



GREEN WE GO,
CHANGE WE MAKE

2021 P4G Seoul Summit

2021. 5. 30 — 31

더 높기 전에,
지구를 위한 행동

Sustainable Businesses Towards 1.5°C and Net-Zero Future

I. The Role of Businesses for a Net-Zero Future

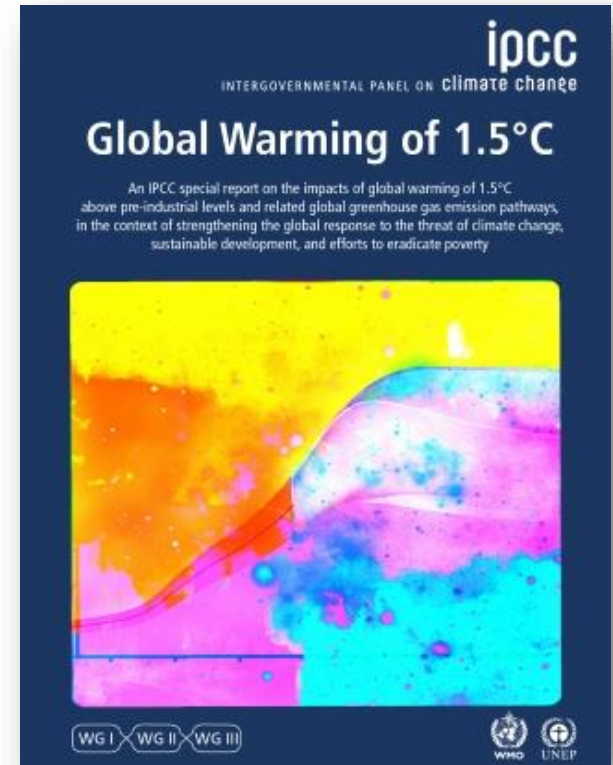
II. Renewable Energy in Low Carbon Transition

III. Local Challenges in Corporate Energy Transition

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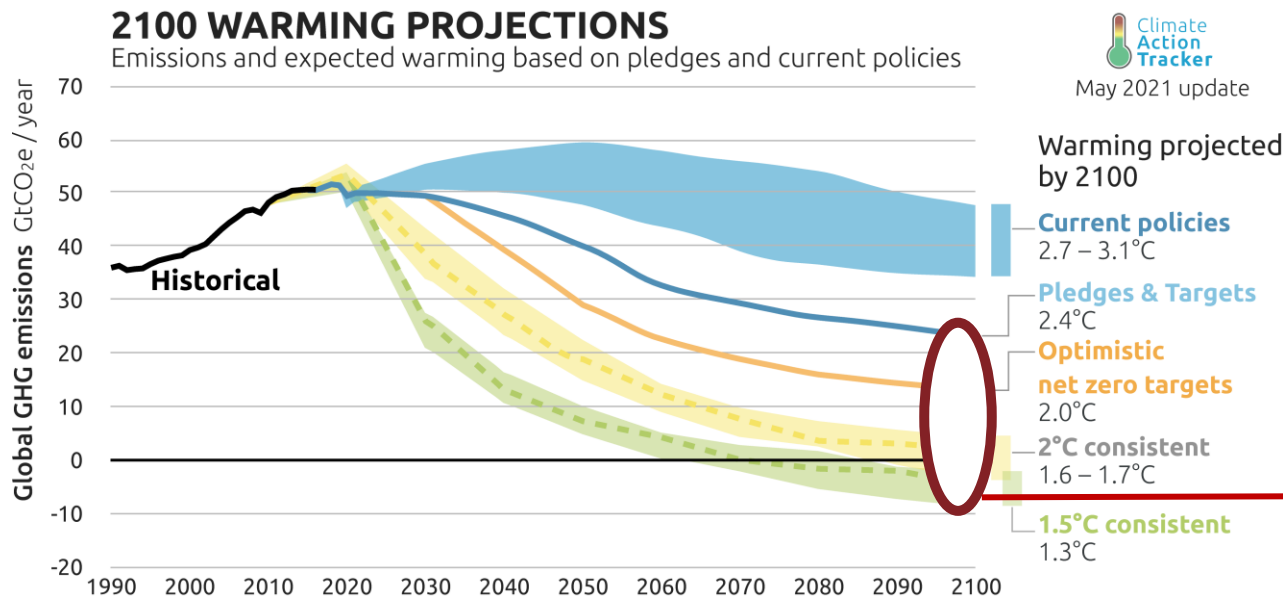
I. The Role of Businesses for a Net-Zero Future

The Intergovernmental Panel on Climate Change's (IPCC's) Special Report on Global Warming of 1.5°C has laid out a stark obligation: we must pursue **“rapid, far-reaching, and unprecedented changes in all aspects of society”** to hold temperature rise to 1.5°C above preindustrial levels or face irreversible damage to our societies, economies, and the natural world (IPCC, 2018).



I. The Role of Businesses for a Net-Zero Future

- Despite emission dips caused by COVID, the world is still heading for a temperature rise in excess of 3°C (UNEP's Emission Gap Report)
- Current national pledges projected to result in about 2.4°C (Climate Action Tracker)
- **We're already at 1°C** above pre-industrial levels
- By 2030, global emissions need to be halved



Private Sector needs to address the gap by limiting warming to 1.5°C instead of 2°C would reduce overall risks and impacts substantially

Private Sector Climate Action

I. The Role of Businesses for a Net-Zero Future

2,537 Commitments
*To bold
action*

1,811 Companies
*leading the
way*

\$24.8 Trillion
market cap

**COMMIT
TO ACTION**



WE MEAN BUSINESS



THE PRINCE OF WALES'S
CORPORATE LEADERS GROUP

THE B TEAM

THE CLIMATE GROUP



Network partners:



Working with:



THE
NEW
CLIMATE
ECONOMY



I. The Role of Businesses for a Net-Zero Future



SCIENCE BASED TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

Partner Organizations:



United Nations
Global Compact



WORLD
RESOURCES
INSTITUTE

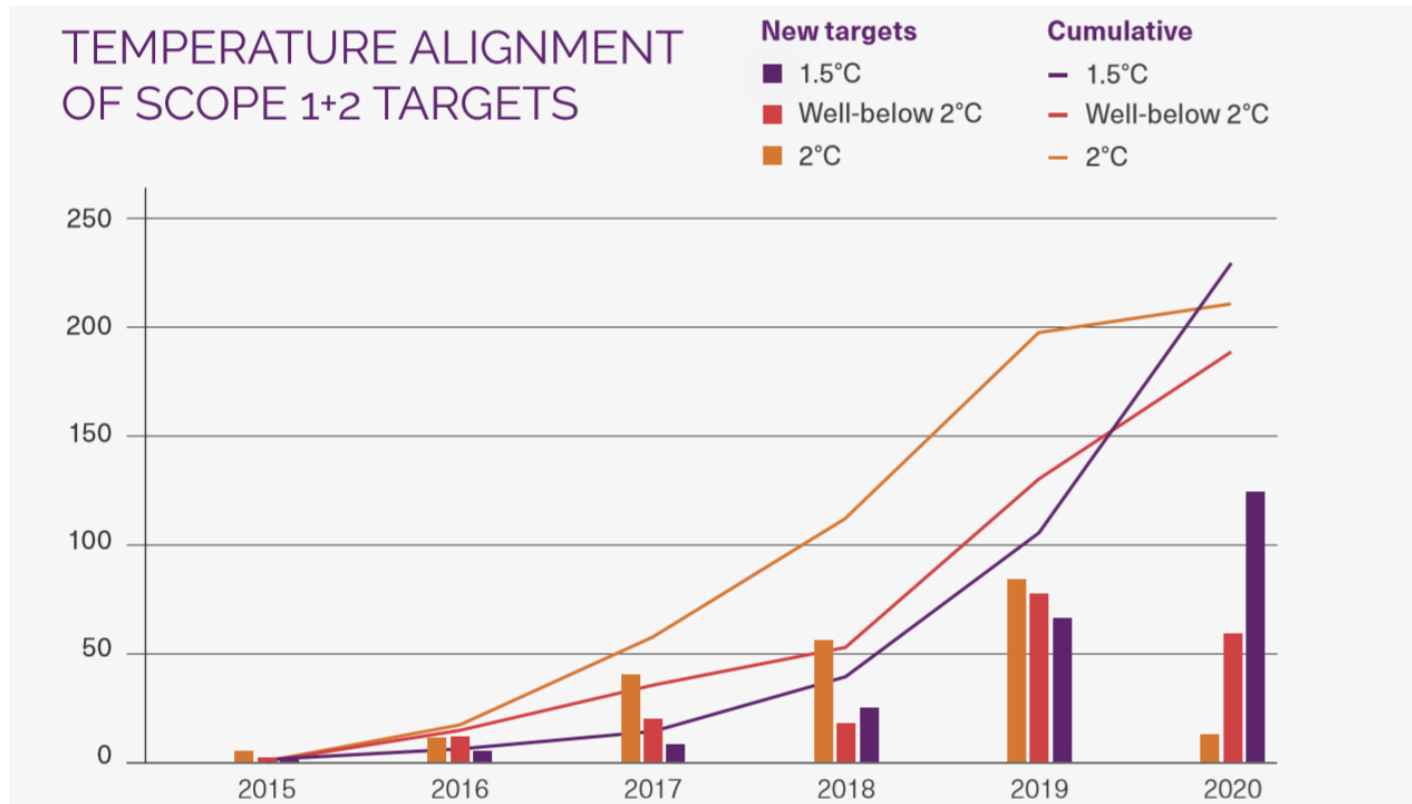
In collaboration with

**WE MEAN
BUSINESS**



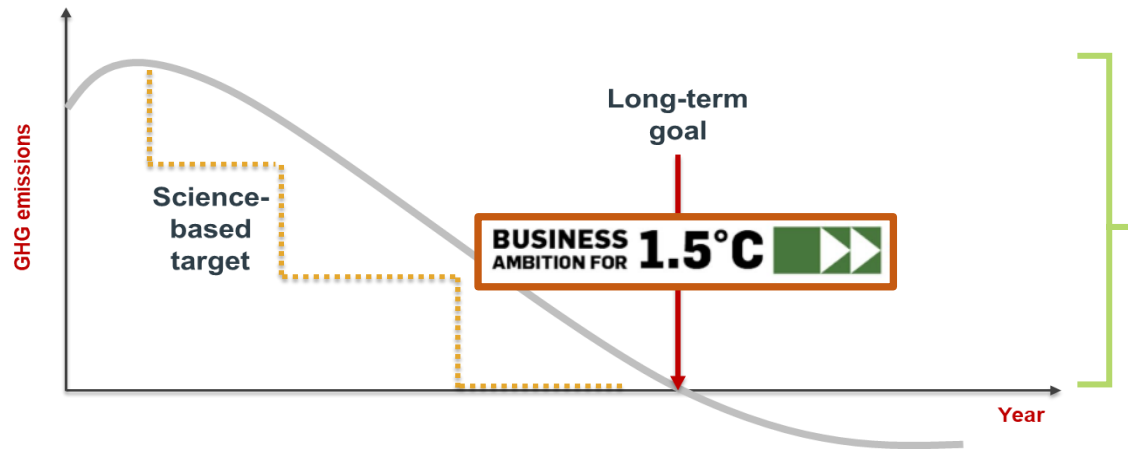
I. The Role of Businesses for a Net-Zero Future

- In 2020, A record number of companies reported Paris Agreement-aligned targets to CDP.
- Ambition from the private sector expected to continue.



II. Renewable Energy in Low Carbon Transition

Tools for the low carbon transition



1. Facilitating energy transition
2. Increasing energy efficiency
3. Deploying decarbonization technologies across all sectors

II. Renewable Energy in Low Carbon Transition

RE100

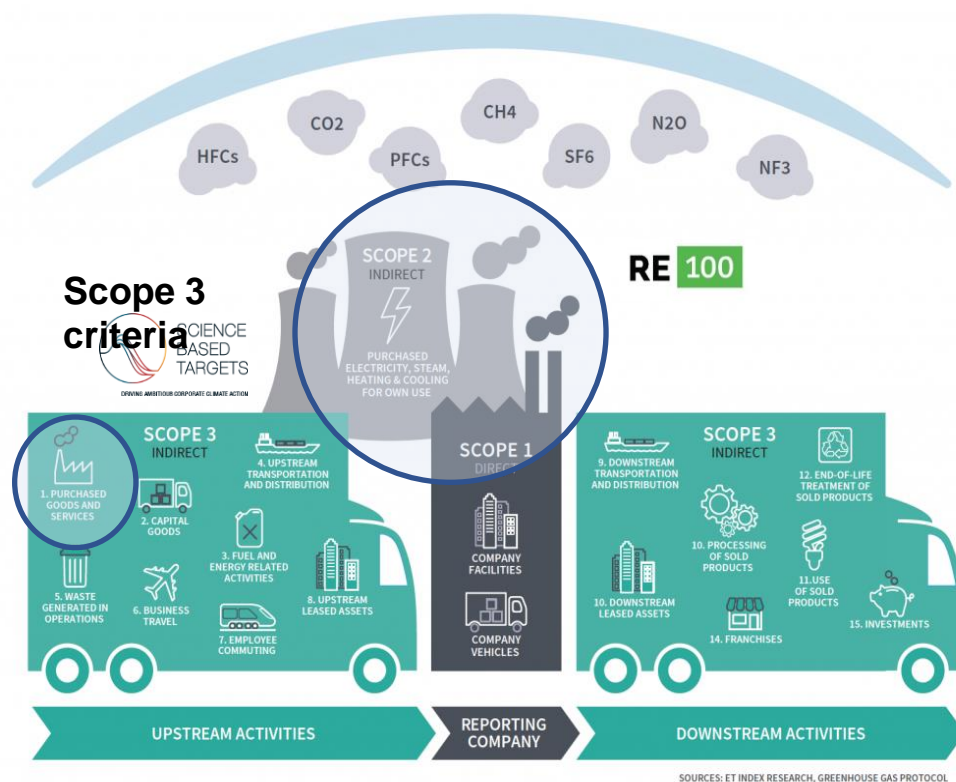
311 Members

- Demand side focus: No power generators
- Influential businesses
- Group level
- Renewable power strategy with credible deadlines
- **100% by 2050 with interim steps**
 - 60% by 2030
 - 90% by 2040



II. Renewable Energy in Low Carbon Transition

RE100 AND SUPPLY CHAINS

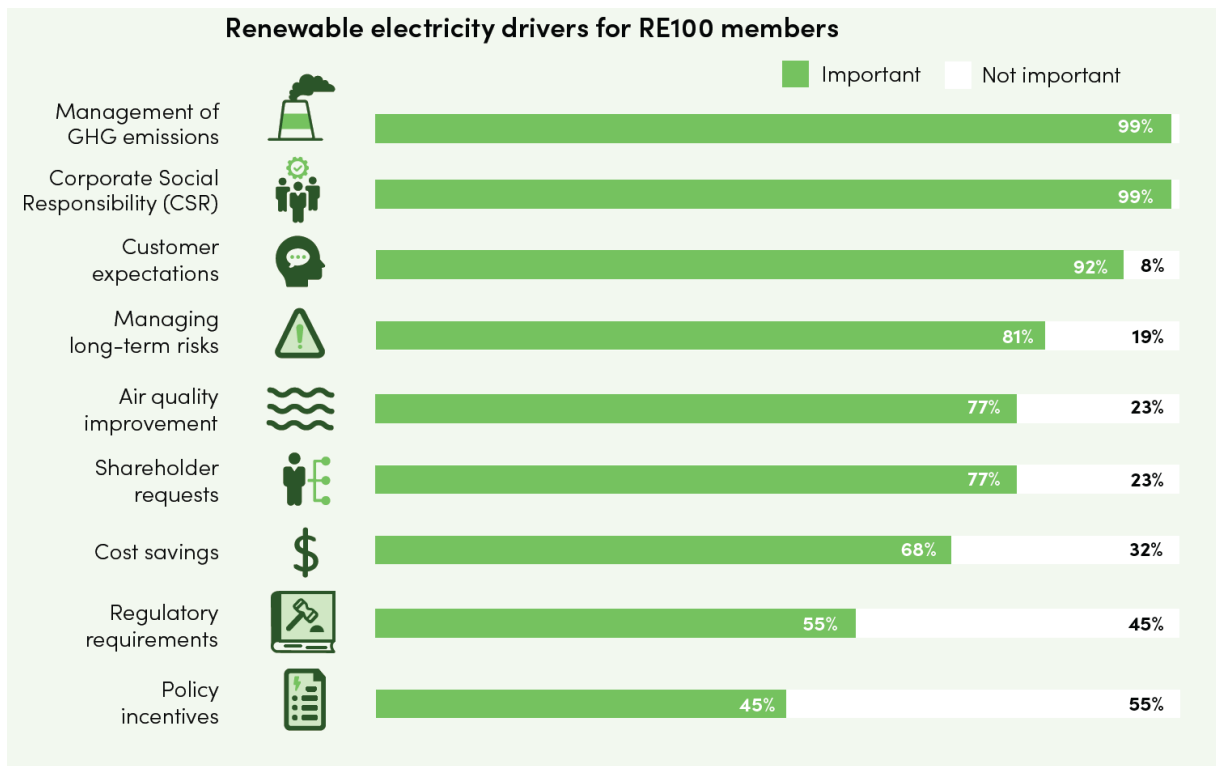


Companies are looking to future-proof their wider operations and accelerate the energy transition to enable more corporate sourcing of renewables worldwide – the “Multiplier Effect”.

- Quick way to reduce Scope 3 carbon footprint
- Helping suppliers:
 - Security against cost fluctuations and cost savings
 - Greater control over energy supply
 - Get ahead of regulatory compliance requirements in key geographies

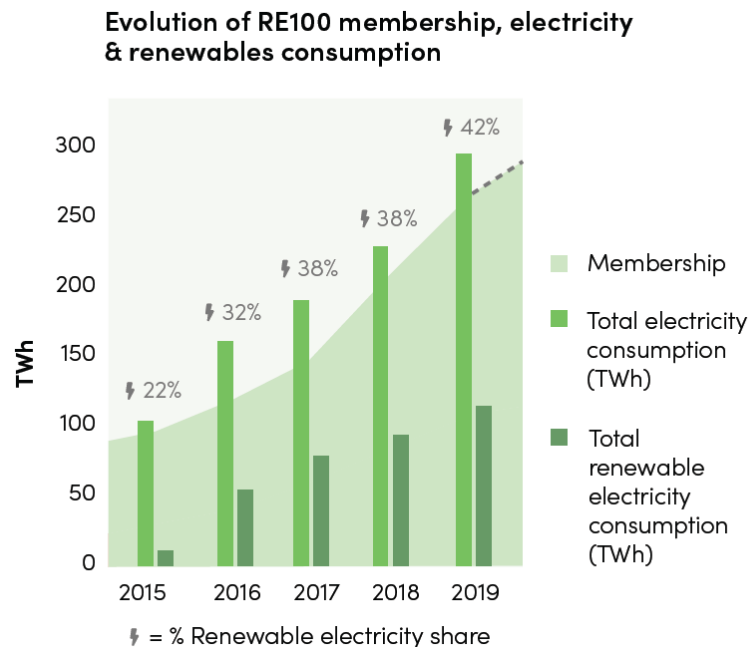
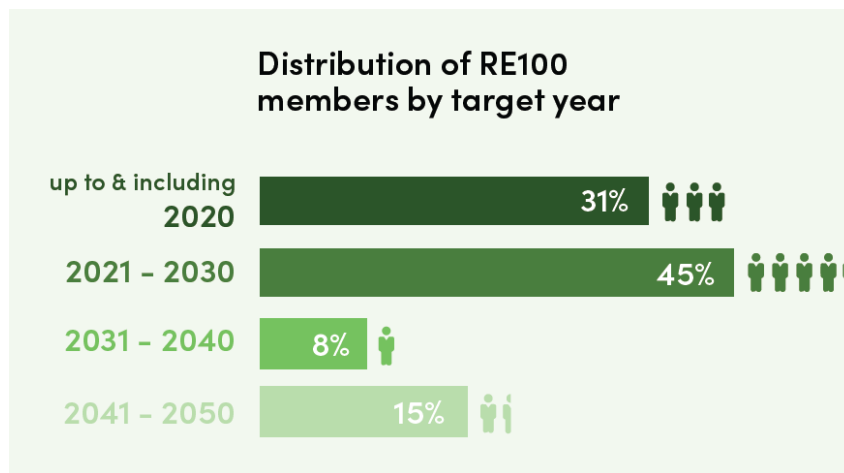
II. Renewable Energy in Low Carbon Transition

- Greenhouse Management and Corporate Social Responsibility cited as the biggest driver
- Customer expectation, long-term management risk and shareholder requests also playing big role



II. Renewable Energy in Low Carbon Transition

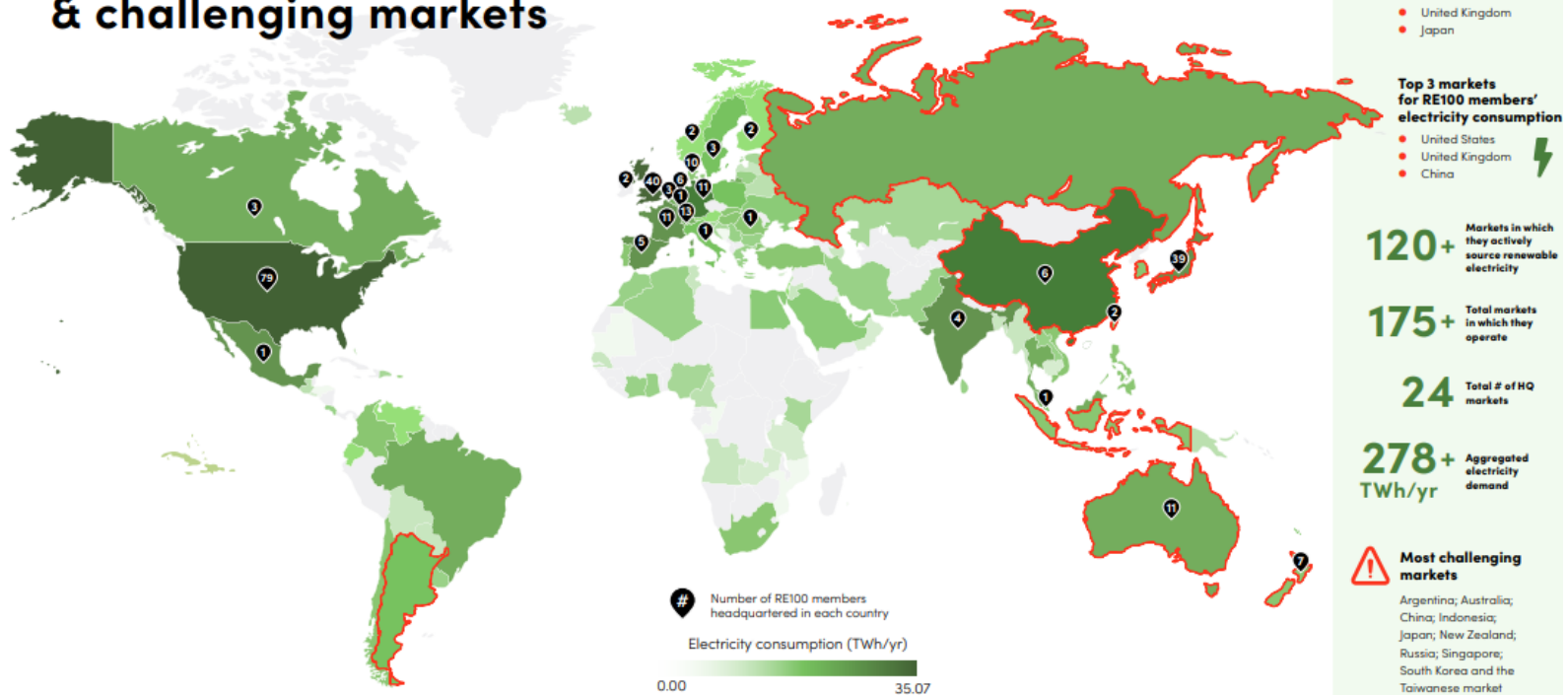
- More than 75% of members set targets year upto 2030
- Average renewable energy consumption rate is 42%
- For 77 members, renewable energy consumption accounts for more than 90% of total electricity consumption.



(출처: RE100 Annual Report 2020)

III. Local Challenges in Corporate Energy Transition

Map of member operations & challenging markets



Market	Barrier highlighted by our members
Singapore	Limited renewables availability; Physical space to build new capacity unavailable
South Korea	Renewables not available for corporate sourcing
Australia	Renewables costs still higher than other markets
Indonesia	Limited options to purchase renewables
Russia	Energy Attribute Certificates (EACs) are currently not available to purchase and other sourcing options are limited

Market	Barrier highlighted by our members
Taiwan	Prohibitive renewables costs
Argentina	Renewables not available for corporate sourcing
Japan	High costs of renewables; Limited availability due to certificate shortage
China (mainland)	Regulatory complexity; Renewables unavailable for sourcing in some regions
New Zealand	Insufficient sourcing options and no tracking system currently in place

III. Local Challenges in Corporate Energy Transition



Challenging markets & barriers faced

		China (mainland)	Singapore	South Korea	Russia	New Zealand	Argentina	Taiwanese market	Japan	Indonesia	Australia
Electricity demand of members citing market barriers (MWh/yr)		877,220	522,581	162,221	405,821	141,779	489,101	74,825	194,279	389,176	135,541
# members citing barriers in that market		18	16	14	13	13	12	12	12	11	11
Total # members in that market		82	63	49	42	36	42	46	76	48	69
Limited/ no availability		High	High	High	High	High	High	High	High	Low	Low
Regulatory barriers		High	Low	High	High	Low	Medium	Low	Medium	Low	Low
Cost		Low	High	Low	Low	Low	Low	High	High	Low	High
Small load		Low	Low	Low	Low	Low	Low	Low	Low	Low	Medium
No certificates available to purchase		Low	Low	Low	Low	High	Medium	Low	Low	Low	Low
Cost of certificates		Low	Low	Low	Low	Low	Low	Medium	Low	Low	Low
Lack of PPAs		Medium	Low	Low	Low	Low	Low	Low	Low	Low	Low
Leased offices		Low	Low	Low	Low	Low	Low	Low	Low	Low	Low

Number of members citing the barrier

High

Medium

Low

III. Local Challenges in Corporate Energy Transition

RE100

RENEWABLE SOURCING

To achieve 100% renewable electricity, a company may choose from the following options →

RE = electricity generated from **biomass (including biogas), geothermal, solar, water and wind energy sources.**

Ensuring accurate generation and attribute information

- 1 Generation from installations owned by the company

Purchased electricity

- 2 Purchase from on-site installations owned by a supplier
- 3 Direct line to an off-site generator with no grid transfers
- 4 Direct procurement from offsite grid-connected generators
- 5 Contract with suppliers (green electricity products)
- 6 Unbundled energy attribute certificate purchase
- 7 Other options

III. Local Challenges in Corporate Energy Transition

CoREi Overview

- The first local initiative to support business ambition for renewable energy



Global Compact
Network Korea



40+

Active
Corporate
Members

9

Lead to the first RE100
memberships in the
country

- Building an Ambition Loop:** The role of CoREi is focused on establishing a systematic channel that facilitates knowledge sharing between the government and the business. Build a friendly policy environment for renewable energy procurement and actively request to enhance the policy through the business alliance
- Awareness Raising and Capacity Building:** Quarterly workshops among business and government representatives / Lesson sharing at international events.

< CoREi Launch >



< UNGC Leaders Summit >



< Capacity Building >



III. Local Challenges in Corporate Energy Transition

- 5 Total methods made available to companies in Korea in 2021
- Also, with amendment to the Electric Business Act having passed the standing committee at the National Assembly, renewable power generators are expected to be able enter into direct PPAs with electricity consumers

Procurement Methods	Overview
Green Pricing	<ul style="list-style-type: none">• KEPCO provides certified renewable energy at a premium on electricity, which is determined at tender auctions.• Proceeds from green pricing to be reinvested into renewable energy
REC Purchases	<ul style="list-style-type: none">• Utilizing REC(Renewable Energy Certificates) not used in RPS(Renewable Portfolio Standard) compliance• REC trading platform for RE100 launched by Korea Energy Agency
Indirect PPA	<ul style="list-style-type: none">• Renewable energy generators can enter into a PPA with KEPCO directly (rather than selling dispatched power solely to the KPX) and KEPCO can then enter into corresponding PPAs with electricity consumers for the same renewable power.
Equity Participation	<ul style="list-style-type: none">• Companies can invest directly in the equity of a renewable power project and purchase the electricity or RECs derived from such projects, entitling them to receive credit for both RE100 participation.
Self-Generation	<ul style="list-style-type: none">• Electricity consumers can obtain certification of renewable power self-generation for direct consumption in satisfaction of RE100 carbon neutrality goals.

III. Local Challenges in Corporate Energy Transition

Future Challenges

- Minimizing trial and error in corporate renewable energy procurement
- Cascading ambition throughout other corporate players(large and small).
- Public – private dialogue in addressing transitional risks arising from rapidly changing policy environment
Ex) EU CBAM^{Carbon border adjustment mechanism}
- Improving renewable energy-related infrastructure for long-term ambition