

CDP

Stepping up: Reading address speed in challenging markets

RE100 annual disclosure report 2021

Foreword

Net zero emissions cannot be reached by 2050 without the near-complete decarbonization of electricity.

The IEA estimates that roughly a quarter of greenhouse gas emissions result from power generation and that companies account for roughly half of global electricity consumption. Companies therefore have a significant role to play in the decarbonization of electricity through leveraging their demand for renewable electricity.



In 2021, renewable electricity growth continued to demonstrate resilience despite global supply chain shocks, and high commodity and manufacturing costs. 2021 set a record for capacity additions in renewable electricity, 60% of which was in solar PV, growing its capacity additions by 17%¹.

2021 also saw the return of COP. COP26's agreement calls on the private sector in several ways: for its direct role in improving financing for adaptation and to help decarbonize emissionsintensive sectors. **Most significantly**, **the UNFCCC implicated the fossil fuel sector's reliance on subsidies in its first**

direct reference to fossil fuels, when 196 countries pledged to phase out ineffective fossil fuel subsidies and to reduce their use of coal².

Private sector companies taking action on climate change are leaders. RE100 is a global leadership initiative to accelerate the decarbonization of electricity by committing large and influential companies to set targets to source 100% of their electricity renewably. This report presents findings from RE100's 2021 disclosure cycle and explores these leaders' performance and impact in sourcing renewable electricity. It captures 315 members (at the time of publication, RE100 has 349 members) with an aggregated electricity consumption of 340 TWh – greater than the United Kingdom's.

This report shines a spotlight on the data behind the RE100 initiative, holding it and its members to account by showing how they are putting their commitments into action. The data also demonstrate the scale of demand, and the pivotal role that corporations play in increasing renewable electricity capacity and opening access to renewable electricity in new markets.



Key findings

45%↑

RE100 members' momentum in sourcing renewable electricity is continuing to grow. 45% of reported electricity consumption by RE100 members is now renewable, up from 41% in the 2020 annual disclosure report.



RE100's membership has seen its biggest yearly growth in the Asia-Pacific, where 36 new members are headquartered, or 62% of new membership. RE100's representation in markets where renewable electricity is more difficult for companies to source has increased.



28%↑

Members are sourcing more of their renewable electricity through Power Purchase Agreements (PPAs) than ever before. 28% of reported procurement of renewable electricity is done through PPAs, up from 26% in the 2020 report. New disclosures in 2021 suggest that RE100 members sourcing through PPAs are directly responsible for bringing new renewable electricity capacity to grids: PPAs are strongly associated with facilities less than two years old.



Japan & Republic of Korea

Are now the markets most frequently cited by members as presenting barriers to sourcing renewable electricity. This is likely because of increased representation in those markets. This increased representation also means RE100's voice for policy change is growing stronger in the markets where members currently expect to take longer to meet their RE100 targets.



Introduction

Key growth statistics



This annual disclosure report captures insights from 315 RE100 members which were expected to report in 2021.

At the time of publication, RE100 has 349 members. Members reporting in 2021 represent 340 TWh of electricity consumption – more than that of the 12th-highest consuming country (the United Kingdom). This year RE100 members reported sourcing 152 TWh of renewable electricity, or 45% of their total electricity consumption. This continues a trend of members advancing towards their RE100 targets. As a share of total consumption, renewable electricity in RE100's membership has seen a compound annual growth rate of 15% since 2015.

> TABLE 1: TOTAL RE100 MEMBERSHIP NUMBERS, ELECTRICITY CONSUMPTION, AND REPORTED SOURCING OF RENEWABLE ELECTRICITY

Membership captured in 2021 reporting	315 members
Annual electricity consumption	340 TWh — RE100 has a higher electricity consumption than the United Kingdom, the 12th-highest-consuming country
Reported annual renewable electricity procurement	152 TWh
Reported share of renewable electricity	45%

> FIGURE 1: RE100'S GROWTH IN MEMBERSHIP NUMBERS, AGGREGATED ELECTRICITY CONSUMPTION, AND SOURCING OF RENEWABLE ELECTRICITY



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Electricity and geographic footprint of RE100 members

> FIGURE 2: MAP OF RE100'S GLOBAL PRESENCE, CHALLENGES, AND POLICY ENGAGEMENT



> NUMBER OF RE100 MEMBERS HEADQUARTERED IN EACH COUNTRY*

USA Japan UK Switzerland Australia German France India Denmar Taiwanese marke Republic of Korea Netherland 85 56 44 15 14 13 10 6 16 10 9 9 China Spain Ireland Canada Belgium Sweden Finland Norway Mexico Singapore Italy Turkey Luxembourg 3 2 2 2 4 3 3 1 1 1

* Numbers not featured on map above







> TOP FIVE MARKETS FOR SOURCING OF RENEWABLE ELECTRICITY (TWh)



Since 2018, over 40% of RE100's annual new membership has been headquartered in the Asia-Pacific. In this report, 36 new members are headquartered in the Asia-Pacific, or 62% of new membership.

	2020	2019	2018	2017	2016	2015
Region			Number of	members		
Europe	124	111	95	77	65	46
Asia-Pacific	102	68	54	26	9	5
North America	89	82	71	53	42	31

> TABLE 2: BREAKDOWN OF THE REGIONS RE100 MEMBERS ARE HEADQUARTERED IN

> FIGURE 3: SECTOR-WISE ELECTRICITY DEMAND AND RENEWABLE ELECTRICITY SOURCING OF RE100 MEMBERS



After Japan, the Republic of Korea has contributed the greatest amount of new membership. Companies face barriers to sourcing renewable electricity in these markets and RE100 is targeting recruitment in them.



of new RE100 membership is headquartered in Japan



> TABLE 3: BREAKDOWN OF ASIA-PACIFIC MARKETS NEW RE100 MEMBERS ARE HEADQUARTERED IN

	2020					
Market	Number of new members	% of total new members				
Japan	17	29%				
Australia	4	7%				
Republic of Korea	9	15%				
Taiwanese market	5	8%				
India	2	3%				
All other new members	22	37%				
TOTAL	59					

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Sectoral changes in membership

The manufacturing sector has contributed the greatest amount of new membership.

> TABLE 4: RECENT CHANGES IN RE100'S REPRESENTATION IN DIFFERENT SECTORS¹

		201	9					
Sector	Number of members	Change from previous year	Electricity demand (TWh)	%RE	Number of members	Change from previous year	Electricity demand (TWh)	%RE
Services	121	9	105	71%	112	17	88	70%
Manufacturing	55	18	95	32%	37	14	65	26%
Retail	27	4	58	22%	23	5	52	22%
Food, beverage & agriculture	28	5	38	39%	23	5	32	31%
Materials	26	6	24	48%	20	4	20	35%
Biotech, health care & pharma	14	6	9.8	46%	8	2	6.0	35%
Infrastructure	22	3	4.2	11%	19	8	9.4	6%
Hospitality	7	2	2.1	65%	5	0	2.0	68%
Apparel	11	1	1.7	49%	10	3	1.7	37%
Transportation services	4	0	0.9	91%	4	0	1.2	84%

i Some 2019 numbers are re-stated



> FIGURE 4: RE100 MEMBERS SECTOR-WISE ELECTRICITY DEMAND AND RENEWABLE ELECTRICITY SOURCING

Manufacturing represents 28% of RE100's electricity demand, up from 23% in 2019. The sector is reporting sourcing 32% of its electricity renewably, up from 26% in 2019. The sector also has the second-highest average electricity demand per member, after retail. Manufacturers are also likely spread over far fewer sites than retailers, meaning their sites can have a major impact on local grids. The manufacturing sector's use of impactful procurement is explored in explored in our section on Manufacturing, PPAs, and China.





Trends in RE100 target years

Last year, the average target year for RE100's membership was 2028. This year, the average target year is 2030. New members have an average target year of 2037.

- > FIGURE 5: TARGET YEARS FOR RE100 AND ITS NEW MEMBERSHIP
 - 2030 2037 RE100 members new RE100 members





RE100's average target year is now further in the future because new membership to the initiative is mostly headquartered in the Asia-Pacific, where renewable electricity is harder for companies to source. In the Asia-Pacific, the average target year overall is 2039, while for new members headquartered there it is 2042. In Europe, the average target year is 2025. In North America, it is 2027.

There is also increased representation in the hard-to-abate manufacturing sector, for which the average target year is 2035. New RE100 members in the manufacturing sector have an average target year of 2040.

Sector	Annual electricity consumption (TWh)	Average target year
Services	105	2026
Manufacturing	95	2035
Retail	58	2029
Food, beverage and agriculture	38	2032
Materials	24	2032
Biotech, healthcare and pharma	9.8	2034
Infrastructure	4.2	2035
Hospitality	2.1	2029
Apparel	1.7	2025
Transportation services	0.9	2018

> TABLE 5: TARGET YEARS BY SECTOR



What influences a member's choice of target year?

Target years selected by RE100 members are reflections of the environments for sourcing renewable electricity in which those members operate. Where it is challenging for members to source renewable electricity currently, members set targets further into the future.

However, the choice of target year also depends on how the member intends to reach its target. Some members have policies of only using direct procurement methods (such as self-generation, direct lines, or PPAs) to source their renewable electricity. Sourcing renewable electricity directly and at scale takes longer (especially in challenging markets) but is strongly associated with new renewable electricity capacity being

brought to grids. The target year alone, therefore, is not the only indicator of ambition for a particular RE100 member.

Implementing the six RE100 policy messages allows companies to more quickly begin sourcing renewable electricity at scale for their operations. RE100 expects that policy change in challenging markets will give members the confidence to choose earlier target dates.

RE100's six policy messages



RE100 works with members. international partners and NGOs to address the market and policy barriers preventing companies from sourcing renewable



RE100 has six global policy messages it considers key to enabling companies to globally source renewable electricity at a reasonable cost.

- Create a level playing field on which renewable electricity competes fairly with fossil-fuel electricity and reflects the cost-competitiveness of renewable electricity
- Remove regulatory barriers and implement stable frameworks to facilitate the uptake of corporate renewable electricity sourcing.
- Create an electricity market structure that allows for direct trade between corporate buyers of all sizes and renewable electricity suppliers.
- Work with utilities or electricity suppliers to provide options for corporate renewable electricity sourcing.
- Promote direct investments in onsite and off-site renewable electricity projects.
- Support a credible and transparent system for issuing, tracking, and certifying competitively priced Energy Attribute Certificates (EACs).

About the data: disclosure rates

Disclosures from 305 members have been used to prepare the 2021 annual disclosure report (out of 315 which were expected to disclose).

Members can report to RE100 either through their CDP climate change questionnaire response, or in more detail through RE100's reporting spreadsheet. The more detailed reporting allows RE100 to draw market-level insights from members and better understand the challenges they face.

159

members reported using the RE100 reporting spreadsheet, giving the most detailed view of their electricity sourcing

Of these members:



disclosed their approaches to impactful procurement of renewable electricity





disclosed the age of the generation facilities they were purchasing renewable electricity from. This was the first reporting period in which members could disclose this information.



disclosed the barriers they faced to sourcing renewable electricity

96 members



disclosed a per-market breakdown of the barriers they faced

149 members



members disclosed how procuring renewable electricity was affecting their organizations' energy costs

152 members



disclosed how renewable electricity factored into engagement with their supply chains

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Assessed 100% claims

Claims of using 100% renewable electricity

61 members claimed sourcing 100% of their electricity renewably. They represented 46 TWh of electricity consumption, or 14% of RE100's entire electricity consumption.

Our assessment against the RE100 technical criteria

RE100 maintains technical criteria for credible sourcing of renewable electricity and claims to its use.

Credible claims of use of renewable electricity are central to members' commitments to RE100. The global applicability of the technical criteria and credible claims principles allow trustworthy signaling of corporate momentum in sourcing renewable electricity which is relied upon as a barometer for demand growth. Making credible claims of use of renewable electricity also provides an important reputational benefit for RE100 members.

The criteria are largely based on the GHG Protocol Corporate Standard. An important feature of the technical criteria is their inclusion of clear geographic market boundaries for sourcing of renewable electricity. Market boundaries require RE100 members to procure renewable electricity from the same markets in which they operate. Members which report in detail to the initiative can have their sourcing assessed against the RE100 technical criteria. If a member is claiming to source 100% of its electricity renewably, RE100 validates the claim before the member's RE100 target is formally considered to be met in a given reporting year and the initiative supports a public announcement by the member.

In 2021, RE100 assessed 107 TWh of electricity consumption from the 159 members submitting detailed reporting, and 70.3 TWh of associated reported sourcing of renewable electricity. 67.4 TWh of this renewable electricity was sourced in-market.

Of the 61 members claiming to source 100% renewable electricity, 50 submitted detailed reporting which RE100 could review. Of these 50, 29 sourced all their renewable electricity in-market.

While out-of-market sourcing of renewable electricity is not aligned with RE100's technical criteria, information about it is still useful for highlighting trends in sourcing methods across RE100's membership.

RE100 is developing its reporting infrastructure so that all members can be assessed for in-market sourcing. Future annual disclosure reports hope to present insights into in-market sourcing which cover RE100's entire membership.



members

claimed

sourcing

of their electricity renewably

	TWh	Share in member consumption
Total renewable electricity sourcing reported by assessed members	70.3 TWh	65.5%
Total renewable electricity sourcing found to be in-market	67.4 TWh	62.8%

Sourcing and impact trends

Leadership, impact, and 100%

RE100 is a leadership initiative which requires its members to commit to and progress towards sourcing 100% of their electricity renewably.



However, RE100 has considered several <u>characteristics of leadership</u> in corporate sourcing of renewable electricity which can be seen at any amount of renewable electricity procurement. It has also discussed <u>how</u> members should frame their progress towards 100%.

RE100 also encourages its members to be leaders by sourcing their renewable electricity in impactful ways. Their impact is studied through the sourcing methods members report using to the initiative.

Why do companies change the way they source renewable electricity over time?

Each year, RE100 explores the sourcing methods members report using to procure their renewable electricity. Sourcing methods change over time for reasons which are associated with the aims of the initiative.

Evolving markets

Electricity markets tend towards liberalization, giving companies more control over their electricity supplies. This allows companies to begin voluntarily procuring renewable electricity where they previously could not credibly claim its use. This can also happen in reverse. In Mexico, for instance, the Government's proposed renationalization of the electricity sector has made the future of PPAs there uncertain.

Procuring with impact

RE100 members may switch their procurement methods to more impactful ones. While impact can be framed in different contexts, RE100 emphasizes additions of new renewable electricity generation capacity as central to impactful procurement.

RE100's evolving technical criteria

The RE100 technical criteria directly influence members' energy procurement and RE100 carefully considers any changes to them. In 2021, the first technical criteria update since 2016 was published. The update recognized two new sourcing methods which allow members to credibly claim use of renewable electricity. These are:



Default delivered renewable electricity from the grid, **only when supported by energy attribute certificates**

Default delivered renewable electricity from a grid that is 95% or more renewable **and** where there is no mechanism for tracking energy attributes

These are additive changes to the technical criteria, giving members credible ways to claim use of renewable electricity which are passive.

For example, in the United States and Australia, utilities complying with Renewable Portfolio Standard-type legislation might be providing their customers with credible claims of use of renewable electricity, without those customers actively procuring it. In these cases, members who are already being charged by their utilities for procuring renewable electricity on their behalf, and have sufficient documentation to make a credible claim, can avoid the cost of having to procure renewable electricity additionally and actively. The approach also remains consistent with RE100's aims. It is not intended to encourage inaction by companies, but instead to create opportunities for consumers to incentivize suppliers and regulators to take on higher targets and provide more renewable electricity to all consumers.



Headline trends in procurement methods used by RE100 members

Members are continuing to increase their share of renewable electricity sourced through what are generally considered impactful procurement methods.



Power Purchase Agreements

(PPAs), referring to a group of sourcing methods that imply direct contracting between an electricity consumer and a generator (instead of a more conventional relationship between a consumer and a retailer of electricity) have increased their share in the total reported sourcing of renewable electricity by RE100 members from 26% in 2019 to 28% in 2020.

Unbundled EACs

have also continued to reduce their share in reported sourcing of renewable electricity by members and are down to 40% from 42%. However, newly introduced passive sourcing methods may have substituted some demand for unbundled EACs. Together, unbundled EACs and passive sourcing methods account for 43% of reported sourcing of renewable electricity.



> FIGURE 7: SOURCING METHOD DISTRIBUTION REPORTED BY RE100 MEMBERS SINCE 2016

> FIGURE 8: DETAILED CURRENT SOURCING METHOD DISTRIBUTION REPORTED BY RE100 MEMBERS





Trends in purchased renewable electricity across regions

Purchases in Europe account for 34% of all purchased renewable electricity reported by RE100 members.

> FIGURE 9: DISTRIBUTION OF SOURCING METHODS IN EUROPE



Green electricity products, such as green tariffs, dominate in Europe, where they are used to deliver 54% of purchased volume. Data from all RE100 members indicate that PPAs are used to deliver only 8% of purchased volume.

Reporting from members, through both detailed spreadsheet reporting and lessdetailed CDP reporting, has maintained the trend of PPAs holding a relatively low share in sourcing of renewable electricity in Europe.

It is possible that some green electricity products reported by members in Europe are better characterized as PPAs. Supply arrangements which might be understood as green electricity products because they involve contracting with an energy retailer might still have underlying direct transacting between consumers and generators. Any contract between a generator and a corporate consumer for the sale of electricity defines a Power Purchase Agreement.

It is also important to note that not all of members' reporting of PPAs is region-specific: 13 TWh of renewable electricity sourced using PPAs was reported without being linked to any markets. This could affect the share of sourcing PPAs hold in Europe.

There is accelerating growth of PPAs in Europe. New PPAs equivalent to 3.5 GW in renewable electricity capacity were entered into in 2020³, and they are expected to appear more frequently in reporting in Europe.



> FIGURE 10: DISTRIBUTION OF SOURCING METHODS IN NORTH AMERICA

Purchases in North America account for 42% of all purchased renewable electricity reported by RE100 members. Unbundled EACs dominate in North America, but it is also the region where PPAs are used most.





Purchases in Asia account for 11% of all purchased renewable electricity reported by RE100 members, while the region accounts for nearly a third of RE100's electricity consumption. Unbundled EACs dominate in Asia, where they are used to deliver 70% of purchased volume.





Manufacturing, PPAs, and China

Manufacturing has the highest electricity demand in RE100 on a per-member basis after retail. Unlike retail, however, members are likely spread over far fewer sites, and therefore have potential to significantly impact their local grids.

Manufacturing should be a high-impact sector. Figure 12, however, shows that manufacturing sector members report sourcing less of their renewable electricity using PPAs than all other sectors except the infrastructure and transportation services sectors. The reason PPAs are not frequently reported by manufacturing sector members is apparent in Figure 13: manufacturing sector members have greater electricity consumption in China than they do in all other markets combined. PPAs are not widely accessible in China. Increasing access to PPAs in China could greatly improve the manufacturing sector's access to impactful procurement methods.

> FIGURE 12: SHARES OF PPAS IN REPORTED PROCUREMENT OF RENEWABLE ELECTRICITY, BY SECTOR[®]

> FIGURE 13: ELECTRICITY CONSUMPTION (TWH) REPORTED IN DIFFERENT MARKETS BY RE100 MEMBERS IN THE MANUFACTURING SECTOR^{III}





II This figure is prepared from RE100's entire reporting sample in 2021

III This figure can only be prepared from RE100's detailed reporting sample of 159 members in 2021 Purchases in Oceania account for 1% of all purchased renewable electricity reported by RE100 members. Unbundled EACs dominate in Oceania, although the region is where PPAs are most used, after North America. Oceania is also the region where passive sourcing of renewable electricity, supported by EACs, is most present in total sourcing. This is likely due to the Large-scale Renewable Energy Target (LRET) for utilities in Australia, which gives consumers access to EACs passively.

> FIGURE 14: DISTRIBUTION OF SOURCING METHODS IN OCEANIA



It is important to note that roughly 10% of all purchased renewable electricity reported by RE100 members was not region-specific. Of this 10%, PPAs accounted for 90%, or over 13 TWh. **The regional distribution of these 13 TWh could significantly affect the share of reported purchases that PPAs hold in some regions.** > FIGURE 15: DISTRIBUTION OF SOURCING METHODS WHERE NO MARKET WAS DISCLOSED





New data: how old are the facilities RE100 members purchase from?

In the 2021 reporting year, RE100 members were asked for the first time to disclose the commissioning dates of the facilities they purchased renewable electricity from. This is an important new indicator for the impact RE100 members have. The goal of RE100 is to accelerate change towards zero carbon grids at scale, and that requires new renewable electricity generation.

The commissioning date is only asked for in the most detailed reporting submitted by members. The response rate of 30% (for 20 TWh of purchases of renewable electricity) is considered good for the first year in which the disclosure has been asked for.

> FIGURE 16: THE AGE OF THE GENERATION FACILITIES RE100 MEMBERS PURCHASE RENEWABLE ELECTRICITY FROM - TAKEN FROM DETAILED REPORTING ONLY



It is also likely that certain procurement methods make it much harder to obtain this information. In detailed reporting, the commissioning date was not disclosed for 86% of reported purchased volume from green tariffs. In contrast, it was disclosed for nearly 50% of reported purchased volume from PPAs.

Where commissioning dates are available, there are clear trends that sourcing of renewable electricity through PPAs is currently exclusively associated with newer generation facilities. Around 3.4 TWh of sourcing using PPAs came from facilities commissioned in the past two years. **Data suggest that RE100 members using PPAs are directly responsible for capacity additions of renewable electricity in the markets in which they operate.**

When purchases of unbundled EACs included information about commissioning dates, 96% of purchased volume came from facilities commissioned in 2006 or later. A fifteen-year financing life is typical of renewable electricity generation facilities, meaning that RE100 members purchasing unbundled EACs are also playing an important role in the financing of such facilities.

New data: markets where EACs are claimed passively

Passive sourcing was one of the subjects of the 2021 RE100 technical criteria update. Supporting members making credible claims to passively delivered renewable electricity has been an important area of engagement with members by RE100's technical team in response to the update.

Market	Total passive claims (GWh)	Number of members claiming	Claims as share of total reported purchases
United States of America	1,562	9	2.8%
United Kingdom	253	8	3.9%
Italy	179	5	32%
Mexico	140	1	11%
Australia	48	4	7.9%
Canada	44	2	7.1%
France	36	2	1.9%
Brazil	33	3	1.2%
Germany	29	2	0.9%
Netherlands	26	3	1.2%
Total	2,470	28	1.7%

> TABLE 7: TOP TEN MARKETS WHERE RENEWABLE ELECTRICITY IS PASSIVELY SOURCED^{iv}

A total of 2.5 TWh of renewable electricity supported by EACs was claimed passively by RE100 members. It is encouraging to see the United States and Australia among the top countries where use of renewable electricity is being claimed passively: these markets have in place legislation that utilities comply with which provides consumers with credible claims to EACs passively. The tracking mechanisms disclosed – US-RECs in the United States, and LGCs in Australia – are the tracking mechanisms associated with the Renewable Portfolio Standards in the United States, and the Large-Scale Generation Targets in Australia.

Iv While passive sourcing has been claimed in these markets, RE100's reporting of the disclosures is not confirmation that all of the sourcing has been credible. RE100's guidance around passive sourcing strongly emphasizes the need for credible data from suppliers, and any member intending to claim default delivered renewable electricity should approach their electricity supplier first.

Barriers reported by RE100 members

Last year, China and Singapore were most frequently reported by members as presenting barriers to sourcing renewable electricity. This year, the Republic of Korea and Japan appear in reporting most frequently, while China and Singapore remain consistent with last year.

This is likely because the Republic of Korea and Japan have contributed the greatest amount of new membership.

In the Republic of Korea, RE100 members currently report sourcing around 2% of their electricity renewably. Members reporting facing barriers in the Republic of Korea, however, do not report sourcing any renewable electricity there at all. This shows the degree of challenges the market is facing: credible procurement options are currently severely limited.

A lack of procurement options is the most frequently reported barrier by RE100 members: appearing most in Argentina, the Russian Federation, and the Republic of Korea. It is clear that corporate demand for renewables is strong, but is often hindered by a lack of frameworks. Markets can evolve rapidly, however. In 2021, Argentina joined the growing list of markets where I-RECs are issued. It is expected that inmarket sourcing using I-RECs in Argentina will appear in future disclosures.

Supply availability is another frequently cited barrier. The barrier is cited in markets where there are resource constraints for renewable energy, such as Singapore and Japan.

RE100's targeted policy engagement is directly related to the barriers members report facing. This year, the Japan Policy Working Group advocated for a 50% renewable electricity target by 2030. A revised target of 36-38% has since been announced by the Japanese government. In Korea, RE100's policy engagement has been centered on PPAs and has led to policy developments which will give access to PPAs at below-average industrial electricity prices. These are only two examples of extensive policy work RE100 is doing to promote its six policy messages.

2%

of members' electricity demand in Republic of Korea is currently from renewables



The Japan Policy Working Group advocated a

50%

renewable electricity target by 2030.

> TABLE 8: TOP 10 CHALLENGING MARKETS

	or of the	es. (egg	Citino	6310000	ALO INCO	Russian Federation	Color A Color	l'aimentese	New Cold	Sauci Sauci Aradis
Members citing barriers	27	24	22	21	18	18	17	14	10	9
Members reporting operations	53	76	92	61	39	45	73	46	35	21
+ Lack of procurement options	9	1	4		11	10	1	1	6	4
X Limited/no supply available	5	9	5	10		3		5	1	3
Regulatory barriers	6	1	7	1	1	2	2		1	
\$ Cost	1	5		7	2		13	4		
Landlord-tenant barriers		2	3		1	1	1	1		
No EACs available in small quantities	3	3		2	2			3		1
Lack of PPAs	3	1	5			1	1			
S Internal barriers		3		1						
No corporate RE market						1			1	
••• Other	1				1	1			1	1







Reported cost savings from purchasing renewable electricity

Purchasing renewable electricity can create cost savings on procurement expenditure for an organization. It can also increase procurement expenditure.

Whether costs go up or down is primarily related to the type of sourcing: if certified electricity is being purchased, whether bundled or unbundled, the expectation is that costs will always be higher than wholesale electricity prices (since certification can only ever be a price premium on top of the electricity itself). However, PPAs can produce significant cost savings if wholesale prices are higher than the rate agreed in a PPA's contract for difference. Similarly, self-generation can produce cost savings by insulating the consumer from fluctuating wholesale prices.

This logic appears in members' disclosures to RE100 around cost savings.

> TABLE 9: PROCUREMENT TRENDS FOR MEMBERS REPORTING INCREASED OR DECREASED COSTS AS A RESULT OF PURCHASING RENEWABLE ELECTRICITY

Number of members	Average % RE of those members	Of which PPAs	Of which green tariffs	Of which unbundled EACs	Of which self- generation
54	60%	24%	40%	28%	5.5%
82	49%	25%	24%	48%	1.0%

Members are saving costs

Saving costs



members are engaging with their supply chains on renewable electricity It is encouraging to see a trend that **members** reporting cost savings tend to procure more of their electricity renewably. Compared with members that do not save costs,

members saving costs nearly halve their

sourcing of unbundled EACs, increase their sourcing through green tariffs (which do not necessarily include EACs), and

tend to generate over five times more of their renewable electricity themselves.

Engaging with supply chains on renewable electricity

77 members are engaging with their supply chains on renewable electricity, while 35 plan to start in the next two years. A quarter of members engaging with their supply chains ask their supply chains to set targets for procuring renewable electricity.

CDP's Global Supply Chain Report 2020 revealed that supply chain emissions are on average 11.4 times greater than operational emissions. Reducing supply chain emissions is a critical part of a corporate decarbonization plan and is often mandated by the Science Based Targets initiative. Renewable electricity is a key theme to engage with supply chains on: it is an easy topic to communicate, and emissions reductions can be made quickly.

Outlooks on membership, disclosure, and impact

Expected trends in membership

RE100 is continuing its targeted recruitment in challenging markets in the Asia-Pacific, which is expected to continue contributing most new membership to the initiative.

The initiative is also working to grow its presence in new markets and regions. In 2021, a South Africa hub was launched, and the conclusion of a market prioritization exercise has informed RE100's regional strategy.

Expected trends in disclosure and annual disclosure reports

RE100 works continuously to improve its infrastructure and guidance for disclosure. Improvements to CDP's climate change questionnaire mean that future annual disclosure reports hope to no longer have to distinguish between detailed and less-detailed reporting. This also means all members' reporting will be able to be assessed against the RE100 technical criteria for improved credibility.

Expected trends in procurement and impact

RE100 studies impactful procurement by considering sourcing methods which are associated with new renewable electricity capacity being added to the grid.

Disclosures this year strengthen the case that RE100 members procure their renewable electricity with this sort of impact: PPAs are strongly associated with generation facilities commissioned in the last two years. RE100 expects that PPAs will continue to increase their share in procurement by the initiative, and that higher disclosure rates for commissioning dates will continue to show PPAs are associated with additionality. However, RE100's view of impact – in terms of additionality – is not the only way impact can be defined.

Innovations in impactful procurement dominate news on corporate sourcing of renewable electricity. In recent years, new approaches to procuring renewable electricity which consider tight temporal or geographic matching of generation and consumption have been developed. While RE100 requires geographic matching of generation and consumption through its market boundary rules, matching can be more precise than RE100's current restrictions, with the intention of optimizing emissions reductions and displacement of fossil fuel generation. These new approaches are currently only deployed in highly developed and liberalized electricity markets where consumers can work closely with their suppliers. Access to accurate, high-resolution data for generation and consumption is necessary for innovative approaches to procurement to be used.

RE100 aims to accelerate the transition to renewable electricity and therefore follows new approaches for procuring renewable electricity closely. RE100's function is also, however, to promote globally applicable frameworks which companies can use to guide their procurement of renewable electricity in any market. These frameworks are also used to inform RE100's policy engagement in the markets which need policy change for companies to have credible claims to use of renewable electricity. It is unlikely, therefore, that these new approaches will significantly influence RE100's technical criteria soon for all markets. However, RE100 is considering ways it can recognize innovative and high-impact approaches to procuring renewable electricity when they are used.

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RE100 °CLIMATE GROUP

CDP

About RE100

<u>RE100</u> is a global initiative bringing together the world's most influential businesses committed to 100% renewable power. Led by international non-profit the Climate Group in partnership with CDP, the group have a total revenue of over US\$6.6 trillion and operate in a diverse range of sectors. Together, they send a powerful signal to policymakers and investors to accelerate the transition to a clean economy. #RE100

°CLIMATE GROUP

About the Climate Group

<u>The Climate Group</u> drives climate action. Fast. Our goal is a world of net zero carbon emissions by 2050, with greater prosperity for all. We focus on systems with the highest emissions and where our networks have the greatest opportunity to drive change. We do this by building large and influential networks and holding organisations accountable, turning their commitments into action. We share what we achieve together to show more organisations what they could do. We are an international non-profit organisation, founded in 2004, with offices in London, New Delhi and New York. We are proud to be part of the We Mean Business coalition. Follow us on Twitter @ClimateGroup.



About CDP

<u>CDP</u> is a global non-profit that drives companies and governments to reduce their greenhouse gas emissions, safeguard water resources and protect forests. Voted number one climate research provider by investors and working with institutional investors with assets of over US\$106 trillion, we leverage investor and buyer power to motivate companies to disclose and manage their environmental impacts. Over 9,600 companies with over 50% of global market capitalization disclosed environmental data through CDP in 2020. This is in addition to the hundreds of cities, states and regions who disclosed, making CDP's platform one of the richest sources of information globally on how companies and governments are driving environmental change. CDP is a founding member of the We Mean Business Coalition. Follow us @CDP to find out more.

Appendices

Additional figures

Regional sourcing of renewable electricity: other key geographies and markets









JAPAN

v Note: 97% of the reported PPA volume sourced in China was from Yunnan Province.

UNITED STATES OF AMERICA



EUROPEAN SINGLE MARKET





Sourcing methods by region















DIRECT LINE SOURCING







Insights into out-of-market sourcing

> TABLE 10: TOP	10 MARKETS	WHERE MEMBERS	CLAIM FROM EXTERNAL	MARKETS
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Market	Members operating in this market and claiming from another market	Volume claimed from another market (MWh)
Singapore	11	719,217
European single market	14	468,038
Australia	2	130,298
Mexico	2	100,218
Russian Federation	10	81,602
Republic of Korea	9	58,036
Ecuador	3	25,428
North American single market	3	7,235
Guatemala	1	6,677
Ukraine	6	5,945

> TABLE 11: TOP 10 EXTERNAL MARKETS MEMBERS CLAIM FROM

Market	Members operating in another market and claiming from this market	Volume supplied to another market (MWh)
Vietnam	3	590,001
Iceland	2	360,876
China	10	188,624
North American single market	5	186,216
European single market	11	125,361
Thailand	2	55,010
Philippines	1	37,265
Malaysia	6	27,971
Peru	1	25,023
Singapore	1	10,802

RE100 considers sourcing of renewable electricity out-of-market when:

- A different market of origin of renewable electricity is disclosed from the market the sourcing is being claimed in;
- No market of origin of renewable electricity is disclosed and there is no other information provided in a disclosure which RE100 can use to determine whether sourcing was in-market (for example, an appropriate EAC system from the same market as the market of consumption).





Market progress table

This table can only be produced from members' most detailed disclosures: it covers 159 of the 305 members which reported in 2021.

These members have reported operations in a total of 159 markets.

Reported market	Reported electricity consumption (GWh)	Reported sourcing of purchased and self-generated renewable electricity (GWh)	Share of renewable electricity	Members reporting operations
United States of America	36,568	28,745	79%	100
China	13,106	5,290	40%	87
United Kingdom	6,807	6,471	95%	89
Republic of Korea	5,552	142	3%	53
Germany	3,806	3,394	89%	78
Japan	3,738	834	22%	77
Brazil	3,079	2,755	89%	54
Australia	2,953	693	23%	74
Netherlands	2,469	2,257	91%	62
France	2,429	1,936	80%	69
Spain	2,389	2,549	107%	66
Mexico	2,003	1,287	64%	54
Ireland	1,596	1,580	99%	43
Canada	1,329	614	46%	57
Poland	1,270	1,133	89%	53
India	1,261	671	53%	68
Belgium	1,203	1,148	95%	47
Singapore	1,159	809	70%	62
Russian Federation	1,056	182	17%	45
Denmark	865	706	82%	38
Switzerland	833	819	98%	51
Thailand	782	103	13%	51
Sweden	759	715	94%	49
Italy	733	571	78%	61

Reported market	Reported electricity consumption (GWh)	Reported sourcing of purchased and self-generated renewable electricity (GWh)	Share of renewable electricity	Members reporting operations
Argentina	672	83	12%	40
Malaysia	589	108	18%	42
Indonesia	509	20	4%	46
Czech Republic	457	447	98%	35
Colombia	423	257	61%	33
Chile	395	185	47%	36
Slovakia	364	312	86%	25
South Africa	323	79	25%	41
Peru	321	286	89%	25
Turkey	320	144	45%	39
Philippines	307	230	75%	41
Portugal	294	287	98%	30
Romania	278	247	89%	25
Hong Kong market	257	190	74%	44
Taiwanese market	249	9	4%	46
Hungary	225	199	89%	29
Finland	222	206	93%	31
New Zealand	220	56	26%	35
Vietnam	216	31	14%	41
Israel	183	21	12%	24
Austria	177	165	93%	43
Puerto Rico	155	11	7%	9
Norway	148	142	96%	29
Venezuela (Bolivarian Republic of)	139	1	0%	5
Ecuador	125	25	20%	11
Ukraine	101	6	6%	18
United Arab Emirates	99	28	28%	44
Saudi Arabia	88	4	5%	22
Morocco	84	1	1%	15
Egypt	76	1	1%	17
Bulgaria	51	38	74%	20
Serbia	48	44	92%	17
Uruguay	46	7	16%	12

Reported market	Reported electricity consumption (GWh)	Reported sourcing of purchased and self-generated renewable electricity (GWh)	Share of renewable electricity	Members reporting operations
Lao People's Democratic Republic	43	0	0%	3
Lithuania	40	39	97%	14
Greece	39	33	84%	23
Ghana	37	0	0%	7
Pakistan	34	1	2%	12
Algeria	34	4	13%	8
Iran (Islamic Republic of)	31	1	5%	3
Côte d'Ivoire	30	0	0%	3
Myanmar	28	0	0%	10
Sri Lanka	26	0	2%	9
Luxembourg	25	23	89%	30
Panama	23	18	75%	13
Slovenia	18	5	31%	10
Kazakhstan	16	0	1%	10
Fiji	16	2	14%	7
Guatemala	16	7	43%	8
Costa Rica	15	14	92%	10
Nigeria	14	1	7%	14
Estonia	13	13	99%	6
Belarus	13	0	0%	5
Croatia	13	11	86%	16
Dominican Republic	13	1	5%	8
Kenya	13	0	3%	13
Papua New Guinea	10	0	0%	6
Paraguay	8	8	100%	3
Qatar	8	4	56%	12
Iceland	8	8	100%	3
Lebanon	6	0	3%	6
Azerbaijan	5	0	1%	3
Nicaragua	5	1	14%	4
Democratic People's Republic of Korea	4	0	0%	3
El Salvador	4	0	2%	4

Reported market	Reported electricity consumption (GWh)	Reported sourcing of purchased and self-generated renewable electricity (GWh)	Share of renewable electricity	Members reporting operations
Latvia	3	3	89%	7
Bolivia (Plurinational State of)	3	0	1%	4
Jordan	3	2	72%	4
Bahrain	3	0	11%	9
Tunisia	2	0	4%	7
Mauritius	1	0	3%	4
Honduras	1	0	37%	4
Oman	1	0	7%	6
Angola	1	0	6%	3
Armenia	1	1	96%	3
Bahamas	1	1	113%	3
Cyprus	1	0	59%	4
Kuwait	1	1	99%	4
Malta	1	1	100%	3
Bermuda	0	0	0%	4
Bangladesh	0	0	42%	7
Liechtenstein	0	0	56%	4
Bosnia and Herzegovina	0	0	51%	4
Brunei Darussalam	0	0	36%	3

The following markets have been excluded from this table because only one or two members reported operations in them:

Albania, Barbados, Botswana, British Virgin Islands, Cambodia, Cameroon, Cayman Islands, Central African Republic, Comoros, Cuba, Curacao, Djibouti, Ethiopia, Europe, French Polynesia, French St Martin, Georgia, Guam, Guernsey, Isle of Man, Jamaica, Jersey, Kiribati, Kosovo, Kyrgyzstan, Libya, Macau, Macedonia, Maldives, Monaco, Montenegro, Mozambique, Namibia, Nepal, New Caledonia, Palau, Reunion Island, Saint Martin, Samoa, Senegal, Solomon Islands, Swaziland, Tanzania, The former Yugoslav Republic of Macedonia, Timor-Leste, Tonga, Trinidad and Tobago, Uganda, Vanuatu, Zambia, Zimbabwe.

The total electricity consumption in excluded markets was 85 GWh and the total reported sourcing of renewable electricity in them was 3.7 GWh.

Member progress table

RE100 member	HQ	Joining year	RE100 target year	RE100 interim targets	% RE - 2020	% RE - 2019	% RE - 2018	% RE - 2017	% RE - 2016	% RE - 2015	
3M Company	United States of America	2019	2050		35%	33%	27%				
7&i Holdings Co., Ltd.	Japan	2020	2050		5%						
AB SKF	Sweden	2020	2030		39%	40%					
ABB	Switzerland	2021	2030		32%						
Accenture	Ireland	2019	2023		30%	26%	24%				
Acer Inc.	Taiwanese market	2021	2035		43%						
Adobe	United States of America	2015	2035	Various regional targets	46%	33%	9%	1%	6%	0%	
Advantest	Japan	2020	2050	70% by 2030	44%	28%					
Aeon Co	Japan	2018	2030		1%	1%	1%	0%			
Airbnb, Inc.	United States of America	2021	2021		100%						Airbnb, Inc. p
Ajinomoto	Japan	2020	2050		2%	1%					
AkzoNobel	Netherlands	2017	2030	50% by 2025 globally and 100% by 2022 in Europe	39%	37%	40%	58%	40%		
Allianz SE	Germany	2018	2023		57%	49%	45%	40%			
Alphabet, Inc	United States of America	2015	2017		100%*	100%*	100%	100%	61%	48%	
Alstria	Germany	2015	2020		100%	100%	100%	95%	61%	92%	
Altana AG	Germany	2021	2040		97%						
Amalgamated Bank	United States of America	2016	2017		No reporting	100%	100%	100%	No reporting	0%	
American Eagle	United States of America	2020	2030		23%	21%					
American Express	United States of America	2020	2018		100%	100%*					American Express pr operations (including the RE100 technical in Argentina, New Ze or credible renewab
Amorepacific Corporation	Republic of Korea	2021	2030		5%						
Anheuser-Busch InBev	Belgium	2017	2025		33%	25%	21%	5%	5%		
Anthem	United States of America	2019	2025		4%	0%	0%				
Apple	United States of America	2016	2020		100%*	100%*	99%	97%	95%	93%	
Arm Ltd	United Kingdom	2021	2023		87%						
Asahi Group Holdings, Ltd.	Japan	2020	2050		12%						
Asahi Kasei Homes	Japan	2019	2025		6%	0%	0%				
ASICS Corporation	Japan	2020	2030		22%	19%					
ASKUL	Japan	2017	2030	80% by 2025	33%	25%	23%	1%	0%		





RE100 member	НQ	Joining year	RE100 target year	RE100 interim targets	% RE - 2020	% RE - 2019	% RE - 2018	% RE - 2017	% RE - 2016	% RE - 2015	
Asset Management One	Japan	2019	2050		23%	3%	4%				
AstraZeneca	United Kingdom	2016	2025	100% in EU & US by 2020	88%	61%	61%	56%	58%	14%	
Atlassian Corporation	United States of America	2019	2025		100%	100%	15%				
Aurora Organic Dairy	United States of America	2019	2020		100%	100%	0%				
Australia And New Zealand Banking Group Limited	Australia	2019	2025	13% in Australia by 2020	18%	0%	0%				
Autodesk Inc.	United States of America	2015	2020		100%	100%	100%	99%	100%	81%	Autodesk Inc. p ai
Aviva plc	United Kingdom	2015	2025	80% by 2020	62%	66%	61%	61%	61%	62%	
AXA Group	France	2017	2025		57%	61%	49%	50%	53%		
Bank Australia	Australia	2019	2020		99.9%	100%	41%				
Bank of America	United States of America	2016	2020		100%	100%	91%	83%	64%	0%	Bank of America an
Barclays	United Kingdom	2019	2030	90% by 2021	74%	64%	64%				
BayWa	Germany	2019	2020		100%	73%	74%				BayWa procured ren compliant with the RE10
BBVA	Spain	2018	2030	48% by 2020 and 70% by 2025 — purchased electricity only	65%	39%	35%	27%			
BESTSELLER	Denmark	2018	2021	20% by 2021, 40% by 2022, 60% by 2023 and 80% by 2024	0%	0%	0%				
BINGO Industries Pty Ltd	Australia	2020	2025	47% by 2021 and 62% by 2023	22%						
Biogen	United States of America	2014	2014		100%	100%	100%	100%	100%	100%	Biogen proc an
Bloomberg	United States of America	2016	2025	35% from direct sources by 2020	50%	49%	17%	39%	2%	1%	
BMW AG	Germany	2015	2050	66% by 2020	81%	72%	75%	62%	67%	42%	
Brenntag	Germany	2021	2025		14%						
British Land	United Kingdom	2016	2020		98%	97%	96%	97%	93%	93%	
BT Group	United Kingdom	2014	2020		99%	92%	87%	80%	82%	95%	
Burberry Group	United Kingdom	2017	2022		93%	90%	68%	55%	39%		
Caixa Bank	Spain	2016	2040		99.3%	99%	99%	99%	99%	98%	
Califia Farms	United States of America	2017	2020		No reporting	No reporting	No reporting	30%	30%		
Canary Wharf Group	United Kingdom	2017	2018		100%*	100%	100%	100%	100%		
Capgemini SE	France	2020	2025		50%						
Capital One Financial	United States of America	2018	2018		100%*	100%*	100%	100%			
Carlsberg Breweries	Denmark	2017	2022		64%	56%	47%	46%	45%		
CHANEL	United Kingdom	2020	2025	97% by 2021	70%	50%					
Charles River Laboratories International, Inc.	United States of America	2020	2030		37%						
Citigroup	United States of America	2017	2020		91%	46%	25%	18%	No reporting		
Clif Bar & Company	United States of America	2017	2030		100%	100%	100%	100%	100%		
Coca-Cola Amatil Limited	Australia	2021	2030	100% by 2025 in Australia and New Zealand	9%						
Coca-Cola European Partners	United Kingdom	2015	2020		99.2%	100%	99%	88%	75%	56%	
Colruyt Group	Belgium	2016	2010		100%	100%	100%	100%	100%	100%	Colruyt Group p an
Commerzbank	Germany	2014	2025		94%	91%	93%	97%	96%	95%	





RE100 member	HQ	Joining year	RE100 target year	RE100 interim targets	% RE - 2020	% RE - 2019	% RE - 2018	% RE - 2017	% RE - 2016	% RE - 2015	
Commonwealth Bank of Australia	Australia	2018	2030		90%	70%	30%	0%			
Continental	Germany	2020	2040	95% by 2020 globally and 100% by 2025 for purchased electricity only	97%	5%					
Coop Sapporo	Japan	2018	2040	60% by 2030	0%	0%	0%	0%			
Corbion	Netherlands	2017	2030	50% by 2020	71%	58%	42%	30%	20%		
Coty Inc.	United States of	2020	2030		17%	14%					
Credit Agricole	France	2016	2030		70%	70%	60%	40%	85%	40%	
Credit Suisse	Switzerland	2020	2025		100%	94%					Credit Suisse p
Crown Holdings	United States of	2019	2050		16%	9%	6%				a
Dai-ichi Life	Japan	2019	2023		5%	3%					
Daiichi Sankyo Co., Ltd	Japan	2021	2050	30% by 2025, 60% by 2030, 90% by 2040	8%						
Daito Trust Construction	Japan	2019	2040		6%	0%	0%				
Daiwa House	Japan	2018	2040	10% by 2021, 50% by 2026 and 70% by 2030	9%	0%	0%	0%			
Dalmia Cement	India	2016	2030		12%	10%	15%	No reporting	No reporting	7%	
Danfoss	Denmark	2020	2030		0%	1%	1%				
Danone	France	2018	2030	50% by 2020	54%	42%	34%	18%	7%		
Danske Bank	Denmark	2016	2015		100%	100%	100%	100%	100%	100%	
DBS Bank Limited	Singapore	2017	2030		32%	21%	No data available	0%	No reporting		
Decathlon	France	2018	2026		57%	59%	56%	57%			
DEKRA	Germany	2020	2025		33%	0%					
Dell Technologies	United States of America	2019	2040	75% by 2030	54%	45%					
Deloitte Touche Tohmatsu Limited	United States of America	2021	2030		73%						
Delta Electronics Inc	Taiwanese market	2021	2030		58%						
Dentsu International	United Kingdom	2015	2020		100%	89%	54%	23%	13%	11%	Dentsu International pro 90% compliant with the I Hong Kong, Ukraine, Ar with RE100's guidelin international purchased Zealand d
DerwentLondon	United Kingdom	2019	2020		100%	100%	100%				
Deutsche Telekom	Germany	2019	2021		48%	64%					
Dexus	Australia	2019	2030	70% by 2025	25%	20%					
Diageo	United Kingdom	2016	2030	50% by 2025	64%	45%	49%	54%	24%	23%	
Diamond Electric Holdings Co., Ltd	United States of America	2020	2050	90% by 2040	1%						
DNB ASA	Norway	2016	2020		100%*	100%*	100%	100%	100%	100%	
eBay	United States of America	2017	2025		74%	64%	50%	45%	54%		
Ecolab	United States of America	2020	2030		63%	7%					
Elopak	Norway	2015	2016		100%	100%	100%	100%	100%	86%	Elopak proc a
Envipro Holdings	Japan	2018	2030		41%	27%	3%	0%			
Envision Group	China	2019	2025	50% by 2023	3%	3%	2%				
Equinix	United States of America	2016	2025	56% by 2017	91%	92%	92%	77%	56%	34%	
Etsy	United States of America	2018	2020		100%	64%	58%	30%			

Observations procured renewable electricity to match its entire global electricity demand and sourced 92% compliant with the RE100 technical criteria. rocured renewable electricity to match its entire global electricity demand and sourced RE100 technical criteria. For eight markets (Russia, Taiwan, Singapore, New Zealand, Argentina and Egypt), factors beyond the business' control have prevented adherence nes to source renewables within the countries' borders. For these countries, dentsu d renewable energy certificates (RECs) from adjacent countries. Subsequently, in New dentsu international has been able to switch to a renewable energy tariff. cured renewable electricity to match its entire global electricity demand and sourced 87% compliant with the RE100 technical criteria.



RE100 member	HQ	Joining year	RE100 target year	RE100 interim targets	% RE - 2020	% RE - 2019	% RE - 2018	% RE - 2017	% RE - 2016	% RE - 2015	
European Metal Recycling	United Kingdom	2020	2030		No reporting	0%					
Facebook	United States of America	2016	2020	25% by 2016 and 50% by 2018	100%	87%	75%	43%	43%	35%	Facebook pro
Fifth Third Bank	United States of America	2018	2022		100%*	97%	32%	38%			
Firmenich	Switzerland	2019	2020		100%	100%	86%				Firmenich pro a
First Solar	United States of America	2020	2028	100% in the United States by 2026	1%	1%	1%				
Formula E	United Kingdom	2014	2020		No reporting	No reporting	No reporting	66%	No data available	50%	
Freshfields Bruckhaus Deringer	United Kingdom	2021	2030		61%						
FUJIFILM	Japan	2019	2050		5%	5%	5%				
Fujikura	Japan	2019	2050		1%	1%	1%				
Fujitsu	Japan	2018	2050		10%	8%	4%	3%			
Fuyo General Lease	Japan	2018	2030		0%	0%	0%	0%			
Gatwick Airport	United Kingdom	2016	2020	100% renewable electricity tariff by 2020, and 50% by direct PPA or on-site generation by 2030	100%	100%	100%	100%	100%	100%	
General Mills	United States of	2020	2030		25%	24%					
General Motors	United States of	2016	2035	100% in the United States by 2025	24%	22%	9%	5%	3%	1%	
Givaudan	Switzerland	2015	2025		76%	75%	69%	58%	48%	40%	
GlaxoSmithKline	United Kingdom	2020	2025		47%						
Goldman Sachs	United States of America	2015	2020		100%	98%	95%	95%	90%	86%	Goldman Sachs pr sourced 99.2% com renewables locally in t of in-market renewable
Grape King	Taiwanese market	2019	2035	15% by 2030	0%	0%					
Grupo Bimbo	Mexico	2018	2025	80% by 2020%	62%	41%	18%	27%			
Grupo Cajamar	Spain	2020	2023		100%	100%					
Gürmen Group	Turkey	2018	2020		100%	100%	100%	100%			
H&M	Sweden	2014	2030		90%	96%	96%	96%	96%	78%	
Hair O'right	Taiwanese market	2018	2025	50% by 2022	15%	9%	16%				
Hazama Ando	Japan	2019	2050	80% by 2030	3%	0%					
Heathrow Airport	United Kingdom	2017	2017		No reporting	100%	100%	1%	1%		
Heineken N.V.	Netherlands	2021	2030		27%						
Helvetia	Switzerland	2016	2020		100%	100%	100%	100%	100%	100%	
Hewlett Packard Enterprise	United States of America	2016	2050		44%	41%	37%	25%	20%	12%	
HNI	United States of America	2020	2030		100%	1%					
HP Inc.	United States of America	2016	2025		51%	43%	47%	50%	14%	16%	
HSBC	United Kingdom	2017	2030	90% by 2025	37%	36%	32%	29%	8%		
Hudson Pacific Properties	United States of America	2020	2019		100%	100%					
Hulic	Japan	2019	2025	47% by 2023	1%	8%					
Ichigo Inc.	Japan	2021	2025		0%						
Infosys	India	2015	2035	75% by 2030	45%	44%	46%	44%	45%	26%	
ING	Netherlands	2015	2020		100%	98%	98%	95%	91%	86%	

Observations rocured renewable electricity to match its entire global electricity demand and sourced 98% compliant with the RE100 technical criteria. ocured renewable electricity to match its entire global electricity demand and sourced 95% compliant with the RE100 technical criteria. rocured renewable electricity to match its entire global electricity demand and mpliant with the RE100 technical criteria. Goldman Sachs was unable to source the Republic of Korea, Russian Federation, and Saudi Arabia due to no availability e energy schemes (i.e. regulatory barriers/prohibitive prices/policy barriers/other).



RE100 member	HQ	Joining year	RE100 target year	RE100 interim targets	% RE - 2020	% RE - 2019	% RE - 2018	% RE - 2017	% RE - 2016	% RE - 2015	
Ingka Group	Netherlands	2014	2025	Generate renewable electricity equal to 100% of electricity consumption by 2020	67%	66%	64%	63%	63%	36%	I
Intel Corporation	United States of America	2020	2030		81%	70%					
Interactive	Australia	2020	2025		0%	0%					
Interface	United States of America	2016	2020		100%	100%	100%	100%	100%	94%	
International Flavors & Fragrances	United States of America	2015	2030	75% by 2025	40%	36%	45%	34%	26%	22%	
Iron Mountain	United States of America	2018	2040	90% by 2025	81%	79%	69%	30%			
J. Front Retailing Co. Ltd.	Japan	2020	2050	60% by 2030	10%						
JCDecaux	France	2019	2022		91%	88%	69%				
JD Sports Fashion	United Kingdom	2019	2025		58%	42%	76%				
Jinko Solar	China	2019	2025	50% by 2022, 70% by 2023 and 85% by 2024	30%	18%	0%				
Johnson & Johnson	United States	2015	2025	35% by 2020	54%	30%	31%	25%	2%	2%	
Jola International Co. Ltd	Taiwanese market	2021	2050	90% by 2020	1%						
JP Morgan Chase	United States	2017	2020		No reporting	22%	22%	11%	11%		
JSW Cement Limited	India	2021	2040		3%						
Jupiter Asset Management	United Kingdom	2017	2018		100%	100%	100%	100%	94%		
Kao Corporation	Japan	2021	2030		12%						
Kellogg Company	United States	2017	2050		24%	26%	28%	19%	20%		
Kering	of America France	2020	2022		91%	84%					
Kerry group PLC	Ireland	2020	2025		20%						
Keurig Dr Penner	United States of	2019	2025		50%	17%	28%				
Kingenen	America	2013	2020		0.89/	0.49/	02%	950/	80%	420/	
Kingspan	Taiwanasa markat	2014	2020		90%	94%	93%	03%	09%	43%	
Kirin Heldings Compony	lapan	2020	2040		10%						
Konico Minelto	Japan	2020	2040		70/	/0/	10/				
Koninkliiko DSM	Nothorlanda	2015	2050	75% by 2020	1 70	470	170	210/	90/		
Koninklijke KPN	Netherlands	2013	2030	15 % by 2030	40%	100%	100%	100%	100%	10.0%	
Korea Water Resources		2014	2011	CON/ bu 2020 and 0.00/ bu 20.40	0%	10070	10070	10070	10070	10078	
Corporation	Republic of Korea	2021	2050	60% by 2030 and 90% by 2040	0%						
Kumagai Gumi Co.,Ltd.	Japan	2021	2050		0%						
L'Occitane Group	Luxembourg	2017	2025	80% by 2020	79%	40%	31%	31%	28%		
La Poste	France	2015	2025		88%	86%	86%	81%	76%	0%	
Landsec	United Kingdom	2015	2020	3 MW of on-site renewable electricity by 2030	98%	97%	96%	93% No data	88%	98%	
Lego Group	Denmark	2017	2017		89%	8%	43%	available	87%		
LG Energy Solution, Ltd	Republic of Korea	2021	2030		33%						
Link Logistics Real Estate LLC	of America	2021	2024		0%						
LIXIL	Japan	2019	2050			7%	0%				
Lloyds Banking Group	United Kingdom	2019	2020			100%	99%				
Logitech	Switzerland	2019	2030		92%	88%					
LONGi	China	2020	2028	70% by 2027	42%	15%					





	RE100 member	HQ	Joining year	RE100 target year	RE100 interim targets	% RE - 2020	% RE - 2019	% RE - 2018	% RE - 2017	% RE - 2016	% RE - 2015	
	lululemon	Canada	2019	2021		2%	1%	0%				
I	Lyft	United States	2018	2030		100%	100%	44%				
1	M&G	United Kingdom	2018	2020		100%	100%	26%	30%			M&G procu
Ì	Mace Group	United Kingdom	2017	2022	75% by 2020	71%	66%	66%	64%	56%		and
1	Macquarie Group	Australia	2019	2025	30% by 2020 and 50% by 2021	34%	18%					
j	Mahindra Holidays & Resorts	India	2018	2050	60% by 2030	No reporting	7%	7%	7%			
1	Mars	United States	2014	2040		56%	54%	58%	36%	36%	37%	
ł	Marui Group	of America	2018	2030	70% by 2025	52%	23%	10/_	0%	0070	0.70	
	Masteroord	United States	2010	2030	1070 by 2023	02%	10.0%	170	070			
ł	Mastercard	of America	2020	2020		93%	100%					
	McCain Foods	Canada United States	2020	2030	60% by 2025	14%	3%		No data			
ļ	McKinsey & Company	of America	2018	2025	400% (95%	95%	87%	available			
	Microsoft	United States of America	2015	2030	100% by 2020 using a combination of direct renewable energy and unbundled energy attribute certificates and 100% by 2025 using power purchase agreements for data centers, buildings and campuses and global electricity use matched with an equal amount of renewable energy purchased.	100%	100%	100%	96%	100%	100%	Microsoft proc ar
	Mindspace Business Parks REIT	India	2021	2050		9%						
	Mirvac	Australia	2019	2030		84%	45%					
	Mitie	United Kingdom	2020	2020		61%	100%					
	Mitsubishi Estate	Japan	2020	2050		3%	1%					
	Mitsui Fudosan	Japan	2020	2050		0%	17%					
	Morgan Stanley	United States of America	2017	2022		19%	18%	17%	17%	5%		
	Murata Manufacturing Co., Ltd.	Japan	2020	2050		15%						
	National Australia Bank (NAB)	Australia	2019	2025		7%	3%					
1	NatWest Group plc	United Kingdom	2018	2025	90% by 2020	90%	79%	79%	74%			
	NEC Corporation	Japan	2021	2050		9%						
	Nestlé	Switzerland	2014	2025		50%	41%	34%	26%	13%	8%	
	New Balance Athletics	United States of America	2019	2025	100% in the United States and EMEA by 2021	60%	47%	51%	20%			
1	Nexans	France	2020	2030		21%						
	Next	United Kingdom	2019	2030		94%	94%	94%				
	Nihon Unisys	Japan	2020	2050		0%	0%					
	Nike	United States of America	2015	2025		50%	27%	22%	22%	20%	14%	
1	Nikon Corporation	Japan	2021	2050		6%						
	Nissin Foods Holdings Co., Ltd	Japan	2021	2050	60% by 2030	2%						
1	Nomura Research Institute	Japan	2019	2050	70% by 2030 for data centers	3%	1%	1%				
	Nordea	Finland	2015	2018		100%*	100%	100%	100%	97%	100%	
	Nordic Real Estate Partners (NREP)	Denmark	2019	2020		100%	8%	0%				
	NORITZ Corporation	Japan	2020	2050	60% by 2030	4%						
	Novartis Pharma AG	Switzerland	2021	2025		33%						
	Novo Nordisk	Denmark	2015	2030		98%	76%	77%	79%	78%	78%	Novo Nordisk procurec facilities and sourced 98%

Observations
red renewable electricity to match its entire global electricity demand d sourced 99.7% compliant with the RE100 technical criteria.
cured renewable electricity to match its entire global electricity demand nd sourced 93% compliant with the RE100 technical criteria.
d renewable electricity to match the entire global electricity demand of its production % renewable electricity for all its operations compliant with the RE100 technical criteria.



RE100 member	HQ	Joining year	RE100 target year	RE100 interim targets	% RE - 2020	% RE - 2019	% RE - 2018	% RE - 2017	% RE - 2016	% RE - 2015	Observations
Novozymes	Denmark	2020	2030		69%	49%	37%				
Ono Pharmaceutical	Japan	2020	2050		13%	11%					
Panasonic	Japan	2019	2050		2%	3%	1%				
Pearson	United Kingdom	2015	2018		98%	100%	100%	100%	100%	100%	
PepsiCo	United States of America	2020	2030		52%	10%					
Pernod Ricard	France	2019	2025		73%	69%					
PNC Financial Services Group	United States	2019	2025		25%	0%	1%				
Procter & Gamble	United States of America	2015	2030	20% by 2020	70%	23%	11%	10%	10%	33%	
Proximus	Belgium	2015	2020		99.6%	100%	99%	98%	98%	98%	
PVH	United States of America	2018	2030	50% by 2025	43%	28%	22%	0%			
PwC	United Kingdom	2018	2030	70% by 2022	65%	53%	44%	37%			
QBE Insurance Group	Australia	2019	2025		98%	63%	0%				
QTS	United States	2019	2025		32%	29%	20%				
Rackspace Hosting	United States of America	2016	2026	Increase RE consumption by 5% per year	0%	0%	0%	55%	50%	45%	
Radio Flyer	United States of America	2019	2020		100%	0%	0%				
Rakuten	Japan	2019	2025	70% by 2021, 80% by 2022 and 90% by 2023	65%	51%					
Ralph Lauren	United States of America	2019	2025		6%	2%					
Reckitt Benckiser	United Kingdom	2018	2030		61%	32%	31%	35%	15%		
Refinitiv	United Kingdom	2020	2020		100%*	100%					
RELX Group	United Kingdom	2014	2020		81%	75%	81%	72%	62%	50%	
Richemont International SA	Switzerland	2021	2025		94%						
Ricoh	Japan	2017	2050		18%	13%	9%	2%	3%		
Royal Philips	Netherlands	2017	2020		99.9%	95%	90%	79%	62%		
Salesforce	United States of America	2015	2022		73%	59%	55%	50%	35%	37%	
SANOFI	France	2020	2030		24%	8%					
SAP SE	Germany	2015	2014		100%	100%	100%	100%	100%	100%	SAP SE procured renewable electricity to match its entire global electricity demand and sourced 87% compliant with the RE100 technical criteria. On a regular base, SAP is evaluating current market conditions, regulatory barriers, prices, availability and quality criteria of RE offerings. In 2020, SAP has not procured renewable sources locally in 37 markets in Asia, LATAM and Africa.
Schneider Electric	France	2017	2030	80% by 2020 and 90% by 2025 at sites covered by ISO 14001	80%	50%	30%	2%	0%		
Schroders	United Kingdom	2018	2025	75% by 2020	67%	67%	65%	70%			
Seiko Epson Corporation	Japan	2021	2023		18%						
Sekisui Chemical	Japan	2020	2050		6%	0%					
Sekisui House	Japan	2017	2040	50% by 2030	6%	3%	17%	17%	3%		
SGS	Switzerland	2015	2025		92%	94%	93%	86%	89%	71%	
Shimadzu Corporation	Japan	2021	2050	85% by 2030 and 90% by 2040	5%						
Siemens AG	Germany	2021	2030		67%						
Signify	Netherlands	2014	2020		97%	94%	89%	80%	67%	58%	
SK Holdings Co., Ltd.	Republic of Korea	2020	2030	60% by 2030	0%						



RE100 member	HQ	Joining year	RE100 target year	RE100 interim targets	% RE - 2020	% RE - 2019	% RE - 2018	% RE - 2017	% RE - 2016	% RE - 2015	
SK Hynix	Republic of Korea	2020	2050		0%						
SK Materials Co., Ltd.	Republic of Korea	2020	2030		0%						
SK Siltron Co., Ltd.	Republic of Korea	2020	2040		0%						
SK Telecom	Republic of Korea	2020	2050	65% by 2030 for SK Telecom and 75% by 2030	0%						
SKC Co., Ltd.	Republic of Korea	2020	2040		0%						
Sky	United Kingdom	2016	2020		100%	99%	62%	62%	100%	76%	
Slaughter and May	United Kingdom	2019	2040		90%	90%	86%				
Sodexo	France	2021	2025		20%						
Sony Group Corporation	Japan	2018	2040	30% by 2030	7%	5%	5%	5%			
Starbucks Corporation	United States	2015	2020		71%	72%	76%	62%	100%	100%	
Steelcase	United States	2015	2014		100%	100%	100%	100%	100%	100%	Steelcase pro
Sumitomo Forestry Co, Ltd.	Japan	2020	2040		17%	16%					a
Sun Metals Corporation Pty Ltd	Australia	2020	2040	80% by 2030	8%						
Suncorp	Australia	2020	2025	50% by 2023 and 75% by 2024	0%	0%					
Sungrow	China	2020	2028	60% by 2025	23%	11%					
Swiss Post	Switzerland	2015	2015		100%	100%	100%	100%	100%	100%	
Swiss Re	Switzerland	2014	2020		100%	93%	93%	84%	87%	87%	
Swisscom	Switzerland	2019	2019		100%*	100%	100%				
Symrise	Germany	2019	2025		17%	16%					
Takashimaya	Japan	2019	2050		0%	0%	0%				
Target	United States of America	2019	2030	60% by 2025	36%	10%	6%				
Tata Motors	India	2016	2030	50% by 2022	20%	21%	17%	21%	16%	8%	
TCI	Taiwanese market	2018	2030		No reporting	10%	10%	0%			
TD Bank Group	Canada	2016	2017		100%	100%*	100%	100%	100%	100%	TD Bank Group ar
Telefonica	Spain	2017	2030		88%	82%	58%	47%	44%		
Tesco	United Kingdom	2017	2030	65% by 2020 and 80% by 2025	99.7%	68%	58%	55%	24%		
Tetra Pak	Switzerland	2016	2030	80% by 2020	83%	69%	55%	45%	35%	22%	
The Bozzuto Group	United States	2019	2040		No reporting	No reporting	0%				
The Crown Estate	United Kingdom	2018	2023		71%	No reporting	77%	69%			
The Estée Lauder Companies	United States of America	2017	2020		100%	66%	65%	51%	45%		The Estée global electric
The Johnan Shinkin Bank	Japan	2018	2050		100%	100%					g
The Mayor and Commonalty and Citizens of the City of London	United Kingdom	2019	2022		99.8%	100%	100%				
The VELUX Group	Denmark	2020	2022		38%	23%					
The Wonderful Company	United States of America	2019	2040		No reporting	2%	2%				
T-Mobile	United States of America	2018	2021		25%	35%	19%	1%			
Toda Corporation	Japan	2019	2050		28%	5%	0%				
Tokyu Construction Co., Ltd.	Japan	2021	2030		9%						
Tokyu Corporation	Japan	2019	2050		1%	1%					





RE100 member	НQ	Joining year	RE100 target year	RE100 interim targets	% RE - 2020	% RE - 2019	% RE - 2018	% RE - 2017	% RE - 2016	% RE - 2015	
Tokyu Land Corporation	Japan	2019	2025		0%	0%	0%				
TOTO Ltd	Japan	2021	2040	90% by 2030	13%						
Trane Technologies	United States of America	2019	2040	60% by 2030	41%	23%	1%				
TRIDL	Taiwanese market	2018	2048		0%	0%	0%	0%			
TSMC	Taiwanese market	2020	2050		8%	7%					
UBS	Switzerland	2015	2020		84%	70%	59%	56%	56%	53%	
Under Armour	United States of America	2021	2030	80% by 2025 with focus on United States of America	5%						
Unilever	United Kingdom	2015	2020		89%	81%	54%	57%	64%	45%	
United Microelectronics Corporation	Taiwanese market	2021	2050		0%						
Vail Resorts	United States of America	2017	2030		47%	8%	2%	1%	1%		
Vaisala	Finland	2015	2020		100%	89%	94%	91%	89%	82%	
Vestas	Denmark	2017	2020		100%	82%	100%	100%	100%		
VF Corporation	United States of America	2016	2025		23%	22%	14%	6%	5%	5%	
Virgin Media	United States of America	2019	2020		99.9%	100%	100%				
Visa	United States of America	2018	2019		87%	27%	27%	11%			
VMWare	United States of America	2017	2020		100%	100%	94%	77%	72%	71%	VMWare proc ar
Vodafone Group	United Kingdom	2018	2025		56%	26%	15%	14%			
Voya Financial	United States of America	2015	2007		100%*	100%	100%	100%	100%	100%	
Wal-Mart	United States of America	2015	2025		15%	9%	9%	9%	26%	No reporting	
Watami	Japan	2018	2040	50% by 2035	0%	0%	0%	0%			
Wells Fargo	United States of America	2016	2020		100%	100%	100%	100%	5%	23%	Wells Fargo pro and
Westpac	Australia	2019	2025		0%	0%					
WeWork	United States of America	2018	2025		15%	5%	1%	0%			
Willmott Dixon	United Kingdom	2020	2030	90% by 2025	70%						
Woolworths Group Limited	Australia	2020	2025		1%						
Workday	United States of America	2016	2008		100%*	100%	100%	100%	100%	100%	
WPP	United Kingdom	2020	2025		65%	37%					
YOOX NET-A-PORTER GROUP	Italy	2014	2020		100%	93%	65%	37%	35%	80%	
Zalando	Germany	2020	2025		100%	99%					
Zoetis Inc	United States of America	2020	2050	60% by 2030 and 90% by 2040	9%						
Zurich Insurance	Switzerland	2019	2022		74%	53%	55%				



