-led, orderly" deployment may be suitable for offshore wind, solar energy is distributed energy form and that can leverage market investment. Measures to drive investments for solar energy in the market must be prepared.

While the proposal includes support for medium- and large-scale solar power plants, which face significant siting and permitting challenges, it does not include support for small-scale solar power, which is a distributed energy source and is key to increasing the

deployment of solar energy.

- **Opinions on the government-led zoning for offshore wind deployment**

- Government-led zoning plays a key role in expanding offshore wind deployment and creating an industry ecosystem by mitigating market uncertainty, so it should be introduced quickly along with the establishment of a detailed implementation plan. The detailed implementation plan should include details on the designation of zones and the volume of bids per round to increase the predictability of the planned siting system itself.
- Delays in the enactment of the government-led zoning system of offshore wind would require solutions to address the ongoing problems driven by private-led siting measures, such as the preemptive securing of sites using wind monitoring instruments, deterioration of the social acceptance of wind power, and inefficiencies in permitting. At the same time, the legal framework for the implementation of offshore wind zoning system needs to be put in place as soon as possible.
- If the government were to "strengthen the public interest by revitalizing the (quasi-)planned municipalities zoning system prior to the enactment of the law," it is unclear how the limitations of the existing municipalities zoning system (difficulties with permitting, lack of grid connection, etc.) will be overcome.
- The current zoning by municipalities faces several issues. One problem is the inability to secure grid integration, which is centrally operated by KEPCO.

Additionally, there are delays in the construction of joint connection facilities due to uncertainties in obtaining permits, as some licensing authorities are ministries. Therefore, if the enactment of the 'Offshore Wind Energy Special Act' becomes delayed again, improvements to the existing (quasi-)planning location system should be made more actively by collecting the opinions of local governments that wish to designate offshore wind farms, such as Boryeong City and Incheon City, and the government-led zoning system should be introduced as soon as possible.

- **Comments on strengthening supply chain competitiveness across the offshore wind ecosystem**

- "Publishing a roadmap of bidding volumes, timing, and evaluation over the next two years" is a positive development toward increasing the predictability of programs and investments.
- To improve the competitive bidding market, the criteria for scoring non-price factors should be transparent. For example, the 2023 wind power fixed price contract bidding system, the detailed scoring criteria were not disclosed, causing market confusion after the results were announced.
- While there is a commitment to hold inter-ministerial consultations to support the establishment of offshore wind ports and vessels such infrastructure is essential for offshore wind deployment and requires a concrete action plan beyond consultations.

- **Other comments (offshore wind)**

- Delayed grid connections and the absolute lack of grid are major barriers to offshore wind deployment, but the proposal does not address the grid for offshore wind. A plan for securing the grid, aligned with the offshore wind deployment targets needed to meet the net-zero goal, needs to be developed soon.

- **Comments on solar power**

- There are three main points in the announcement by MOTIE regarding solar power deployment. It is encouraging that the proposal clearly identifies the issues that are delaying the deployment of solar power by stating that factors such as the depletion of sites, grid saturation, and low social acceptance by residents are holding back deployment.
- The government has stated that if solar separation distance regulations for securing exemplary sites are not voluntarily eased on the municipal level, the issue will be addressed through legislative amendments. Encouraging municipalities to voluntarily deregulate separation distances was a failed policy under the previous administration, with the number of municipalities that implemented solar separation distance regulations increasing from 84 in 2017 to 130 in 2023. Separation distances lack scientific substantiation, and this problem should be promptly addressed through legislation without further delay.
- There are no considerations for the deployment of small-scale solar power plants. The proposal fails to identify the reasons for the bias against small-scale solar

power plants. The advantages of solar power and its differentiation from other energy sources are that it is small scale and distributed. Such advantages should be leveraged to enable grid flexibility and distributed grids, among others.

- The Ministry of Trade, Industry, and Energy (MOTIE) has determined that the industry ecosystem has collapsed and announced a plan to reform the market system to solve the problem. However, the collapse of the solar power industry was not a result of the current market system but the regulations that are causing a decline in new deployment. To strengthen the industry's supply chain, the utmost priority is to improve regulations that are hindering deployment.