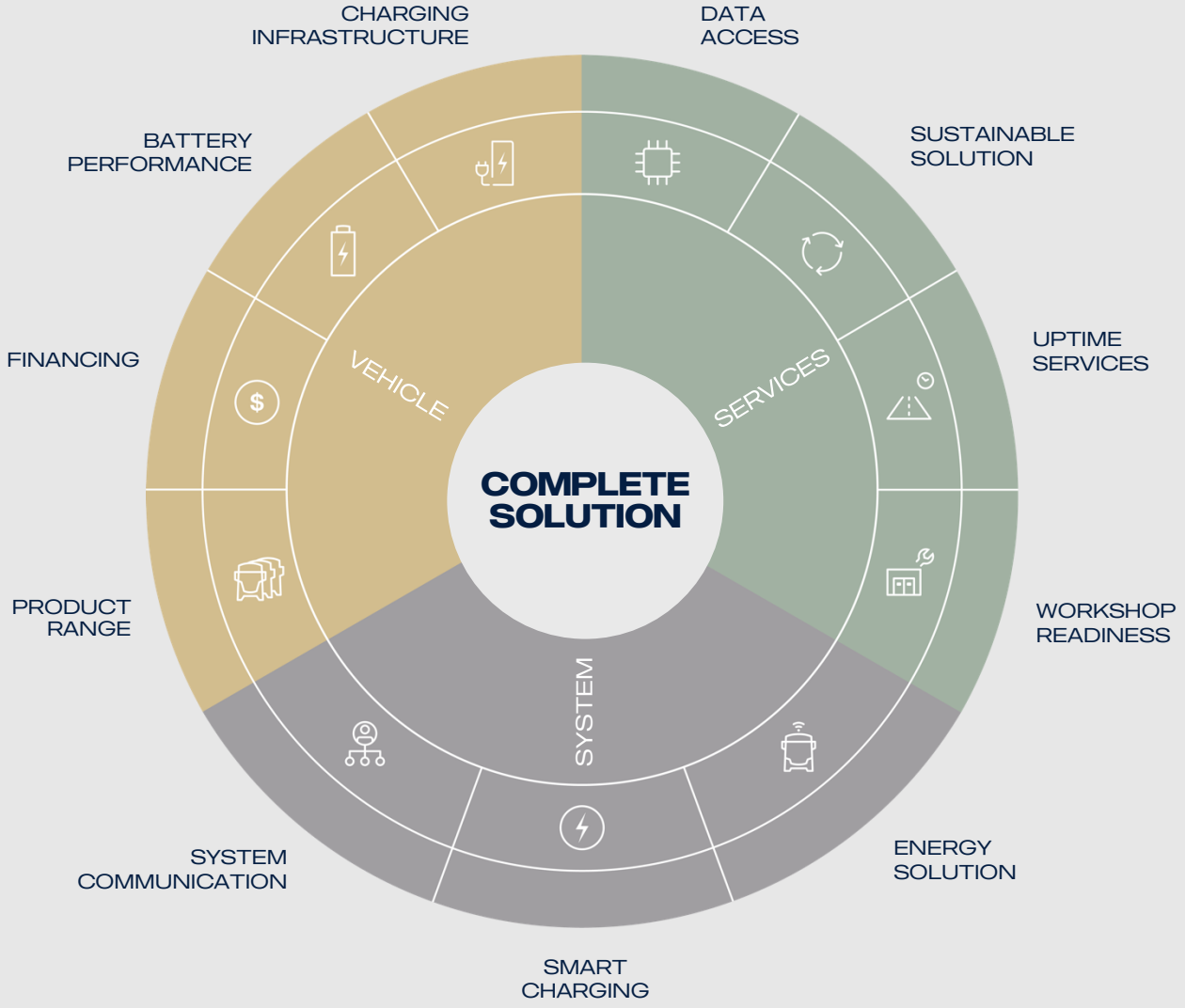
COMPLETE ELECTRIC SOLUTION FROM SCANIA

SCANIA

TAILORED SOLUTION FROM SCANIA

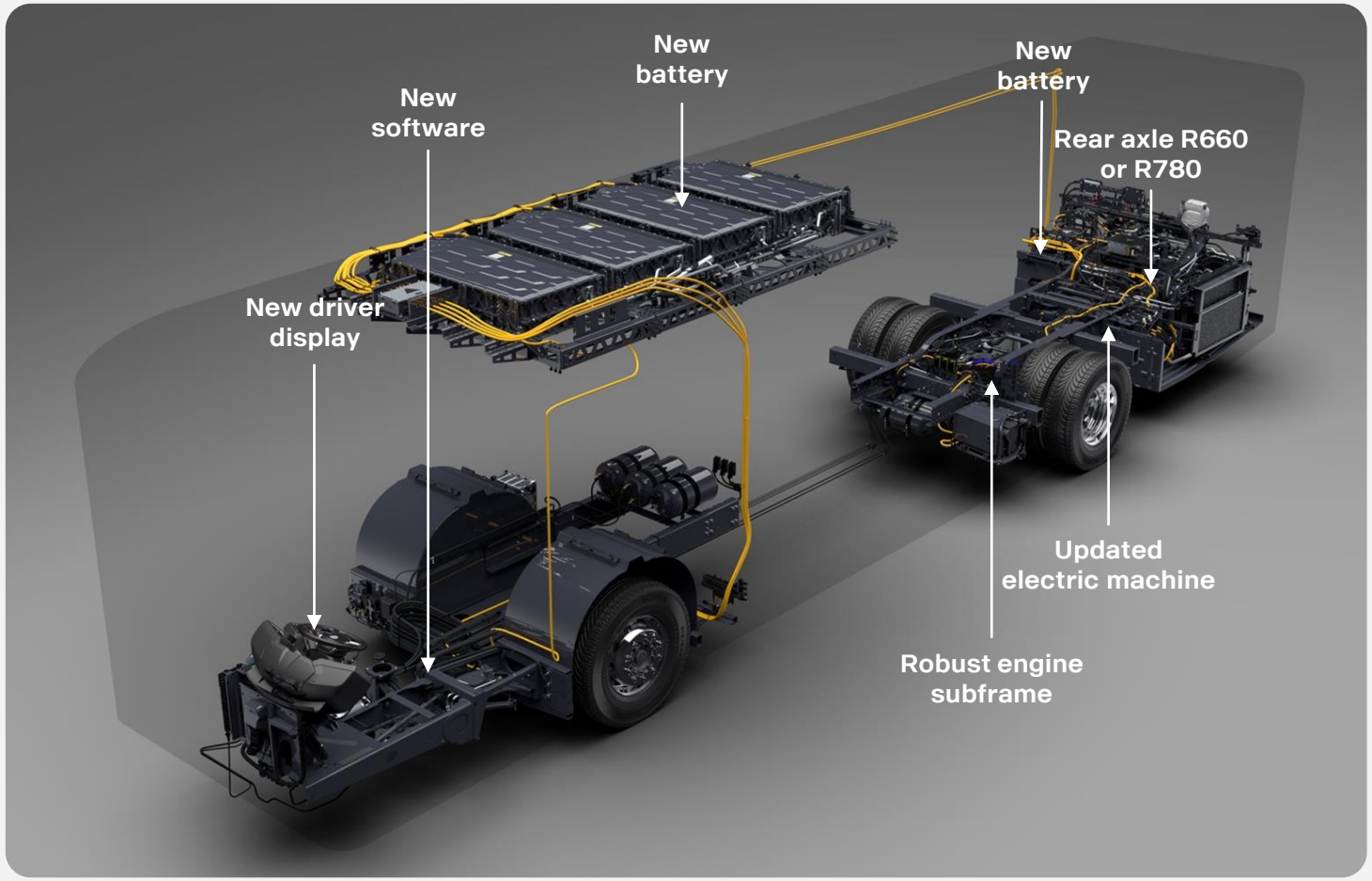


LOW ENTRY 4X2 BEV

LOW ENTRY 4X2 BEV

Designed for:

- City & Intercity Routes
- Heavy Duty Operations
- Simplified Maintenance
- Smart & Safe Features
- Tough Conditions
- Cyber Security
- Flexible Bodybuilder Adaptation



BATTERIES

- Modules and packs assembled by Scania
- Cells from Northvolt
- Competitive Life Cycle Assessment
- Battery chemistry: NMC
- Installed energy: 104 kWh
- Weight per battery pack ~600 kg
- New Scania inhouse BMS (Battery Management System)

BATTERY INSTALLATION

4 batteries

5 batteries

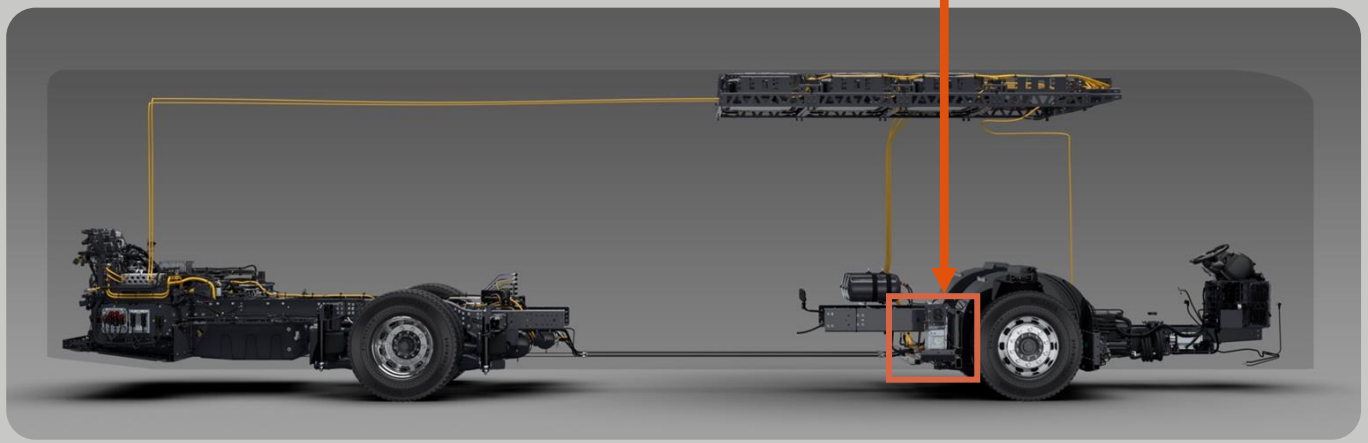
ELECTRIC MACHINE

- Max. power: 300 kW at 1400 rpm
- 30 min. continuous power: 250 kW at 1750 rpm
- 2-speed gearbox

CIB – CHARGING INTERFACE BOX

Connector

CCS2
Combined Charging System type 2



Charging power	130 kW
Charge current	up to 200 A
Charging time	
4 batteries	~ 150 min (200 A)
5 batteries	~ 170 min (200 A)

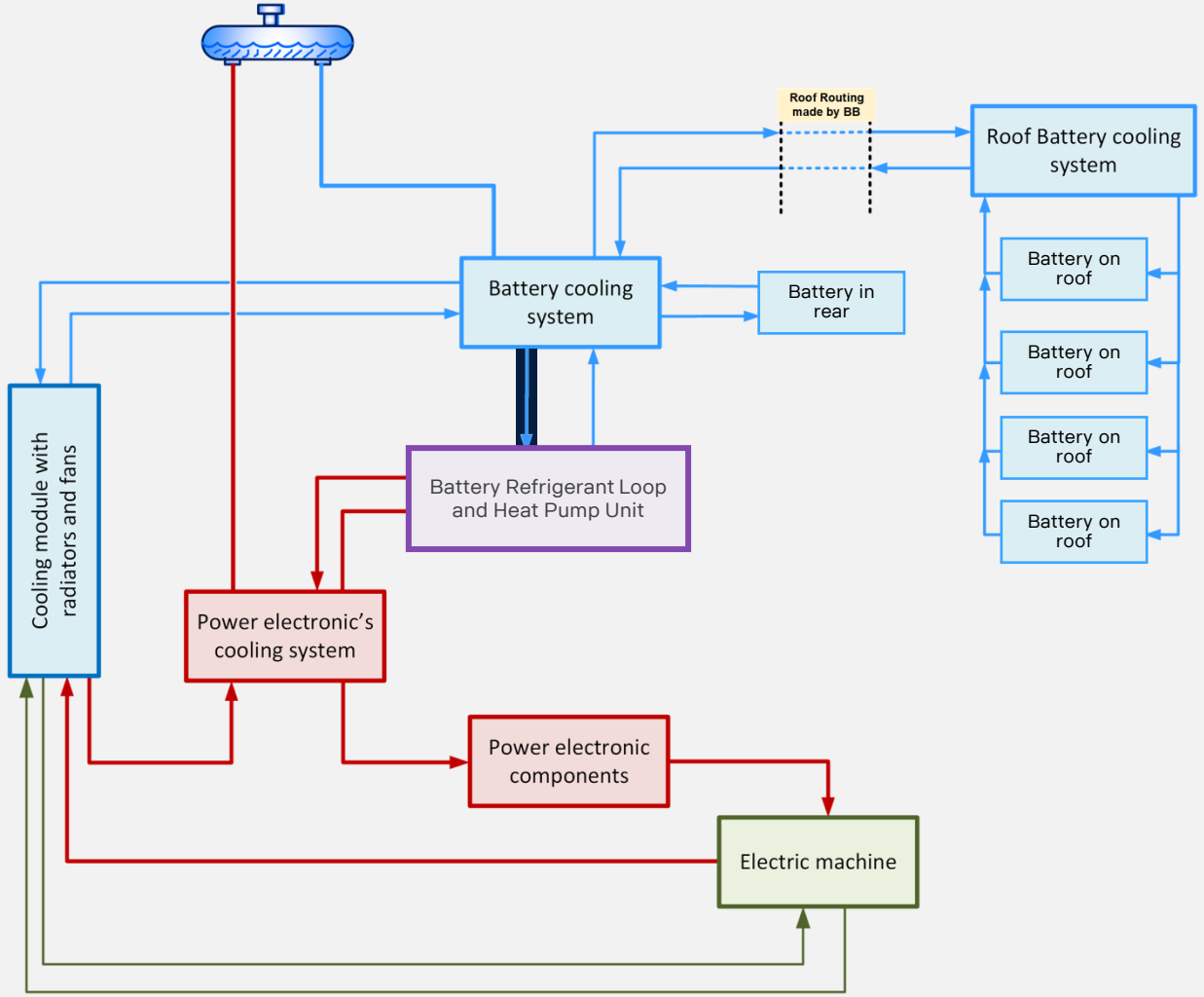
COOLING SYSTEM

One shared cooling system for batteries, electric machine and power electronic

Space saver

Energy efficient

Silent



SMART DASH

- 12.3 inch
- Navigated via Steering Wheel Buttons

SCANIA SAFETY FEATURES

Alcolock preparation

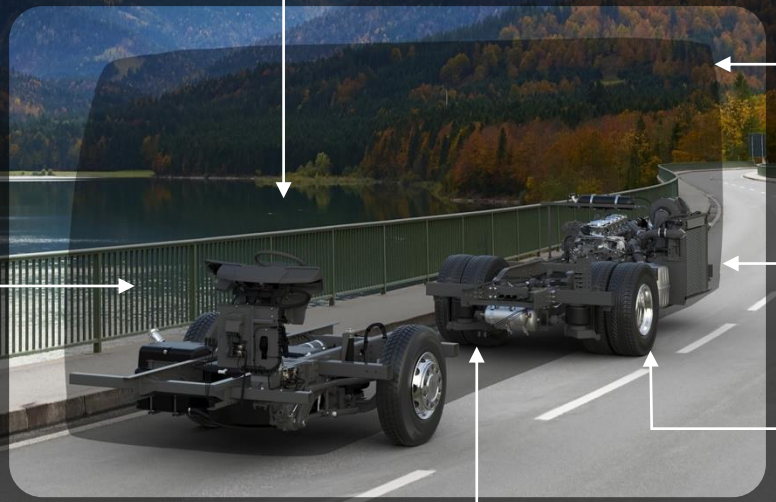
Driver attention support

NEW Speed sign information

NEW Vulnerable road user collision warning – front

Improved Adaptive cruise control

Advanced emergency braking



Vulnerable road user detection – rear NEW

Emergency braking indication

Tyre Pressure Monitoring NEW

Lane departure warning

Blind spot warning

Lane departure warning with active steering

Lane change collision prevention

Vulnerable road user collision warning-side

LOW ENTRY 4X2 BEV

	4 batteries	5 batteries
Installed energy	416 kWh	520 kWh
Wheel configuration	4x2	
Electric machine Power	300 kW peak, 250 kW continuous	
Electric machine Torque (powertrain)	5400 Nm Max, 3400 Nm continuous	
Charging	CCS Type 2 with up to 130 kW (DC charging plug-in)	
Charging time	~150 min (200 A)	~170 min (200 A)
Gearbox	2 Speed gearbox	
Breaks	Recuperation via e-machine and electro pneumatic disc brake	
Driver Area	Smart Dash	
Width	2500 mm with RFS and 2550 mm with IFS	

SCANIA'S CHARGING SOLUTION

SCANIA CHARGING

SCANIA CHARGING SOLUTIONS

Tailor-made charging solutions for your unique needs.

Charging solution → **Analysis** → **Solution Design** → **Installation & Commissioning** → **Support & maintenance**

FINDING THE RIGHT SOLUTION

- TOTAL OPERATING ECONOMY
- PERFORMANCE & UPTIME
- BATTERY CONDITION & FLEXIBILITY
- SUPPORT, REPAIR & MAINTENANCE

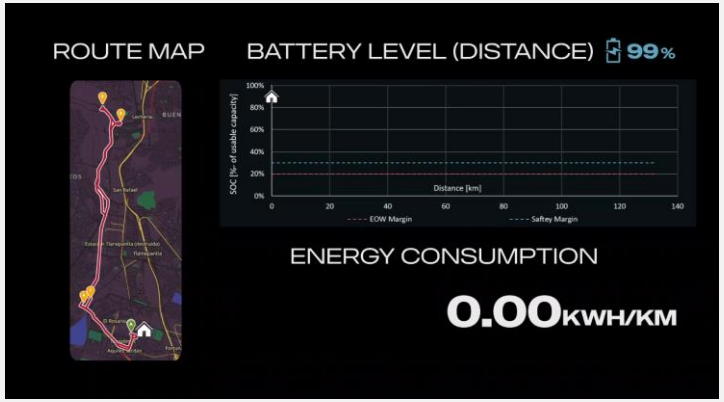
OPERATIONAL ANALYSIS

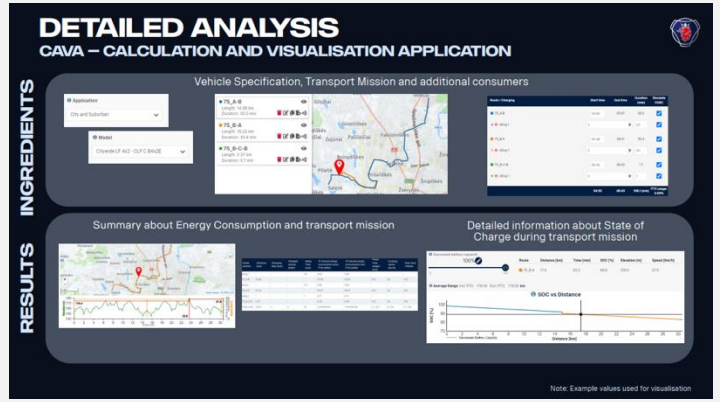
UNDERSTANDING THE FEASIBILITY & ENERGY DEMAND OF ELECTRIC VEHICLES IN YOUR OPERATIONS

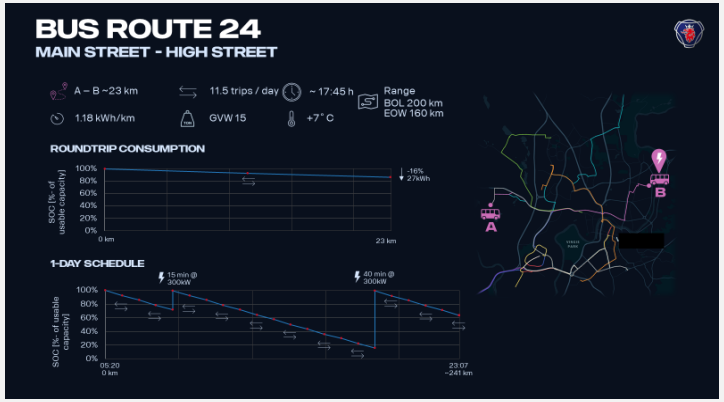
Input

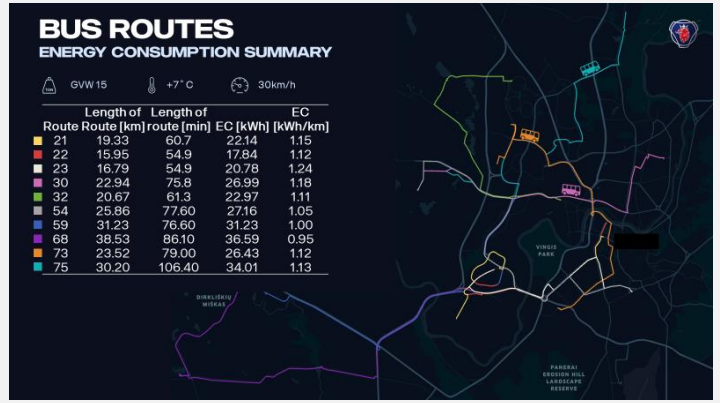
- Routes
- # Shifts
- Duration
- Passengers

Result







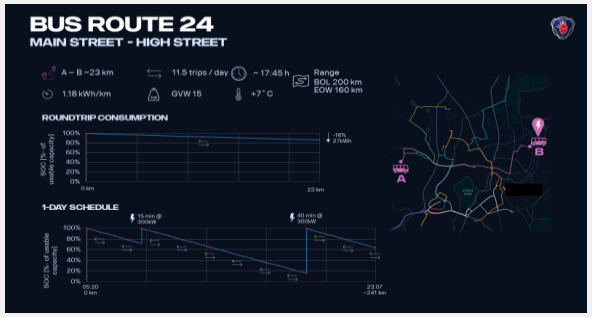


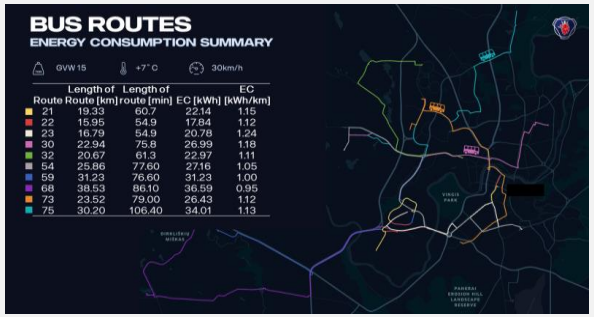
ENERGY ANALYSIS

UNDERSTANDING THE AGGREGATED DEMAND FOR ENERGY & CHARGERS ON SITE

Input

Operational Analysis



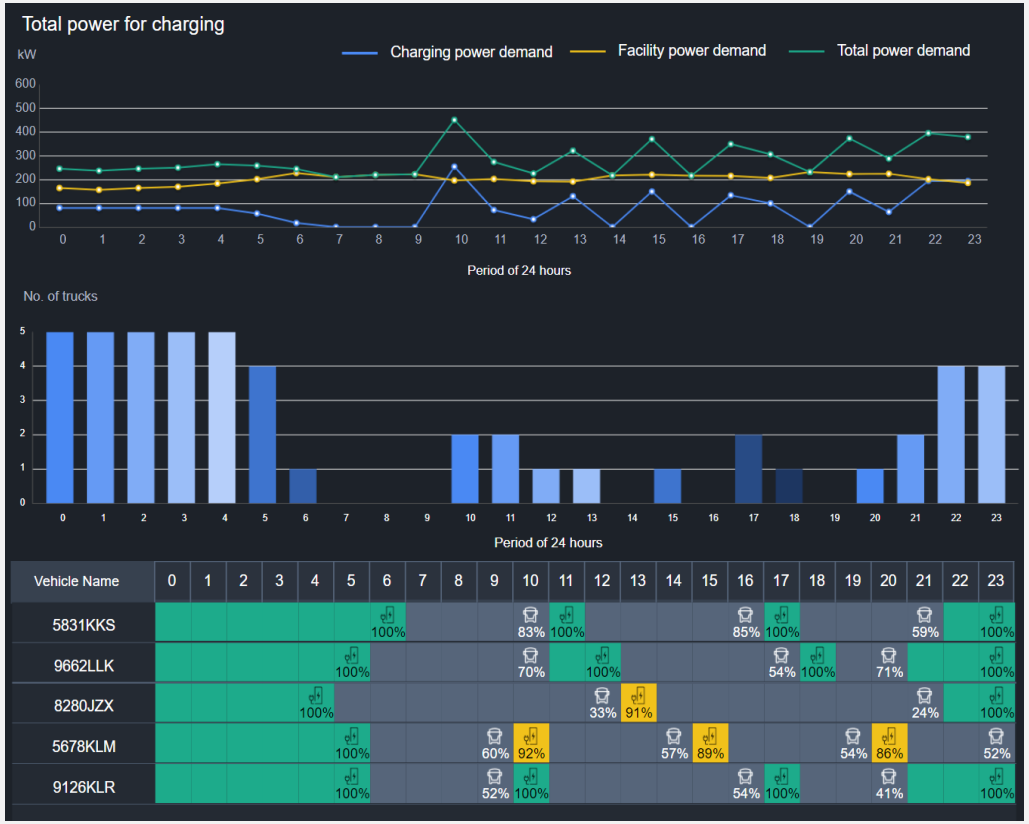


Other inputs

- Available power
- Contracted & used capacity

Result

- Understand energy demand & distribution potential for optimal charging setup
- Identify capacity needs for efficienct charging & cost savings
- Enhance total cost of ownership through data-driven analysis



CHARGING HARDWARE

BROAD & QUALITY TESTED HARDWARE PORTFOLIO FOR ALL DIFFERENT NEEDS AT A BUS DEPOT

All-In-One Stations

Satellites with Power Unit

Wallboxes

Portable Chargers

	All-In-One Stations	Satellites with Power Unit	Wallboxes	Portable Chargers
Description	Modular system with high scalability & reliability. Excellent for all types of charging. Recommended for top-up charging & smaller fleets	Scalable & flexible system with dynamic power distribution. Excellent for bigger fleets with plans to scale. Recommended for smart & high power Bus fleet charging	Flexible system with high scalability & reliability. Excellent for all types of slow charging. Recommended where minimal cabling is required	Small footprints. Great for workshops & depot charging. Plug & play (3 phase – 400V)
Power Range	24 - 360 kW	40 – 360 kW	24 - 44 kW	25 or 40 kW
Benefits	• Can be placed as standalone • Doesn't require external Power Unit • Easy to service & maintain • Less complex installation	• Dynamic Power Distribution • Scalability & flexible with small footprint • Grid & lay-out optimization	• Practicality - Can be placed upon a wall • Cheaper to install	• Low installation costs • Less grid & infrastructure dependencies • Easy to use & can be moved
Limitations	• Bigger footprint & tight spots	• Must be installed with external Power Units • Higher installation cost • Distance dependency	• Longer charging times • Lower maximum power output • Limitations with safety	• Not suitable for bigger fleets • Mainly used for slower power charging • Lacks modularity & smart charging
Connection Type	Electricity & cable installation required May require groundwork	Electricity & cable installation required May require groundwork	Electricity & cable installation required	Plug into 3 Phase-plug (400V) 32A – 22 kW 63A – 40 kW

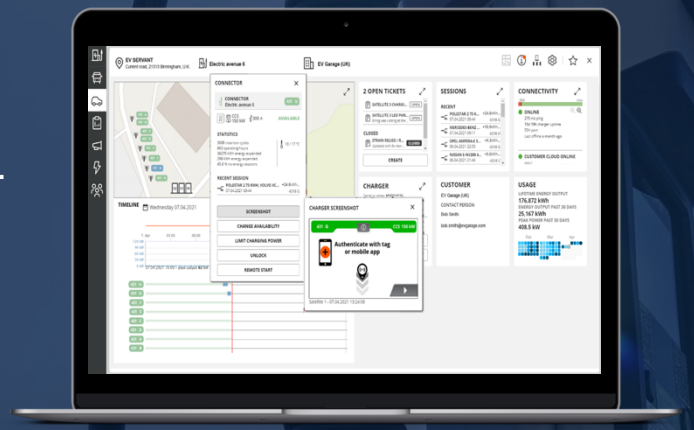
CHARGING SOFTWARE

OPTIMIZE EFFICIENCY, REDUCE COSTS & MAXIMIZE POTENTIAL

Charging Management System

Improve efficiency & revenue by managing and optimizing your charging operations through Smart Charging

- Schedule charging to secure uptime & lower costs.
- Manage chargers to optimize energy usage & reduce grid investments needs.
- Secure the best uptime & flexibility while keeping batteries healthy.
- Monetize on charging infrastructure by giving others possibility to charge.



BASIC

- Charging statistics & history
- Monitoring
- Remote control
- Access level management
- Charging session details

ADVANCED

- Basic capabilities
- Detailed control
- Vehicle identification
- Power limits
- Advanced charging reports & insights
- Standard APIs to 3rd party systems

MASTER

- Advanced & basic capabilites
- Vehicle priority charging
- Depature scheduling
- Alerts via e-mail & SMS
- Dynamic peak power shaving
- Energy tariff optimization
- Vehicle charging & pre-heating control

INSTALLATION & COMISSIONING

CERTIFIED SUPPLIERS TRAINED TO INSTALL & COMMISSION THE PRODUCTS IN OUR PORTFOLIO

WE WILL HELP YOU WITH ...

- Project Management
- Civil Works
- Installation
- Commissioning
- Training

SUPPORT, REPAIR & MAINTENANCE

CERTIFIED SUPPLIERS TRAINED TO SERVICE & SUPPORT

- Support levels that aligns with your needs and goals.
- Expertise & commitment to excellence propel your fleet towards success.
- We ensure that you recieve the highest level of care needed for your specific requirements.

REMOTE SUPPORT

- 24/7 Call-center in
  - Direct contact to techincal assistance
  - Local language
  - Remote intervention on chargers
- Basic diagnostic & incidents follow-up.

TECHNICAL ASSIST ON SITE

- Assistance on site.
- Quicker access to spare parts.
- Annual maintenance for warranty & optimal performance.
- Service Level Agreement management & execution.

OEM SUPPORT

- Advanced remote diagnostics.
- Support on-site or factory replacement.
- Software & firmware updates.

SCANIA'S SERVICES FOR BEV

REPAIR & MAINTENANCE ON BEV

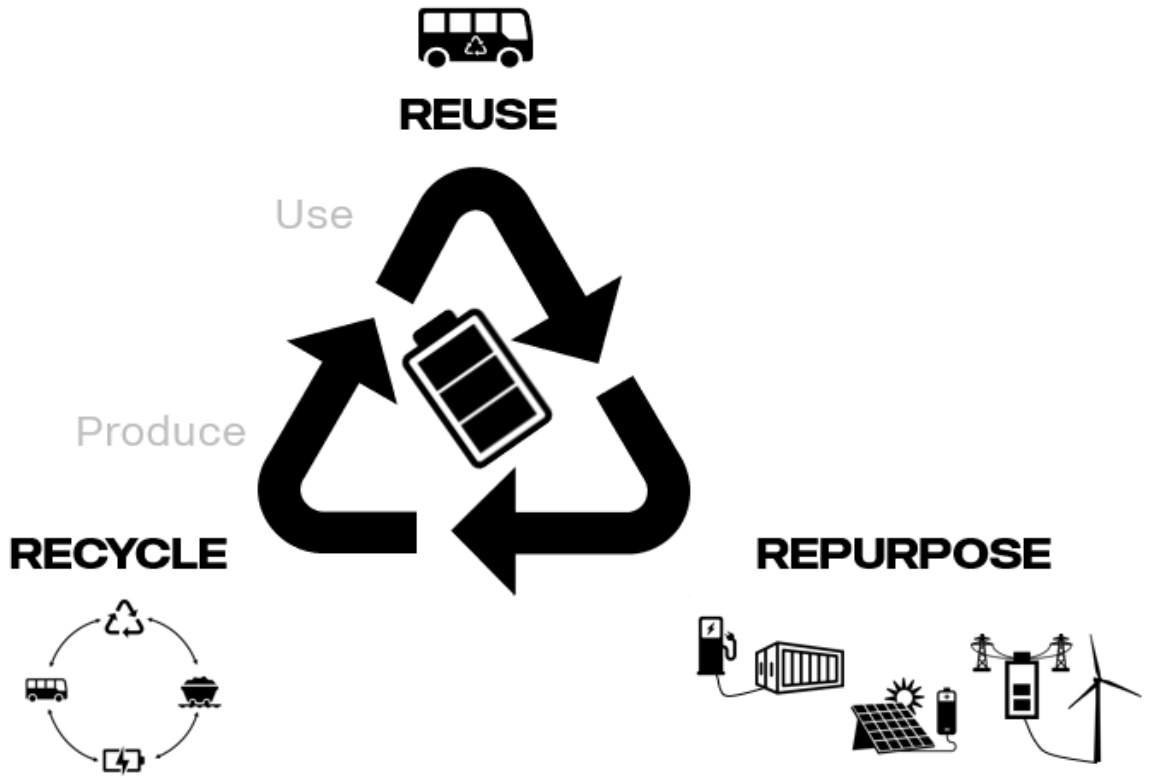
R&M is a key service and it's adapted for BEV.

Scania workshops are prepared for performing R&M on BEV.

Flexible maintenance – planned proactively together with you, and scheduled so it never interferes with your transport operations.

SCANIA'S CIRCULAR BATTERY STRATEGY

A CLOSED LOOP STRATEGY



ALL YOUR DIGITAL E-MOBILITY SERVICES IN ONE PACKAGE

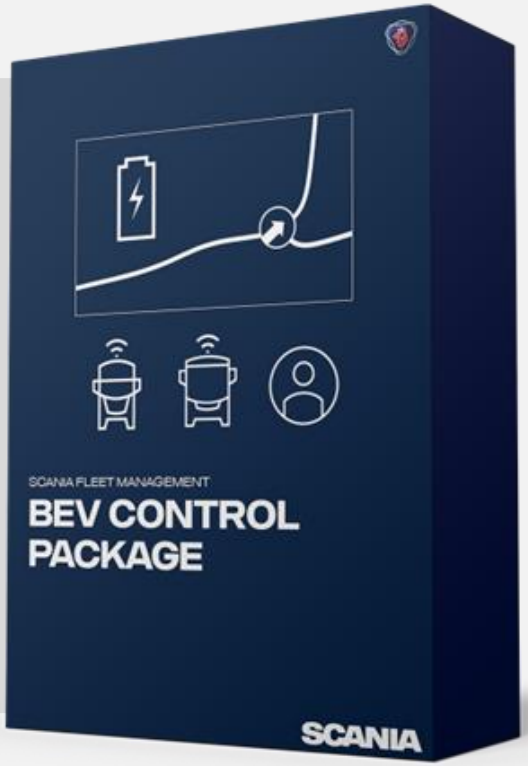
BEV CONTROL

View and manage your electric vehicles in the same familiar environment as the other vehicles in your fleet.

Gain additional insights, optimize the flow of your operations and boost the performance of your electric vehicles.

Increase uptime, improve safety and reduce operating cost through tracking data.

- **Fleet Position**
- **Monitoring Report**
- **Vehicle Performance**
  incl. Environmental Report
- **Driver Evaluation**
- **Range Support**
- **Service Planner**
- **Charging monitoring**

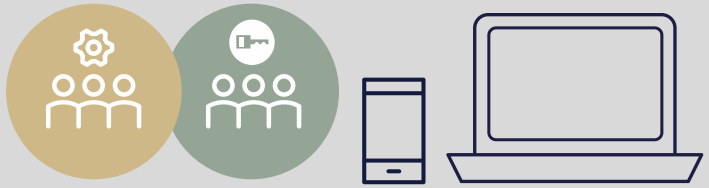


CONNECTED DIGITAL ECOSYSTEM

MY SCANIA

My company

- The way into digital Scania
- Mobile friendly portal



DRIVER APP

Me as a driver & my bus

The Scania companion that empower & provide drivers' daily support

- Native app
- Connected to My Scania

FLEET APP

My fleet

- The way to be in control of your fleet – wherever you are
- Native app
- Connected to My Scania

VAS – VALUE ADDED SERVICES

Function

Enabling preconditioning of the passenger area prior to departure.

How

- Internet connection.
- Communication between CMS and the vehicle, controlled via the charging station.
- Only used when a charger is connected.

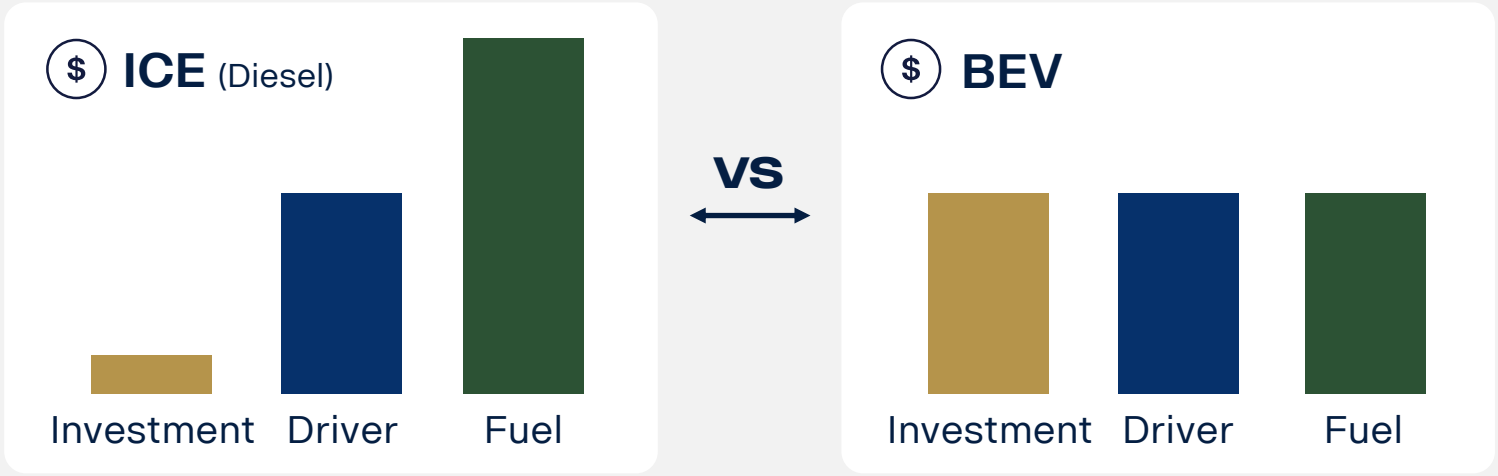
**Charging Management System*

DRIVER TRAINING
FOCUS AREAS

SCANIA'S FINANCING SOLUTION FOR BEV

DIFFERENCES FINANCING
A BEV VS. ICE

- Operating expenses (opex) will turn into capital expenditures (capex).
- Importance of financing will increase.
- Financing model and payment terms adapted to object and operation.
- Charging equipment increases capex further.



Benefits with financing your BEV with Scania

- One-stop-shop.
- We can offer solutions that off-load risks.
- Financing model and payment terms adapted to object and operation.
- Knowing the business means we can adapt under way.

FINANCING MODELS

Loan or hire purchase

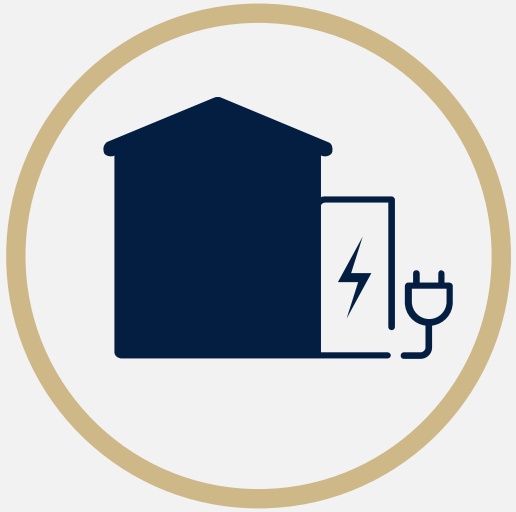
Financial lease

Operating lease

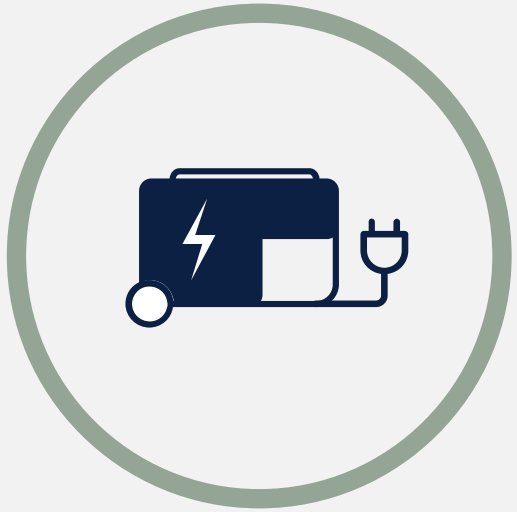
Same models are still applicable.

FINANCING OF CHARGING EQUIPMENT

- Prepared to finance charging equipment.
- Loan/hire purchase or financial lease.
- Complexity depends on type of equipment.



STATIONARY CHARGERS



PORTABLE CHARGERS

SCANIA