

ISSUE BRIEF

ENERGY CUSTOMER NEEDS IN THE REPUBLIC OF KOREA

The Republic of Korea's technology-driven, export-oriented economy is enjoying rapid growth as domestic and international companies look to invest and expand their operations there. This growth creates more demand for electricity, and South Korea already has the highest electricity demand on a per-capita basis of any G20 country in the Asia-Pacific region. The Clean Energy Buyers Association (CEBA) commends the Republic of Korea (ROK) for pledging to triple global renewable energy capacity by 2030 and commit to carbon neutrality by 2050.

CEBA is a business trade association that supports all forms of carbon-free energy and activates a community of energy customers and partners to deploy market and policy solutions for a global carbon-free energy system. CEBA's [more than 400 members](#) represent more than \$7.5 trillion in annual U.S. revenues and include some of the largest corporate and industrial energy customers in the ROK and worldwide, from a range of sectors including industrial and manufacturing, technology, and retail.

As CEBA members and value chain partners seek to expand investment in their business operations in the ROK, their primary challenge is a lack of cost-effective renewable energy, which impedes companies' abilities to grow their operations and meet their ambitious sustainability commitments.

CEBA also is engaged in the Clean Energy Demand Initiative, a joint Secretariat between CEBA and the U.S. State Department that aims to foster public-private collaboration to accelerate the deployment of clean energy in global energy markets.

CEBA is eager to support public-private partnership with the ROK to build a resilient carbon-free energy system where every customer has a viable, cost-effective pathway to zero-emission energy from sources such as wind and solar by 2030.

Access to cost-effective and zero-emission energy is a key factor in companies' business decisions and the ROK economy's global competitiveness. Corporations are making [clean energy a priority](#) to address environmental concerns, achieve social and economic benefits, and meet customer and investor requirements. Governments and companies worldwide are increasingly aware of climate change, its impacts, and the opportunity for economic growth that the clean energy transition provides.

Policies that support development of clean energy generation will improve the ROK's energy independence, enhance industrial competitiveness, catalyze nascent clean energy industries like offshore wind, and reduce exposure to increasing regulatory pressures, including the Korea Emissions Trading Scheme (K-ETS) and the European Union's Carbon Border Adjustment Mechanism (CBAM).

Today, companies in the ROK with 100% renewable energy commitments can only secure about 2% of their electricity demand from renewables. By 2030, the gap between renewable energy supply and demand will grow to an estimated [60 terawatt hours \(TWhs\)](#), with voluntary corporate renewable energy demand projected at 80 to 100 TWhs.

To better meet energy customer needs and enable future economic growth in the ROK, CEBA encourages the ROK to implement these measures that will expand access to and rapid deployment of renewable energy by 2030 as well as other new carbon-free energy technologies in years beyond:

1. Ensure opportunity and choice for energy customers.

Markets should have mechanisms that allow customer participation and cost-effective purchasing of renewable energy and facilitate efficient bilateral contracting. CEBA applauds the recently announced transparency improvements to the ROK's Green Premium program and is committed to supporting high-impact utility programs and accelerating the accessibility of direct and virtual power purchase agreements (PPAs) for all energy customers. Further opportunities can be achieved by:

- **Expanding utility-driven procurement options** by providing companies with the ability to purchase from new, additional renewable energy projects. Introducing a utility green tariff program where the Korea Electric Power Corporation (KEPCO) sources and prices cost-effective renewable energy from new and additional energy projects on top of the existing Renewable Portfolio Standard (RPS) target would allow customers to contract electricity and green attributes on a long-term basis, with greater customer flexibility than a PPA mechanism.
- **Improving pricing and accessibility to PPAs** through increased fairness and transparency in contractual obligations, network usage fees, wheeling and balancing services, and incidental costs. Additionally, providing credit/insurance guarantees can de-risk and build local renewable energy project financing capacity for off-takers. Virtual PPAs are another established and widely adopted procurement option for customers in many markets, and unlocking this option in the ROK can help increase customer participation.
- **Enabling voluntary granular tracking** of clean energy through time-based energy attribute certificates. This would facilitate hourly claims of clean energy consumption, encourage clean energy development in high-emission areas, and help verify that hydrogen production and storage is derived from carbon-free sources and has ultra-low carbon intensity across the entire value chain.

2. Create a policy environment that accelerates renewable energy and clean tech development and investment while enabling a resilient and affordable carbon-free energy system.

Possible steps to achieve this:

- A government-mandated ambitious renewable energy target for 2030 and 2035 that aligns with 2050 carbon neutrality and an increased RPS target, with inclusion of a percentage set-aside for voluntary renewable procurement for customers to access new projects in auctions.
- Zero-emission clean energy investment and/or production tax incentives linked to responsible practices and impactful siting, to accelerate renewable energy production.
- A higher carbon price on fossil fuels, with revenues dedicated to fund the clean energy transition.
- High life-cycle greenhouse gas emissions intensity standards for all existing and emerging technologies and their incentives programs.

3. Facilitate the build-out of a reliable grid by driving cost-effective clean energy integration at scale through proactive planning, financing, streamlined siting and permitting procedures, and early stakeholder engagement. Solutions include:

- Conducting an integrated study that examines the size and location of renewable energy plants, transmission lines, and demand growth to proactively plan for needed transmission expansion.
- Developing financing programs and/or incentives that support innovative solutions such as grid enhancing technologies, high-voltage lines, and renewable energy corridors.
- Prioritizing the implementation of proposed provisions on renewable energy zones and establishing the ROK's Ministry of Trade, Industry, and Energy as the single lead agency to streamline permitting.
- Requiring early, ongoing, and effective engagement with stakeholders and local communities to empower them in grid planning, permitting, and siting processes.