

Charging Forward Fleet Report

Why your fleet needs to go electric now





Introduction

Learn why electrification matters to your company's fleet

Electric fleets are the future

Lower fueling and operational costs. Lower emissions. Higher driver satisfaction. What's not to love about electric vehicles?

Companies all over the world are proving that EVs are the smart choice for every fleet. This report shows why now is the time to shift to electric and helps you make the transition in a way that saves money without disrupting your fleet operations.

25% lower total cost of ownership

Early adopter fleets have realized 20 to 25 percent cost savings from greater efficiency, more affordable fueling and reduced maintenance. While savings will vary by fleet, the opportunity is hard to pass up.

50% lower emissions

Going electric can lower greenhouse gas emissions by half or more depending on how the power used to charge the fleet is generated. Savings will vary by vehicle type, local energy source and miles driven.

1 in 3 commercial vehicles

By 2040, more than [one in three](#) commercial vehicles operating in cities worldwide will be electric. Heavy duty commercial vehicle sales are expected to increase 250% from 2021 to 2022 (BNEF).

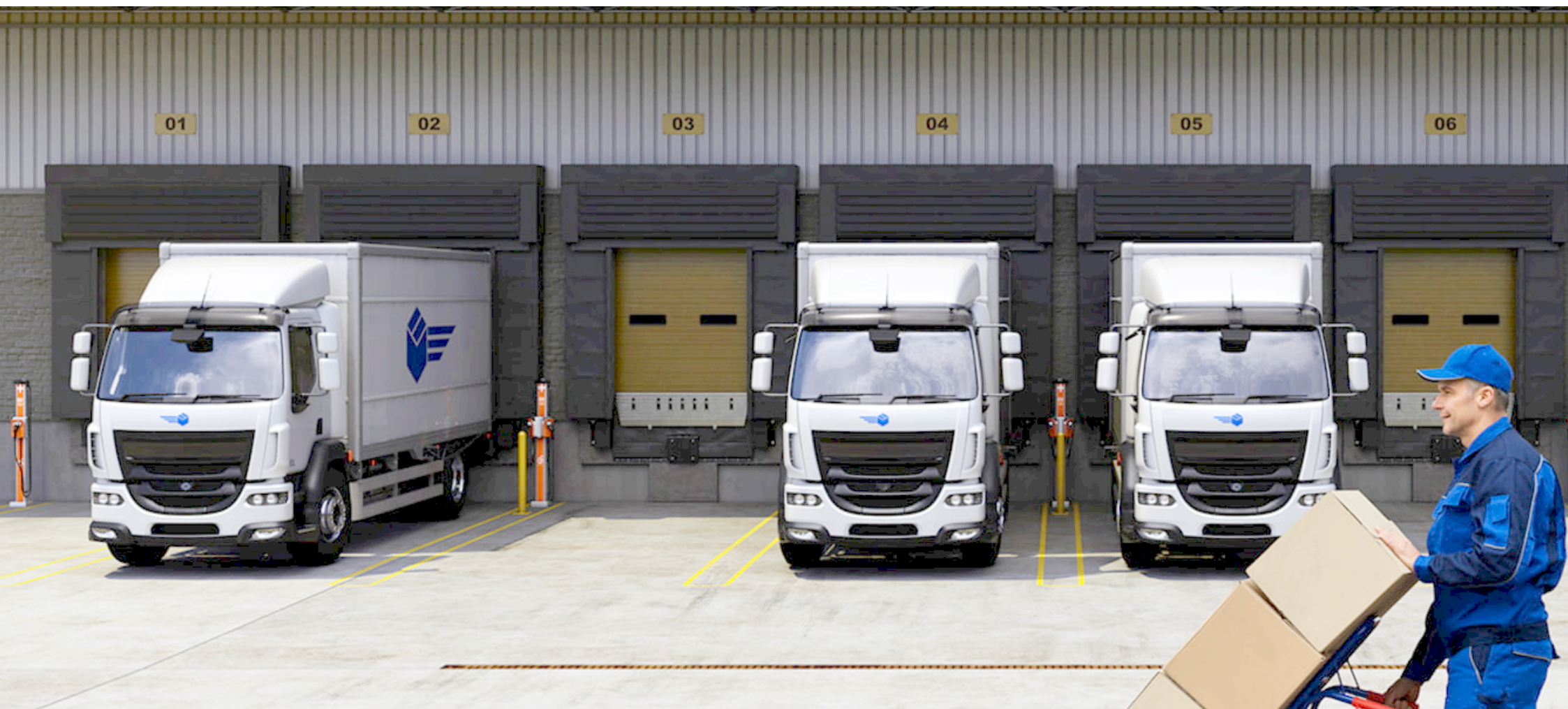


There are 12 million passenger EVs, one million commercial EVs, and over 260 million electric two- and three-wheelers on the road globally today.

Electric Vehicle Outlook 2021, BloombergNEF



Ready to learn how your fleet can go electric?



Cost savings and sustainability goals drive electrification

See how much your company's fleet can save by going electric

What's driving fleet electrification?

The convergence of cost savings, sustainability goals and government requirements means that now is the time for every fleet to electrify.

Fuel savings dominate

Fleet operators are turning to electric to create operational efficiencies. EVs offer significant advantages when it comes to operational costs, including fueling and maintenance costs.

Electric motors convert over **85%** of electrical energy into motion, compared to less than **40%** for a gas combustion engine.

[NRDC](#)

Electricity is less expensive than fossil fuels and can offer more predictable

pricing. It also allows fleets to optimize charging activity for the most efficient and least expensive use of energy, including scheduling vehicles to charge at times with off-peak electricity rates or using renewable energy sources.

Greater efficiency matters

EVs are much more efficient than combustion engine vehicles as well, getting more out of the fuel they use. Baseline operations are much more efficient for electric vehicles.

Approximately **75%** of available battery energy goes to propel and operate a medium-duty electric vehicle. In a similar medium-duty diesel-powered truck, only about **35%**

of the fuel energy translates to useful work to propel the vehicle ([Gao et al](#)). That's a major efficiency gain.

Electric motors convert over **85%** of electrical energy into motion, compared to less than **40%** for gas combustion engines ([NRDC](#)). Additionally, EVs convert about **77%** of electrical energy of the grid to power at the wheels, compared with only **12-30%** for conventional gas vehicles ([DoE](#)).

Less maintenance lowers costs

Due to fewer moving parts, EVs require significantly less maintenance: no oil changes and almost no part replacements. This not only cuts

The energy consumption per mile for an electric truck may be **one-quarter to one half** that of a modern conventional truck.

[NREL](#)

costs, but also allows EVs to spend more time making deliveries or running routes and less time under repair orders in the workshop.

Many fleets have found that fleets offer substantial savings. New York City [estimated](#) that EVs reduce maintenance costs by 75 to 80 percent. Beginning to electrify

vehicles can have a positive impact on your maintenance budget.

Sustainability drivers

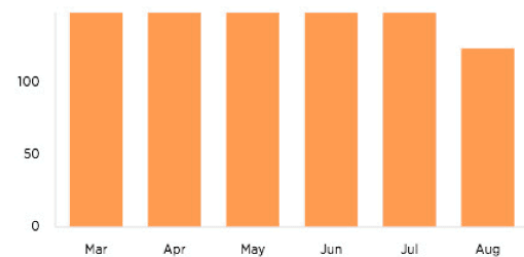
Transportation is a leading source of greenhouse gas emissions, and medium- and heavy-duty vehicles generate a disproportionate share of these emissions. Electrification allows any fleet to reduce emissions in a

measurable, scalable way and report on emissions avoided using solutions like ChargePoint (below).

A growing number of organizations have established ambitious sustainability goals that are driving new business choices, and electrification is a major way to reach those goals. Later in this report, we'll

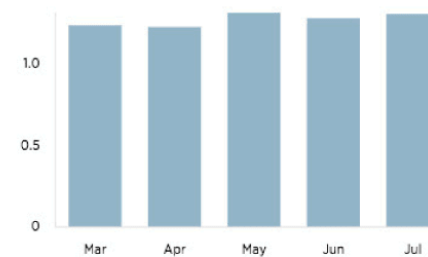
Unique Drivers

in thousands



Sessions

in millions



Environment

Lifetime

Here's how EV charging has helped:



You've avoided
144,515,985 kg
greenhouse gas
emissions



that's like
planting
4,341,558
trees
and letting them

take a look at some of the brands that lead the way in sustainability commitments for their fleets.

Consumer demand grows

Shopping habits are shifting, with weekly online purchases [growing nearly 30 percent](#) in early 2020. With online purchases comes an expectation for speedy delivery: 80% of shoppers want same-day shipping (Temando).

At the same time, 81% of consumers feel strongly that companies should help to improve the environment (Nielsen). Electrification offers companies the opportunity to meet customer preferences while achieving efficiency and cost savings.

Miles back with every stop

Last-mile or last-meter delivery is particularly well suited to electrification, because EVs recover range through regenerative braking



and are more efficient for city driving than gas or diesel vehicles. This means delivery vehicles can recover some range with every stop.

EVs reduce health costs

Health is an underrecognized factor driving the need for electrification. Emissions from gas and diesel vehicles can exacerbate respiratory conditions such as asthma and contribute to other conditions,

including heart disease and cancer. This endangers the health of individuals, particularly in frontline communities, and increases societal healthcare costs.

[American Lung Association](#) research, shown in the table below, finds that EVs can help save thousands of lives while delivering US\$72 billion (60,8B€) in health benefits and US\$113 billion (95,5B€) in climate

Health benefits of electrification

Premature deaths avoided	6,300
Asthma attacks avoided	93,000
Lost work days avoided	416,000
Health benefits	US\$72B (60,8B€)
Climate benefits	US\$113B (95,5B€)

benefits. The opportunity to contribute to community benefits may be particularly important to many municipal fleets.

[Analysis](#) of data from The Journal of Allergy and Clinical Immunology showed an economic impact of **\$0.01 per vehicle mile travelled (VMT)** for treating children affected by traffic-related asthma in Los Angeles County. Reducing emissions could save millions of dollars in healthcare expenses as well as prevent suffering and premature deaths.



Kids living within 75 metres of a major road have a 29% increased risk of lifetime asthma.

Michele Goldman, CEO, Asthma Australia



Better health for the community can also mean better health and well-being for fleet delivery drivers, who can enjoy a quieter ride and cleaner air even when their vehicles are idling for delivery. Many drivers come to develop a preference for driving EVs when they are available in their fleets.

“

I've been driving this new electric truck and I just love it. It's very quiet, very smooth and has a lot of power making it a lot easier to transport heavy loads. It's just like driving a car.

[Herodes Montano, Sysco e-vehicle driver](#)

Improved driver satisfaction

Delivery fleets are always in need of great drivers, and the global COVID-19 pandemic complicated recruitment efforts. [According](#) to leading industry publication Transport Dive, "The ongoing driver shortage has prompted fleets to raise pay for drivers, in hopes of enticing new talent to the workforce and retaining truckers already on the payrolls."

A creative way to attract new drivers might be the opportunity to drive an



electric vehicle, which provides superior performance while being more enjoyable to drive (not to mention environmentally friendly) thanks to being quieter and having fewer emissions. Most EV drivers give positive feedback on their experience.

“

I've had a positive experience and enjoyed driving the truck. It's a whole different experience and it's a step up.

[Marty Boots, eCascadia driver for Schneider](#)

[Get your free fleet readiness assessment from ChargePoint](#)



Regulations encourage electrification globally

Last-mile delivery fleets everywhere can benefit from going electric

Government mandates expand

Cities, countries and regions around the world have set ambitious goals for electrification. Many such requirements are accompanied by financial incentives to accelerate the transition. Here are some notable mandates which are driving electrification globally.

North America

Canada

Canada has made a variety of commitments to electrification at the city and province level. The federal iZEV program allows businesses to choose between a financial incentive for purchasing up to 10 eligible light-duty vehicles or a tax write-off covering light-, medium- or heavy-duty vehicles.

The Canadian government, along with provincial governments in British Columbia and Quebec, and the City of Vancouver have all signed the [Drive to Zero commercial vehicle pledge](#).

British Columbia, Edmonton, Toronto, Montreal and Laval transit agencies have committed to stop purchasing diesel buses between 2020 and 2025.

United States

Major commitments to electrification among cities, states and regions will drive growth in electric fleets in the U.S. over the next decade and beyond. States and utilities are offering billions of dollars in funding to incentivize fleet electrification.

The United States recently passed the Infrastructure Investment and Jobs Act (IIJA), a bipartisan, trillion-dollar infrastructure package with \$5 billion for highway charging, \$2.5 billion in additional grants for alternative fueling infrastructure along highways and in communities, and \$5 billion for a Clean School Bus program, as well as additional incentive programs to support electrification of fleet vehicles at ports, transit bus depots, and schools.

A 30% federal tax credit for installing EV charging



infrastructure was extended through 2021, and Congress is currently considering further extension of the tax credit into 2022 and beyond.

Climate Mayors EV Purchasing Collaborative

Nearly 200 collaborative members have [committed](#) to purchase more than 3,500 EVs by the end of 2021, thereby [avoiding](#) nearly 28 million tons of CO₂ emissions and 1.7 million gallons of gas per year and investing US\$123.5 million (104,3M€) in EVs.

Multi-State Medium- and Heavy-Duty ZEV MOU

The [Multi-State Medium- and Heavy-Duty ZEV MOU](#) has state 16 signatories aiming to make at least 30% of all new medium- and heavy-duty vehicle sales zero-emission vehicles by 2030.

Illinois, Indiana, Michigan, Minnesota and Wisconsin will form the Regional Electric Vehicle Midwest Coalition, or “REV Midwest.”

Electrification Commitments from Cities and Counties

Several regions have agreed to fully or mostly electrify their fleets, paving the way for their

experiences to inform other heavy-duty fleets:

- + Broward County, FL: ZEV-only electric fleet and transit vehicles by 2030
- + Chicago, IL: 100% electric bus goal
- + Denver, CO: 100% of light-duty fleet vehicles will be electric by 2050 and 100% of public transportation will be carbon free by 2050.
- + Los Angeles, CA: 100% electric buses
- + New York, NY: 100% electric fleet commitment (500 vehicles by 2024, all-electric by 2029)
- + Sarasota, FL: 90% electric by 2024
- + Seattle, WA: fossil fuel-free fleet commitment by 2030

California Commitments

California has been setting the pace for all-electric fleets for years. Beyond leading the way for the multi-state medium- and heavy-duty ZEV MOU already mentioned, here are some notable commitments the state has made toward promoting electric fleet vehicles for various uses.

The [California Clean Miles Standard](#) creates new requirements to help curb emissions among transportation network companies (TNCs) as new

forms of mobility continue to emerge.

The [Advanced Clean Trucks \(ACT\) Rule](#), California's Clean Truck Standard, creates fleet reporting standards and requires zero-emission sales to rise to 55% for Class 2b–3 trucks, 75% for Class 4–8 straight trucks and 40% for truck tractors by 2035. By 2045, every new truck sold in California will be zero-emission.

Governor Gavin Newsom has also [announced](#) that California will sell only zero-emission new light-duty and off-road equipment by 2035, and zero-emission new medium- and heavy-duty vehicles by 2045.

The [California Department of General Services](#) will purchase only zero-emission vehicles for its fleet, and only purchase from manufacturers that have committed to California's clean fuel requirements.

North American Utility Commitments

EVs are an important area of focus for utilities due to the increased demand for energy they will generate. Utilities can both make their own fleets

run on electricity and support fleet electrification more broadly by building out charging infrastructure and offering incentives for businesses that want to electrify.

American Electric Power (AEP) will [replace](#) 100% of 2,300 cars and light-duty trucks with electrics by 2030, leading to a 40% electric fleet in under 10 years. AEP serves Arkansas, Indiana, Kentucky, Louisiana, Michigan, Ohio, Oklahoma, Tennessee, Texas, Virginia and West Virginia.

AEP commits to
100% Electric
by 2030

Xcel Energy [aims](#) to transition 20% of vehicles in its service area (Colorado, Michigan, Minnesota, New Mexico, North Dakota, South Dakota, Texas and Wisconsin) to electric by 2030.

Duke Energy commits to

100% Electric
Light-duty fleet vehicles
by 2030

In North Carolina, **Duke Energy** [announced](#) it will electrify 100% of its nearly 4,000 light-duty fleet vehicles and convert 50% of its roughly 6,000 medium- and heavy-duty and off-road vehicles to electric and other zero-emission vehicles by 2030. The planned fleet electrification targets will reduce carbon emissions and petroleum usage by 60,000 metric tons/year and 10 million gallons/year by 2030, respectively.

FirstEnergy (serving northern Ohio, most of Pennsylvania, northern New Jersey, eastern West Virginia and western Maryland) [expects](#) to electrify 30% of its approximately 3,400 light duty and aerial fleet vehicles by 2030, representing 1,034 vehicles, with the goal of electrifying 100% by 2050.

First Energy expects to electrify

30% by 2030

100% by 2050

Georgia Power plans to electrify portions of its own public fleet as part of a Southern Company initiative to electrify [half](#) of company fleet vehicles, including auto, forklift and ATVs, by 2030.

Portland General Electric (PGE) in Oregon [has committed to go 60% electric by 2030](#), including going 100% electric for Class 1 vehicles by 2025.

PGE commits to
100% Electric
by 2025

In August 2020, the California Public Utilities Commission approved the nation's largest utility program for charging infrastructure: \$437 million for **Southern California Edison** to fund 40,000 chargers. Half of the investment is for low-income communities and 30% is dedicated to multi-family residences. The program demonstrates the leadership of utilities in bringing charging to underserved communities.



Europe

Incentives

- + The UK [Office for Zero Emission Vehicles](#) (OZEV) provides a **130% tax credit** for EV infrastructure.
- + Germany has a €500 million grant program for workplace and fleet.
- + **France aims to roll out 100,000 public charging stations by the end of 2021 by providing up to €9,000 in subsidies through [ADVENIR](#).**

Requirements

- + Europe is leading the way with the European Green Deal, which aims for "no net emissions of greenhouse gases by 2050, economic growth decoupled from resource use and no person and no place left behind."
- + Car and van makers selling in Europe must sell at least 15% zero- or low-emission vehicles by 2025 and 37.5% zero- or low-emission cars and 31% vans by 2030.
- + The [European Energy Performance of Buildings Directive](#) requires existing non-



- residential buildings with 20+ parking spots to have at least one charging spot by the end of 2024, with potential updates in Q4 2021.
- + The [EU Clean Vehicles Directive](#) will deploy up to 15% clean trucks and 66% clean buses by 2030.
- + Norway will ban the sale of new gas vehicles in 2025, followed by Sweden, Denmark, Ireland, the Netherlands and the UK in 2030, then France and Spain in 2040 and Germany in 2050.

Energy providers

- + Many European utilities have made major commitments to electrification.
- + The UK Electric Fleets Coalition has called for 100% EV sales by 2030 and includes many utility members.
- + Several European utilities are also members of the Climate Group [EV100 agreement](#).



Vehicle availability is increasing

Electric vehicles are available for all fleet types and vehicle classes

Every fleet can go electric



Advances in battery and vehicle technology are supporting electrification across the vehicle classes needed for every type of fleet, including buses, vans, tractors and medium- and heavy-duty trucks. As more and more vehicles become available, every type of fleet will continue electrifying, at a faster pace.

There are already more than 600,000 eBuses and 400,000 electric delivery vans in operation globally, and eBuses are anticipated to make up 62% of the global bus fleet by 2040. Globally,

100,000 electric commercial vans and trucks were sold in 2020, but sales are picking up fast.

More than 18,000 electric commercial vehicles are expected to be sold in the U.S. in 2022, with that figure rising fast to over 379,000 commercial EV sales in the U.S. in 2030. (BNEF) This rapid growth points the way toward quick and comprehensive electrification of all vehicle and fleet types.



Commercial and passenger fleets in the United States could include as many as eight million EVs by 2030.

[McKinsey](#)



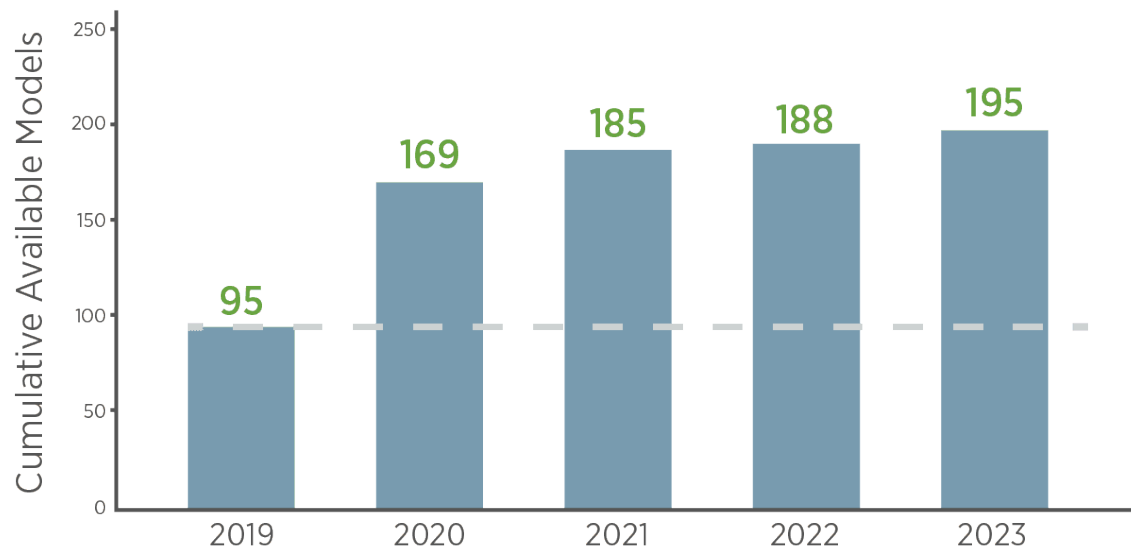
Expected electric commercial vehicle sales growth from 2021 to 2022

Commercial vehicle type	Expected sales growth (2021 to 2022)
Heavy duty	250%
Medium duty	226%
Light duty	145%
eBus	25%

Source: BNEF

Anticipated Growth in Commercial Electric Vehicle Availability

Total cumulative vehicle models, U.S. & Canada



Source: CALSTART (2020): Drive to Zero's Zero-emission Technology Inventory (ZETI) Tool Version 5.5. Available online at <https://globaldrivetozero.org/tools/zero-emission-technology-inventory/>

OEMs are making major commitments

Leading automotive manufacturers, including Daimler, Traton and Volvo, have made major commitments to electrifying their commercial

vehicles. Daimler has set an ambitious target of 100% electric by 2040, while Volvo is aiming for an "absolute majority" of vehicles to be electric by the same year. Traton will make its Scania brand 50%

electric by 2030, and its MAN brand will be 40% (long-haul) and 60% (delivery) electric by 2030. As more vehicles become available on the market, sales will continue to accelerate worldwide.

Commercial vehicle availability is growing

CALSTART, a nonprofit working to advance clean transportation, has developed a useful Zero-Emission Technology Inventory (ZETI) tool to showcase the rapidly growing availability of EVs for commercial applications.

By 2023, 195 commercial EV models are expected to be available on the market, opening up the logistics and delivery fleet markets to more rapid electrification. No matter what type of fleet needs to be electrified or what type of vehicle is needed, the right technology is increasingly available.

Choosing the right vehicle is essential

While all types of vehicles and fleets can benefit from electrification, choosing the right vehicle is essential to success. Fleet managers must verify that a vehicle can handle the route and duty cycle that needs to be completed. A mismatch between expectations and vehicle capabilities will set fleets up for failure. Fortunately, ample assistance is available in evaluating and selecting EV models.

Fleet vehicles use standard connectors

All fleet vehicles will use a standard connector type to charge. The use of standard connectors enables the development of EV charging solutions that will work for a variety of fleet vehicles, simplifying infrastructure adoption and scaling for fleets. **It's important for fleets to prepare for electrification by building out EV charging infrastructure as vehicles are in the process of being procured or even before.** Many lighter-duty vehicles are able to rely more heavily on AC charging, which uses a universal J1772 connector in North America or Type 2 connector in Europe. DC fast charging may use a CHAdeMO or SAE Combo connector (Type 1 or 2) and is suitable for heavy-duty vehicles or high-mileage routes.



chargepoint+ Fleets Dashboard Depots Fleets

DEPOT
← Downtown

Overview 5 Settings Alert History

Vehicle, fleet, or charger name... Filters (2) Showing 19 matches View as M

Charger	Vehicle	Fleet	Status	Trip	Trip Length ...	SOC	Estimated Range (mi)	Pull Out	Charge Com...
Long Name Tr...	8945	Box Truck	Charging	7171	170	62 %	115	05:10	04:45
A - Port 2	8946	Box Truck	Complete	7175	85	80 %	129	13:13	13:13
B - Port 1	8947	Box Truck	Not Charging	7173	160	10 %	22	08:00	10:10
C - Port 2	8948	Box Truck	Charging, Late	7181	120	16 %	36	07:27	09:02
D - Port 2	8949	Box Truck	Charging	7171	150	20 %	38	13:10	12:45
East Depot Ch...	8942	Box Truck	Charging	7179	123	10 %	12	08:55	08:00
E - Port 2	8950	Box Truck	Station Fault	7162	120	73 %	115	05:10	06:00
D - Port 1	8953	Box Truck	Complete	1215	112	60 %	129	13:13	13:13
C - Port 1	8944	Box Truck	Complete	1210	150	91 %	120	08:00	07:10
B - Port 2	8943	Box Truck	Charging	1208	120	14 %	36	07:27	07:10
Long Name Tr...	-	Box Truck	-	-	-	-	-	-	-
Long Name Tr...	-	Box Truck	Station Fault	-	-	-	-	-	-
Long Name Tr...	-	Box Truck	-	-	-	-	-	-	-
Long Name Tr...	-	Box Truck	-	-	-	-	-	-	-
Long Name Tr...	-	Box Truck	-	-	-	-	-	-	-

Electrification saves big

Fleets go electric to lower fueling and maintenance costs

Cost savings drive fleet electrification

Electric fleets slash fueling and maintenance costs without sacrificing operational readiness.

Cost savings are a major driver for fleet electrification. Electric fleets have a lower total cost of ownership

(TCO) due to lower fueling and maintenance costs. Simpler mechanics reduce maintenance needs

while delivering power so EVs spend more time working and less time getting repaired, extending their useful life.

Because electric fueling is easily connected with other systems such as telematics and route planning tools, fleet managers can manage fueling and power use to lower costs. Charging can be prioritized by vehicle need and fleets can set power ceilings to avoid expensive utility demand charges. Smart charging blends cost optimization with peace of mind, ensuring that electric fleets are



Electric fleets are estimated to have a 15-25% lower TCO than those with ICE vehicles by 2030.

[McKinsey and Company](#)

Fuel savings add up fast

Electricity is less expensive than fossil fuels at baseline, but electric fleets also bring with them the benefit of sophisticated energy management tools that enable additional savings through fueling optimization.



Scheduled Charging Saves Money

charged and ready when needed at the lowest cost possible.

Operational savings

According to the [Alternative Fuels Data Center](#), electric vehicles typically require less maintenance than conventional vehicles because:

- + The battery, motor and associated electronics require little to no regular maintenance.
- + There are fewer fluids to change.
- + Brake wear is significantly reduced by regenerative braking.
- + There are far fewer moving parts relative to a gasoline engine.

Fleets could collectively save \$561 million USD and 1.4 billion liters of fuel over 7 years.

[Geotab study](#)

Reduced maintenance can keep vehicles in service longer and reduce total cost of ownership.



New York City estimated that EVs reduce maintenance costs by 75 to 80 percent.

[City of New York](#)



[New York City](#) analyzed maintenance costs and found that EV maintenance costs were only 20-25% of the costs of maintaining vehicles with combustion engines. In other words, going electric could reduce a fleet maintenance budget by 75-80%.

Global fleet charging growth

As vehicle availability continues to expand, we continue to see steady growth in charging activity across our fleet customer base. We expect this



growth trend to accelerate as more fleets electrify, bring the right EV charging partner on board and grow their electric fleets to meet savings and sustainability goals. Fleet charging growth is enabling significant emission savings:

66% more GHG emissions have been avoided by fleet charging in 2021 to date over all of 2020

Fleet charging behavior

How do fleets charge? As you might expect, the peak charging time for fleets is early in the morning, from 5:00 to 7:00 AM, so that vehicles are ready to tackle their routes when the day begins. As fleets grow, charging activity can be spread over time.

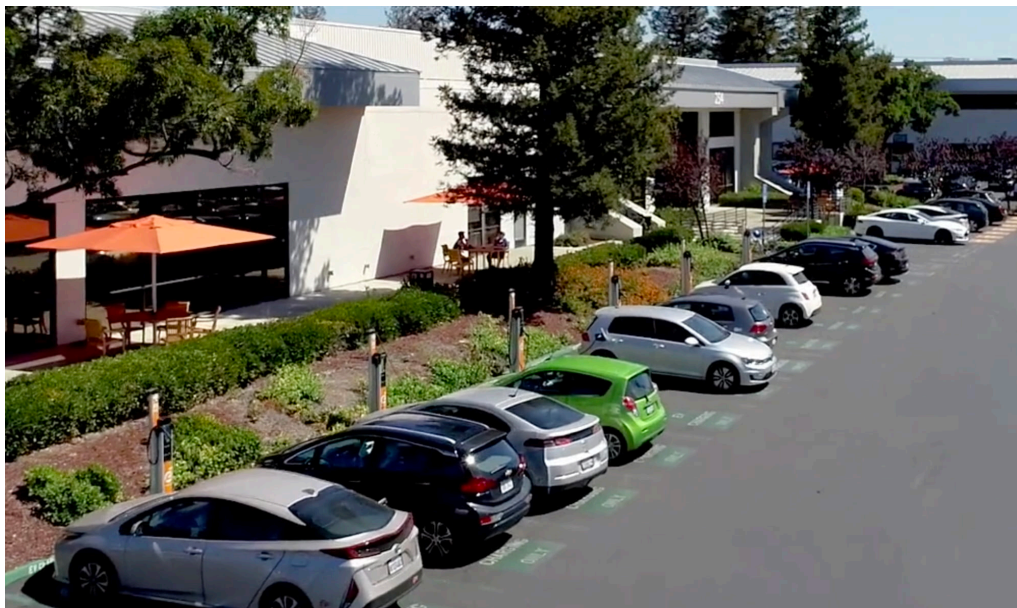
Fleet vehicles charge on average for about 2.5 hours before rolling out. This suggests that there is ample time to charge fleet vehicles and, importantly, to do so at times that typically have lower energy costs.

Smart charging technology unlocks additional savings

Beyond the fueling and maintenance savings offered by EVs, smart charging technology can help fleets save even more by scheduling charging at off-peak rates or setting a power ceiling to reduce utility demand charges.

Initially, [Alameda County's EV fleet](#) was 35% less costly to operate compared to its gas-powered vehicles. With Power Management capabilities, that number jumped to **54%**, saving the county thousands of dollars each year — and those savings continue to increase with every new EV added to the fleet.

Here at [ChargePoint](#) headquarters, we accommodated more EVs at low cost by using our own solution to optimize energy use across charging spots. We saved more than \$8,000 (6,759€) annualized on energy bills.





Big brands lead the way

Major corporate fleets are electrifying fast

Major corporate commitments

When big brands electrify, there's no turning back.

Voluntary pledges

Even when they are not required to do so, many companies have made substantial commitments to fleet electrification for sustainability purposes. Let's take a look at a few global electrification initiatives and the companies leading the way.



The Climate Group EV100

The Climate Group's global [EV100](#) program brings together 82 companies committed to accelerating the transition to EVs and making electric transport the new normal by 2030.

Notable participants include AstraZeneca, Baidu, Bank of America, Biogen, BT, Genentech, Goldman Sachs, several airports including Heathrow, HP, IKEA, Lyft, NTT, PG&E and Unilever, showing that electrification is everywhere.

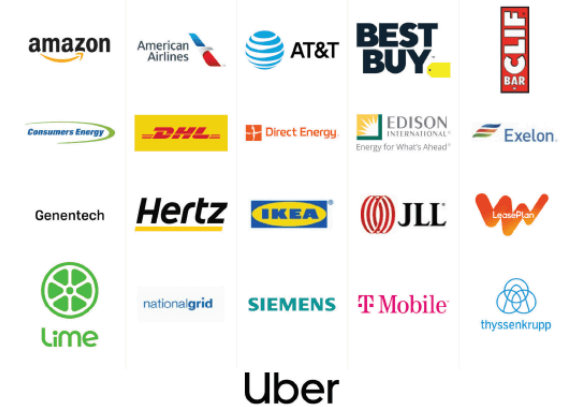


The Climate Pledge

Founded in 2019, [The Climate Pledge](#) has brought companies on board to reach the Paris Agreement targets 10 years early. Founded by Amazon, the pledge has attracted commitments from several high-profile brands.

Amazon has committed to 100,000 electric delivery vehicles, the largest-ever order. [Mercedes-Benz](#) will provide more than 1,800 electric vehicles for Amazon's delivery fleet in Europe. Large organizations such as [Verizon](#), Infosys and RB have also signed on to The Climate Pledge agreement.

Corporate Electric Vehicle Alliance Members



Corporate Electric Vehicle Alliance

The [Corporate Electric Vehicle Alliance](#), led by Ceres, is a collaborative group of companies focused on accelerating the transition to electric vehicles. It supports companies in making and achieving bold commitments to fleet electrification. The Alliance also aggregates corporate demand for EVs to expand the business case for production of a more diverse array of EV models. Members include Amazon, AT&T, Best Buy, DHL, Exelon, Hertz, IKEA, JLL and Uber.

Other global commitments

Beyond industry organizations, many international companies have made impressive commitments to electrification. Let's look at a few.

[BT Group](#) is an EV100 member and has committed to convert about 30,000 vehicles to electric or zero-carbon by 2030.

DHL aims to operate 80,000 EVs within 10 years (Frost and Sullivan).

[DPD](#) has electrified 10% of its fleet ahead of schedule and is helping develop the next generation of electric vehicles, including cargo bikes and vans.

[FedEx](#) has purchased 1,000 electric trucks and will completely electrify by 2040.

Flipkart plans to add 25,000 electric vehicles to its fleet by 2030

[Hertz](#) ordered 100,000 Tesla vehicles for its rental fleet.



[IKEA](#) has committed to zero-emission deliveries as part of a quest to be climate-positive by 2030. Deliveries may already be emission-free in Amsterdam, Los Angeles, New York, Paris and Shanghai.

[La Poste](#) uses 39,696 electric vehicles, including 16,260 lightweight utility vehicles and 23,436 bikes and trolleys. It claims the world's largest EV fleet.

[Lyft](#) has committed to 100% EVs by 2030.

NTT aims for 100% EV conversion by 2030.

[PepsiCo](#) has 70,000 trucks delivering both heavier weight liquids and lightweight snacks. The company is currently using four Class 6 electric delivery vehicles out of Modesto, California.

Schneider will reduce carbon emissions by 60% per mile by 2035.

[Total](#) has committed to 20,000 EVs for the Metropolitan Region Amsterdam Electric, as well as other ventures in Germany, France and the UK.

[Uber](#) has committed to electrify 100% of its rides by 2030 and transition to a 100% zero-emission platform by 2040.

[UPS](#) has invested in Arrival and committed to 10,000 electric trucks.

[Volvo](#) will launch a full range of electric heavy-duty trucks in Europe in 2021.

[Walmart](#) has committed to 100% renewable energy by 2035 and zero-emission global operations and electrifying long-haul trucks by 2040. Flipkart plans to add 25,000 EVs by 2030.



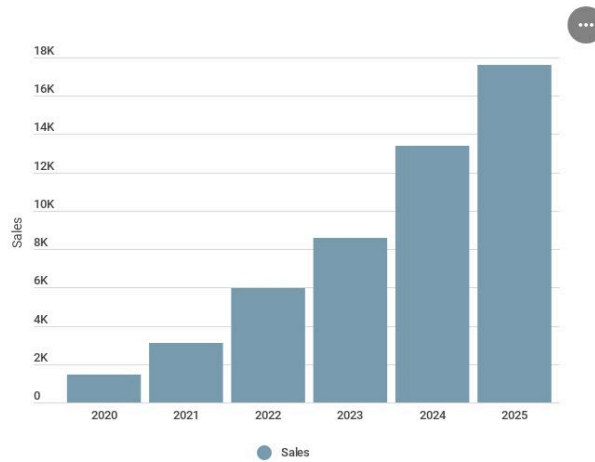


EV Sales Growth Forecasts

Electric vehicle model availability is expected to contribute to substantial sales growth across the medium- and heavy-duty vehicle categories that make up crucial components of delivery and logistics fleets. This sales growth has the potential to radically transform the face of these fleets.

As even more models become available across all vehicle classes, sales will continue to grow and electric fleets will be able to reduce costs, meet regulations and achieve sustainability goals.

The financial and sustainability advantages of

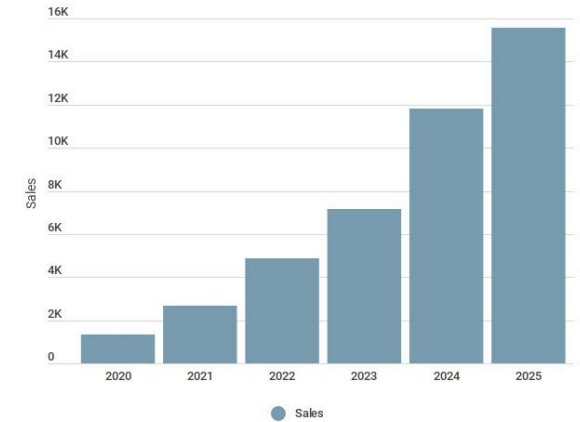


Medium-Duty Electric Vehicle Sales Projections (NA and EU)

Data Source: BNEF

electrification are leading to major corporate fleet commitments and significant sales growth for electric fleet vehicles. As more companies choose electric vehicles for fleet and other purposes, they will need to rely on smart EV charging solutions that can keep electric vehicle fleets in service at low cost with optimized energy use.

ChargePoint has the expertise to deliver smart,



Heavy-Duty Electric Fleet Vehicle Sales Forecast (NA and EU)

Data Source: BNEF

comprehensive charging that works for any fleet depot or destination, expertly supporting the transition to electric mobility while reducing emissions and total cost of ownership for fleets and businesses worldwide.



How to charge fleets of vehicles

Your company needs the most complete solution

Comprehensive fleet charging portfolio



Everything you need from design to deployment.

It's easy to see that fleet electrification is rapidly becoming a reality. It offers cost savings and operational efficiency while meeting sustainability goals and government regulations. Companies of all sizes are making major electrification

commitments, and OEMs are ready to deliver many new electric commercial vehicle models.

This means that fleets need to get started now by choosing a charging solution that meets the needs of today and is able to scale as fleets grow. ChargePoint fleet solutions cover everything fleets

need to electrify and optimize fueling over time. No matter the size of a fleet, what class of vehicles are in operation or where vehicles need to charge, ChargePoint delivers a complete set of solutions designed for seamless scaling, cost-effective charging and a great experience.

Any type of fleet

From logistics and delivery fleets operating a variety of vehicle classes to fleets with light-duty vehicles that employees take home and everything in between.

Any point in your journey

Whether you're just starting a pilot or scaling up your electric fleet, we have the solutions and services to ensure your success.

Anywhere you charge

In the depot, on route or at home — ChargePoint has the right charging solutions for you.

The ChargePoint difference

Comprehensive solution

Ensure a smooth transition to electrification using ChargePoint integrated fleet software, robust charging hardware, expert design/build services and responsive technical support.

- + Operational readiness of every vehicle while optimizing fuel cost.
- + Visibility into and management of your

charging infrastructure using cloud software.

- + Designed for reliability, tested for safety, and built to the highest quality standards.

Scalable charging

Optimize your cost per vehicle using the most integrated, modular platform.

- + Keep vehicles running on time with dynamic,

scheduled charging.

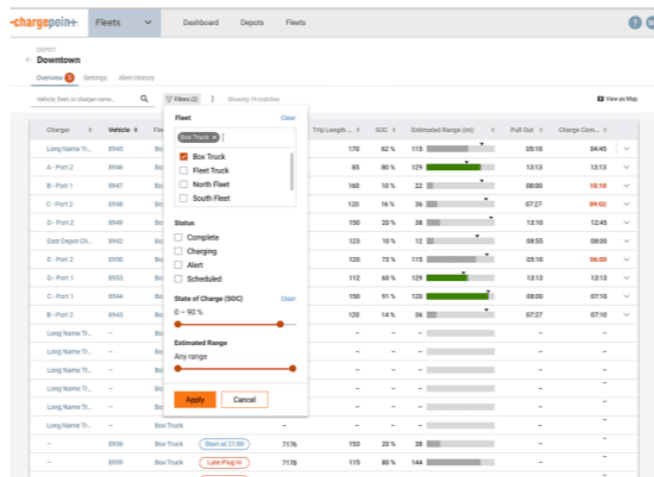
- + Easily add power and charging ports as your fleet grows and diversifies.
- + Charge more vehicles with Power Management.



Operational visibility

Integrated fleet depot software provides real-time insights and monitoring of your fleet charging.

- + Manage charging remotely for any vehicle in your fleet.
- + Gain visibility with role-based notifications and alerts.
- + Save time with seamless integration with your fleet's existing operational systems.



The screenshot shows the ChargePoint fleet management software interface. It features a dashboard with various filters and data columns. The interface includes a search bar, a 'Fleet' dropdown menu, and a table with columns for 'Charger', 'Vehicle', 'Fleet', 'Trip Length', 'SOC', 'Estimated Range (mi)', 'Full Out', and 'Charge Com.'. The table displays data for various vehicles and chargers, including 'Long Name Tr.', 'A-Part 2', 'B-Part 1', 'C-Part 2', 'D-Part 2', 'E-Part 1', 'F-Part 2', 'G-Part 1', 'H-Part 2', 'I-Part 1', 'J-Part 2', 'K-Part 1', 'L-Part 2', 'M-Part 1', 'N-Part 2', 'O-Part 1', 'P-Part 2', 'Q-Part 1', 'R-Part 2', 'S-Part 1', 'T-Part 2', 'U-Part 1', 'V-Part 2', 'W-Part 1', 'X-Part 2', 'Y-Part 1', 'Z-Part 2', 'AA-Part 1', 'AB-Part 2', 'AC-Part 1', 'AD-Part 2', 'AE-Part 1', 'AF-Part 2', 'AG-Part 1', 'AH-Part 2', 'AI-Part 1', 'AJ-Part 2', 'AK-Part 1', 'AL-Part 2', 'AM-Part 1', 'AN-Part 2', 'AO-Part 1', 'AP-Part 2', 'AQ-Part 1', 'AR-Part 2', 'AS-Part 1', 'AT-Part 2', 'AU-Part 1', 'AV-Part 2', 'AW-Part 1', 'AX-Part 2', 'AY-Part 1', 'AZ-Part 2', 'BA-Part 1', 'BB-Part 2', 'BC-Part 1', 'BD-Part 2', 'BE-Part 1', 'BF-Part 2', 'BG-Part 1', 'BH-Part 2', 'BI-Part 1', 'BJ-Part 2', 'BK-Part 1', 'BL-Part 2', 'BM-Part 1', 'BN-Part 2', 'BO-Part 1', 'BP-Part 2', 'BQ-Part 1', 'BR-Part 2', 'BS-Part 1', 'BT-Part 2', 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'ZM-Part 1', 'ZN-Part 2', 'ZO-Part 1', 'ZP-Part 2', 'ZQ-Part 1', 'ZR-Part 2', 'ZS-Part 1', 'ZT-Part 2', 'ZU-Part 1', 'ZV-Part 2', 'ZW-Part 1', 'ZX-Part 2', 'ZY-Part 1', 'ZZ-Part 2'. The interface also includes a 'Status' section with checkboxes for 'Complete', 'Charging', 'Alert', and 'Scheduled'. There are also 'Apply' and 'Cancel' buttons at the bottom of the table.

Expert services

Get your installation done right the first time with industry-leading services and ongoing technical support.

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- + Be confident with the ChargePoint Assure® Pro maintenance program and Spares Management Service.
- + Around the-clock technical support for uninterrupted operations.
- + Flexible financing options that work with your budget.



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