

CONVERT TO A SUSTAINABLE TRANSPORT SOLUTIONS

# TAKE CONTROL RIGHT HERE, RIGHT NOW.



**SCANIA**



## YOUR CONCERN, OUR MISSION.

As the world turns, so do the wheels of road transport. An ever increasing population means our cities are growing, accelerating mobility needs. As a consequence, vehicles transporting goods and people in and between urban areas will become even more crucial tomorrow. But that's only half the story.

Since our planet also struggles with serious health problems, such as pollution and climate change due to local and global emissions, these transport solutions must be of a new kind. A kind that has a minimal impact on the environment.

However, finding such a solution has been a difficult task for the whole industry. Simply because there haven't been any commercially viable options around.

Until now.

With a long and proven track record of providing fuel efficient, clean running vehicles we are proud to offer tomorrow's sustainable transport solution, today.

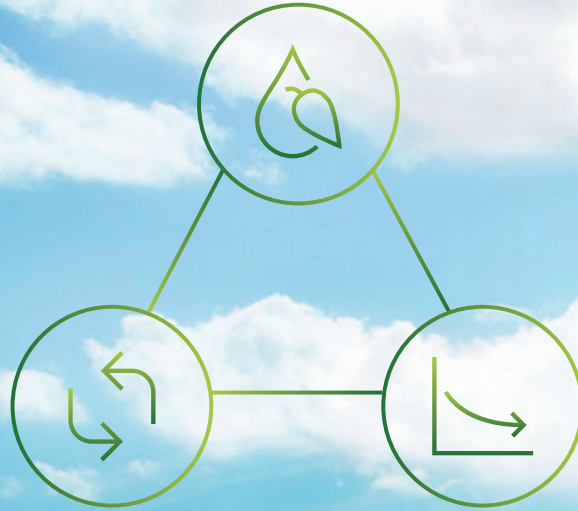






# Convert to a sustainable transport solution

ALTERNATIVE FUELS



SMARTER TRANSPORT

ENERGY EFFICIENCY



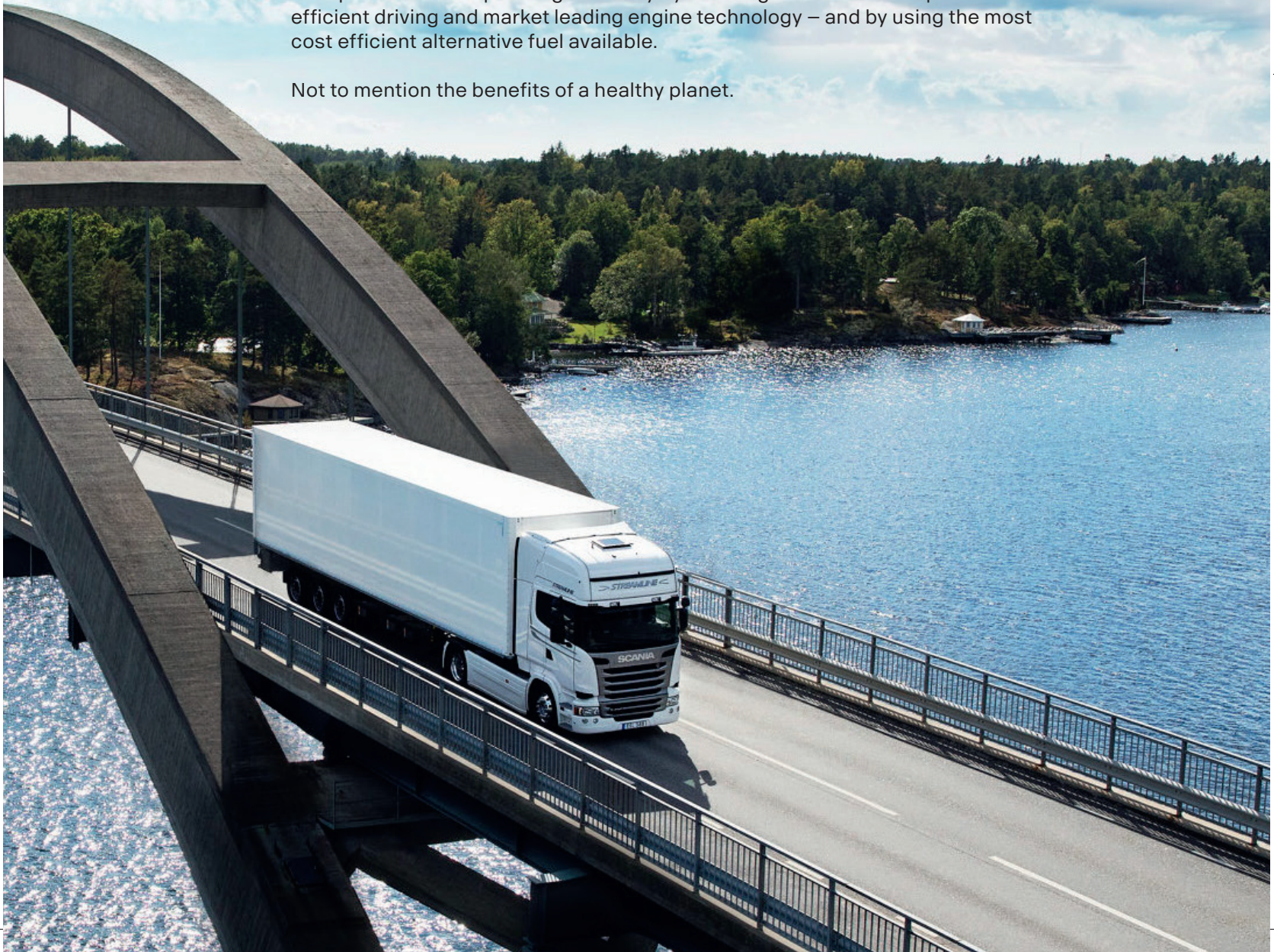
## TIME TO CHANGE THE GAME.

Globally, the transport sector today is a major source of fossil CO<sub>2</sub> emissions. This means that the transport sector – given the right means and measures – can also be a major contributor when it comes to reducing these emissions. Around the world companies formulate ten year plans to reach their reduction targets and then look for ways to realise them. This is where Scania enters the scene with a game-changing offer.

With a holistic view on transport we deliver low-carbon solutions founded on three corner stones: alternative fuels, energy efficiency and smarter transport. By combining actions within these three areas, we are able to tailor transport solutions that will help any company to take a giant leap towards their CO<sub>2</sub>-targets – right here, right now. Suddenly a ten year plan can be turned into a one year plan.

It does not have to come with a big price tag either, since with Scania – being sustainable also means being profitable. The CO<sub>2</sub>-reduction will come with the best possible total operating economy by lowering the fuel consumption with efficient driving and market leading engine technology – and by using the most cost efficient alternative fuel available.

Not to mention the benefits of a healthy planet.





## MAKING VISIONS BECOME REALITY.

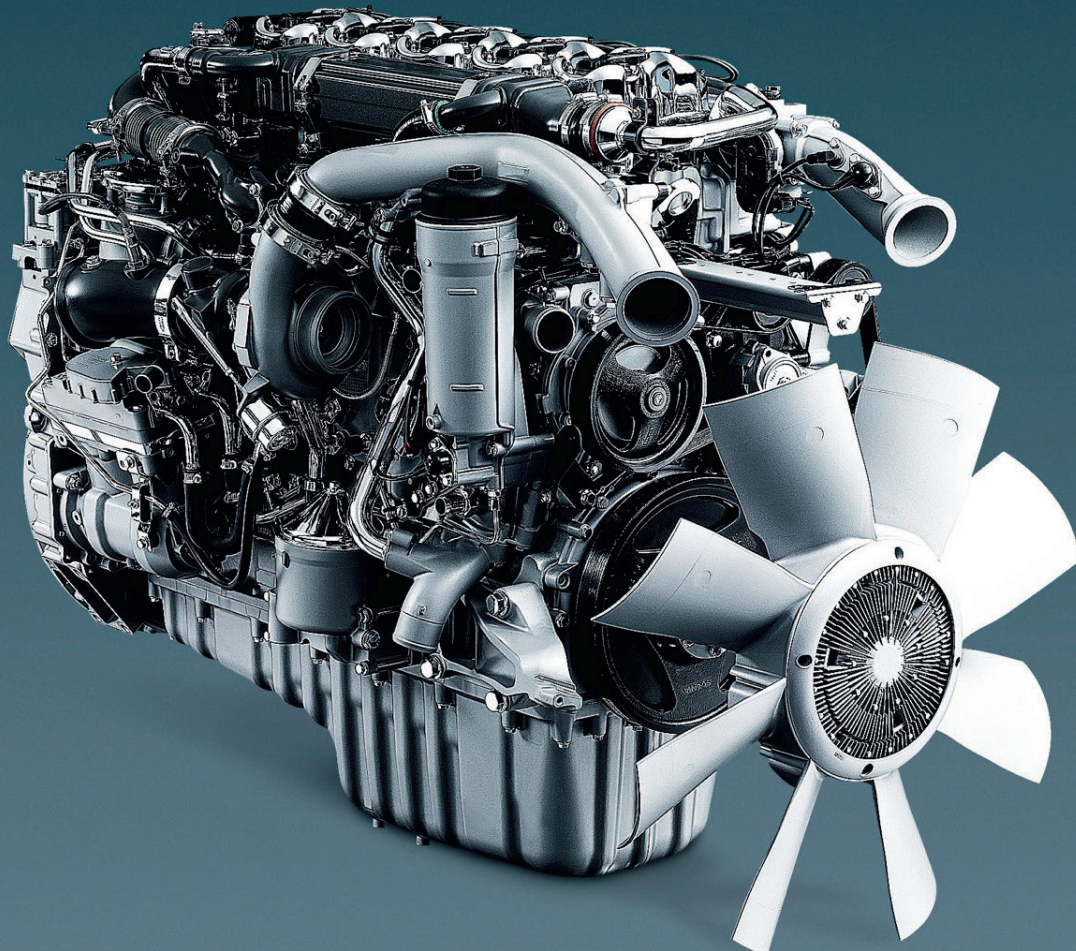
The greatest challenge is not to develop engines that run on renewable fuels, but to make these engines so powerful that you can't tell the difference from a traditional diesel engine.

The thrust of torque, the push of horsepowers and the responsive feel when pressing the accelerator. Everything must be there for an engine to become a first hand choice.

Then it's the question of the fuel itself. To qualify as one of Scania's viable alternatives, the fuel type must pass three crucial criteria: That it will reduce CO<sub>2</sub>, that it is available in large enough quantities, and that the price is right.

With unmatched experience and expertise Scania has developed a full range of engines that make a significant contribution to the reduction of CO<sub>2</sub>-emissions (and CO<sub>2</sub>-equivalents) from well-to-wheel.

Scania is also pro-active in supporting the development of an efficient infrastructure to support each alternative fuel type. The idea is to make the switch to sustainable transport solutions as smooth a ride as possible.









## CONGRATS! YOU ARE GOING DOWN.

A minimised fuel consumption will reduce CO<sub>2</sub>-emissions and lower the total transport costs. This true double-win scenario is possible to achieve given Scania's history as a leading manufacturer of fuel efficient powertrains, and unique ability to understand specific transport needs.

Ecolution by Scania is a tried, tested and successful Scania offer. It effectively makes you reach a maximum level of energy efficiency. Ecolution by Scania includes three important action areas, that are also offered separately.

### **Optimised vehicle specification**

The vehicle is specified to perform in a way that decimates fuel consumption without compromising on efficiency. The process covers areas such as choice of engine, gearing, air deflectors, support systems and possible usage of alternative fuels.

### **Optimised driving**

Education is usually a long-term investment, but when it comes to driver training the results will show right away. These improvements apply to both new and seasoned drivers and can be made to last. An optimised training typically reduces fuel consumption by up to 10 percent, but can also give more.

### **Optimised maintenance**

Regular maintenance will keep the vehicle in the best possible condition. The programme can include checks of tyre pressure and tyre status, axle alignment, air deflector adjustment and more. All these actions contribute to reduce fuel consumption further.







**NATURAL GAS  
(CNG / LNG)**

Natural gas is methane gas found in pockets in the Earth's crust. It is extracted from separate gas deposits, or in connection with oil extraction. Natural gas is a fossil fuel, but since the methane molecule contains only one carbon atom the emitted amount of CO<sub>2</sub> during combustion is smaller, compared to a standard diesel engine. Natural gas and biogas can be used in parallel. Compared to standard diesel, an optimal CO<sub>2</sub>-reduction can reach up to...

20%

REDUCTION IN  
CO<sub>2</sub>-EMISSIONS



**BIOGAS (CBG / LBG)**

Biogas can be produced from a number of sources, but the most cost efficient and sustainable source is local sewage or waste. Biogas consists of the same molecule as natural gas, but biogas is renewable and natural gas is fossil. The two can be used in parallel. Liquefied Natural Gas / Liquefied Biogas is methane gas cooled down to a liquid state. The volumetric energy content in LNG compared to diesel is 1:2. Compared to standard diesel, an optimal CO<sub>2</sub>-reduction can reach up to...

90%

REDUCTION IN  
CO<sub>2</sub>-EMISSIONS



**HVO**

Hydrogenated Vegetable Oil – HVO – is a modern way to produce high-quality biobased diesel fuels without compromising fuel logistics, engines, exhaust after-treatment devices, or exhaust emissions. HVO can be made from different sources – waste oil, rape seed oil, palm oil and animal fat. Using these sources of energy has a great impact on the total greenhouse gas savings. Compared to standard diesel, an optimal CO<sub>2</sub>-reduction can reach up to...

90%

REDUCTION IN  
CO<sub>2</sub>-EMISSIONS



**BIODIESEL**

Biodiesel (or FAME as in Fatty Acid Methyl Ester) can be made from various sources like rape seed, plants, and waste cooking oil. In Europe rape seed is the largest source. Having the advantage of being fairly simple to produce, biodiesel is available in large quantities. The supply of biodiesel is primarily being used for blending in diesel, but is also available in its pure 100% form. Compared to standard diesel, an optimal CO<sub>2</sub>-reduction can reach up to...

66%

REDUCTION IN  
CO<sub>2</sub>-EMISSIONS



**BIOETHANOL / ED95**

Bioethanol is the most widely used biofuel in transport today. It is also the fuel that is most likely to be able to supply both large and sustainable volumes in the future. A major advantage is that it is a liquid and available in large volumes globally. It can be produced from a variety of sources, like organic waste from sugar cane, wheat, corn or cellulose. In addition, bioethanol is comparatively easy to produce, even on a small scale. Compared to standard diesel, an optimal CO<sub>2</sub>-reduction can reach up to...

90%

REDUCTION IN  
CO<sub>2</sub>-EMISSIONS



**HYBRID**

The hybrid runs on electrical power, in combination with a biofuel. This greatly reduces the fuel consumption, that in turn leads to lower emissions. It also reduces noise, giving the hybrid vehicle special benefits like permission to deliver in cities during early mornings, late evenings, or nights. Off-peak deliveries offer several benefits such as reduction of driving time, fuel consumption and CO<sub>2</sub>-emissions. It also increases the use of the vehicle. Compared to standard diesel, an optimal CO<sub>2</sub>-reduction can reach up to...

\* 92%

REDUCTION IN  
CO<sub>2</sub>-EMISSIONS

\*the estimate refers to a hybrid and HVO combination.



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## POWERED BY NATURE.

Time to open up for a sustainable transport operation that runs on nature's own gifts. To every challenge, we have the right solution.







## NATURAL GAS (CNG/LNG)

Scania's Euro 6 gas engines set a new standard for fuel efficiency. This is the most diesel-like gas engine in the world. A powerful engine with high torque at low revs.

### Recommended areas of use:

City and regional distribution, refuse collectors, general cargo (LNG/LBG).

- Diesel-like torque and driveability
- Low noise
- Up to 20% CO<sub>2</sub>-reduction
- Scania service net available
- Euro 6

## BIOGAS (CNG)

Scania's Euro 6 gas engine sets a new standard for fuel efficiency. This engine can be operated from a number of sources. A powerful engine with high torque at low revs, just like a diesel engine.

### Recommended areas of use:

City and regional distribution, refuse collectors, general cargo.



# CO<sub>2</sub> CONVERT WITH THE POSSIBLE

SCANIA OFFERS THE WIDEST RANGE OF READY-TO-GO GAS, HYBRID, BIOETHANOL, BIODIESEL AND HVO SOLUTIONS THAT, ON THE LOCAL MARKET CIRCUMSTANCES, THE OPERATION AND THE SPECIFIC CO<sub>2</sub>-REDUCTION TARGETS. THESE



## GAS (CBG/LBG)

Gas engines set a new standard for fuel efficiency. This is achieved by operating with biogas from various sources. It is a clean engine with high torque and performance like a regular diesel.

- Diesel-like torque and driveability
- Low noise
- Up to 90% CO<sub>2</sub>-reduction
- Scania service net available
- Euro 6

### Recommended areas of use:

Regional distribution, refuse and general cargo (LNG/LBG).

## HVO

Every Scania diesel truck is an HVO truck. You just have to switch fuels. It's easy to use, work's like a standard diesel, and requires the same service intervals.

### Recommended areas of use:

All applications.

- Up to 90% CO<sub>2</sub>-reduction
- Simplicity
- Normal diesel engine
- All year round
- Euro 6



# THE WIDEST RANGE OF CAPABILITIES.

TRUCKS THAT MATCH THE EURO 6 LEVEL ON THE MARKET. WHAT TYPE OF VEHICLE AND FUEL THAT WILL FIT THE BILL DEPENDS ON YOUR REQUIREMENTS. THESE ARE SCANIA'S ALTERNATIVE FUEL OPTIONS TODAY AND A SELECTION OF THEIR FOREMOST ADVANTAGES.



## BIODIESEL

Biodiesel engines are available for a wide range of applications on all engine platforms, 9, 13 and 16 litres. Can run on biodiesel as well as conventional diesel.

### Recommended areas of use:

Long haulage, forestry, distribution refuse collectors and construction.

- Local production
- Diesel efficiency
- Up to 66% CO<sub>2</sub>-reduction
- Robustness
- Euro 6

## BIOETHANOL/ED95

Scania has a long experience of developing and producing ethanol engines for commercial vehicle operations. It is the most used and well-known biofuel, globally.

### Recommended areas of use:

City and regional distribution.

- Local production
- Liquid fuel
- Diesel-like
- Up to 90%
- Euro 6





Local production possible  
 Liquid fuel, easy to handle  
 Diesel-like efficiency  
 Up to 90% CO<sub>2</sub>-reduction  
 Euro 6

## HYBRID

The perfect choice for vehicles with a high frequency of stops and starts, for example city distribution and refuse collectors. Many competitive advantages.

### Recommended areas of use:

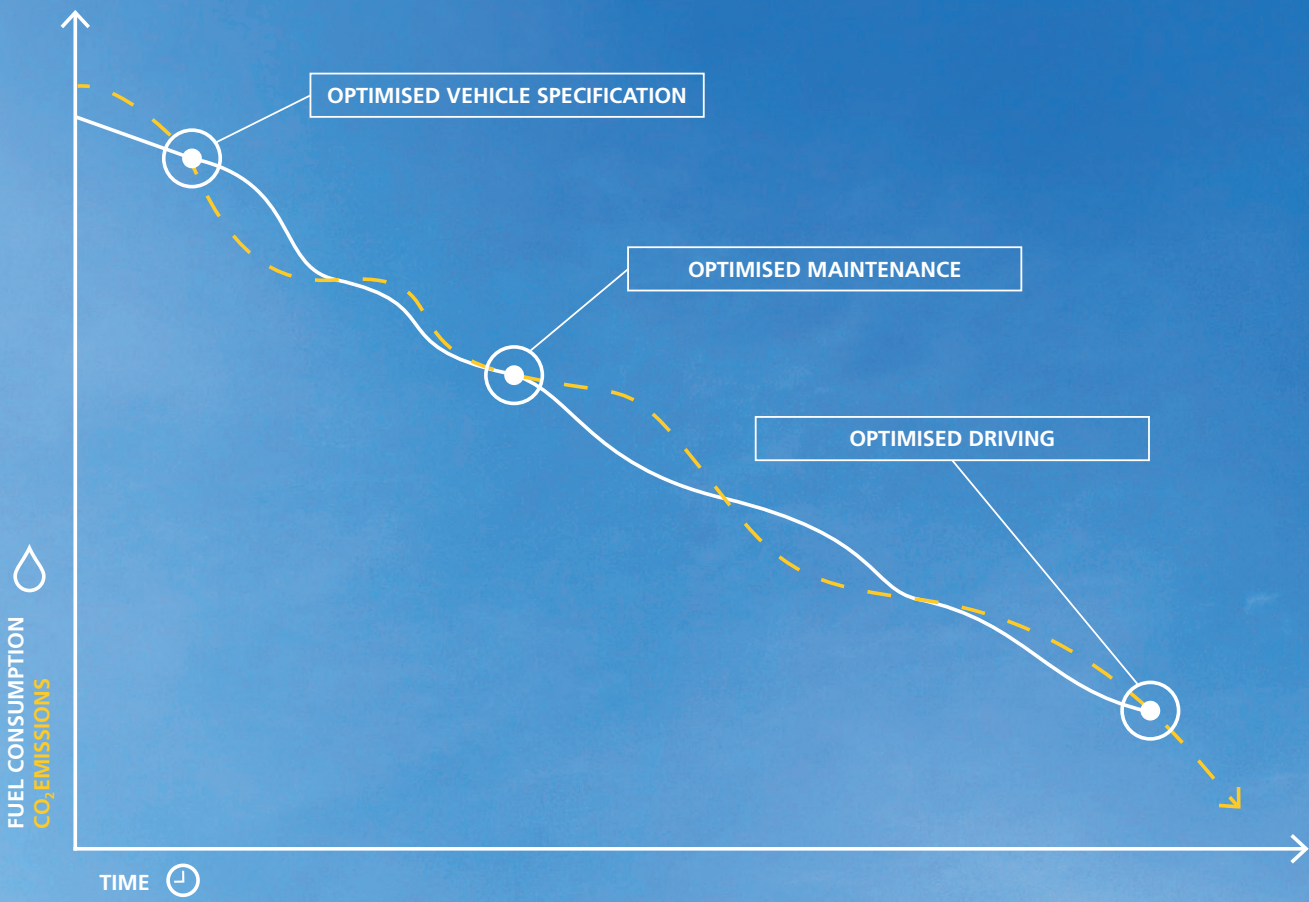
Distribution and refuse collectors.

- Available with diesel, biodiesel and HVO
- Lower fuel consumption with around 18%\*
- Up to 92% CO<sub>2</sub>-reduction\*\*
- Stop-start system
- Better drivability, fast response and gear shifts
- Low noise levels, transport all hours
- Euro 6

\*Depending on application.

\*\*The estimate refers to a hybrid and HVO combination.







## GO WITH THE FLOW.

Logistics is a highly complex matter, involving many actors. Through a close dialogue with our customers and other partners and stakeholders, Scania helps drive down the transport sector's carbon footprint and ensures profitability by optimising the entire flow, from supplier to end consumer. Two examples of technical solutions and tools that enhance these efforts are the connected services within Scania's Fleet Management Services and The Fleet CO<sub>2</sub>MPOSER – a unique Scania tool developed to help analyse and optimise any given transport fleet with the right choice of alternative fuels. Scania is constantly exploring new ways of making transports smarter.

### MAKE IT COUNT. FOR REAL.

We are not satisfied with counting drops. We want to make a real difference and the only way to do this is together with you. With a long tradition of having close cooperation with our customers we truly understand the challenges of transport.

But even more importantly, we also have the experience and expertise to turn these challenges into opportunities by launching the most effective sustainable transport solution on the market. Right here, right now.

Alternative fuels, energy efficiency and smarter transport solutions. These words are usually found in corporate visions of a distant future. To us they're a reality, waiting for you to take control over your CO<sub>2</sub>-emissions and your future business.



## THREE STEPS TO TAKE CO<sub>2</sub> NTROL.

With Scania, switching to a sustainable transport solution is no big deal – even though it makes a huge difference. All it takes is the will and a phone call to your local Scania representative. The process that follows has three simple steps.

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### STEP 1 THE MEETING

Initially, the local Scania representative will arrange a meeting to hear about your specific transport challenges and CO<sub>2</sub>-targets – and to inform about how Scania can help you. This meeting can include all parts involved in today's transport solution.

### STEP 2 THE ANALYSIS

If you decide to proceed with Scania's offering, this is the next step. Now, a Scania expert will take a closer look at your operation using the Fleet CO<sub>2</sub>MPOSER, to discuss and propose what measures need to be done to reach your CO<sub>2</sub>-targets.

### STEP 3 THE SWITCH

This is the step where Scania implements the agreed solutions, such as new vehicles running on alternative fuels, energy saving actions and ways to make your transports smarter. You are now turning sustainable!

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Contact your local Scania representative for further information.



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## SUSTAINABILITY PUT INTO PRACTICE.

Take a few minutes to learn more about how a sustainable transport solution can work in real life. These three companies all run a public and well-established operation with a high-profile environmental agenda.

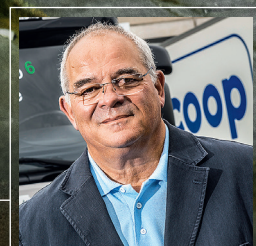
Their full stories can be found on [scania.com/alternative\\_fuels](https://scania.com/alternative_fuels)



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In addition to the positive environmental effects, the gas engine offers a very interesting operating cost. Biocoop, France

**Keeping it quiet with gas engines.** Interest in gas-powered vehicles is growing. The driving forces are environmental considerations and increasing demand for quieter vehicles, but also more available biogas and lower gas prices.



Jacques Chapin, manager of STB, Biocoop's wholly-owned transport company





Our target is not a green image. It's getting result from our efforts. Coop, Switzerland

**Scania biodiesel trucks help Coop become carbon neutral.** As part of a plan to become carbon neutral by 2023, Swiss supermarket chain Coop is taking delivery of more than 50 Scania biodiesel trucks. The chain says the move has everything to do with efficiency and making a difference in the world.

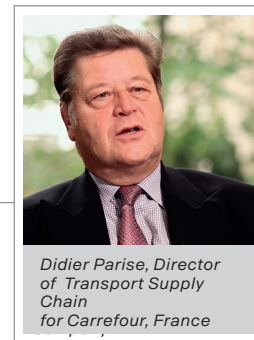


Josef Zettel,  
Head of Logistics,  
Coop, Switzerland



French people are becoming increasingly aware of environmental issues. Carrefour, France

**Filling up with French wine.** At the initiative of Scania, Carrefour – one of the world's largest retailers – is participating in a successful trial of ethanol trucks in France, using bioethanol produced from the waste products of winemaking.



Didier Parise, Director  
of Transport Supply  
Chain  
for Carrefour, France





Scania pursues an active policy of product development and improvement. For this reason the company reserves the right to change specifications without prior notice. Furthermore, due to national or EU legal requirements, some products and services may not be available in all local markets. For further information in these respects, please contact your local dealer or visit [www.scania.com.au](http://www.scania.com.au)

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