

The background of the entire page is a low-angle photograph of a white wind turbine tower. Two people, a man in a yellow safety vest and orange helmet, and a woman in a purple shirt and white helmet, are standing on a metal staircase leading up the side of the tower. They are looking up at the tower. The sky is a clear, pale blue.

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THE °CLIMATE GROUP



RE100 Progress and Insights Annual Report, November 2018

MOVING TO TRULY GLOBAL IMPACT
Influencing renewable electricity
markets

FOREWORD

2018 will be remembered as the year scientists gave their starkest warning¹ yet on the impacts of 1.5°C global warming. But it was also the year the corporate movement for renewable electricity started to go truly global.

Key results

Since the beginning of 2018, 37 new companies have signed up to the RE100 initiative which, led by The Climate Group in partnership with CDP, brings together the most influential businesses committed to 100% renewable power for their global operations. Putting renewables at the heart of business strategy, the current 155 members are **creating demand for 188 TWh of renewable power per year – equivalent to the 23rd largest country electricity consumption in the world**. They have a total combined revenue of more than US\$4.5 trillion, over 5% of global GDP².

This report tracks the progress of member companies as they work toward their 100% goals. A full data breakdown is available in the corresponding annex³. **72 TWh of renewable power was being sourced in 2017 – up 41% in one year**. Over a third of their total electricity consumption is already from renewable sources, with some members beating interim targets and the vast majority on track to go 100% renewable by 2030 – a critical step for businesses decarbonizing in line with the Paris Agreement.

Implications

RE100 is now both increasing renewable energy capacity and reaching new frontiers – **our impact now expands into more than 140 markets**. These businesses want reliable and affordable access to renewables wherever they operate in the world. Increasingly, our members are developing markets where renewables are at a less mature stage. The growth in Japan is particularly notable and demonstrates how corporate action can play a key role in shifting a whole market.

In Japan, Europe, the US and the Taiwanese market, RE100 members are demonstrating new levels of leadership by **intervening in key policy debates**, and showing how corporate sourcing of renewables can help meet ambitious national climate goals. Increasingly, they are also **engaging their suppliers**.

Looking forward

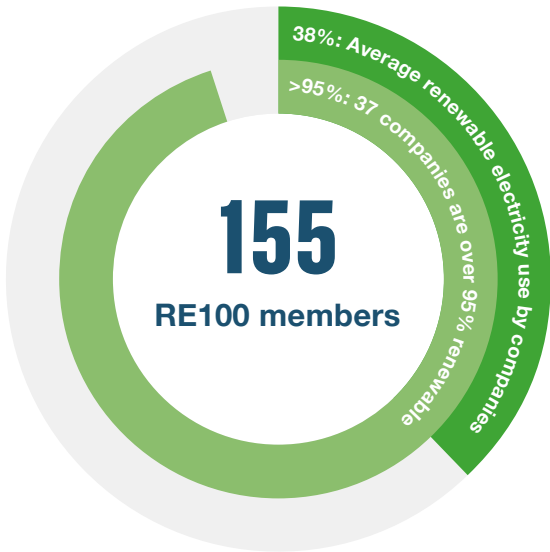
Private sector usage accounts for two-thirds of the world's electricity demand. There is still a very long way to go to reach the level of renewables that the IPCC recommends to contain global temperature rise, especially to 1.5°C by the end of the century. RE100 members are taking on this challenge but there are still sectors and geographies with unrealized potential for growth and need for even greater **supply chain and policy influence**. The award-winning RE100 initiative⁴ will continue to focus on growth in these areas, accelerating the transition to the clean energy systems of tomorrow.

KEY FINDINGS

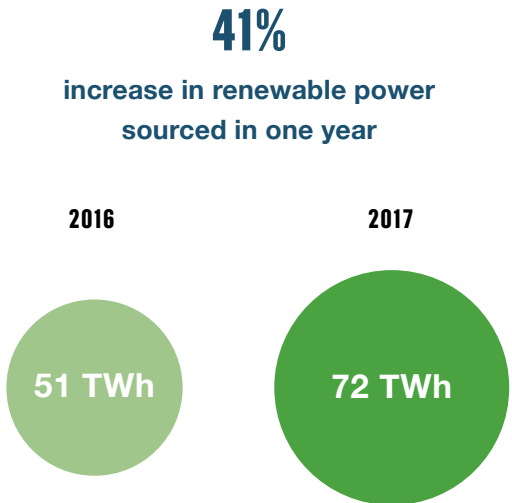
Fast progression

Truly global

Clean energy delivered



4 MORE MAJOR MARKETS
with RE100 member HQs



SCALE OF RE100 DEMAND

If RE100 were a country, it would be the 23rd largest electricity user in the world⁵:

1	China	5,898.9
2	US	4,147.5
3	India	1,216.1
4	Japan	1,012.3
11	UK	330.4
19	Australia	243
22	Thailand	197.5
23	Egypt	170.6
24	Poland	159.1

RE 100 → 188

TWh/yr

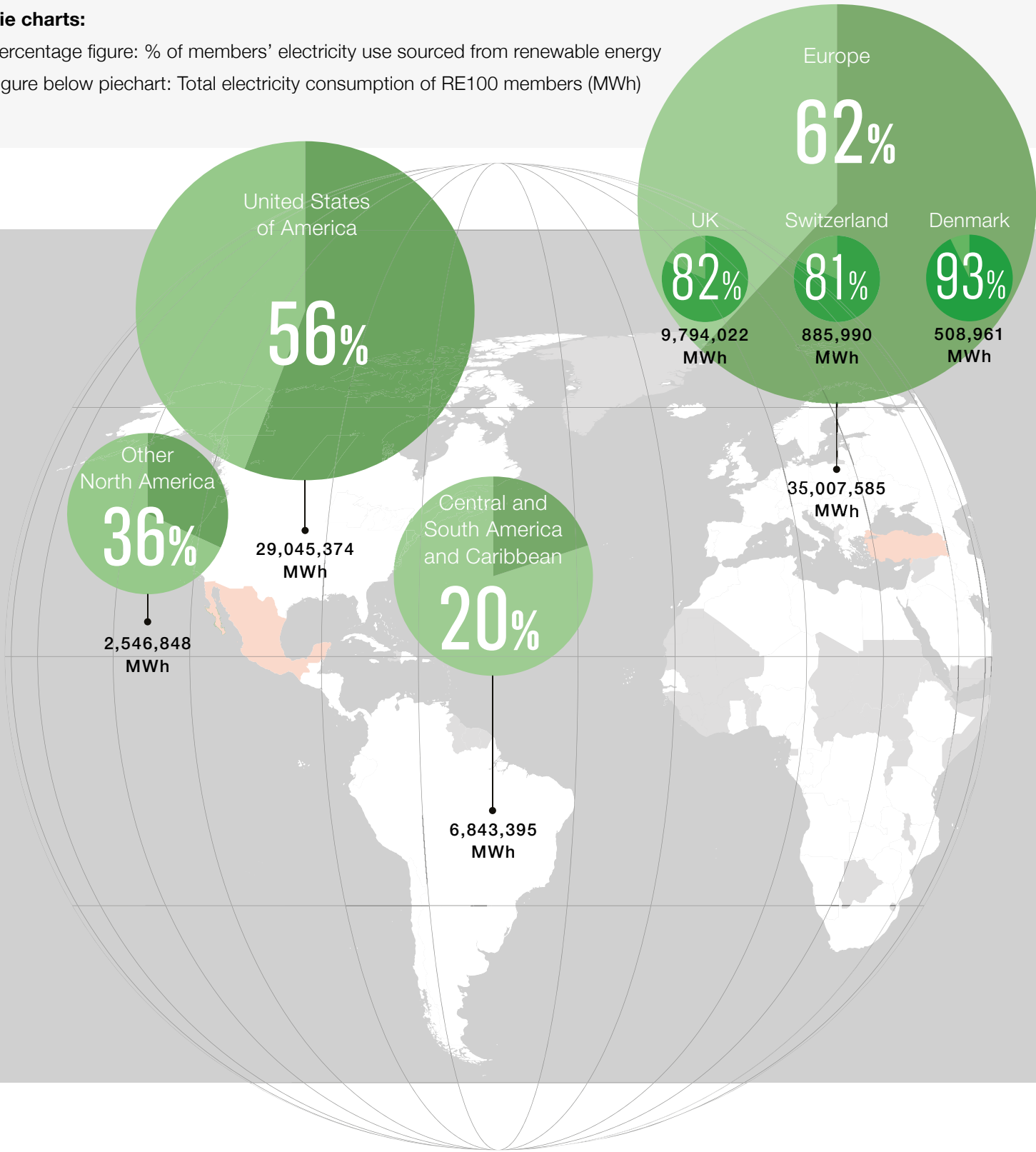
195 countries

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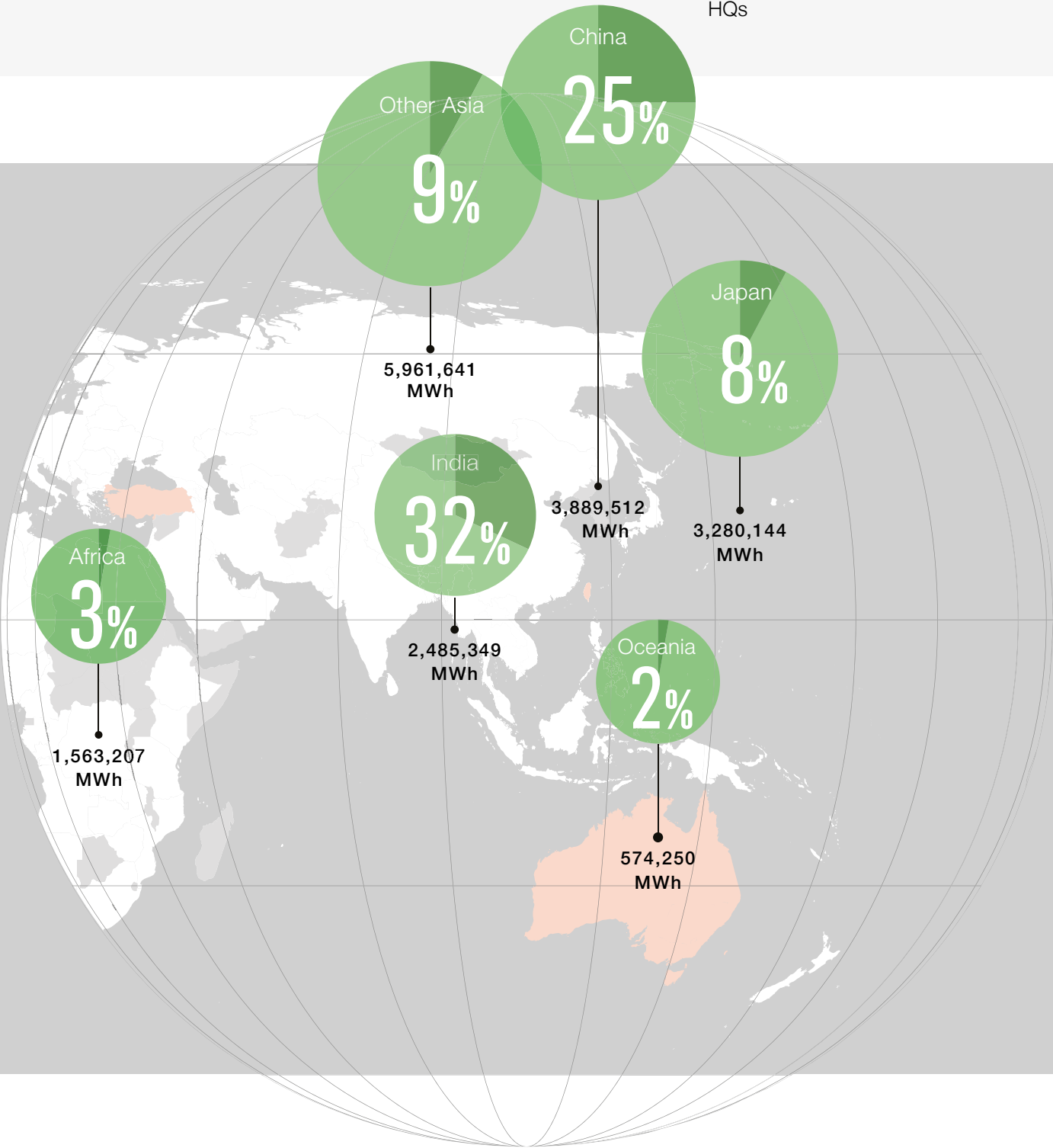


RE100 MEMBERS BY REGION AND MARKET

Pie charts:
Percentage figure: % of members’ electricity use sourced from renewable energy
Figure below piechart: Total electricity consumption of RE100 members (MWh)



77 company HQs in Europe
53 company HQs in North America
24 company HQs in Asia
***4** more major markets with RE100 member HQs
1 company HQ in Oceania



RE100 company operations (colored white on map):

North America: Canada, US, Mexico

Central America: The Bahamas, Bermuda, Costa Rica, Cuba, Dominican Republic, El Salvador, Guatemala, Honduras, Jamaica, Mexico*, Nicaragua, Panama, Puerto Rico, Saint Martin, Trinidad and Tobago

South America: Argentina, Bolivia, Brazil, Colombia, Chile, Ecuador, Paraguay, Peru, Venezuela, Uruguay

Europe: Armenia, Austria, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Gibraltar, Georgia, Germany, Greece, Guernsey, Hungary, Iceland, Isle of Man, Republic of Ireland, Italy, Kyrgyzstan, Latvia, Lithuania, Luxembourg, Republic of Macedonia, Malta, Montenegro, Netherlands, Norway, Poland, Portugal, Republic of Moldova, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Ukraine, United Kingdom

Africa: Algeria, Angola, Cameroon, Ivory Coast, Democratic Republic of the Congo, Egypt, Ethiopia, Gabon, Ghana, Kenya, Lesotho, Libya, Mauritius, Morocco, Mozambique, Namibia, Niger, Nigeria, Senegal, South Africa, Tanzania, Tunisia, Uganda, Zambia, Zimbabwe

Asia: Azerbaijan, Bahrain, Bangladesh, Cambodia, China, Hong Kong, India, Indonesia, Iran, Iraq, Israel, Japan, Jordan, Kazakhstan, Kuwait, Laos, Lebanon, Macao, Malaysia, Maldives, Myanmar, Nepal, Oman, Pakistan, Philippines, Qatar, Republic of Korea, Saudi Arabia, Singapore, Sri Lanka, Taiwan* (China), Thailand, Turkey*, Turkmenistan, United Arab Emirates, Uzbekistan, Vietnam

Oceania: Australia*, Brunei Darussalam, Fiji, Guam, New Zealand, Papua New Guinea

A GROWING MOVEMENT

In 2018, the corporate-led transition to renewable electricity is underway at pace. To date (November), 37 companies have joined RE100 since the start of the year. Together, our 155 members had an electricity demand of 188 TWh in 2017 – greater than that of Argentina and Portugal combined⁶, and up 29 TWh compared to the previous year. **If RE100 were a country, it would be the 23rd largest in terms of electricity use, ahead of Egypt and just behind Thailand.**

The geographical reach of RE100 has rapidly expanded, with commitments originating in and covering new territories, helping to accelerate the clean energy transition on a global scale. This reflects rapidly changing renewable electricity economics worldwide, with costs becoming competitive with conventional energy sources in more and more countries.

10 of the 37 new members for 2018 are headquartered in Japan, which, after the US and UK, is the third most represented country in the membership with 13 companies based here. This rapid growth has moved the perspective on clean energy in Japan, leading the Ministry of Environment and the Ministry of Foreign Affairs to commit their own departments to 100% renewable power and to act as ambassadors for RE100.

Members from four new geographies joined RE100 in 2018: Gürmen Group from Turkey, Grupo Bimbo from Mexico, TCI and Tridil from Taiwan, and Commonwealth Bank of Australia. These geographies are all significant in the global energy transition, either because of their exposure to coal (Turkey, Taiwan, Australia), or because they are implementing an ambitious energy reform that needs reinforcement (Mexico). By joining RE100, companies are sending a strong signal to policy makers and regulators that easy access to renewable energy is a competitive advantage in a globalized economy.

“As a global company, we are firmly committed to working every day with a high sense of environmental responsibility. We are the first Mexican and Latin American Company to join RE100 and we are confident that many other companies in the region will join this important initiative.”

- Jorge Zárate, Vice President of Global Operations, Grupo Bimbo

Beyond their headquarters, **RE100 members’ commitments cover more than 140 markets where they have operations.** Even in countries where members’ aggregated consumption is small, their progress can be transformative. By bringing even a few megawatts of renewable power capacity online, they carry some of the early adoption risks inherent to technology deployment, helping to reduce costs and therefore facilitating wider deployment in about two thirds of the world’s countries.

Companies from the financial sector remain the most represented in RE100 in 2018 (39), ahead of Consumer Discretionary (33) and Consumer Staples (23)⁷. In terms of electricity consumption, the Consumer Staples sector comes first (39% of the total), followed by Information Technology (17%) and Consumer Discretionary (14%). These trends have remained stable since last year, showing a homogeneous growth of the membership from a sectoral perspective.



Grupo Bimbo joins RE100 at Climate Week NYC, 2018



RE100 meets the former Environment Minister, Japan

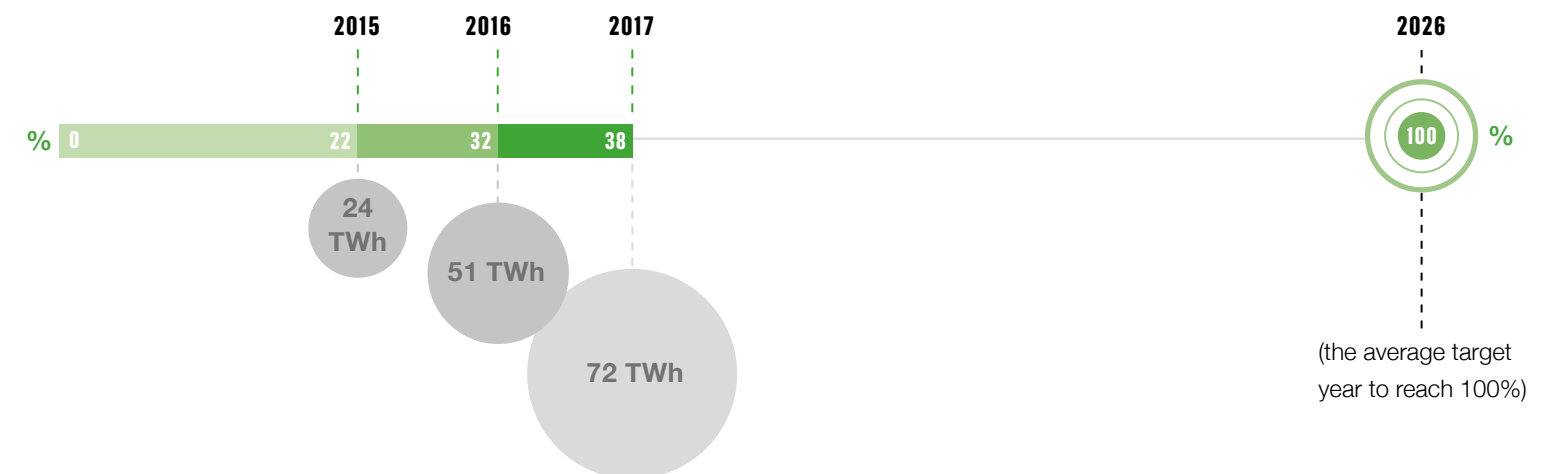
PROGRESS TOWARD RE100 GOALS

The average target year for RE100 members to become 100% renewable is 2026, and more than three in four companies aim to get there by 2030.

Companies have continued to progress toward these goals. In 2017, 155 RE100 members together consumed 72 TWh of renewable electricity – more than enough to power Bangladesh and Sri Lanka⁸, two of the countries most at risk from climate change⁹. This is 21 TWh more than what 122 member companies sourced in 2016 – a 41% increase.

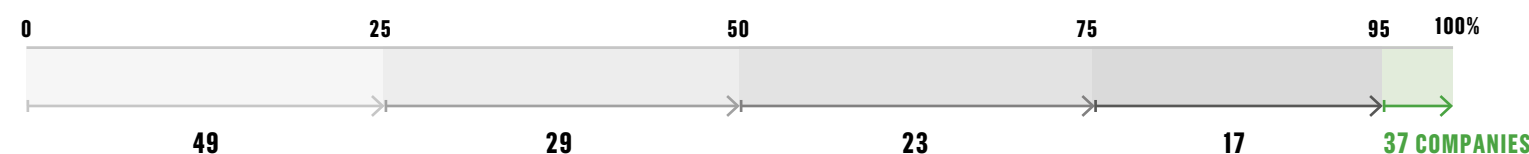
On average, our 155 members were sourcing 38% of their power from renewables in 2017. This is an encouraging proportion given that more than half of the new joiners since January 2018 were right at the beginning of their renewable energy journey (<5% renewable). The companies that were included in last year’s analysis¹⁰ have done even better, achieving an average of 42% renewable electricity in 2017, up from 32% in 2016 – showing that once companies make the RE100 commitment, they quickly move to implementation.

Renewable electricity sourced per year (MWh and % of total electricity consumption)



Nearly a quarter of the total membership (37 of 155 companies) sourced above 95% of their electricity from renewables in 2017, and almost half of the membership achieved above 50%. This puts them far ahead of the global average of 26.5%¹¹, and ahead of leading countries such as Spain (33.7%)¹² or the UK (26%)¹³.

Progress (%) towards RE100 goal by number of companies



More than 20 companies sourced all their electricity from renewable sources in 2017. **Six new companies reached their 100% target for the first time: Amalgamated Bank, Capital One, Google, Gurmen Group, Jupiter Asset Management, and Wells Fargo**, with Jupiter Asset Management reaching its goal one year ahead of target. Earlier this year, Apple also announced having reached its 100% renewable electricity target.

Five members surpassed an interim target in 2017: AkzoNobel, Bloomberg, Givaudan, HP, Inc. and RELX Group.

HP, Inc. made the most progress in 2017, sourcing 50% of its electricity from renewable sources (up from 16% in 2016) and surpassing its interim target of 40% by 2020, three years ahead of schedule.

“At HP we recognize that using cost-effective, low-carbon energy is critical to the resilience and growth of our company, and supports our efforts to reduce greenhouse gas emissions across our entire value chain. In light of the IPCC Special Report on Global Warming issued in October 2018, it’s clear that businesses must accelerate their transition to renewable energy sources as a way to reduce the devastating consequences of climate change. We are committed to reaching our goal of using 100% renewable electricity in our global operations and urge other companies to aggressively set and pursue their own renewable energy goals, thereby ensuring a sustainable future for everyone.”

- **Nate Hurst, Chief Sustainability and Social Impact Officer, HP**

Bloomberg, Equinix, Johnson & Johnson and HSBC also made impressive progress, increasing their renewables consumption by over 20 percentage points in just one year. All these companies have operational power purchase agreements (PPAs), helping to bring additional renewable power capacity to the grid.

Facebook, H&M, Procter and Gamble, Salesforce and Walmart all brought forward a new target year for achieving 100% renewable electricity. IKEA Group complemented its 100% generation target with a 100% consumption target.

Hatsun Agro Product Ltd joined RE100 in 2018 and stands out as a fast progressing Indian company. It sourced 69% of its electricity from renewables in 2017 through a combination of PPAs and self-generation.

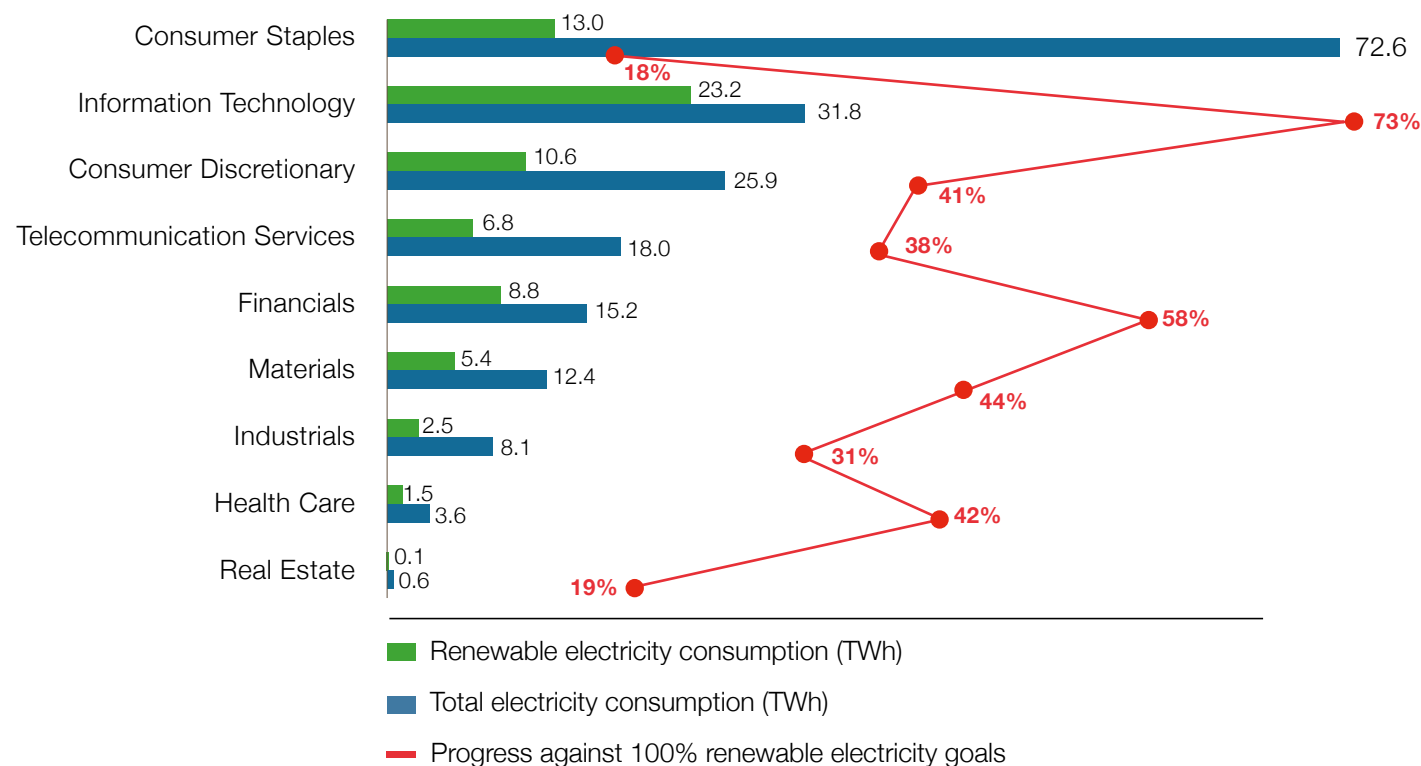
“We in Hatsun Agro are very much concerned with the warming up of earth above 10C since a higher temperature reach will cause major damage especially to the developing economies like India. To date, HATSUN is meeting 69% of our overall power needs through wind and solar, and 92% in Tamil Nadu. It is our sincere wish that other industries will follow more and more the renewable energy route to leave a better world for our future generations.”

- **R.G Chandramohan, Chairman and Managing Director, Hatsun Agro Product Ltd**

PROGRESS BY SECTOR

RE100 members in the Information Technology sector continue to lead on progress towards their 100% renewable electricity goals, averaging 73% renewable in 2017. Both the Health Care and Financials sectors saw significant progress, with an increase of 56% and 51% respectively compared to 2016.

Progress (%) towards RE100 goal by sector (GICS)



PROGRESS BY GEOGRAPHY

RE100 members source over 50% of their electricity from renewable sources in just under 30 markets.

Europe remains the region where RE100 members have the highest share of renewable power, 62% in 2017. The top three countries (where members source more than 0.5 TWh renewable electricity) are Denmark (93%), the UK (82%) and Switzerland (81%). This is similar to last year and is due to the existence of a strong tracking mechanism system for renewable electricity (Guarantees of Origins), favourable market conditions for renewable electricity investments and, for the UK, the existence of a mature market for corporate PPAs.

By contrast, RE100 members struggle to achieve a high share of renewables in Africa, Asia, Central and South America, and the Caribbean. Those geographical discrepancies mirror the diversity of policy frameworks for renewables around the world: **policy barriers are most commonly cited by RE100 members as obstacles to progress**. 78% of members responding to our survey this year said ‘regulatory uncertainty and complexity’ were a key barrier, highlighting the urgent need for governments to adopt clear, transparent and open frameworks for corporate renewable energy sourcing.

DRIVERS AND BARRIERS

Policy environments have a direct impact on the costs of renewables – the second most cited barrier by RE100 members (76% of respondents said this was ‘important’ or ‘very important’). Countries where the price of renewables is maintained at a high-level miss out on new investment opportunities created by companies’ demand for clean energy. Indeed, RE100 members represent a significant source of private funding for renewable electricity deployment – over US\$90 billion in the next 12 years for the 128 RE100 companies members, as of March 2018¹⁴.

Fortunately, the business case for renewables continues to grow. 80% of responding RE100 members cited **the economics of renewable energy as a key consideration** – the third main driver for renewable electricity sourcing after the need to manage greenhouse gas emissions (95%) and corporate social responsibility (95%).

“As a leading ICT company, we recognize the transition to de-carbonized society is one of the most important challenges. Renewable energy adoption in a strategic way is very significant for us. We believe joining RE100 is a great driver for our vision and activities.”

- **Tatsuya Tanaka, Representative Director and President, Fujitsu**

It is clear that clean, smart energy use goes hand in hand with good business performance; RE100 research shows that across all sectors, members outperform their peers on key financial performance indicators¹⁵. **Iron Mountain reports savings of US\$2 million per year** since it started procuring renewables, and **T-Mobile USA forecasts US\$100 million of savings over the next 15 years**.

“Through our commitment to RE100, we’ve made investments in green power that will save T-Mobile around \$100 million over the next 15 years and help create jobs in renewable energy. There is no doubt this is the right thing to do for our business and the planet... we’re truly cleaning up the wireless industry for good!”

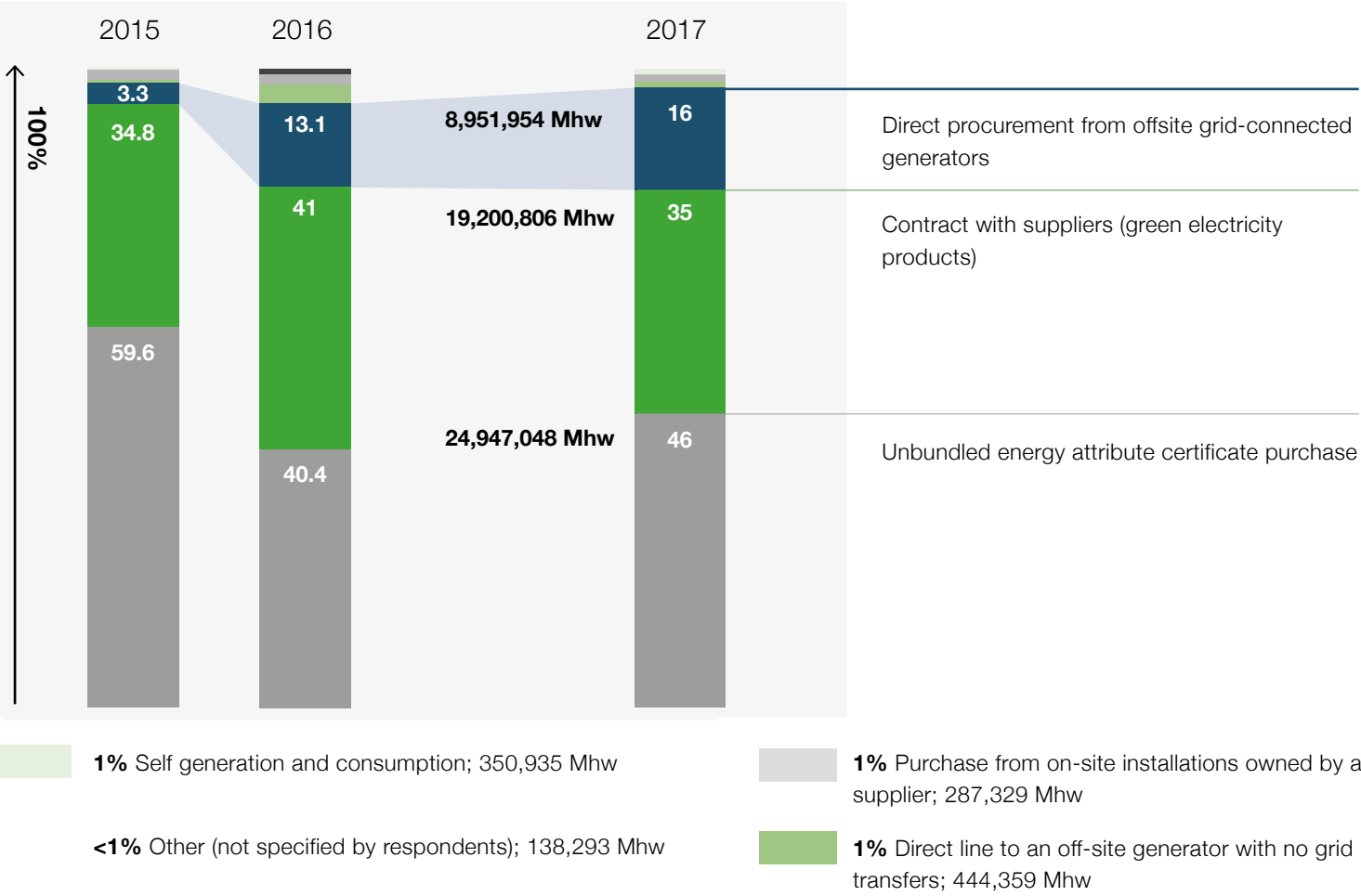
- **Neville Ray, EVP and CTO, T-Mobile**

EVOLVING SOURCING STRATEGIES

Ambitious targets are driving pioneer companies to experience and innovate in their sourcing strategies, creating exciting and rapidly evolving markets. RE100 members have adopted a wide variety of strategies to progress toward their goal. Internal factors such as capital availability, and external factors such as market maturity, lead them to mix approaches that all advance renewable energy deployment globally but that have different direct impacts on the grid.

The breakdown of sourcing strategies in 2017 was similar to 2016, with unbundled energy attribute certificates (EACs) and contracts with suppliers representing 81% of the total, although this time electricity sourced through unbundled EACs was higher than through contracts with suppliers. **PPAs were once again on the increase, representing 16% of renewable electricity consumed by member companies**, with the amount sourced this way reaching just under 9 TWh in 2017 – almost double the amount reported for 2016.

Approaches to renewable electricity sourcing by RE100 members (% of total)



In 2017, **PPAs represented 20% of all the renewable electricity purchased by RE100 members in the US** and 17% in India. In Europe, this was only 5%, close to 2016’s 4% – although the total amount of electricity sourced through PPAs in this region increased by 42% compared to 2016. The US, India and Europe represent the majority of the global corporate PPA market, but RE100 members have also signed these agreements in Mexico and Chile, and in 2017 **Unilever** signed a corporate PPA with a geothermal plant in the Philippines. Other innovations have included **Etsy, Apple and Swiss RE** being off-takers of an aggregated corporate PPA in the US earlier this year, enabling Etsy to sign one of the smallest corporate renewable PPAs on record.

Contracts with suppliers were particularly popular in Europe (accounting for 62% of the renewable electricity consumed by members there), where utilities have crafted new offers to match their customers’ needs. By contrast, **in India 43% of renewable electricity use was procured through a direct line to an off-site generator** with no grid transfer – a unique situation at the global level due to issues relating to grid reliability.

Unbundled EACs remained a key sourcing strategy for companies, especially in strongly regulated markets where companies cannot sign PPAs (in China 96% of members’ renewable electricity was sourced this way), and where the renewable energy offers from suppliers are less widely available. Unbundled EACs are also particularly convenient in regions where companies’ consumption is smaller.

While lagging behind on procurement, **Asia was a leading region for self-generation** among members – accounting for 42% of the global total (just behind Europe’s 43%). India alone represented 35% of the global total, and solar PV was a particularly popular option.

CATALYZING FUTHER ACTION

RE100 members’ leadership goes beyond delivering on their 100% renewable electricity commitment. Many are also striving to maximise their impact on the clean energy transition¹⁶.

Through RE100, companies are leveraging their voice in the public debate to **advocate for policy frameworks favorable to renewables**, helping to raise global ambition by **championing the business case** for moving away from fossil fuels. In the EU for example, our efforts to raise the profile of corporate renewable energy sourcing as part of the RE-Source Platform¹⁷ have helped to secure a 2030 renewable energy target and legal framework for PPAs in the new Renewable Energy Directive.

In the UK and Japan, members’ efforts to engage with governments have started to move positions on renewables in the right direction. In October 2018, **Mars, Unilever and Fujitsu** supported RE100 at the Federal Parliament in Australia by highlighting the potential of corporate sourcing of renewables to drive a prosperous economy. In the Talanoa Dialogue and during the Global Climate Action Summit, RE100 members including **BT and Unilever** were vocal supporters of more ambitious action on climate and clean energy in the Paris Agreement framework.

Acknowledging their responsibility to look beyond their own operations, companies have also maintained their efforts to support the uptake of renewable energy across their supply chains. **More than a third of RE100 members responding to our survey are actively engaging their suppliers**, for example Apple has strengthened its Supplier Clean Energy Program with a new \$300 million investment fund in China to support more of its suppliers to switch to clean power. We are helping to accelerate these efforts by joining forces with CDP and the Rocky Mountain Institute’s Business Renewables Center.

Large consumer-facing brands have also looked at their downstream value chains and are seeking to broaden their impact by **engaging customers** on their renewable energy journey. **AB InBev**, the world’s largest brewer, launched a 100% renewable label in 2018 for Budweiser beers that have been brewed using 100% renewable electricity in the US. The label aims to raise awareness on clean energy among consumers, while positioning renewables as a mainstream choice of electricity.

LOOKING AHEAD

We expect corporate renewable electricity sourcing to maintain momentum in 2019, thanks to RE100 members’ leadership and their constant striving for impact. As the business case for renewables gets clearer in more and more geographies, the international expansion of the corporate-led transition to renewable electricity will continue at pace. Members will keep progressing toward their targets – a high number of PPAs signed in 2017 and 2018 will progressively come online – and increasing their impact beyond them.

More importantly, pioneer companies will have an increasing role in designing the energy systems of tomorrow. The faster RE100 members deliver against their goals, the stronger their voice becomes and the more carefully that governments will listen. Companies will be actively pushing for higher ambition on renewables and enabling policy frameworks, making easy access to clean power an issue of economic competitiveness. This will help to reach the scale and speed required by the recent IPCC report on 1.5°C warming, which we currently fall short of meeting fully.

The energy revolution looks more feasible, unstoppable and above all desirable than it has ever done before.

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Led by **The Climate Group** in partnership with **CDP**, RE100 is a collaborative initiative bringing together the world's most influential businesses committed to 100% renewable power. Renewables are a smart business decision, providing greater control over energy costs while helping companies to deliver on emission reduction goals. RE100 members, including Global Fortune 500 companies, have a total revenue of over US\$4.5 trillion and operate in a diverse range of sectors – from information technology to automobile manufacturing. Together, they send a powerful signal to policymakers and investors to accelerate the transition to a low carbon economy.

Please visit RE100.org or follow us on Twitter @theRE100 to find out more. #RE100

THE CLIMATE GROUP



The Climate Group's mission is to accelerate climate action to achieve a world of no more than 1.5°C of global warming and greater prosperity for all. We do this by bringing together powerful networks of business and governments that shift global markets and policies. We focus on the greatest global opportunities for change, take innovation and solutions to scale, and build ambition and pace.

We are an international non-profit organization, founded in 2004, with offices in London, New Delhi and New York.

Our business campaigns are brought to you as part of the We Mean Business coalition.

Please visit TheClimateGroup.org or follow us on Twitter @ClimateGroup to find out more.

CDP is an international 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 US\$87 trillion, we leverage investor and buyer power to motivate companies to disclose and manage their environmental impacts. Over 7,000 companies with over 50% of global market capitalization disclosed environmental data through CDP in 2018. This is in addition to the over 750 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, formerly Carbon Disclosure Project, is a founding member of the We Mean Business coalition.

Please visit CDP.net or follow us on Twitter @CDP to find out more.

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