TRAVEL OPERATIONS

INTRODUCING A NEW GENERATION OF COACHES

SCANIA

ACHIEVING SUSTAINABLE MOBILITY

Reducing CO_2 emissions is crucial to driving the shift to sustainable transport. Much can be done to limit environmental impact by reducing the number of vehicles on the road simply by getting people to travel together rather than separately. And by transitioning to highly efficient conventional powertrains that run on renewable fuels, emissions generated through transport operations can be significantly reduced. Simply put, switching to low-emission vehicles will be essential for creating transport solutions that stay within the environmental boundaries of our planet.

Scania's ambition is to be a frontrunner in this shift towards sustainable transport. We know that making a difference to the big picture requires a long-term commitment to research and development, and paying attention to the details. This ensures that our coaches perform not only for the operator, driver and passengers, but also from an environmental perspective.

For more than a century, we have acquired a deep understanding and knowledge base that allows us to develop coaches and services that enable sustainability to go hand-in-hand with operating economy. This is essential for scaling sustainable transport and underpins our approach to develop and refine products that meet or exceed environmental requirements without compromising on performance, driveability or productivity.

Further, sustainable transport cannot be achieved through a single solution. We at Scania instead approach the challenge from several angles, offering a wide range of efficient, high quality products and services to meet the varying needs of travel operators.

LOW-EMISSION POWERTRAIN OPTIONS

For travel operators, major reductions in emissions can be reached with fuel efficient coaches running on renewable fuels. Scania's offering includes renewably fuelled powertrains that minimise environmental impact. They use the technology most suitable for the operating conditions and with consideration to the availability of renewable fuels and operational needs.

Renewably fuelled powertrains
Scania has vast experience of powertrains that run on renewable fuels, having built our first biofuel engine in 1916. Today we offer a wide range of engines which also run on fuels such as biodiesel/FAME, HVO and biogas. Engines running on renewable fuels play a key role in reducing emissions and can provide an immediate solution to meet climate and environmental targets. This is especially true for high-mileage, long-distance operations.

Intercity	Biodiesel/FAME	HVO	Biogas
Tourism	Biodiesel/FAME	HVO	Biogas

Gas powertrain benefits

Scania has developed gas engines for more than a century. Running on both liquified gas (LBG/LNG) and compressed gas (CBG/CNG), our engines can contribute to the reduction of CO_2 emissions by up to 90%* compared to diesel. Furthermore, Scania engines require no additives in order to use the fuel, eliminating dependence on the additive's availability, and reducing costs.

In addition to CO_2 emission reduction, powertrains driven by gas also produce less sulphur, nitrogen and carbon monoxide emissions, and are quieter than their diesel counterparts. For travel operators running extended routes, gas can therefore deliver significantly reduced environmental impact.

* Using biogas.

GREEN
Up to 90% reduction in CO_2 emissions.

CLEAN
Better air quality with less particle emissions.

SMART
Lower operating costs than equivalent diesel.

QUIET
Less engine noise and less vibration.

A win-win-win possibility

Biogas is produced through the natural breakdown of food and sewage waste. It uses a process called anaerobic digestion to split waste material into gas (bio fuel) and solids (bio fertilizer).

The production of biogas does not just give communities a sustainable renewable fuel source, it can also help boost local economy and reinforce social responsibility. This creates a win-win-win situation for operators, authorities, and society at large.

ENERGY EFFICIENCY THAT MAKES A DIFFERENCE

The energy consumption of a coach depends on several parameters. To achieve the most energy-efficient operation, it is necessary to consider the impact of product technology, product usage, maintenance, and more. By considering all of these factors, fuel consumption can be lowered which in turn reduces CO_2 and other emissions.

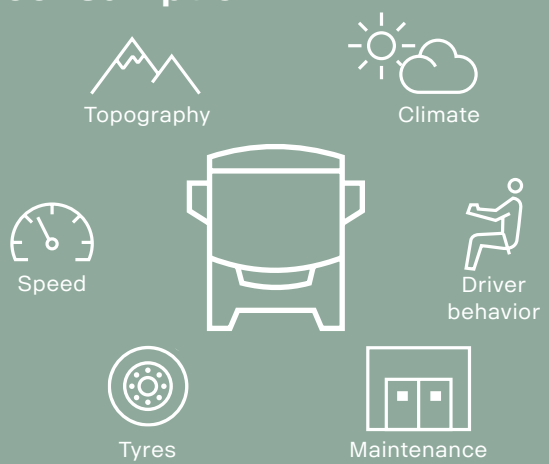
A 360° view of fuel consumption

Scania addresses fuel consumption from multiple angles by making sure that operators have the right vehicle for the operation and offering services that enable the vehicle to be driven in a way that further reduces fuel consumption. With high-quality coaches, innovative technical solutions that support the driver, as well as high-quality maintenance and driver services, we help operators to minimise environmental impact by reducing fuel consumption.

First and foremost, it is crucial to ensure the coach is specified correctly for its operational needs and reduced energy consumption, without compromising on factors such as performance, comfort and load capacity. This process includes the selection of powertrain components, support systems, the possible use of renewable fuels and more. During operation, the vehicle must be kept in optimal condition through the use of driver support systems and quality maintenance. This can include, for example, axle alignment, tyre pressure monitoring via the dashboard system or during maintenance, or oil and filter changes.

Driving style also plays an important part in the vehicle´s energy consumption. Scania Driver Services consist of driver training and driving-style evaluation, where instant feedback and guidance is provided in the dashboard during driving. These features and services can have an immediate impact on consumption. In addition, Scania Fleet Management Services allow for trend monitoring and greater insight into overall fleet performance, enabling further improvements through operational adjustments or training. It typically reduces fuel consumption and emissions by as much as 10%, while technology and design features such as aerodynamic efficiency and Scania Cruise Control with Active Prediction further enhance fuel efficiency, e.g. by maintaining speed in an efficient manor or anticipating topography and adjusting powertrain behaviour accordingly.

Factors affecting fuel consumption



Science-based targets

As the first major manufacturer of heavy commercial vehicles, Scania's far-reaching climate targets have officially been approved by the Science Based Target initiative (SBTi).

Scania is committed to achieving the Paris agreement goals of limiting global warming to 1.5°C above pre-industrial levels.

We will cut CO_2 emissions from our own operations by 50% by 2025 and reduce emissions from our products by 20% during the same period.

Biogas

Produced from various sources, of which the most cost-effective is often local sewage and organic waste.

This engine can also run on natural gas or a combination of the two, facilitating operations and a transition to biogas.

CO_2 reduction compared to diesel from a well-to-wheel perspective: 50–90%, typically 80%.

Up to **90%**

Biodiesel/FAME

Produced from sources such as rapeseed, soy and other oil plants, as well as from waste cooking oils.

CO_2 reduction compared to diesel from a well-to-wheel perspective: 50–80%, typically 60%.

Up to **80%**

HVO

Produced from sources such as waste oils, rapeseed oil and animal fats. HVO can be used in most diesel engines without any changes.

CO_2 reduction compared to diesel from a well-to-wheel perspective: 50–90%, typically 83%.

Up to **90%**

IMPROVING OPERATING ECONOMY

Operators know the importance of keeping fuel costs down and maximising vehicle uptime. At Scania, customer profitability is a key consideration in the products and services we develop and offer.

Our coaches are highly energy-efficient and reliable, and offer high passenger and luggage capacity. Along with the professional supporting services we offer, this contributes to cost savings and potentially to generating more income, thereby improving the operating economy of the vehicle and for the operation as a whole.


SOLUCIONES SUSTENTABLES
SCANIA

LOWER COST THROUGH ENERGY EFFICIENCY

A vehicle's energy consumption depends on a number of factors. Powertrain performance and vehicle construction are two important parameters, as is specifying the vehicle correctly according to operating conditions. Moreover, how the product is actually used in operation will also have a major impact on energy consumption.

Because fuel consumption is one of the main factors in operating cost, an efficient powertrain can save a lot of money. Scania develops and offers highly energy-efficient powertrains, both conventional and hybrid.

Up to
2%
reduced fuel consumption and emissions

Significant savings
Compared to the previous generation, the new generation Scania coaches can reduce fuel consumption and emissions by as much as up to 2%, without compromising on performance. This is achieved through a number of features, with the most significant savings coming from improved engine efficiency. The engine alone can save a notable part, depending on engine size and vehicle configuration and usage, while our enhanced gearbox range and Scania Cruise Control with Active Prediction also contribute to further savings. During operation, energy efficiency also depends on the actual performance of the powertrain, and regular, high-quality maintenance is the key to ensuring optimal performance.

Services that drive efficiency
Driving style can potentially have the biggest impact on fuel consumption. The driveability of Scania vehicles and our driver assistance systems and driver services can help operators achieve significant additional savings. Operation-based, hands-on driver training and support typically contributes to fuel and emissions savings of 10%. In addition, Scania´s fleet management services allow operators to view and collect real-time fuel consumption data and make operational adjustments or schedule training sessions to improve performance.


SCANIA

ENSURING AVAILABILITY

We know the cost of downtime, and that high vehicle utilisation is key to generating income and thereby achieving good operating economy. To make this possible, the vehicle first and foremost needs to be well designed and reliable with good driveability. Keeping the vehicle in peak condition also requires workshop services that are both professional and tailored to operational and specific vehicle needs. All in all, these factors reduce downtime, secure revenue and improve operating economy. Scania Assistance is available 24/7, every day of the year, should the coach require attention resulting from any incident. Insurance can also be arranged to provide a replacement vehicle, if the coach requires lengthy repairs.

Scania Assistance is available

24 / 7 / 365

With one call, you can get in touch with a professional service coordinator who knows your Scania vehicle and speaks your language.

Coaches designed for uptime

Scania produces around 100,000 vehicles each year, and our coaches are built on proven technology and components. This, along with other factors, results in long lifecycle chassis and powertrains that are highly dependable, durable, and robust – meeting a wide variety of demands in terms of road condition, climate, topography, and driving style – and in high passenger and luggage capacity that can enable higher income.

The vehicle's design and construction must also ensure that sensitive and expensive components are protected in the event of a collision. Limiting damage and avoiding deformation of components is critical for minimising costs and complex time-consuming repairs.

We build our vehicles with all this in mind, but also strive to prevent and avoid accidents

altogether. Our state-of-the-art driver assistance systems and the superb driveability of our vehicles also contribute to accident avoidance and/or vehicle damage reduction, further reducing costs of downtime.

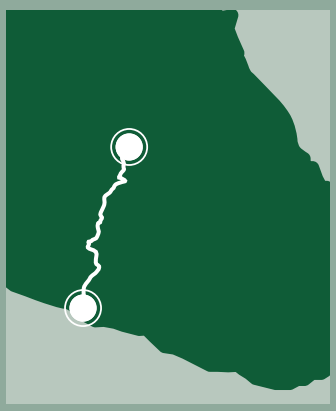
Additionally, Scania coaches are designed to make maintenance and daily cleaning as efficient as possible. Easy access to parts and the cleanability of interior surfaces ensure that the vehicle does not spend more time off the road than necessary.

Connected and tailored workshop services

Keeping vehicles in top condition is crucial in all travel operations. Through a comprehensive service network, Scania provides expert repair and maintenance services, supported by outstanding parts availability. We offer services specific to the needs of each individual vehicle, making sure they are neither underserviced nor overserviced. This ensures high availability throughout the fleet and eliminates unnecessary costs. Based on real-time vehicle data, we can draw up tailored maintenance plans that maximise uptime and minimise disruption to daily operations. Connectivity and real-time data also allow proactivity, either completely preventing a breakdown through vehicle data analysis and operational data or preparing the workshop and parts by initially diagnosing the vehicle remotely. Furthermore, having access to this data allows the workshop time to be used as efficiently as possible. By combining and concentrating repair and maintenance to the same occasion, total downtime can be reduced. All this can be performed in a Scania workshop or with Scania supplying the required support to operator workshops.

Scania Flexible Maintenance

Through real-time data and continual monitoring and analysis, Scania Flexible Maintenance allows for tailored maintenance plans to be created for each vehicle – decreasing operational disruptions and instead ensuring maximum uptime and productivity.



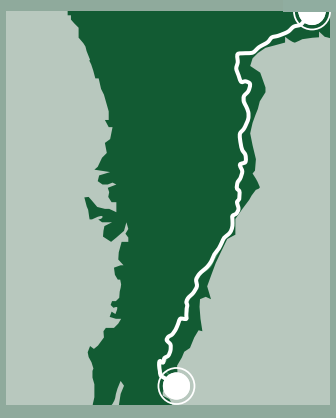
Acapulco de Juárez – Mexico City

Dusty roads in varying topography putting high load on the retarder and clogging the air filters. In summertime the temperature is often +35° C.

Wear and tear

Chumphon (Lomprayah Pier) – Bangkok

Low strain on the powertrain due to flat route and few starts and stops. High strain on the air filter due to dust and humidity. High to extreme high temperatures.



Wear and tear

DRIVER AND PASSENGER ENVIRONMENT

Whether operating at higher speeds on intercity routes, or in busy city environments, safety is of the utmost importance – protecting passengers and the driver, as well as other road users. Scania coaches have state-of-the-art safety systems and features that help to prevent accidents or minimise potential damage in the event of an incident. The driver is supported by advanced driver assistance systems and safety features that reduce the risk of accidents. Additionally, the rear of the vehicle, are of reinforced construction.

As well as enhanced safety features, Scania coaches offer a pleasant environment for both driver and passengers. The top-quality driver area is comfortable and ergonomic, offering excellent driveability, visibility and control, and passengers benefit from the forgiving suspension, smooth powertrain and low interior noise levels, as well as individual climate control, and USB charging points.

Moreover, keeping drivers healthy and alert is another aspect of operational importance and here, the top-quality driver area in Scania coaches can make a big difference.

SAFER BY DESIGN

Safety is central to any operation, and not least at the higher speeds associated with highway coach travel. It is also essential that the coach is equipped with enhanced safety features to operate in the urban environments that are often their destination. Here, the vehicle's design along with digitalised and automated services play a crucial role in reducing risks; protecting drivers, passengers and other road users.

Accident prevention
To prevent accidents, Scania coaches have built-in state-of-the-art safety systems and features. These systems help the driver by increasing their awareness of surrounding road users or even helping to control the vehicle when needed. Our advanced driver assistance systems (ADAS) include lane departure warning, lane change collision prevention, vulnerable road user collision warning, attention support, and advanced emergency braking.

Together, they create a safer traffic environment by keeping the driver alert and the vehicle in the right position as well as controlling the speed and distance from other road users. The driver is further assisted with an electropneumatic parking brake that locks the brake until acceleration is activated, thus preventing unintentional vehicle motion and potential accidents, and with Scania Zone, a service which helps the driver to comply with speed regulations.

Security of the coach and its passengers is also enhanced, thanks to an anti-theft alarm system and rear- and mid-door placed cameras which enable a view over entry points, for example during rest stops.

Minimising potential damage
While avoiding accidents altogether is the goal, accidents can of course happen. Therefore, the vehicle itself, right down to its individual components, needs to be designed in a way that protects the driver, passengers and third parties. Through reinforced body and chassis construction at the front and rear, our coaches are built to offer enhanced safety for both drivers and passengers. Additionally, in the event of a collision, Scania coaches are designed to avoid major deformation and prevent passenger cars from sliding under the coach and also have fire extinguishers and escape routes for use in the event of fire or collision.

A FIRST-CLASS DRIVER AREA

A coach operating on extended routes needs to be optimised for this purpose, and the driver needs to have the best possible pre-requisites to perform. That is why we have developed a driver area we believe is industry leading.

An outstanding work environment
The driver area in Scania coaches offers a highly welcoming work environment in terms of ergonomics, reachability, climate control, safety features and comfort. This allows the driver to sit comfortably and handle all that needs to be handled, but without risking to lose focus and compromising on safety. In addition to creating a safer environment for the driver and passengers alike, as well as for surrounding road users, Scania´s first-class driver area can potentially reduce sick-leave and enable higher employee retention. All while helping to attract the best drivers and creating a workplace that they can be proud of.

Exceptional driveability
Moreover, excellent visibility for the driver, an overall well balanced vehicle, a powerful and reliable powertrain, and a great turning radius, makes for great driveability. In addition to that, the driver is supported with advanced driver assistance systems. These systems give the driver enhanced control of the vehicle through improved and assisted handling, steering and braking, all in all allowing for a more relaxing and safer environment for the driver and passengers alike.

A COMFORTABLE PASSENGER EXPERIENCE

A relaxing environment is crucial, especially for longer coach journeys. The comfortable ride characteristics offered by a Scania coach are achieved through a forgiving suspension, an efficient gearbox with smooth transmission, powerful engines and well-balanced weight distribution. Additionally, the coach's excellent driveability, combined with Scania's driver services, contribute further to improved passenger comfort.

Efficient climate system
Individually adjustable fresh air flow and being able to have the right temperature inside the coach is also essential for a positive passenger experience. Scania's highly efficient climate system achieves this, while minimising energy consumption, regardless of the ambient climate. The cooling system is also separate from that of the powertrain, and therefore there is no compromise in passenger comfort.

A low noise, high quality environment
Passengers should be able to read, work, watch a film or rest in comfort. In our coaches, the seats are designed to offer comfort on extended journeys and each seat features USB charging points. In addition, low noise levels make for more relaxing journeys, and the design and quality of materials help to minimise interior noise levels and create a bright and attractive interior.

Coach operators have the possibility to configure each coach according to their specific, operational needs including the inclusion and placement of rest rooms and kitchens.

SOLUTIONS

Scania enables operators to achieve sustainable mobility by providing complete solutions that consist of high-quality products and services.

Our product portfolio consists of products with multiple options, allowing for custom configurations that enable operators to meet the specific needs of their travel operations.

Our service offering consists of a number of services for minimising emissions and optimising operating economy, focusing on areas like fuel consumption and uptime. This complete package enables us to offer suitable solutions catered to each operator’s individual challenges and needs.


Tempo de operação do compressor

PRODUCT OFFERING

Scania Touring – high decker (left hand drive)


2-axle


3-axle

Scania Touring – high decker (right hand drive)


2-axle


3-axle

K-chassis – high floor


2-axle


3-axle

K-chassis – high floor with low driver area


2-axle


3-axle


4-axle

F-chassis*


2-axle


3-axle

Combustion, Euro 3	Output	Torque	Fuel options
9-litre	250 hp (184 kW) at 1900 r/min	1250 Nm (1000-1350 r/min)	Biodiesel, HVO, diesel
9-litre	310 hp (228 kW) at 1900 r/min	1550 Nm (1050-1350 r/min)	Biodiesel, HVO, diesel
13-litre	360 hp (265 kW) at 1900 r/min	1800 Nm (1050-1350 r/min)	Biodiesel, HVO, diesel
13-litre	410 hp (302 kW) at 1900 r/min	2050 Nm (1000-1350 r/min)	Biodiesel, HVO, diesel
Fuel capacity (usable volumes): 275–460 litres			

Combustion, Euro 6	Output	Torque	Emissions control	Fuel options
9-litre	280 hp (206 kW) at 1900 r/min	1350 Nm (1000-1400 r/min)	EGR	Biogas, natural gas
9-litre	340 hp (250 kW) at 1900 r/min	1600 Nm (1100-1400 r/min)	EGR	Biogas, natural gas
13-litre	410 hp (302 kW) at 1900 r/min	2000 Nm (1100-1400 r/min)	EGR	Biogas, natural gas
Fuel capacity (usable volumes): 1260–1875 litres (CBG/CNG), 700 litres (LBG/LNG)				

** The information in the brochure is focused on K-chassis and is not always relevant for F-chassis. For more options, see Scania's urban transport offering.*

SERVICE OFFERING

Driver services

Scania Driver Training
Enables drivers to drive safer and more efficiently and can reduce the need for maintenance. Scania Driver Training combines theory and practice, covering topics such as safe and efficient driving, not only to save energy but also regenerate energy. The training also handles other aspects of professional driving, always with a focus on profitability, fuel economy and reduced emissions.

Scania Driver Evaluation
An on-board device that assesses the driving style by comparing it to that of drivers operating in similar conditions. The result, which can be used to achieve long term improvements, is visible in the Scania Fleet Management Portal and Scania Fleet App.

Fleet management services

Through the Scania Fleet Management Portal and the Scania Fleet App, operators can gain access to valuable insights into the performance and status of their fleet. The data collected onboard the coach provides valuable insights into driving styles, productivity and economy. This level of tracking and diagnostics can bring significant benefits in terms of increased uptime, improved safety and reduced operating costs.

Scania Zone
A position-based system for real-time vehicle adjustments in predefined zones. It allows operators to ensure that each vehicle stays within the set speed limits, increasing safety and comfort as well as lowering fuel consumption. Scania Zone is an optional add-on in Scania's fleet management system.

Repair and maintenance services

Having access to professional workshops and quality parts is key to keeping the vehicles in prime condition. Scania offers a range of repair and maintenance services.

Scania Flexible Maintenance
Uses real-time vehicle data to produce maintenance plans tailored to each vehicle's actual operation, meaning no underservicing or overservicing. This is done by continually monitoring and analysing operational data to ensure maximum uptime and scheduling maintenance customised to operational needs, thus increasing productivity and decreasing disruptions.

Scania Fleet Care
The fleet operator receives a dedicated Fleet Manager from Scania equipped with advanced tools and systems, to optimise maintenance and prevent breakdowns based on operational data and vehicle data analysis.

Customer workshop services
Tailored collaboration services designed to facilitate workshop services for the operator by streamlining and quality assuring the workshop and processes to meet Scania´s high standards.

Financial services

Flexible financing and insurance solutions that match operational needs, tailored to provide predictable costs and manageable risks – over the entire lifecycle of the vehicles.

Scania Financing
Tailored solutions for financing expansion or fleet renewal. Supported by professional knowledge of transport business financing and optimised for the local tax and legal environment.

Scania Insurance
Tailored solutions that, together with a claims support service and Scania Assistance, will help get the vehicle back on the road quicker, safeguarding uptime – and peace of mind.

Scania's data API's comply with the rFSM standards 1.x and 2.x.

Scania CV AB
SE 151 87 Södertälje, Sweden
Telephone +46 8 553 81 000
www.scania.com