



Volvo Trucks. Driving Progress

# ELECTROMOBILITY MADE EASY

ELECTRIFIED URBAN TRANSPORT BY VOLVO TRUCKS





VOLVO TRUCKS **ELECTROMOBILITY**







**THE FUTURE IS ELECTRIC**

*Let us take you there.*

# Going electric.

*Electromobility made easy.*

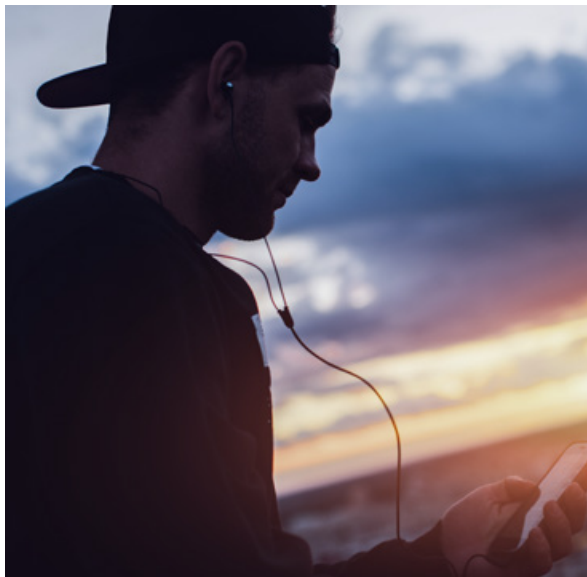
**DO YOU WANT TO GO ELECTRIC** with your urban transport business – and make cities quieter and cleaner, whilst reducing your CO<sub>2</sub> footprint? Volvo Trucks is here to make your transition smooth. We're here to support you at every step – from identifying your needs, to creating a custom solution and helping you get started.

**SMOOTH TRANSITION.** We know the transport business. And we understand the importance of a smooth transition when undergoing a technology shift. Our goal is to help complete your shift without drama or interruption.

**OPTIMISED FOR YOUR NEEDS.** Going electric is an investment for the future – financially and from an image perspective. It's best to get it right from the start. We always begin with a thorough analysis of your needs to be able to tailor a complete solution that fits you perfectly.

**THE TRUCKS.** We offer two different battery electric truck models. The compact and agile Volvo FL Electric and the larger Volvo FE Electric for heavier and more demanding assignments. With 50% higher battery energy and improved driving range, the 2nd generation Volvo FL and Volvo FE electric are now even more powerful. From 2022 we will offer the Volvo FH Electric, Volvo FM Electric and Volvo FMX Electric, aimed for regional distribution and urban construction transport.





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# Your ideal match.

*You don't actually choose a truck model from Volvo Trucks – you get a transport solution built for your specific transport needs. And we tailor it for your assignments and your routes. Whatever your operations within urban transport, you can now go all-electric.*

**URBAN DISTRIBUTION.** Both the Volvo FL and the Volvo FE Electric are suited for delivering and picking up goods in the city. The Volvo FL Electric is more agile and will work easily in narrow spaces. The Volvo FE Electric is a perfect match for delivering to and in the inner city whilst more optimised for the slighter heavy loads. Both trucks are of course battery electric, generating minimum noise and opening up for night time deliveries.

**URBAN CONSTRUCTION.** For the suburban and urban construction work with demand on heavier payload and fossil free transports, the Volvo FE Electric will be the perfect match.

**WASTE COLLECTION.** If you collect waste – the starts, stops, and compaction get cleaner and quieter when you go electric. Take care of the staff working around the truck and make the neighbourhood quieter.

Going electric also  
means getting closer  
to your customers.





# True door-to-door deliveries.

*With an all-electric truck, the expression “door-to-door deliveries” takes on a whole new meaning. You’ll get closer to your customers and care about your drivers.*

**GO ALL THE WAY.** With zero emissions and lower noise, you’ll be able to pick up and deliver the goods in places where regular trucks cannot. In and out of environmental zones. Drive directly into indoor warehouses rather than stopping outside. Trim down your logistics and open up possibilities for new efficient workflows.

**SHOW YOUR SUSTAINABILITY.** When you deliver your goods, you also represent a brand. Everybody knows that transport has an environmental impact. Take the opportunity to show the world that your company is serious about sustainability, in every step of the supply chain. Are you ready to take a stand?

**WHAT’S YOUR SOLUTION?** Go for the agile and straight-forward Volvo FL Electric or the larger Volvo FE Electric with higher load capacity and a more powerful powertrain. Whatever your assignments and routes, we’ll find an optimised solution that helps your drivers do an even better job.





# Stand for sustainability.

*Going electric also means driving quieter and cleaner. One big advantage if you operate in residential areas and city environments. With our electric trucks, you get it all in one package.*

**IDEAL FOR STOP AND GO.** Compared to a traditional truck, an all-electric truck is very quiet. Both when driving and standing still. An electric motor also delivers the maximum torque immediately, which gives a very smooth and seamless power delivery. This is ideal for the stop and go driving you typically do in urban transport.

**BETTER WORKING ENVIRONMENT.** You'll experience a big difference – both in the cab and when working around the truck. The noise and vibration levels in the cab are much lower. Quieter operation and cleaner air improves the working environment for your staff and for people in the street.

**QUIETER ALL OVER.** Going electric also means getting quieter. The drive-by noise level from our electric truck reaches 69 dB compared to 79 dB for a traditional truck. A 10 dB increase is perceived as twice as noisy. Imagine what electrification does for the working environment and the level of noise pollution in cities.

**WHAT'S YOUR SOLUTION?** The Volvo FE offers a high load capacity and a powerful powertrain. Whatever your capacity demands and routes, we'll find an optimised solution that helps do an even better job.





With quieter trucks,  
you can collect waste  
and transport goods  
during off-peak hours  
– and avoid traffic jams.





# Built to last in your operations.

*We tailor your truck's capacities to your needs. Electric trucks may be new, but the core technology we use to build your electric truck has a strong track record – our Volvo Group colleagues already have 4,000 electrified buses out on the roads worldwide.*





**ELECTRIC POWERTRAINS.** Two versions of the powertrain are available. The Volvo FL Electric powertrain consists of an electric motor and a 2-speed gearbox. It's the same solution as in the all-electric Volvo buses. The Volvo FE Electric powertrain uses the same motor but in a dual installation.

**THE ELECTRIC MOTOR.** The power to drive the truck is generated by an electric motor with a power output of 200 kW and 425 Nm of torque. The Volvo FE has a dual engine installation, meaning a 400 kW power output and 850 Nm of torque.

**TRANSMISSION.** Both powertrains utilise a 2-speed gearbox to make use of the motor's range in the most efficient way. Designed and built by Volvo, the gearbox has independent power flows that enables gear shifting without interruption in power. It offers an experience of fully controlled and seamless power in all driving situations.

**BATTERY PACKS.** The battery capacity and number of battery packs is tailored to your needs. The Volvo FL Electric can be fitted with up to six battery packs and the Volvo FE Electric four. Each pack has an energy capacity of 66 kWh and an estimated lifetime of 8–10 years depending on your operations.

**CHARGING.** The charging connection meets the current automotive standard and different charging methods are possible. Either you can use the onboard AC charger, which enables you to charge at industrial sites, or use the charging cable included with



the vehicle. Finally, you can also charge at external DC stations for faster charging, assuming that they can deliver an output voltage of up to 750 V.

**POWERING THE SUPERSTRUCTURE.** All functions on the bodywork are powered by a separate electric motor that drives a peak output of 530 Nm and 100-kW.

**TESTED AND RELIABLE.** The electric powertrain and the battery pack are based on the solution used by Volvo Buses. So far 4,000 buses with either hybrid or all-electric drive are in use. Volvo Trucks also has a track record with hybrid drive trucks.





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# A great workplace just got even better.

*If you're used to traditional trucks, getting a vehicle that's both cleaner and quieter means a huge improvement in working environment. Still the Volvo FL and Volvo FE with conventional powertrains offer some of the best workplaces in the industry. Of course, that's already included in our electromobility package.*

**BUILT FOR THE CITY.** These trucks are made for stop and go driving, getting in and out of the cab, collecting and making deliveries, completing missions and moving onto the next. And to do it with great respect to the surrounding people and environment. From an ergonomic, safety and environmental perspective.

**A CLEAR VIEW.** All the cabs have large windscreens, side windows and mirrors that let you see what's going on around your truck. You will also get extra windows in the passenger door and side panels to maximise your view and safety\*.

**CONVENIENT ACCESS.** All versions of the Volvo FL and Volvo FE cabs are easy to enter and exit – a feature that gets greater the more times you get in and out of the cab during a shift. The Volvo FE Electric offers a low-entry cab that makes it even easier.

**COMFORTABLE WORKPLACE.** Regardless of the model, all Volvo cabs offer comfortable seats, ample space, low noise levels and a smooth ride. In urban transport, our electric trucks offer even more of this – a quieter and more vibration free operation.

**VOLVO SAFETY CAB.** Collision tests. Barrier tests. Head impact tests. The cabs on our electric trucks have passed them all and they're probably the toughest cabs around. You're always well protected.

**EASY AROUND THE VEHICLE.** It's convenient to get in and out of the cab. But also to work around the truck. You can attach working lights and other forms of assistance. And since there are no exhaust emissions, the working environment is better than ever.

\*Depending on cab and option choices.



# We're there all the way.

*Going electric requires getting many practical things into place – no doubt about it. That's why we're there to support you all the way. Everything starts with an analysis of what you want to achieve.*



**PRE-STUDY.** We start by finding answers about your assignments and your needs. The goods and the distances, your capacity requirements and the number of stops. Where will you drive and when? How detailed is your route planning? Are there charging stations along your routes? We take the whole scope into account to be able to present the best solution.

**TAILORING THE TRUCKS.** Once we have answers that paint the full picture, we can start putting together a solution for your needs. How can we match your needs for load capacity and operational range in order to maximise your efficiency?

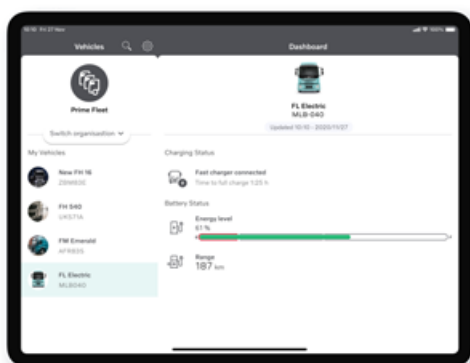
**CHARGING.** Range anxiety and charging possibilities are probably one of your concerns when going electric. There's an onboard AC charger, and a charging cable included, which allows for overnight charging. Faster charging requires an external charging station. Volvo Trucks collaborates with charging station suppliers to support you in securing a charging infrastructure that suits your needs.

**MAINTENANCE.** Electric trucks require different and less frequent servicing than a traditional truck. You don't need the frequent engine oil changes, for instance. But there are other functions that call for inspection and servicing. Assigned service technicians at your Volvo Truck dealer are trained to take care of your electric trucks.

**PEACE OF MIND.** Volvo Trucks provides a Gold Service Contract that covers the complete vehicle. This offer brings full peace of mind by including battery coverage and battery monitoring services allowing you to focus on your core business. To assure a sustainable and cost effective operation, we will remanufacture batteries, provide a second life together with partners, and at end of life we recycle them.

**SERVICES.** We provide our appreciated Dynafleet services together with our electric trucks, for example the existing positioning and environment reports. But we are also adding an energy usage report and an electric performance report. In the My Truck App you can make sure that you always have a view of the truck accessible in your phone or tablet, including the charging status.

**ADVANCING.** Once you have made the choice to go electric, it's easier to take the further steps. We're there to support you with the right solutions.





**Quieter.  
Cleaner.  
Electric.**





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The page features decorative circuit-like lines. In the top left, there are grey lines with circles and dots. The bottom half of the page is filled with a complex network of blue lines, some with circles and dots, creating a technical, circuit-board aesthetic.

# Our solutions for electromobility.

*Specifications*



VOLVO TRUCKS **ELECTROMOBILITY**



# Size and capacity matter.

*Our electric trucks cover a range of 16.7 to 27 tonnes.  
What you ultimately choose depends on your assignments.*



**VOLVO FL ELECTRIC**

A two-axle truck with a gross vehicle weight up to 16.7 tonnes. We can deliver complete vehicles for urban transport like deliveries.

**VOLVO FE ELECTRIC**

A three-axle truck with a gross vehicle weight up to 27 tonnes. We can deliver complete vehicles for demanding types of urban transport like waste collection, light construction transports and deliveries.



# Volvo FL Electric.

*For urban delivery transport and waste collection.*

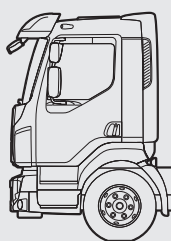
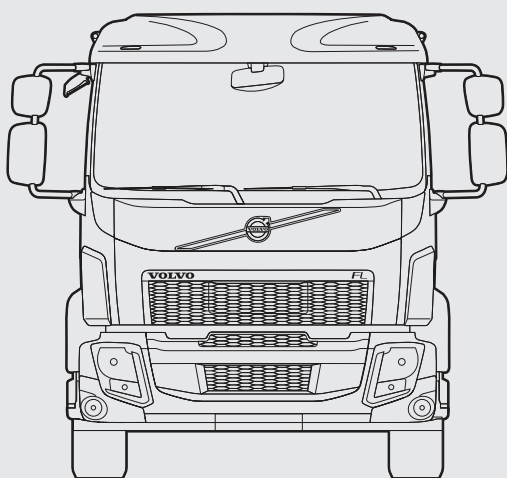
## **VOLVO FL ELECTRIC**

Gross vehicle weight:	Up to 16.7 tonnes
Cab options:	Day cab or Short sleeper cab
Number of axles:	2
Wheel bases:	4 400 mm or 5 300 mm
Power output (peak/continuous):	200 kW/165 kW
Number of batteries:	2 to 6
Electric motor power output for PTO (peak/continuous):	100 kW/70 kW
Electric motor torque for PTO (peak/continuous):	530 Nm/270 Nm
Charging time (fast/regular):	Less than 2 h/11 h (example with 4 batteries)
Operating range:	Up to 330 km depending on battery configuration and driving cycle
Usable energy	Up to 317 kWh

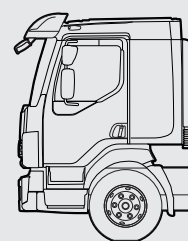




## CABS



Day cab



Short sleeper cab

## RIGID AXLE CONFIGURATIONS

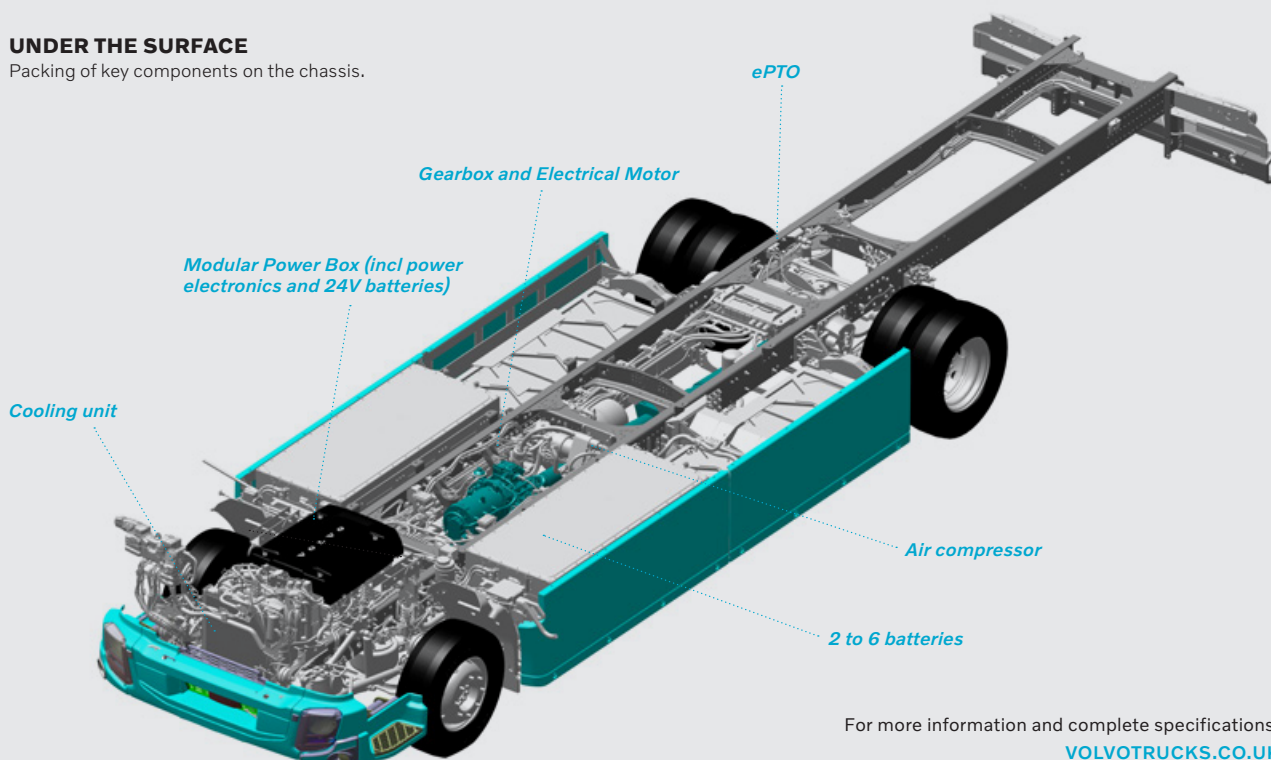


4x2  
Medium

- = Drive axle.
- = Non-driven axle (tag, pusher or front axle).

## UNDER THE SURFACE

Packing of key components on the chassis.



For more information and complete specifications:  
[VOLVOTRUCKS.CO.UK](http://VOLVOTRUCKS.CO.UK)



# Volvo FE Electric.

*For urban transport of waste collection, consumables  
and light construction work.*

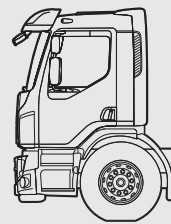
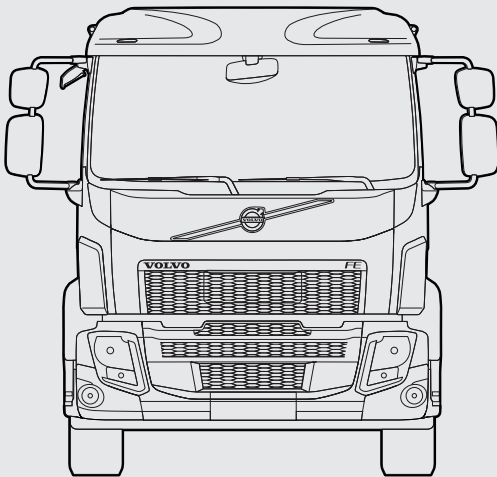
## **VOLVO FE ELECTRIC**

Gross vehicle weight:	Up to 27 tonnes
Cab options:	Day cab, Short sleeper cab, Sleeper cab or Low entry cab
Number of axles:	3
Wheel bases:	From 3 900 mm up to 5 000 mm
Power output (peak/continuous):	400 kW/330 kW
Number of batteries:	3 or 4
Electric motor power output for PTO (peak/continuous):	100 kW/70 kW
Electric motor torque for PTO (peak/continuous):	530 Nm/270 Nm
Charging time (fast/regular):	Less than 2 h/11 h (example with 4 batteries)
Operating range:	Refuse and light construction up to 120 km, distribution up to 200 km, depending on battery configuration and driving cycle
Usable energy:	Up to 211 kWh





## CABS



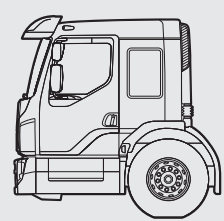
Day cab



Short sleeper cab



Sleeper cab



Low entry cab

## RIGID AXLE CONFIGURATIONS

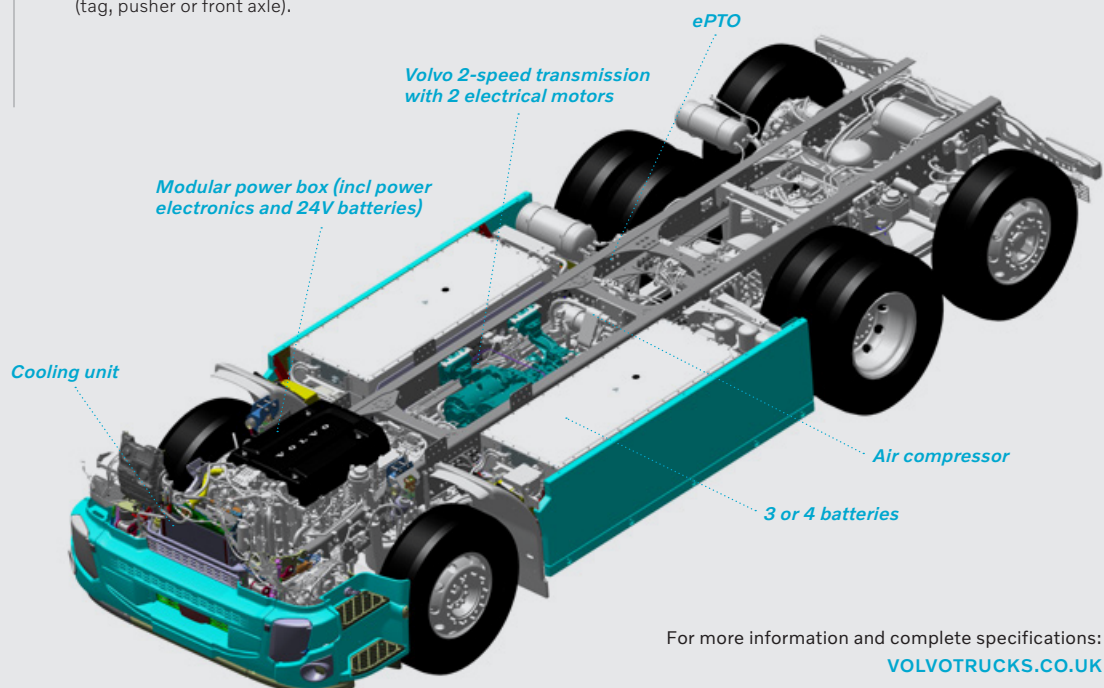


6x2  
Medium

- = Drive axle.
- = Non-driven axle (tag, pusher or front axle).

## UNDER THE SURFACE

Packing of key components on the chassis.



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**VOLVO**

Volvo Truck Corporation  
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