





# **ANNEX: RE100 PROGRESS AND INSIGHTS ANNUAL REPORT, DECEMBER 2019**



This annex presents information disclosed by RE100 members for the RE100 Progress and Insights Annual Report, December 2019. The annual reporting is carried out through either the RE100 reporting spreadsheet or the CDP Climate Change Questionnaire. For those companies that joined after the close of the reporting cycle in August 2019, basic data is extracted from their RE100 joining form.

At the time of writing (November 18, 2019), 211 companies have joined RE100, led by The Climate Group in partnership with CDP. The report and annex show the electricity consumption of these members during the 2018 reporting year.

Not all members report using the RE100 reporting spreadsheet (which provides greater detail regarding the geographical breakdown of companies' electricity consumption and their sourcing strategies than the CDP Climate Change Questionnaire) and not all companies provide a response to every question.

- 5 members have not reported any data
- 11 members provided basic data through email
- 21 new joiners provided data through their joining form
- 74 members provided data through the reporting spreadsheet
- 100 members provided data through the CDP questionnaire

A breakdown of the data included in the analysis is provided below:

- 206 members have provided their total electricity consumption
- 206 members have provided their renewable electricity consumption data
- 74 members provided data through the RE100 reporting spreadsheet
- 144 members provided data through the CDP questionnaire
- 74 members provided a country breakdown of their electricity consumption data
- 164 members provided renewable electricity procurement data
- 125 members provided self-generation of renewable electricity data
- 72 members provided data about their engagement with suppliers
- 61 members provided data about their renewable electricity strategy
- 73 members provided data about the drivers to meeting their RE100 commitment
- 69 members provided data about the barriers they face to meet their RE100 commitment
  65 members provided data about the potential cost savings of meeting RE100 commitment
- 57 members provided data about co-benefits identified of meeting RE100 commitment

Our analysis is based on information self-reported by companies. Thorough checks and corrections are undertaken to ensure that the quality of companies' submissions is in line with RE100 requirements.

Any questions on the content of this annex or the main report can be sent to <a href="mailto:info@re100.org">info@re100.org</a>.



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### 1. GROWTH OF RE100

TABLE A: Membership by HQ location

	Decem	December 2019		per 2018
	Number of	% of RE100	Number of	% of RE100
Company HQ	companies	membership	companies	membership
US	65	31%	51	33%
UK	37	18%	29	19%
Japan	28	13%	13	8%
Switzerland	11	5%	8	5%
France	9	4%	8	5%
Germany	8	4%	4	3%
Denmark	7	3%	5	3%
Netherlands	7	3%	7	5%
Australia	7	3%	1	1%
India	5	2%	5	3%
China	4	2%	2	1%
Spain	4	2%	4	3%
Taiwan	3	1%	2	1%
Belgium	3	1%	3	2%
Sweden	3	1%	3	2%
Canada	2	1%	1	<1%
Norway	2	1%	2	1%
Turkey	1	<1%	1	<1%
Singapore	1	<1%	1	<1%
Italy	1	<1%	2	1%
Ireland	1	<1%	1	<1%
Finland	1	<1%	1	<1%
Mexico	1	<1%	1	<1%
Total	211	100%	155	100%

57¹ companies have joined RE100 since the previous Annual Progress and Insights Report (November 2018), bringing the total membership to 211 companies at the time of writing (18 November 2019). Once again, japan saw a significant increase in membership and is the third most represented country in the membership, behind the US and the UK. 44% of new joiners since the beginning of 2019 joined form the Asia Pacific region.

 $<sup>^{\</sup>mbox{\tiny 1}}$  SAVE S.p.A. group left RE100 in 2019.



TABLE B: Membership by sector

	Number of		
Sector	companies	% of membership	% of electricity use
Services	94	45%	29%
Manufacturing	34	16%	22%
Food, beverage & agriculture	20	10%	13%
Retail	15	7%	24%
Infrastructure	14	7%	3%
Apparel	10	5%	1%
Materials	8	4%	4%
Biotech, Health Care & Pharma	6	3%	2%
Transportation services	5	2%	1%
Hospitality	4	2%	<1%
Industrials	1	<1%	<1%
Grand total	211	100%	

The previous sector categories have been replaced by the CDP Activity Classification System, which makes comparison with the 2018 data complicated.

Most of the members services sector (which includes the financial sector), followed by the manufacturing (15%) and the food, beverage & agriculture (10%) sector. The companies from the retail sector comprise only 7% of the members, but account for 24% of the total electricity use.



#### 2. PROGRESS TOWARD RE100 GOAL

**TABLE C: Commitment target years** 

Target buffer	Number of companies	% of membership
<2018	27	13%
2019-2025	101	50%
2026-2030	28	14%
2031-2040	19	9%
2041-2050	29	14%
Grand total	204²	100%
Average commitment year	2028	

The average commitment year for RE100 members is 2028. Approximately three quarters of members are aiming to source 100% renewable electricity for their global operations no later than 2030 – well ahead of the minimum threshold required by science to limit the worst impact of climate change<sup>3</sup>.

TABLE D: % of electricity sourced from renewables by RE100 companies in 2018

Progress buffer	Number of companies	% of membership
0-25%	73	36%
26-50%	32	16%
51-75%	30	15%
76-95%	25	12%
>95%	45	22%
Grand total	205	100%

38% of all the electricity used by RE100 members was generated from renewable sources in 2018. Over 30 companies achieved their 100% commitment in 2018. In addition, a third of companies were already sourcing over 75% of their electricity from renewable sources, and almost half were sourcing over 50% renewable electricity.

<sup>&</sup>lt;sup>2</sup> 7 companies do not have a target date. In the early years of the RE100 initiative, it was possible for companies to commit to 100% without a target date, which was done by a small number of companies. Companies are not able to do so anymore, and most companies without a target date have adopted one since or are considering one.

<sup>&</sup>lt;sup>3</sup> The IPCC projects that renewable sources will provide 70-85% of global electricity demand by 2050 in a 1.5°C pathway (IPCC, 2018, Global Warming of 1.5°C, Special report).



#### 3. SOURCING APPROACHES

TABLE E: Renewable electricity per sourcing strategy (2018)

Sourcing strategy	Number of companies	2018 (MWh)	2018 (%)	2017 (%)	2016 (%)
Unbundled energy attribute	98	32,387,367	43%	46%	40%
certificate purchase					
Contract with suppliers (green	108	23,325,904	31%	35%	41%
electricity tariffs/products)					
Direct procurement from offsite	46	14,160,001	19%	16%	13%
grid-connected generators (PPA)					
Self-generation and consumption	108	3,089,443	4%	1%	3%
Purchase from onsite installations	31	1,825,026	2%	1%	<1%
owned by a supplier					
Direct line to an offsite generator	1	7,648	<1%	1%	<1%
with no grid transfers					
Other	12	200,366	<1%	<1%	1.5%
Total		54,320,724	100%		

164 companies provide information on their renewable electricity sourcing strategy in their reporting.

In 2018, the purchase of unbundled EAC remains the main sourcing options in terms of (43% of the energy purchased by members). The second most popular strategy also remains having a green electricity contract with suppliers, with 31% of the renewable electricity being sourced this way. However, there is a slight decrease for those two options compared to 2017, which in line with the trend observed the year before.

The proportion of renewable electricity sourced using power purchase agreements (PPAs) reached 19% in 2018, continuing the growth observed in the two previous years. This 3-percentage point increase represents an additional 5 TWh of renewable electricity – an 58% increase compared to 2017.

Self-generation is also on the increase: 108 members are relying on this option which represents 4% of all the electricity they source. The amount of renewable electricity sourced through a purchase from on-site installations owned by a supplier and self-generation has also been increasing.

This means that approaches that directly enable or finance new renewable energy projects account for over a quarter of all the renewable electricity consumed by RE100 members in 2018, against 19% in 2017.



TABLE F: Procured renewable electricity per technology type

Technology	2018 (MWh)	2018 (%)
Wind	20,878,972	59%
Large Hydro (>25 MW)	3,405,643	10%
Solar (PV et CSP)	847,312	2%
Small Hydro (<25 MW)	590,675	2%
Biomass	506,795	1%
Hydro	186,434	1%
Geothermal	107,638	<1%
Other	8,775,560	25%
Total	35,299,029	100%

66 members gave detailed information on the renewable technology used in their procured electricity. These figures do not include technology types used for self-generation of renewable electricity.

Wind remains the most used technology (62% of the energy purchased), followed by large hydro (11%).

TABLE G: Self-generation and consumption by region (2018)

Region	Number of members	Self-generated RE directly consumed in reporting year (MWh)	2018 (%)
Europe	26	108,659	38%
Asia	11	78,718	28%
Latin and South America	6	61,819	22%
North America	12	25,714	9%
Oceania	5	8,464	3%
Total	47	283,373	100%

47 companies reported data on self-generation of renewable electricity. Table G shows, for each region, the amount of renewable electricity from self-generation that is directly consumed by RE100 members, or for which RE100 members retain the renewable energy attribute certificates.

Europe and Asia were the main regions in which RE100 members self-generated and consumed renewable electricity, accounting for 38% and 28% of the total respectively. On its own, India represents 20% of the total.

The total amount of renewable electricity self-generated by RE100 members is much higher than the number included in this table. In total, RE100 members generated over 4 TWh of renewable electricity in 2018 – however, the largest share of this was sold back to the grid. Although RE100 members cannot always claim this electricity for their own consumption, it still constitutes a very significant contribution to the deployment of renewable electricity worldwide.



TABLE H: Self-generation and consumption by technology type (2018)

Technology	Number of members	2018 (MWh)	2018 (%)
Solar PV	44	235,645	83%
Wind	7	36,271	13%
Bio-power	4	11,120	4%
Large Hydro (>25 MW)	1	197	0%
Solar CSP	2	133	0%
Geo-thermal	2	5	0%
Hydrogen Fuel-cell	1	1	0%
Small Hydro (<25 MW)	1	0	0%
Total	47	283,373	100%

47 companies reported data on self-generation of renewable electricity. Table J shows, by technology type, the amount of self-generated renewable electricity that is directly consumed by RE100 members.

The majority of self-generated and consumed renewable electricity is from solar PV (83%). This is followed by wind technology (13%). The proportion of renewable electricity generated and consumed from solar PV, however, has increased by 25% percentage points, while the generation from wind technology has decreased.

When looking at the renewable electricity generated by members, independently of whether it has been directly consumed or not, wind technology come first, representing 82% of the RE generated by members.

TABLE I: Self-generation and consumption from solar PV by region (2018)

Region	Number of members	Self-generated RE directly consumed in reporting year (MWh)	2018 (%)
North America	12	81,420	35%
Asia	10	78,718	33%
Latin and South America	6	61,819	26%
Europe	25	60,931	26%
Australia	5	8,464	4%
Total	44	235,645	100%

44 companies reported using solar PV as a technology for self-generation and consumption of renewable electricity.

In total, 235,645 MWh of renewable electricity was generated and consumed from solar PV technology in 2018 by the 44 responding members. Of this, the majority (35%) was generated and consumed in North America, followed by Asia (33%), Europe (26%) and South America (26%). India alone represents 24% of the total.



#### 4. DRIVERS

TABLE J: Drivers for renewable electricity sourcing (%)

			Not		Very
Driver	Blank	Irrelevant	important	Important	important
Management of GHG emissions	0	1	0	11	87
Corporate social responsibility					
(CSR)	1	0	1	20	77
Customer expectations	3	4	6	61	27
Managing long term risks	1	7	7	59	25
Cost savings	0	8	11	49	31
Air quality	4	4	15	44	32
Shareholder requests	7	8	8	59	17
Policy incentives	17	13	20	32	18
Regulatory requirements	14	17	18	42	8

74 members responded to the question on drivers for renewable electricity sourcing.

Management of greenhouse gas (GHG) emissions and Corporate Social Responsibility were listed as 'important' or 'very important' drivers for renewable electricity sourcing by over 95% of responding members. All drivers listed are perceived as 'important' or 'very important' by 80% or more of the responding members, at the exception of Policy incentives and Regulatory requirements, which are perceived as 'not important' or 'irrelevant' by over 40% of the responding members.

TABLE K: Costs savings

Costs savings % of responding mem	
Identified	44%
Anticipated	11%
No costs savings	25%
Not assessed	10%

**TABLE L: Co-benefits** 

Co-benefits	% of responding members having identified them		
Employee satisfaction/staff retention	51%		
Customer retention	37%		
Local community benefits	30%		
Other (Please explain in the comment box)	29%		
Job creation	18%		
Any benefits identified	80%		



### 4. BARRIERS

TABLE M: Barriers to renewable electricity sourcing (%)

			Not		Very
Barrier	Blank	Irrelevant	important	Important	important
Costs of renewable electricity	4	3	9	50	34
Market structure	6	3	9	38	44
Lack of necessary government					
support	9	1	22	44	24
Lack of tracking systems	12	6	18	37	28
Operational issues	9	7	21	40	24
Technical barriers	10	4	29	34	22

67 companies responded to the question on barriers to renewable electricity sourcing.

The main barriers to meeting the renewable energy goals are the market structures and the cost of renewable electricity, which are perceived as 'very important' or 'important' barriers by more than 88% of the responding companies.

All the barriers are perceived as important by the responding members, but operational and technical barriers are perceived as 'not important' or 'irrelevant' for over 30% of the responding members.