EV 100 | THE CLIMATE GROUP

ANNUAL REPORT

Charging ahead on electric fleets:
will automakers keep pace with corporate demand?

FOREWORD

We are now in the first months of the Climate Decade. Over the 2020s, we have to halve greenhouse gas (GHG) emissions and set the world on track to net zero emissions by 2050. This means taking bold action now across all sectors to avoid catastrophic climate change.

Transport has a key role to play. As a sector it is responsible for a quarter of global emissions[1], and the largest source of emissions in markets like the US[2] and the UK[3].

So we need to transition to cleaner solutions and fast. Luckily rapid progress is possible, and as this report shows, forward-thinking businesses are already starting down that road.

The Climate Group's EV100 initiative brings together **67 global businesses leading the way;** switching their fleets to electric vehicles (EVs) and/or installing EV charging company-wide by 2030. Together, they represent over US$880 billion in revenue and 3.4 million employees.

EV100 members are **driven by a desire to lead on tackling the climate crisis and toxic air pollution**, while acting on the growing expectations of their stakeholders and realizing business benefits.

They have already rolled out more than 80,000 EVs and nearly 10,000 charge points for their workers and customers – with two in five members running all their charge points on 100% renewable electricity. I applaud this tremendous progress.

But we must go further and faster still.

This report shows that for our members, **the lack of EV supply is the biggest barrier to faster progress.** As more businesses join EV100 and strengthen the corporate demand signal, automakers have a choice: get ahead of the curve and seize the market opportunities, or lag behind and get hit by harsher regulations. Ambitious government commitments and robust policy measures are equally vital for setting the direction of the clean transport transition.

Together, we will show the auto industry and decision makers around the world that business is ready to go all in on electric transport.

Helen Clarkson,
Chief Executive Officer,
The Climate Group

ABOUT EV100

EV100 is a global initiative, led by The Climate Group, bringing together forward-looking companies committed to accelerating the transition to EVs. Members publicly commit to at least one of the following by 2030:

- Electrifying owned/leased fleets
  - <3.5 metric tons (7,000 lbs): 100%
  - 3.5-7.5 metric tons (7,000-15,000 lbs): 50%
- Requiring EVs in service contracts
- Workplace charging at all relevant sites
- Customer charging at all relevant sites

Cover image: IKEA electric delivery vans in Shanghai. Credit: Ingka Group

KEY FINDINGS

EV100 MEMBERSHIP SNAPSHOT

67
MEMBER COMPANIES

80
MARKETS WORLDWIDE

340,000
VEHICLES TO SWITCH TO EV

2.3 MILLION
LEASING COMPANY VEHICLES TO GO NET ZERO

21
MEMBERS WITH SERVICE CONTRACT COMMITMENTS

3,200
SITES TO HAVE CHARGING INSTALLED

1 MILLION
EMPLOYEES TO HAVE ACCESS TO CHARGING

42 MILLION
METRIC TONS – CO2E EMISSIONS SET TO BE AVOIDED BY 2030

PROGRESS OVERVIEW

80,000+
EVs DEPLOYED SO FAR BY EV100 MEMBERS

1,100
SITES WITH CHARGING INSTALLED (UP 50%)

600,000
EMPLOYEES WITH ACCESS TO CHARGING ALREADY (UP 80%)

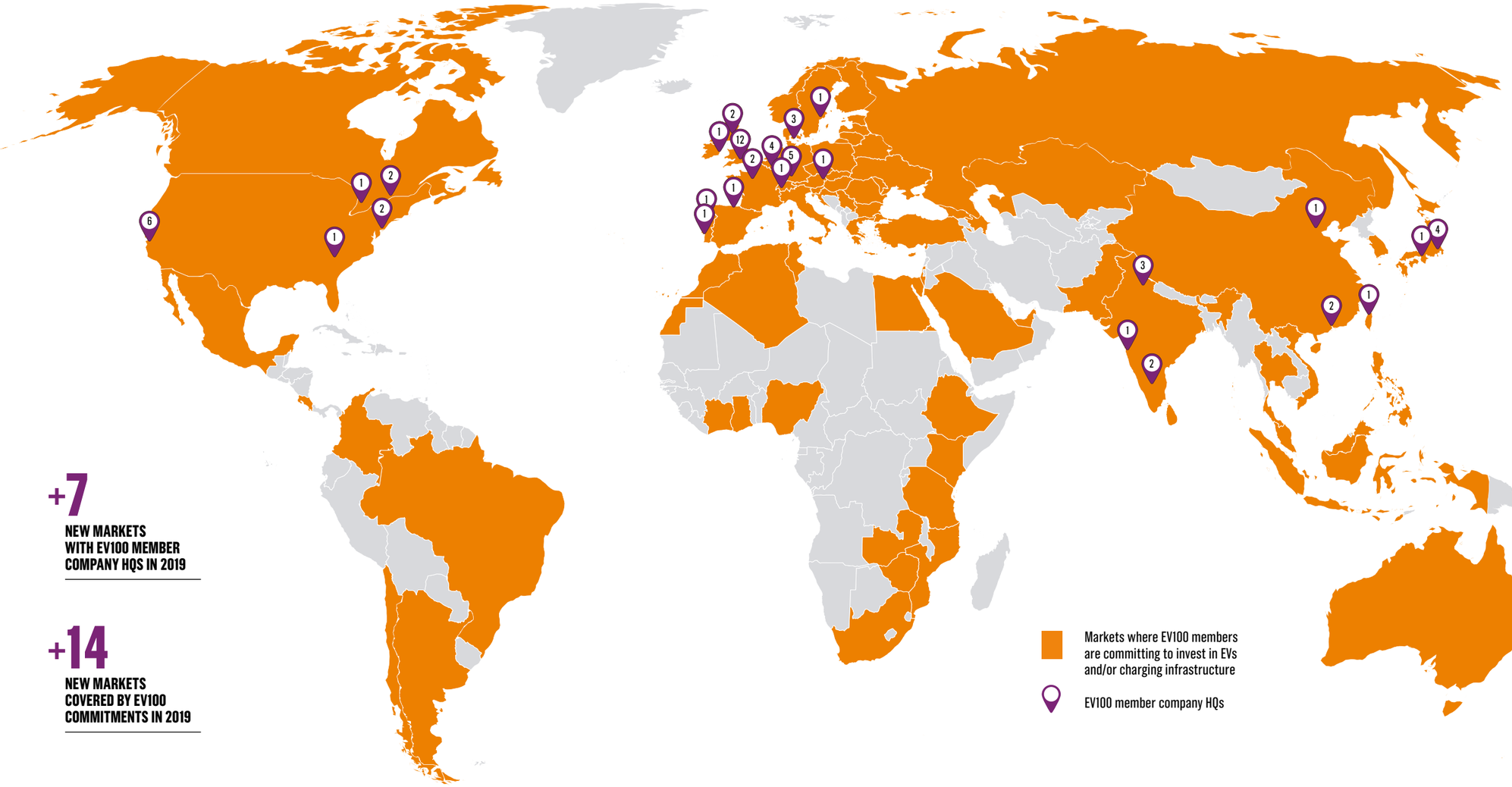
2 IN 5
MEMBERS USING 100% RENEWABLE ELECTRICITY FOR CHARGING

#1 DRIVER
DESIRE TO LEAD ON ADDRESSING THE CLIMATE CRISIS

#1 BARRIER
NOT ENOUGH EV SUPPLY TO MEET DEMAND

All data on members' commitments, revenue, employees and GHG emissions is for the total membership at the time of publishing (February 2020). All data on progress towards targets, drivers and barriers is from the 60 member companies reporting in July-October 2019. For the full data on company commitments and progress see the Members' Summary Table in the Annex.

EV100 COMMITMENTS AND PROGRESS AROUND THE WORLD



+7
NEW MARKETS WITH EV100 MEMBER COMPANY HQS IN 2019

+14
NEW MARKETS COVERED BY EV100 COMMITMENTS IN 2019

TOP MARKETS FOR FLEET COMMITMENTS

GERMANY: 78,767 VEHICLES
UK: 56,859 VEHICLES
FRANCE: 38,413 VEHICLES

TOP MARKETS FOR EVs DEPLOYED

GERMANY: 21,424 EVs
SWITZERLAND: 5,980 EVs
FRANCE: 3,772 EVs

TOP MARKETS FOR CHARGING COMMITMENTS

US: 348 SITES
UK: 324 SITES
GERMANY: 231 SITES

TOP MARKETS FOR SITES WITH CHARGING INSTALLED

US: 217 SITES
UK: 131 SITES
JAPAN: 95 SITES

TOP MARKETS FOR CHARGE POINTS INSTALLED

US: 2,012 CHARGE POINTS
JAPAN: 1,200 CHARGE POINTS
CHINA: 798 CHARGE POINTS

REGION	HEADQUARTER OFFICES (HQS)	COMMITTED VEHICLES	EVs ALREADY DEPLOYED	COMMITTED SITES FOR EMPLOYEE/ CUSTOMER CHARGING	SITES WITH CHARGING ALREADY DEPLOYED	INDIVIDUAL CHARGE POINTS ALREADY DEPLOYED
Africa	0	1,307	0	6	0	0
Asia & Middle East	15	54,344	3,443	651	252	2,936
Europe	35	222,254	35,399	1,612	601	4,108
North America	12	25,276	679	400	251	2,191
Oceania	5	1,051	186	58	35	214
South America	0	3,359	18	11	0	0

REGION	HEADQUARTER OFFICES (HQS)	COMMITTED VEHICLES	EVs ALREADY DEPLOYED	COMMITTED SITES FOR EMPLOYEE/ CUSTOMER CHARGING	SITES WITH CHARGING ALREADY DEPLOYED	INDIVIDUAL CHARGE POINTS ALREADY DEPLOYED
Rest of world / not specified	Reporting members	14,598	2,269	268	N/A	N/A
	New members**	20,332	N/A	176	N/A	N/A
Total		**342,521**	**41,994**	**3,182**	**1,139**	**9,449**

NB: Excludes leasing companies' customer fleet commitments

* Includes members joining since October 2019.
** Members joining since October 2019. Data from EV100 joining forms rather than full annual reporting.

01 AMBITION

EXPANDING MEMBERSHIP FOOTPRINT

In the last year, The Climate Group has **more than doubled the number of EV100 members** from 31 to 67 at the time of writing. We have significantly increased our presence in key markets, tripling our European membership and more than doubling in Asia and North America. The total geographic reach of our members' commitments has increased from 66 markets to 80.

As the membership grows, so does the **real-world impact** of EV100. The total number of company owned/leased vehicles committed to switch to EVs has increased by more than half, from 210,000 to over 340,000.

There are now three leasing companies in EV100. **LeasePlan** and Lex Autolease (part of **Lloyds Banking Group**) have committed to achieve net zero emissions across their customer fleets, electrifying them as far as possible and offsetting any residual emissions. **Zenith** has become the first leasing company to commit to fully electrify all the vehicles it procures on behalf of its customers.

TOP THREE CORPORATE FLEET COMMITMENTS (VEHICLES)

DEUTSCHE POST DHL: 85,573
EDF GROUP: 40,047
BT GROUP: 29,345

All three are positioning themselves at the forefront of the EV transition, working with their clients to promote EVs and accelerate the switch. In total these commitments cover a further 2.3 million vehicles.

This year, including leasing companies, the cumulative carbon savings of EV100 members' fleet commitments now stands at 42 million metric tons CO2e by 2030, equivalent to the annual emissions of 11 coal power plants.

TOP THREE CHARGING COMMITMENTS (SITES)

METRO AG: 783
INGKA GROUP: 468
CLP GROUP: 192

On the charging side, the number of company sites set to get EV charging has gone up to 3,200. The number of employees that will benefit from access to EV charging by 2030 has grown to just over 1 million.

The rapid growth and increasing visibility of the EV100 initiative demonstrates growing awareness of the **crucial role of business in accelerating the shift to clean transport**.

60
CORPORATE FLEET COMMITMENTS

3
LEASING CUSTOMER FLEET COMMITMENTS

21
SERVICE PROVIDER COMMITMENTS

53
WORKPLACE CHARGING COMMITMENTS

16
CUSTOMER CHARGING COMMITMENTS

A SELECTION OF EV100 MEMBERS' INTERIM TARGETS AND MILESTONES

2020

DELTA ELECTRONICS
100% of committed sites with EV charging

GENESIS ENERGY
100% electric/hybrid light vehicle fleet

HEATHROW
100% electric light vehicle fleet

INGKA GROUP
(formerly IKEA Group)
100% of committed sites with EV charging
100% zero-emission home deliveries in Amsterdam, Los Angeles, New York, Paris and Shanghai

INTU
100% of committed sites with EV charging

2021

LEASEPLAN
100% electric employee fleet

ROYAL HASKONINGDHV
100% electric fleet in the Netherlands

VATTENFALL
100% electric benefit car fleet

2022

AIRPORT AUTHORITY OF HONG KONG
100% electric light vehicle fleet (airside)

AIR NEW ZEALAND
100% electric fleet

2023

JOHN SISK & SON
100% of committed sites with fast EV charging

2024

AIRPORT AUTHORITY OF HONG KONG
100% electric van, mini-bus and bus fleets (airside)

2025

ASTRAZENECA
100% electric fleet

INGKA GROUP
100% zero-emission home deliveries and services worldwide
100% zero-emission owned/leased/shared vehicle fleet

ØRSTED
100% electric fleet
100% of committed sites with EV charging

PORT AUTHORITY OF NEW YORK & NEW JERSEY
100% electric airport shuttle bus fleet

2028

DELTA ELECTRONICS
100% electric car fleet

2030

ALL EV100 MEMBER COMPANIES
100% across all EV100 commitments

THE EV TRANSITION IS ALREADY UNDER WAY

02 PROGRESS

ACCELERATING ACTION

Setting ambitious targets sends a powerful signal to markets and policymakers, but implementing those targets is what drives down emissions. The transition is already under way. **EV100 members are translating their ambition into action**.

The total number of EVs deployed by EV100 members now stands at more than 80,000 vehicles.

This includes 42,000 EVs deployed across members' corporate fleets, which has pushed up members' average progress by more than half compared to last year, from 8% to 13%.
The 23 members that also reported last year have on average already achieved 17% of their 2030 fleet targets, demonstrating companies are quickly taking concrete steps to deliver on their commitments.

Additionally, **LeasePlan** reported in November 2019 that it has electrified 2.1% of its 1.9 million customer fleet – approximately 40,000 vehicles – with EVs accounting for 5.7% of new orders[7].

FLEET ELECTRIFICATION PROGRESS FOR EV100 MEMBERS

80,000+
EVs DEPLOYED BY EV100 MEMBERS

42,000 EVs (13%)
ACROSS MEMBERS' CORPORATE FLEETS

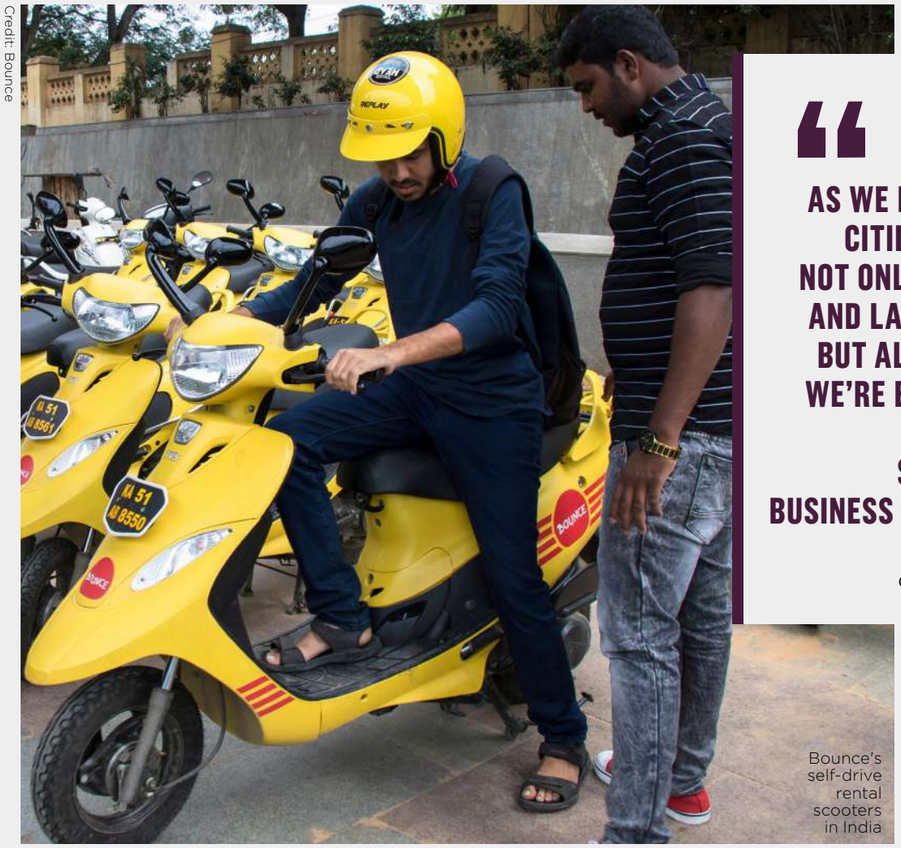
40,000 EVs (2%)
ACROSS LEASING COMPANY CUSTOMER FLEETS

Credit: Swiss Post

Swiss Post's electric three wheeler delivery vehicle

Within the pool of corporate fleet vehicles already electrified, 2-3 wheel EVs are playing an increasing role, with almost 21,000 electric 2-3 wheelers already deployed. Postal companies such as **Austrian Post**, **Deutsche Post DHL** and **Swiss Post** are rethinking their delivery chain by using e-cargo bikes to more efficiently navigate city centres and reduce congestion as well as air pollution.

Two-wheelers also play a crucial role in personal transport, particularly in Asia, as demonstrated by the rapid uptake of electric e-scooters by Indian scooter rental company **Bounce**.



Credit: Bounce

Bounce's self-drive rental scooters in India

> **"AS WE EXPAND TO NEWER CITIES THE PROMISE IS NOT ONLY TO SOLVE FIRST- AND LAST-MILE MOBILITY BUT ALSO TO MAKE SURE WE'RE ENVIRONMENTALLY CONSCIOUS AND SUSTAINABLE AS A BUSINESS WHEREVER WE GO.**
>
> *Vivekananda Hallekere, CEO & Co-Founder,* ***Bounce***

CASE STUDY: BOUNCE

BOUNCING INTO THE FUTURE

Bangalore-based self-drive scooter rental company, Bounce, is on a mission to make electric mobility accessible to all in India.

By providing convenient first- and last-mile connectivity at metro stations, the dockless scooter service aims to reduce traffic congestion and encourage commuters to choose public transport – making it a viable transport option for people on low incomes.

Bounce is committed to transitioning its entire scooter fleet to electric and has already switched over 2,000 vehicles. The company is looking to expand dramatically over the next few years, projecting that it will operate over one million two/three-wheeler vehicles by 2025 and two million by 2030. Over the next five years, Bounce plans to operate in almost every major city in India.

In Bangalore, the total number of vehicles rose from 1.4 million in 2000 to more than eight million in February 2019[4] leading to increased air pollution and congestion. Transport is the biggest source of harmful emissions in the city[5], contributing around 40%[6]. Bounce calculates that over 40% of all its scooter journeys start or end at public transport stops, providing a crucial solution.

Reduced vehicle costs, including reduced vehicle maintenance costs, meant that switching to electric was a good business decision for Bounce. Sustainability strategy is another key driver.

FACILITATING LEARNING BETWEEN EV100 MEMBERS

The Climate Group brings together fleet, facility and sustainability professionals from around the world to share experiences and make connections with each other – providing valuable learning opportunities for EV100 members as they are working to implement their commitments.

We organize regular webinars and workshops showcasing members' best practice case studies and technical insights from our knowledge partners. These cover issues such as EV charging, company cars, commercial fleets, and engaging employees and landlords.

EV100 members' meeting during Climate Week NYC 2019

> **"TAKING THE LEARNINGS FROM A SMALLER INITIAL ROLLOUT, WE ARE NOW SUPERCHARGING OUR ELECTRIC VEHICLE PROGRAMME WITH AN ADDITIONAL 75 EVs ON UK ROADS EVERY MONTH.**
>
> *Simon King, Fleet & Procurement Director,* **Mitie**

TOP EV DEPLOYMENTS (EVs)

DEUTSCHE POST DHL: 21,822
SWISS POST: 5,940
EDF GROUP: 3,789

TOP CHARGING DEPLOYMENTS (SITES)

INGKA GROUP: 351
PG&E: 114
CLP GROUP: 81

TOP CHARGING DEPLOYMENTS (CHARGE POINTS)

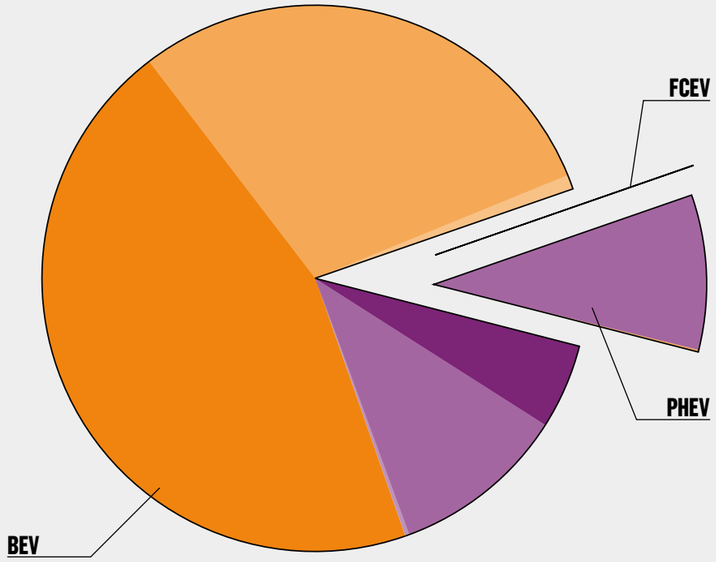
INGKA GROUP: 2,177
PG&E: 1,206
AEON MALL: 1,176

The number of small/medium electric vans in the membership (4 wheelers <3.5 metric tons / 7,000 lbs) has almost doubled, from around 7,000 to over 12,000, while the number of large electric vans/small electric trucks (4+ wheelers 3.5-7.5 metric tons / 7,000-15,000 lbs) has grown five-fold, from 69 to 372.

Ingka Group for example, has already achieved its goal of fully electric first-and-last mile deliveries in Shanghai, where it handles more than 20,000 home deliveries every month. Globally, Ingka Group has deployed EVs in 19 markets already, doubling its share of electric deliveries in the past year.

EV100 MEMBERS' EV FLEETS IN DETAIL

Similarly to last year, EV100 members are sourcing more electric commercial vehicles than passenger vehicles, and buying far more battery electric vehicles (BEVs) than fuel cell electric vehicles (FCEVs) or plug-in hybrid electric vehicles (PHEVs).



	VEHICLE TYPE	ICE*	BEV	PHEV	FCEV	Total
PASSENGER VEHICLES	2-3 WHEELS <3.5 METRIC TONS (7,000 LBS)	20,074	2,108	0	0	22,182
	4 WHEELS <3.5 METRIC TONS (7,000 LBS)	109,572	4,359	3,848	9	117,788
	4+ WHEELS 3.5-7.5 METRIC TONS (7,000-15,000 LBS)	1,700	101	0	0	1,801
COMMERCIAL VEHICLES	2-3 WHEELS <3.5 METRIC TONS (7,000 LBS)	936	18,877	0	0	19,813
	4 WHEELS <3.5 METRIC TONS (7,000 LBS)	138,755	12,275	45	0	151,075
	4+ WHEELS 3.5-7.5 METRIC TONS (7,000-15,000 LBS)	20,425	364	8	0	20,797
	Total	291,462	38,084	3,901	9	333,456

NB: Excludes new members and leasing company customer commitments
*Internal combustion engine

While this growth demonstrates the **strong interest of EV100 members in electrifying heavier commercial vehicles** (>3.5 metric tons / 7,000 lbs), they only account for around 1% of the total EV100 EV fleet. Commercial vans and heavy-duty vehicles were cited as the most challenging vehicle segments for our members working towards fleet electrification – for more information see p.16.

BEVs remain EV100 members' preferred choice of EV, accounting for 91% of all EVs this year. Use of PHEVs remains largely constrained to the passenger fleet as last year (accounting for 37% of passenger EVs vs <1% of commercial EVs).

As vehicle technologies mature and range anxiety diminishes, companies are switching straight to BEVs to maximize fuel savings.

There are currently nine hydrogen vehicles in the EV100 fleet, all of them passenger cars.

In addition to transitioning their own fleets, companies are already leveraging their influence as customers to drive broader market change. Out of 20 reporting companies that have committed to require EVs in service contracts, 11 members have introduced policies to encourage their service providers (e.g. taxi and car rental companies) to switch to EV – twice as many as last year.

> **BY CONVERTING OUR OWN FLEET AND INSTALLING CHARGERS AT OUR SITES WE ARE DEMONSTRATING THAT ELECTRIC TRANSPORTATION IS PRACTICAL NOW.**
>
> *Ken Hartwick, President & CEO,* **Ontario Power Generation**

11 companies have switched service contracts over to providers that use EVs as a result of the policy, while 12 members report that existing service providers have introduced EVs to retain their business.

EV100 members are also driving electrification within their broader business. The **State Bank of India**, for example, is helping its customers switch to EV with a preferential Green Car Loan.

The EV100 membership has also made huge strides in expanding charging at their premises. Company sites with EV charging already installed for employees and/or customers have increased by 50% to over 1,100. The number of individual charge points deployed has increased by two thirds to 9,500. **The total number of employees with access to charging today has almost doubled to 610,000.**

Free charging is the most common model for EV100 members. Across the 41 EV100 members offering workplace charging for employees, 54% do so for free. Similarly, across the 23 members offering customer charging, 48% do so for free.

EV100 members are also working hard to make their EVs fully zero-emission by powering them from renewables. 20 of them are members of RE100, The Climate Group's leadership initiative on renewable electricity. The number of EV100 **members using 100% renewables for their EV charging has increased significantly from 29% to 43%**, while the number of members at least partially powering vehicles with renewables has increased slightly from 82% to 88%.

EDF, for example, has installed 100 smart chargers – one per EV – at its Le Blayais site near Bordeaux, all running 100% on power generated from its 17,000 on-site solar panels.

Credit: EDF Group

EDF's solar powered workplace charging at Le Blayais, France

Credit: Genentech

A Genentech double decker electric commuter coach in California

> **"I'M PROUD TO WORK FOR A COMPANY THAT IS SHOWING SUSTAINABILITY LEADERSHIP BY PROVIDING CLEAN TRANSPORTATION COMMUTING OPTIONS AND ON-SITE EV CHARGING STATIONS. IT'S GREAT TO HAVE THE OPTION OF HOPPING ON THE ELECTRIC BUS OR CHARGING MY EV WHILE AT WORK."**
>
> *Lavender Whittaker, Associate Director,* ***Genentech EHS***

CASE STUDY: GENENTECH

GENENTECH'S 'GREEN GENES'

US biotechnology company, Genentech, part of the Roche Group, is demonstrating how companies can provide tools for employees to make sustainable choices.

Genentech's 4,000 strong 'Green Genes' employee volunteer team is committed to increasing workplace understanding of sustainability, including clean transportation, through EV ride and drives, talks from EV manufacturers, and e-bike trials.

Although there is already a larger than average proportion of EV drivers in California, where Genentech is based, its efforts have helped to create a domino effect – encouraging more and more employees to make their next personal car an EV. Already there are 800 EV drivers at its South San Francisco campus.

In response, Genentech installed over 100 charging stations, powered by a combination of on-site solar and purchased renewable power. The company is now analysing utilization patterns to determine where and when additional chargers are needed.

Genentech also actively encourages an end to 'car culture' and promotes the use of public transport. The location of the campus means that employees would typically need to drive to get to work, so the company has provided a commuter transportation program for over two decades and is now transitioning its bus fleet to electric.

At the time of publishing, Genentech has ten electric buses, with eleven more being added in early 2020. It is the first company in the world to have double-decker electric commuter coaches.

Although the upfront cost is 20-40% higher than an ICE equivalent, significant rebates from the California state government make up some of the difference. Genentech is also seeing reduced fuel costs and is anticipating reduced maintenance costs.

03 DRIVERS

THE CASE FOR CORPORATE EV ACTION

The number one driver for corporate EV action is reducing greenhouse gas emissions. This is not surprising given the unprecedented prominence of climate change on the political agenda in 2019.

Tackling air pollution is the second most important driver for EV100 members, cited by 84%. For example, four healthcare companies – **AstraZeneca**, **Genentech**, **Mawdsleys** and **Novo Nordisk** – joined EV100 in the past year, and all cite the health benefits of EVs as a key driver.

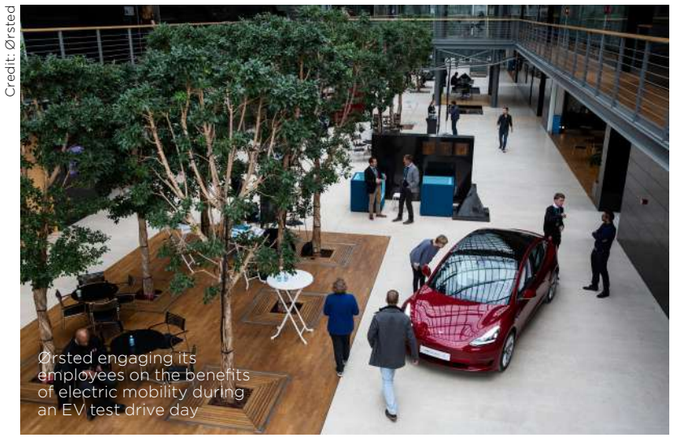
Customer demand is now cited as a driver by 38% of members. This shows that as public concern over climate change increases, customers are increasingly demanding robust climate action from businesses. It also suggests that more people are buying EVs and so they need more public and workplace charge points.

> **E-MOBILITY IS THE FUTURE. IT'S TIME FOR BUSINESSES TO MAKE THE SWITCH FOR A CLEANER CLIMATE FOR GENERATIONS TO COME.**
>
> *Mukesh Dadhich, Head of Sustainability & Clean Technology,* ***BYPL***

> **ELECTRIC VEHICLES REDUCE GREENHOUSE GAS EMISSIONS AND HELP ALLEVIATE ROADSIDE AIR POLLUTION. THIS IS PARTICULARLY IMPORTANT FOR THE DENSELY-POPULATED ASIAN CITIES IN WHICH WE OPERATE.**
>
> *Richard Lancaster, CEO,* ***CLP Group***

> **AS EV SALES GROW THERE WILL BE AN INCREASED DEMAND FOR CHARGE POINTS ACROSS THE UK. WE RECOGNISE THIS SHIFT IN TECHNOLOGY AND BEHAVIOUR AND WE WANT TO ENSURE THAT EVERY LANDSEC ASSET WITH PUBLIC PARKING HAS EV CHARGING FACILITIES AVAILABLE TO OUR CUSTOMERS.**
>
> *Caroline Hill, Corporate Affairs & Sustainability Director,* ***Landsec***

Credit: Ørsted



Ørsted engaging its employees on the benefits of electric mobility during an EV test drive day

> **AS A PROVIDER OF SERVICES TO THE UK'S NATIONAL HEALTH SERVICE, AIR QUALITY AROUND HOSPITALS IN PREDOMINANTLY URBAN AREAS IS A HIGH PRIORITY FOR US.**
>
> *William Sanders, Chief Executive,* ***Mawdsleys***

EVs ALREADY COMPETE ON COST

> **FOR US THERE IS A CLEAR FINANCIAL CASE FOR MAKING THE SWITCH TO ELECTRIC. WE EXPECT OUR ELECTRIC VANS TO BE UP TO 10% CHEAPER OVER THEIR EIGHT-YEAR LIFECYCLE THAN THE EQUIVALENT ICE VANS.**
>
> *Paul Janacek, VP Group Fleet,* ***Austrian Post***

The key question for fleet managers is: how much does it cost to run an EV, compared with an ICE vehicle?

The first consideration is up-front cost. EVs are still more expensive to buy than ICE vehicles. But EV battery prices – the core cost component – have fallen 87% from 2010 to 2019 and are expected to fall to around $100/kWh by 2023[8], making EVs competitive with ICEs on purchase price[9].

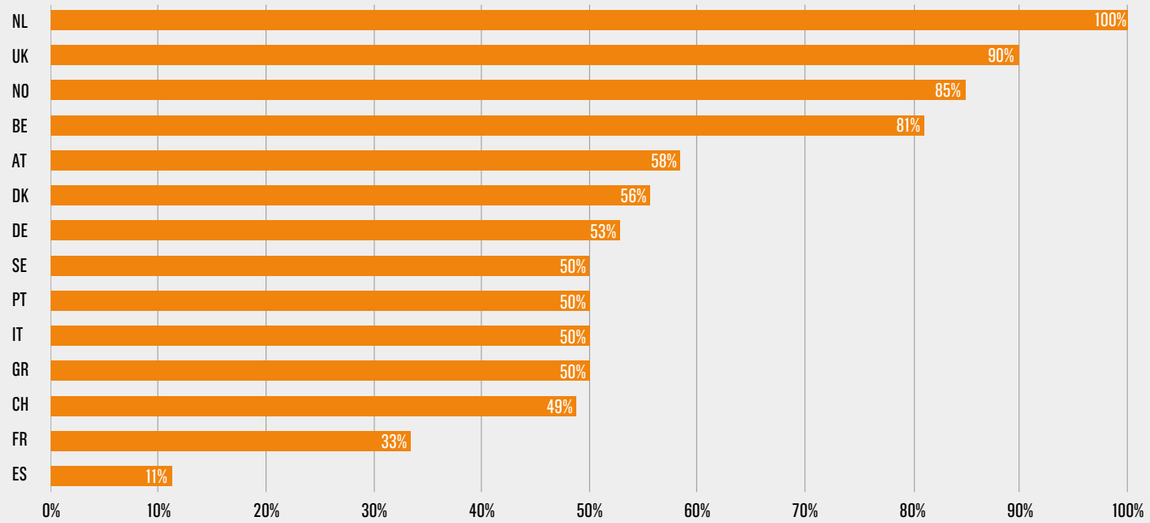
Where EVs really win out is on fuel and maintenance costs. Electricity is cheaper than gasoline or diesel (which means high-mileage users stand to save more money) and EVs are cheaper to maintain (because they have fewer moving parts that need servicing). Fleet managers weigh up these costs and benefits over the lifecycle of a vehicle in a total cost of ownership (TCO) analysis.

In October 2019, **LeasePlan** published a TCO analysis for EVs in Europe[10]. Across almost one thousand TCO scenarios, EVs were found to already work out cheaper than their ICE equivalents. The TCO for EVs was on average 5% cheaper than the ICE vehicles. This is before accounting for foregone revenue if companies are unable to operate in jurisdictions with ICE vehicle restrictions. For instance, the C40 Fossil Fuel Free Streets group of 35 global cities are all bringing in zero emission zones by 2030[11].

A recent ICCT study also found that zero emission trucks are also expected to reach TCO parity with diesel by 2030 in the US, even accounting for the costs of associated charging infrastructure[12].

> **THE COST OF NOT CHANGING IS BIGGER THAN THE INVESTMENT.**
>
> *Angela Hultberg, Head of Sustainable Mobility,* ***Ingka Group***

% OF VEHICLES FOR WHICH EV IS CHEAPER THAN ICE



This graph, reproduced with kind permission from LeasePlan, shows the percentage of scenarios in which the TCO is lower for the EV compared to the ICE vehicle. For example, the EV has a lower cost than the ICE in 85% of the scenarios in Norway.

04 BARRIERS

ADDRESSING THE REMAINING OBSTACLES

The case for action is compelling, but there are also challenges that need to be overcome to unlock further progress.

This year, our members are reporting that **the main barrier is the lack of supply of the right electric vehicles**. The share of members citing this has shot up from third place (44%) in 2018 to first place (79%) in 2019. As corporate ambition is scaling up, **the auto industry is not responding fast enough for supply to match demand**.

For company car fleets, while the picture varies internationally, the market is relatively well established. EV100 members have reported most difficulty in procuring commercial vans and heavy duty vehicles.

Schenker AG is currently retrofitting existing diesel trucks to electric due to a lack of volume EV production from automakers. **Danfoss** meanwhile needs EVs that can tow trailers with a hook, which are proving difficult to source. In Japan, it is last-mile commercial vehicles – weighing just one metric ton – that are proving most challenging for **Askul**. For **Aéroports de Montréal**, the biggest obstacle is finding electric snow removal vehicles.

Active dialogue between companies and vehicle suppliers can help address these gaps and point manufacturers to new market opportunities. Alongside the Transport Decarbonisation Alliance, CALSTART and others, The Climate Group is a key partner in the Zero Emission Freight Vehicle Action Group[13]. Launched at the 2019 UN Climate Action Summit, the Group aims to stimulate this crucial market segment.

Credit: Metro

Metro AG EV lorries

> **CHARGE POINTS NEED TO BE SMART AND INTEROPERABLE. IN ORDER TO REACH 2030 TARGETS, PROVEN ON-STREET CHARGING NEEDS TO BE AVAILABLE.**
>
> *Gabrielle Ginér, Head of Environmental Sustainability,* ***BT***

> **SHORT TERM AND INCONSISTENT FISCAL, REGULATORY AND INCENTIVE POLICIES WILL DETER ADOPTION AND MAKES PLANNING AN EV TRANSITION HARDER. GOVERNMENTS NEED TO PROVIDE CLEAR AND CONSISTENT POLICIES TO FACILITATE PLANNING AND TO GIVE CONFIDENCE TO SWITCH.**
>
> *Andy Leeden, Global Fleet Manager,* ***AstraZeneca***

Credit: Mitie

Mitie's first electric vans

Strong policy frameworks actively encouraging the automotive sector to produce EVs are equally vital. Options include tightening emissions standards (as in Europe), EV mandates (as in China and California) and government grants (common in many markets).

Lack of charging infrastructure remains a significant concern for 65% of members, although this is slightly lower than last year. Given the critical importance of robust charging networks, investment from both governments and the private sector – including EV100 members – is crucial and welcome.

Route-based rapid charging is particularly important for long-distance EV journeys. Grid constraints can also be an issue. Some companies are taking innovative approaches to secure access to charging. **Ingka Group**, for instance, is in discussions with university campuses and churches in North America to set up chargers in their parking facilities to charge their suppliers' delivery vehicles overnight.

Better batteries are also part of the solution. **Austrian Post** reports that it can complete 70% of its routes on a single charge and is expecting this to increase to 80% in the coming years.

> **WE ARE DOING WHAT WE CAN AS A BUSINESS BY PROVIDING FREE CHARGING FOR EMPLOYEES AND OFFERING DISCOUNTS ON EVs. BUT THERE IS MORE TO BE DONE AT A NATIONAL LEVEL AROUND ENCOURAGING EV UPTAKE AND BUILDING OUT THE CHARGING NETWORK.**
>
> *Jessica Rodger, Sustainability Manager,* ***Genesis Energy***

A policy roundtable on electric mobility hosted by The Climate Group in New Delhi

BUSINESS ADVOCACY FOR INCREASED POLICY AMBITION

With EV100 now reaching global scale, its members have an important opportunity to shape policy and market frameworks. The Climate Group is working with EV100 companies to call on governments to bring in supportive EV policies, and to ask auto manufacturers to scale up the supply of electric models.

For example, as the German government was publishing its transport decarbonization strategy last spring, EV100 members **E.ON**, **Ingka Group**, **LeasePlan**, **METRO AG** and **Vattenfall** joined our concerted media campaign calling for ambitious EV policies. This sent a strong message about corporate demand for EVs and businesses' support for accelerating the transition.

With national governments required to strengthen their climate pledges in the run-up to the UN climate summit (COP26) in November, 2020 is a critical year for the private sector to step up with its own ambitious commitments and clear policy asks. **EV100 members cite EV subsidies, charging investment, tax benefits and national electrification plans as their most important policy measures.**

05 LOOKING AHEAD

The EV transition is well underway but there is still a long road ahead.

This report charts the growth in companies making ambitious commitments under The Climate Group's EV100 initiative and the major progress made by the existing members towards their goals.

Alongside walking, cycling and shared transport, EVs are vital for decarbonizing transport. They can be deployed rapidly and, thanks to economies of scale, will soon be cheaper to buy than ICE vehicles. The carbon benefits will grow further over time as the electricity they run on is increasingly generated from renewables.

Achieving 100% EV sales by 2030 is as achievable as it is necessary. Through EV100, **The Climate Group is helping accelerate the switch** by giving the auto industry confidence in the massive scale of corporate demand and by engaging policymakers to push for supportive EV policies.

Credit: Swiss Post

A Swiss Post employee charges up an electric postal van

Companies not yet making the transition to EVs will be asked why not by their employees and customers. EVs are starting to positively compete with conventional vehicles on simple economics, while ICEs will be increasingly squeezed by national, state and city level restrictions. Failing to prepare for this future is preparing to fail.

Automakers resisting the EV transition risk irrevocably falling behind once the market tips. Shareholders need to be asking car companies how (fast) they can exit the plunging ICE market to secure their position in the booming EV market.

For governments, the message is two-fold. Firstly, it's time to match the private sector's ambition. **The pace of corporate action and EV market development should give governments great confidence to ramp up their climate pledges** ahead of this year's crucial climate summit (COP26). Second, **we need policy frameworks that consistently support and do not impede, this market transformation.**

Amplifying this message will be the key focus for EV100 through 2020 and beyond. The Climate Group looks forward to working with EV100 members and stakeholders across government and industry to accelerate the drive towards a clean, electric transport future – **on the timescale required to avert climate crisis.**

Credit: EDF Group

EDF's electric car fleet at Le Blayais, France

GLOSSARY

BEV
Battery electric vehicle (i.e. fully electric)

CO2(E)
Carbon dioxide (equivalent)

CHARGE POINT
An individual connector that can be used to charge an EV

COMMITTED FLEET
Members' vehicles to switch to electric by 2030
- normally 100% of vehicles <3.5 metric tons / 7,000 lbs
- plus 50% of vehicles 3.5-7.5 metric tons / 7,000-15,000 lbs

COMMITTED CHARGING SITES
Company sites to have EV charging installed by 2030
- normally all company sites with parking for employees and/or customers

EV
Electric vehicle (i.e. BEVs, FCEVs and PHEVs)

FCEV
Fuel cell electric vehicle (i.e. hydrogen vehicle)

GHG
Greenhouse gas

ICE
Internal combustion engine

PHEV
Plug-in hybrid electric vehicle

TCO
Total cost of ownership

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ANNEX

EV100 MEMBERS' SUMMARY TABLE

MEMBER	HQ LOCATION	JOINING YEAR	CORPORATE FLEETS		LEASING CUSTOMER FLEETS		SERVICE CONTRACTS	WORKPLACE CHARGING		CUSTOMER CHARGING	
			VEHICLES COVERED BY FLEET COMMITMENT	VEHICLES ALREADY CONVERTED TO EV (%)	VEHICLES COVERED BY FLEET COMMITMENT	VEHICLES ALREADY CONVERTED TO EV (%)	POLICIES UPDATED TO SPECIFY USE OF EVs	OFFICE SITES COVERED BY EV100 WORKPLACE CHARGING COMMITMENT	OFFICE SITES WITH CHARGING ALREADY INSTALLED (%)	CUSTOMER SITES COVERED BY EV100 CUSTOMER CHARGIN COMMITMENT	CUSTOMER SITES WITH CHARGING ALREADY INSTALLED (%)
60 MEMBERS REPORTING IN 2019											
AEON Mall	Japan	2017								81	94%
Aéroports de Montréal	Canada	2019	79	14%			YES	2	100%	1	100%
Air New Zealand	New Zealand	2018	139	44%			NO	8	100%	2	100%
Airport Authority Hong Kong (AAHK)	Hong Kong	2019	3,340	22%			NO	1	100%	1	100%
APCOA Parking (UK) Ltd	United Kingdom	2019	267	0%			NO	3	67%	89	8%
ASKUL	Japan	2017	287	4%							
AstraZeneca*	United Kingdom	2019	16,338	3%							
Austrian Post	Austria	2019	8,493	13%				N/A	N/A		
Baidu	China	2017	46	100%				5	100%		
Bank of America	USA	2018						79	72%		
Bounce	India	2019	22,000	9%				2	100%		
BSES Rajdhani Power Limited	India	2019	176	5%			NO	2	100%		
BSES Yamuna Power Limited	India	2018	18	44%			YES	15	33%		
BT Group	United Kingdom	2018	29,345	1%				30	33%		
Centrica	United Kingdom	2019	12,673	4%							
Christchurch Airport	New Zealand	2018	20	55%				1	100%	1	100%
Clif Bar & Company	USA	2018	42	0%				6	50%		
CLP Group	Hong Kong	2019	931	10%				192	42%		
Danfoss	Denmark	2019	2,229	3%				70	10%		
Delta Electronics	Taiwan	2018	145	20%				17	76%		
Deutsche Post DHL Group	Germany	2017	85,573	26%			NO	N/A	N/A		
E.ON	Germany	2019	N/A	N/A				N/A	N/A		
EDF Group	France	2017	40,047	9%							
EDP – Energias De Portugal	Portugal	2019	3,403	6%							
Genentech	USA	2019	1,368	9%				7	57%		
Genesis Energy Ltd	New Zealand	2018	132	33%				7	57%		
Heathrow Airport	United Kingdom	2017	316	30%			YES	1	100%	1	100%
HP Inc.	USA	2018						85	32%		
Iberdrola	Spain	2019	3,059	4%			YES	59	100%		
Ingka Group	Netherlands	2017	12,537	7%			NO	468	75%	416	81%
Intu	United Kingdom	2019	27	11%						14	93%
John Sisk & Son	Ireland	2019	484	1%				58	5%	58	5%
Landsec	United Kingdom	2019								40	30%
LeasePlan	Netherlands	2017	2,507	16%	1,900,000	2%		90	27%		
Mawdsleys	United Kingdom	2019	75	3%			NO	6	33%		
Mercury	New Zealand	2017	117	72%			NO	21	90%		

MEMBER	HQ LOCATION	JOINING YEAR	CORPORATE FLEETS		LEASING CUSTOMER FLEETS		SERVICE CONTRACTS	WORKPLACE CHARGING		CUSTOMER CHARGING	
			VEHICLES COVERED BY FLEET COMMITMENT	VEHICLES ALREADY CONVERTED TO EV (%)	VEHICLES COVERED BY FLEET COMMITMENT	VEHICLES ALREADY CONVERTED TO EV (%)	POLICIES UPDATED TO SPECIFY USE OF EVs	OFFICE SITES COVERED BY EV100 WORKPLACE CHARGING COMMITMENT	OFFICE SITES WITH CHARGING ALREADY INSTALLED (%)	CUSTOMER SITES COVERED BY EV100 CUSTOMER CHARGIN COMMITMENT	CUSTOMER SITES WITH CHARGING ALREADY INSTALLED (%)
Meridian Energy	New Zealand	2019	112	36%				N/A	N/A		
METRO AG**	Germany	2017					YES	10	50%	773	9%
Mitie	United Kingdom	2019	5,366	5%				33	3%		
Nippon Telegraph and Telephone Corporation (NTT)	Japan	2018	10,856	0%							
Novo Nordisk	Denmark	2019	8,000	1%							
Ontario Power Generation	Canada	2019	552	7%				20	60%		
Ørsted	Denmark	2019	331	21%			NO	31	26%		
Pacific Gas & Electric Company**	USA	2017						141	57%		
Port Authority of New York & New Jersey	USA	2018	1,413	20%				N/A	N/A	5	100%
Post CH Ltd (Swiss Post)	Switzerland	2019	10,736	55%				16	31%		
RBS	United Kingdom	2018	268	1%				11	36%		
Royal HaskoningDHV	Netherlands	2017	603	42%			YES	12	92%		
Schenker AG	Germany	2019	244	5%			YES	50	10%		
Shuttl	India	2019	1,164	1%							
Signify	Netherlands	2018	2,462	2%							
SSE plc*	United Kingdom	2019	3,912	4%				20	100%		
State Bank of India	India	2018	1,791	0%			NO	50	0%		
Takashimaya Company Limited	Japan	2019	435	0%			NO	N/A	N/A	21	24%
Taxelco*	Canada	2019	1,500	0%							
Toyko Electric Power Company Holdings, Inc (TEPCO)	Japan	2019	4,400	10%				N/A	N/A		
Unilever	United Kingdom	2017	11,771	3%			YES	50	16%		
Vattenfall	Sweden	2017	4,451	15%			YES	73	56%		
VMWare	USA	2019	5	0%				125	N/A		
Wipro Limited	India	2018	2,000	2%				8	38%		
7 MEMBERS JOINING AFTER 2019 REPORTING CYCLE											
Efacec	Portugal	2019	485	N/A				2	N/A		
Foxtons	United Kingdom	2019	850	N/A				1	N/A		
Goldman Sachs	USA	2019						38	N/A		
Lime	USA	2020	325	N/A							
Lloyds Banking Group / Lex Autolease	United Kingdom	2019	4,000	N/A	349,500	N/A		83	N/A	N/A	N/A
Schneider Electric	France	2019	14,500	N/A				50	N/A		
Zenith	United Kingdom	2020	173	N/A	48,438	N/A	N/A	2	N/A	2	N/A

* Three Members also reported existing EV infrastructure despite only formally being signed up to fleet commitments. These are: AstraZeneca (10), SSE (20), Taxelco (2)

** Two Members also reported EV deployment in their vehicle fleets despite only formally being signed up to charging commitments. These are: Metro AG (38), PG&E Co. (120)

ACKNOWLEDGEMENTS

We would like to thank all EV100 members for their support for the initiative and their participation in the annual reporting process. We also express our gratitude to Jamie Clark, Alp Katalan and Myles McCarthy at the Carbon Trust for the data analysis, as well as our external reviewers: Till Bunsen (IEA), Cristiano Façanha (CALSTART), Ian Featherstone (Energy Saving Trust) and Dale Hall (ICCT).

The Climate Group is also grateful for the support of **ClimateWorks Foundation, Heising-Simons Foundation** and **New Venture Fund/We Mean Business.**

Report content: James Beard, Marie Reynolds, Nina Black, Ralph Palmer, Sandra Roling

Regional support: Kristin Hanczor, Swati Madan, Atul Mudaliar, Falgun Patel, Louisa Plotnick

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EV 100

EV100 is a global initiative by The Climate Group bringing together forward-looking companies committed to accelerating the transition to electric vehicles (EVs), to make electric transport 'the new normal' by 2030. Electric transport offers a major solution to climate change, as well as curbing air and noise pollution. Businesses can lead through their investment decisions and influence on millions of employees and customers worldwide. By joining EV100 they increase demand, drive mass roll-out, and make electric cars more rapidly affordable for everyone.

In driving corporate EV uptake, The Climate Group works closely with regional engagement partners Ceres and Japan Climate Leaders Partnership (JCLP) in the US and Japan respectively.

Visit **TheClimateGroup.org/EV100**

CARBON TRUST

Established in 2001, the Carbon Trust works with businesses, governments and institutions around the world, helping them contribute to, and benefit from, a more sustainable future through carbon reduction, resource efficiency strategies, and commercialising low carbon businesses, systems and technologies. Headquartered in London, the Carbon Trust has a global team of over 30 nationalities based across five continents.

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. We are proud to be part of the We Mean Business coalition.

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