



E-MOBILITY BUS SOLUTIONS

URBAN POWER – BATTERY ELECTRIC PEOPLE TRANSPORT



SCANIA

THE POWER OF THE CITY:

THE PEOPLE OF THE CITY

At Scania, we embrace the power of the city. The pulse, the everyday commute, the people who are relying on daily public transportation to work seamlessly – and that care about a sustainable future.

Cities are living beings made up by a collective of people, and our battery electric low-entry buses embody the power of collective movement – quite literally. But we offer far more than just vehicles: A holistic solution that defines the right products and services, and ensures the buses operate smoothly. From energy and charging infrastructure planning to vehicle specification and financing.

And of course maintenance and the digital services that provide efficiency and sustainability improvements on a day-to-day basis. Quite simply, a complete solution to ensure the buses are always able to be where they need to be, when they need to – and are operated as sustainably as possible from both a climate and business standpoint.



What solution is right for the people of your city?

The right solution starts from the prerequisites, the customer and tender demand. We would be happy to straighten out any question marks and help guide you to the solution you need.

SBTi

Scania was the first manufacturer of heavy commercial vehicles that committed to the Science Based Targets initiative (SBTi) – a joint initiative between global corporate actors to ensure progress towards the Paris agreement goals of limiting global warming to 2°C above pre-industrial levels. In fact, we're pushing even further towards a goal of 1.5°C.



SCIENCE
BASED
TARGETS

MORE THAN AN ELECTRIC BUS

A FULL SOLUTION FROM SCANIA

When it comes to electric buses it's about a lot more than just the vehicle itself. Electric operation brings new challenges in terms of route planning, charging infrastructure, maintenance, financing and the list keeps going.

In our opinion, those are quite simply challenges that shouldn't steal focus and time away from the key priority: the actual operation. For this very reason, the buses we offer come in the shape of a flexible solution covering vehicles, system aspects and surrounding services. All integrated, tailor-made to the specific needs or demands, and with Scania taking full responsibility for every part of it.

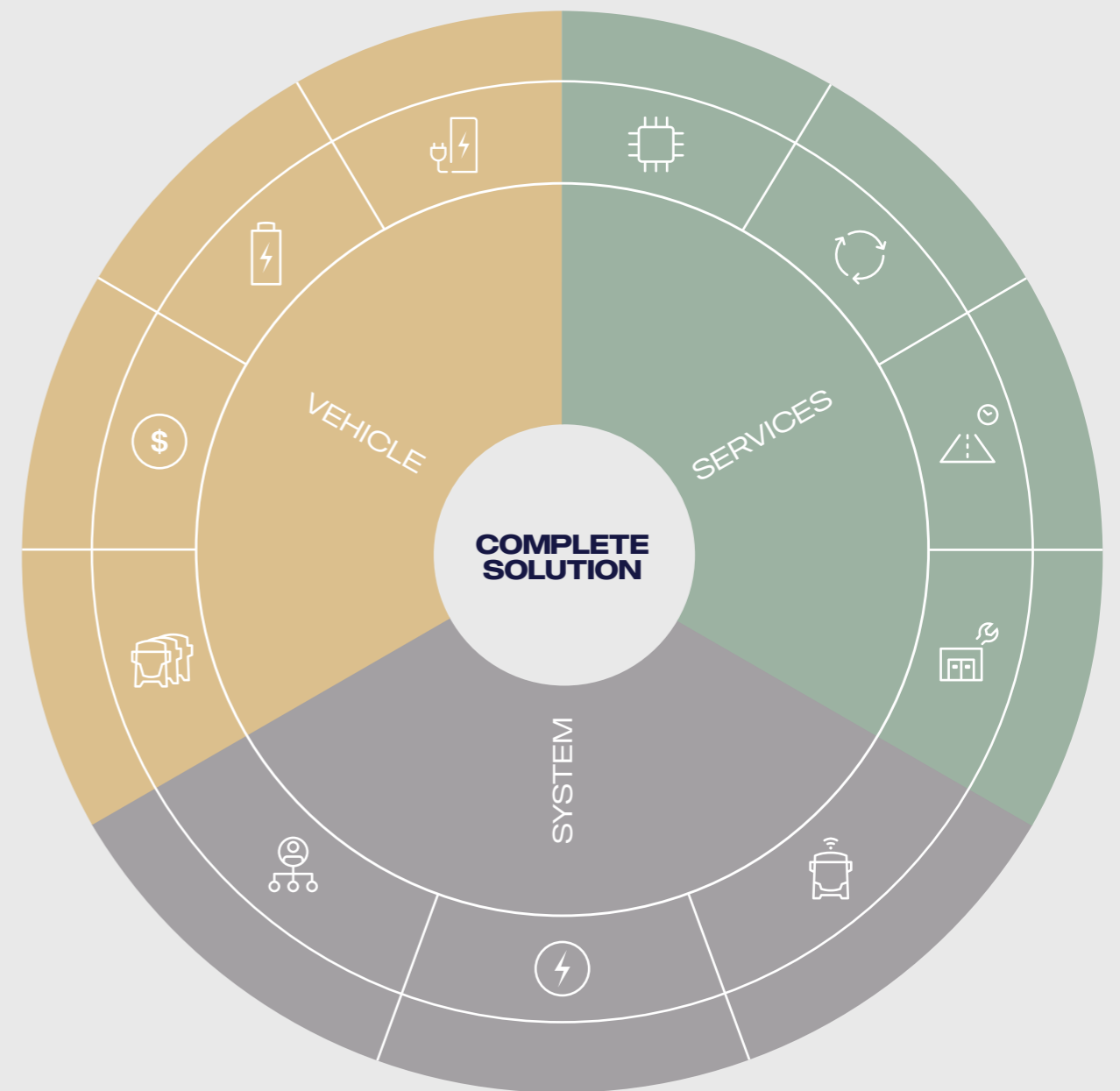
Want help with charging infrastructure planning? Need introductions to the right green energy partner? Would you benefit from operational planning support? Want to finance not only vehicles, but also charging infrastructure? Is repair and maintenance staff in place or would a Scania workshop on your premises be helpful? No matter the context – we've got you covered.

Optimised total cost of ownership
The full solution is also what determines the operating economy. When factoring in every detail in the long-term instead of looking at individual factors in the short-term – it's clear that the Scania focus is on energy efficiency. Reliability and smart digital services are however also key for providing the best return-on-investment.



Participating in a public tender?

We value strong long-term partnerships and would gladly stand by your side from the start to help provide the strongest possible tender proposition.



CREATING THE COMPLETE SOLUTION

The right solution for any given need is almost always unique, but arriving at that result follows a very systematic and methodical approach – and it all starts with analysis. The combined insights from a thorough operational analysis and site energy analyses provide both the requirements and prerequisites for your solution.

With that as a base, we can look at vehicle options and financing alternatives, which can also tie into covering any investments needed in charging infrastructure and hardware. The right charging software is the next step, which together with our digital services offering allows you to operate smart and efficiently. We can then

establish and execute on a plan for installation and commissioning of the charging hardware to suit your fleet needs in both the short and long term perspective. And as a final step, we can ensure that you have the right level of support and Repair & Maintenance contracts, as well as insurance in place.

OUR BATTERY ELECTRIC BUS PLATFORM

GREATER THAN THE SUM OF ITS PARTS

With a mentality of continuous improvement of our products and services – we seldom think in product generations. But sometimes, the right factors of progress coincide – and instead of many small steps, we get a big leap.



Our low-entry battery electric bus is a great example, with simultaneous updates to the chassis with multiple width options, rear axle gears, the electric machine, and batteries. Not to forget faster charging, and all the management systems and software gaining new features – providing a higher level of control.



Sustainable 416 and 520 kWh batteries

Our high-capacity battery packs enable a range of over 500 km (520 kWh) in optimal conditions, and are built for great energy storage capacity per weight unit with cells that are developed in collaboration with Northvolt. The result is the most sustainable heavy commercial vehicle battery on the market, from both an environmental and social perspective.



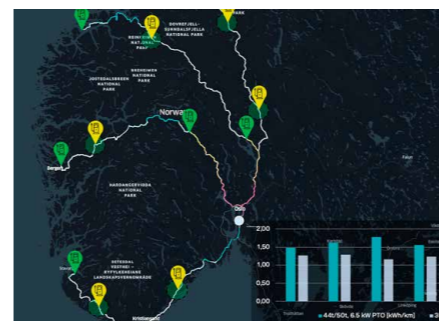
For cities all over the world

The low-entry BEV bus comes in two different chassis widths – 2,500 and 2,550 mm – and is suitable for usage all over the world in both medium and heavy-duty operations, in both Class I and Class II. Additionally, the two different axle gears available provide ratio options that work in even the most challenging topography.



Even safer – inside and out

Our multiple advanced state-of-the-art driver assistance systems (ADAS) provide the safest possible operation for the driver, the passengers and surrounding traffic. All while meeting the strict EU safety regulations for heavy commercial vehicles.



Smart, connected and future proof

Connected digital solutions enhance your vehicles with everything from advanced safety features and remote diagnostics, to real-time maps and geofencing functionality. And to help drivers quickly adopt the new technology, the Smart Dash provides the ultimate interface for confident electric operation in every sense – with a seamless user centric and dynamic approach. With continuous wireless updates and full integration in your fleet management tools – you are future proof from the start.



Improved electric machine

Not only is our new electric machine more powerful – it comes with a new integrated cooling system and an updated control system which meets the highest cyber security demands.



Charging port placement & faster charging

Our updated battery packs and battery management system allows faster charging than ever before.



Questions about our engineering solutions & possibilities?

With tailor-made solutions as a core value, all Scania vehicles provide a strong basis for reliable, efficient, and flexible solutions. If you have thoughts on how to use the Scania platform to build the right bus for you – we would love to get into the details

OUR CHARGING OFFER

TAKING CHARGE OF THE E-MOBILITY SOLUTION

Charging is a key part of a complete BEV solution, and it is about a lot more than just plugging in and waiting. Finding the right charging solution to meet specific needs can feel like a demanding undertaking – but it doesn't have to be. Scania stands by your side as a guide throughout the whole process – from start to finish.

Step 1

Operational analysis

We identify which routes would be suitable for electrification and how this is best achieved, laying the foundation for an electric roadmap and establishing the basis for your electric operations.

Step 2

Site energy analysis

The energy analysis looks at the feasibility of charging strategies – the energy availability and capacity as well as how and when to best charge the buses.

Step 3

Charging hardware

Charging hardware comes in many types and capabilities which can be combined in countless ways – we need to choose the right hardware for the solution as a whole.

Step 4

Charging software

A key component to getting the most capacity out of your power grid and charging hardware. Our advanced systems can intelligently schedule charging to pre-condition the buses, avoid peak energy prices, secure uptime, and maintain battery health.

Step 5

Installation and commissioning

In parallel, we find a partner for the deployment and do site assessments. Where to place the chargers, what cable routing is needed, and evaluate if grid capacity needs to be increased – and bringing it all the way to where the chargers are fully operational.

Step 6

Support, Repair & Maintenance

And as a final step, we set up an appropriate support and Repair & Maintenance contract for your operation – with multiple levels of support and availability, both remote and on-site. All to ensure your uptime and operational efficiency is maximised

Depending on the prerequisites and needs of the operation, we can use different types of charging hardware from multiple high-quality manufacturers. Stationary chargers with Power Units & Satellites, All-in-one chargers as both wall boxes and stations, and even movable chargers. All to find the right solution for your needs.



Stations



Satellites with Power unit



Wallbox



Portable

THE SERVICES TO BRING IT ALL TOGETHER

TURNING THE COMPLEX INTO SIMPLE

Electric operation brings new challenges and unknowns compared to traditional operations – making the goal of our services offer to ensure that you always feel confident and well-supported in your operations.



Financing and insurance

We have developed a financing offering that covers not only vehicle costs, but also infrastructure investments, insurance tailored for electric vehicles, and which is available with multiple payment models.



Uptime services

Well-scheduled periodic maintenance and quick and accessible repairs are available through our best-in-class global service network with high-voltage certified mechanics. And thanks to our modular system – we have outstanding parts availability for repairs.



Driver services

Driver behaviour influences not only traffic safety and wear and tear of the vehicle, but as much as 15% of the energy consumption – affecting range and energy costs. Our Driver Evaluation service is integrated both with the in-vehicle Smart Dash and the My Scania platform, providing direct feedback on areas to improve and tips on how. Our driver training is also specialised to deliver maximised uptime and safety, long vehicle life and full range utilisation.

FLEET MANAGEMENT SERVICES

Our digital fleet management services allow for valuable insight into the operation and for office staff to utilise functionalities that help increase uptime, safety, and efficiency. If you already have an interface in place, you can of course choose to instead make use of the data there.

Value-adding functionalities

With our digital services packages – the Control Package and the Data Access Package – you can access functionalities such as:

- ✓ Fleet Position
- ✓ Monitoring Report
- ✓ Vehicle Performance and Environmental Report
- ✓ Range Support
- ✓ Departure Scheduling
- ✓ Service Planning
- ✓ Driver Evaluation

My Scania & Scania Driver app

My Scania is an easily accessible platform for our digital services and holds valuable data on the performance and status of the fleet, enabling well-informed improvement implementations.

For drivers, we also offer the Scania Driver app – with features such as driver score and tips on how to improve further, as well as simplifying workflows like checklists and defect report handling.



Scania K-chassis LE BEV

Our updated low-entry electric bus platform is designed to provide great vehicles for both city and intercity routes, and will competently handle tough conditions and heavy duty operations. It has been engineered to ensure simplified maintenance, a high level of cyber security, flexible

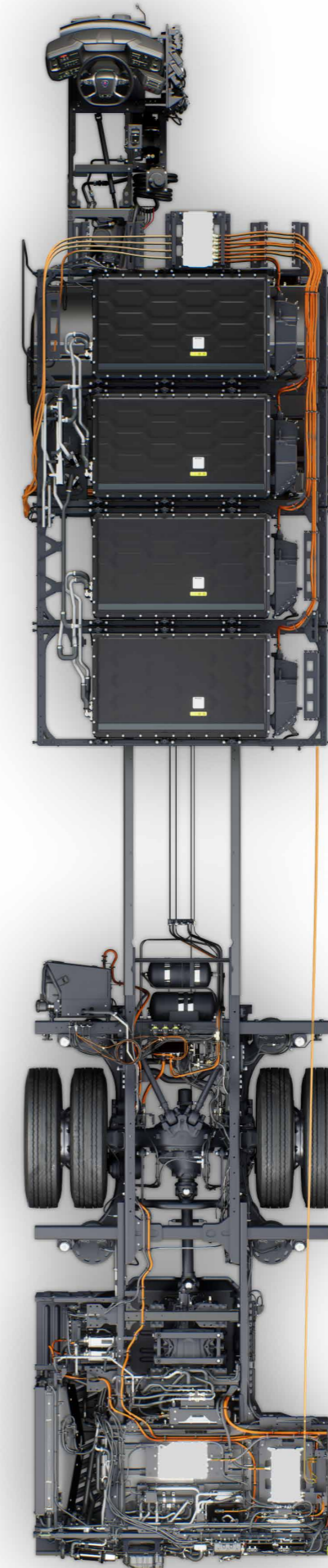
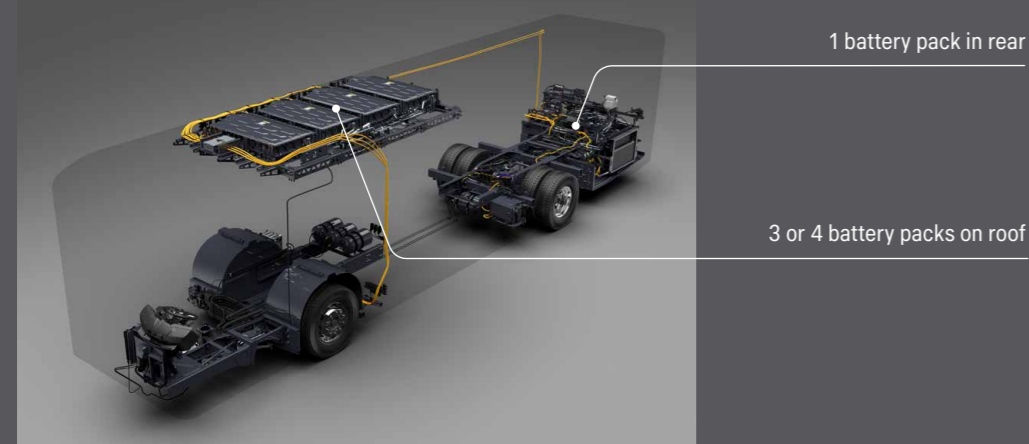
bodybuilder adaptations, and to provide state-of-the-art Smart & Safe features. Additionally, it comes with an all-new in-house developed battery management system to make the most out of the vehicle and its batteries both in the short and long term.

Chassis	Low entry
Wheel configuration	4x2
Chassis width	2,500 mm & 2,550 mm
E-machine	300 kW peak 230 kW continuous
Battery capacity	416 kWh (4 battery packs) – range: >400 km * 520 kWh (5 battery packs) – range: >500 km *
Charging & position	CCS type 2, DC plug-in / front RHS
Suspension	IFS - Independent front suspension. 2,550 mm chassis width / smooth roads. RFS- Rigid front suspension 2,500 mm chassis width / smooth or uneven road.
Axle gear	R660 & R780

* Estimated range assumes optimal conditions

4 BATTERY PACKS		5 BATTERY PACKS	
Capacity	416 kWh	Capacity	520 kWh
Weight	~ 2,400 kg	Weight	~ 3,000 kg
Charging time	~ 150 min (200A)	Charging time	~ 170 min (200A)

BATTERY PLACEMENT



NOT JUST ANY BATTERIES

RESPONSIBLE BUSINESS DEMANDS RESPONSIBLE BATTERIES

When it comes to electric vehicles, there's always one burning question: "But what about the batteries?" And we agree, that is most definitely a key question.

Battery discussions are relevant both in terms of range, capacity, battery management and charging speed – but also in terms of how they're made, how the raw materials are sourced, and what happens to them after they're no longer fit for the vehicle.



Partnership with Northvolt

Although we manufacture our battery packs in-house, the battery cells are developed and sourced through a close partnership with Northvolt – a company that matches our ambitions in terms of sustainability leadership. Together we create battery solutions for heavy commercial vehicles that not only have great capacity and a long service life – but which are being manufactured with only one third of the carbon emissions of comparable industry batteries.



northvolt

Northvolt is a leading provider of sustainably made batteries, with facilities powered by clean renewable energy and raw materials sourced using responsible practises both in terms of minimised climate impact as well as safe and healthy working conditions.

TOWARDS CIRCULAR BUSINESS

Together with our partners and with strategically located hubs, we are actively working to establish an ecosystem that supports circularity for our battery packs and the cells within.

Re-use

Reuse is the first option in circular economy. A good example is mid-life renovation, where instead of mounting brand-new batteries that would outlast the vehicles, reused batteries whose lifetime matches the remaining vehicle lifespan can be installed.

Re-purpose

Even after reaching the end of their life in the vehicle, batteries can be used for solutions and products such as Battery Energy Storage Systems (BESS). These systems can provide frequency balancing services to grid operators as more renewable energy sources are introduced, or to boost underpowered local electric grids, e.g. at bus depots.

Re-cycle

When the battery has reached a stage where it cannot be reused or repurposed, Scania has partnerships and infrastructure in place where precious raw materials such as cobalt are recycled to reduce the need for virgin material in the production of new batteries.



LIFE CYCLE ANALYSIS

Life cycle analysis insights are key to ensure that climate impact is truly addressed rather than just shifted or attributed to other sectors, industries and stakeholders. Since every aspect of a product life cycle can offer opportunities to increase overall sustainability – they are all

important. From raw material extraction and sourcing, to production and manufacturing. But also when the product is in use by our customers, and all the way to the circular business strategy that addresses second-life and end-of-life.

