



Scania Euro 6 Ethanol Trucks.
Fourth generation intelligence.

TIME TO CHANGE THE GAME

Globally, transport is a major source of fossil CO₂ emissions. On the bright side, this means that the transport sector also can be a major contributor when it comes to reducing these emissions.

FOR SCANIA BEING SUSTAINABLE ALSO means being profitable. The CO₂ reduction will come with the best possible total operating economy; lowering the fuel consumption with efficient driving, market-leading engine technology and

by using one of the most cost-efficient alternative fuels available. Looking at your business from a wider perspective also means using cutting-edge connected services to improve in all areas possible. Connected trucks are efficient trucks.

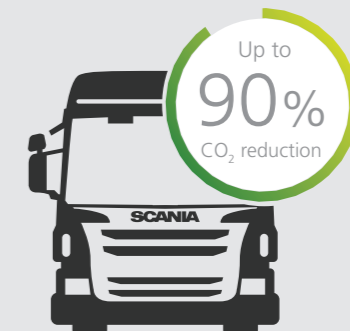


ETHANOL

Ethanol is the world's largest biofuel. It's a powerful fuel with low emissions that can be made from local forestry, agricultural and household waste.

FOR OVER 30 YEARS, we have been making ethanol-fueled engines which are commercially viable for use in heavy transport. We developed the first Scania ethanol powertrain in the 80's and it was already much cleaner than any other engine at that time. Since then we have continued to refine and develop our Euro 3 engine, a Euro 5 engine and now our fourth generation, Euro 6 ethanol engine. This engine is another marvel of Scania modular engineering that now meets the dramatically reduced Euro 6 emission limits without compromising any power or purpose.

The CO₂ reduction varies by raw material and production process, but with up to a 90% CO₂ reduction, ethanol biofuel formulated for use in modified diesel engines is widely available and making a cleaner difference right now.



ASKO – WHOLESALER WITH AMBITIOUS CLIMATE TARGETS

Every day, a fleet of about 600 trucks carries goods to ASKO and to ASKO's customers all across Norway.

This wholesaler has the ambition to set their industry's standard of excellence with 100% sustainable and climate-neutral operations.

According to Marius Råstad, ASKO Corporate Logistics Manager, they picked Scania as its overall truck

supplier because Scania is one of the few truck brands able to provide ASKO with technology that enables the use of 100% renewable fuels. What's more, ASKO's ethanol trucks from Scania are helping reduce CO₂ emissions by 82-85% using ethanol produced locally from forest bi-products.

“Our drivers are very proud and engaged in our company's sustainability efforts to use only 100% renewable energy and Scania Trucks contribute a lot to that pride and engagement.”

MARIUS RÅSTAD
Corporate Logistics Manager,
ASKO, Oslo, Norway

YOUR PROFITABILITY IS THE KEY

To help you reach your sustainability goals in the most cost-efficient way, Scania's ethanol engine shares most parts and all interfaces with our diesel engine – boosting uptime.

The adaptations make sure you can run on ethanol in all conditions – from the coldest to the hottest day of the year.

1

DIESEL POWER WITHOUT DIESEL FUEL

In a modified diesel (compression-ignition) engine, ethanol can be utilised. That makes the energy output efficiency of our ethanol engines as high as conventional diesel-powered engines – so you get the power you expect from a Scania truck.

2

FOUR GENERATIONS STRONGER

The Euro 6 ethanol engine is arguably the strongest, most robust ethanol engine ever built. From the cylinder heads down to the gaskets, from the pistons to the fuel system, every bit of this high-compression workhorse is engineered and refined to take the world's most available biofuel, ethanol, and make it work for you. It produces all the torque you need for a large number of applications; making it easy for you to match it right for your business.

3

PATENTED AIR-INTAKE-MANAGEMENT SYSTEM

Finding new ways to get the most energy from every drop of fuel is never easy but we're doing it. Our fourth-generation, Euro 6, ethanol trucks are now equipped with our new, patented Air-Intake-Management system that precisely regulates air-intake temperature to optimize the combustion of the air/fuel mixture.



THE CHALLENGE – REDUCING EMISSIONS WITHOUT LOSING POWER

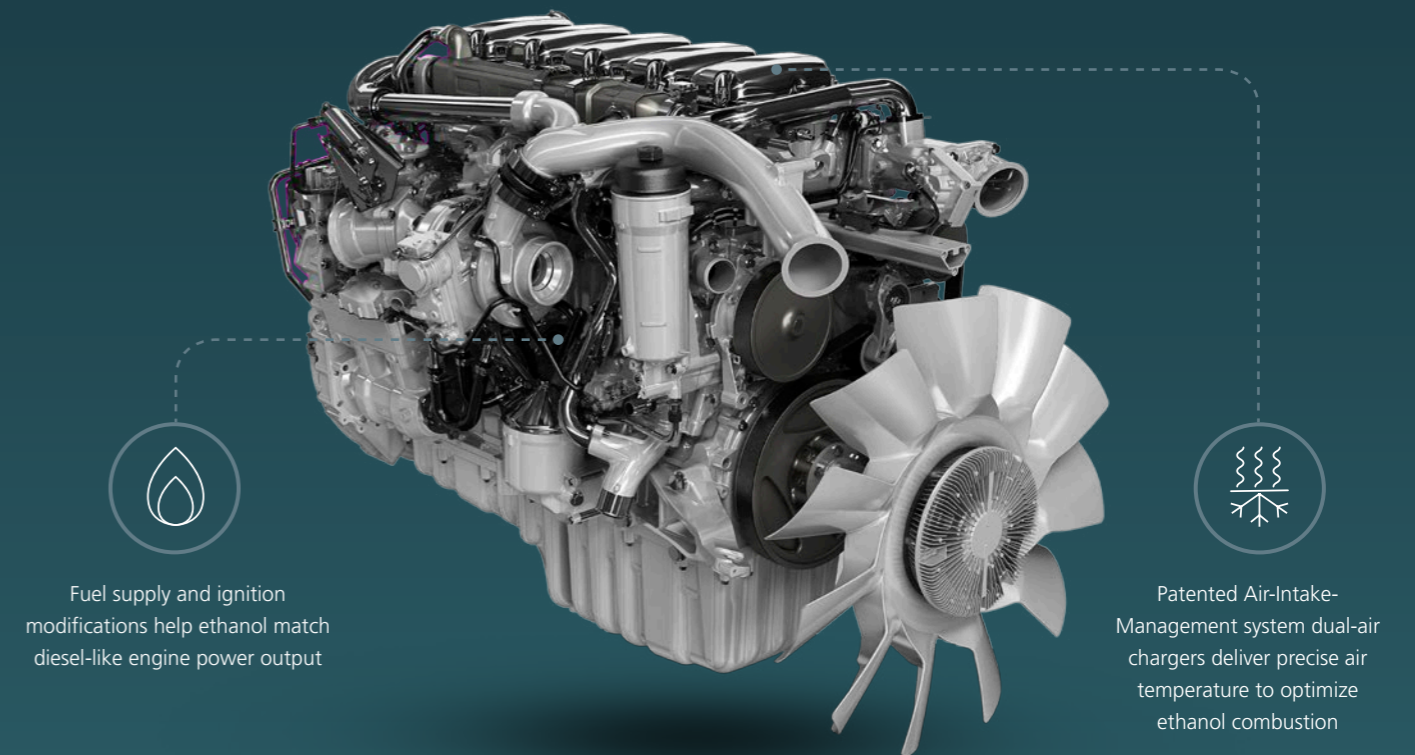


SCANIA INNOVATIONS TAKE ETHANOL FARTHER

This Euro 6 Scania engine has two new air- and fuel-supply systems to help get the best out of ethanol: (1) Our patented Air-Intake-Management system helps ethanol ignite more effectively, (2) Our new, larger fuel-supply system helps maintain optimal thermal efficiency.

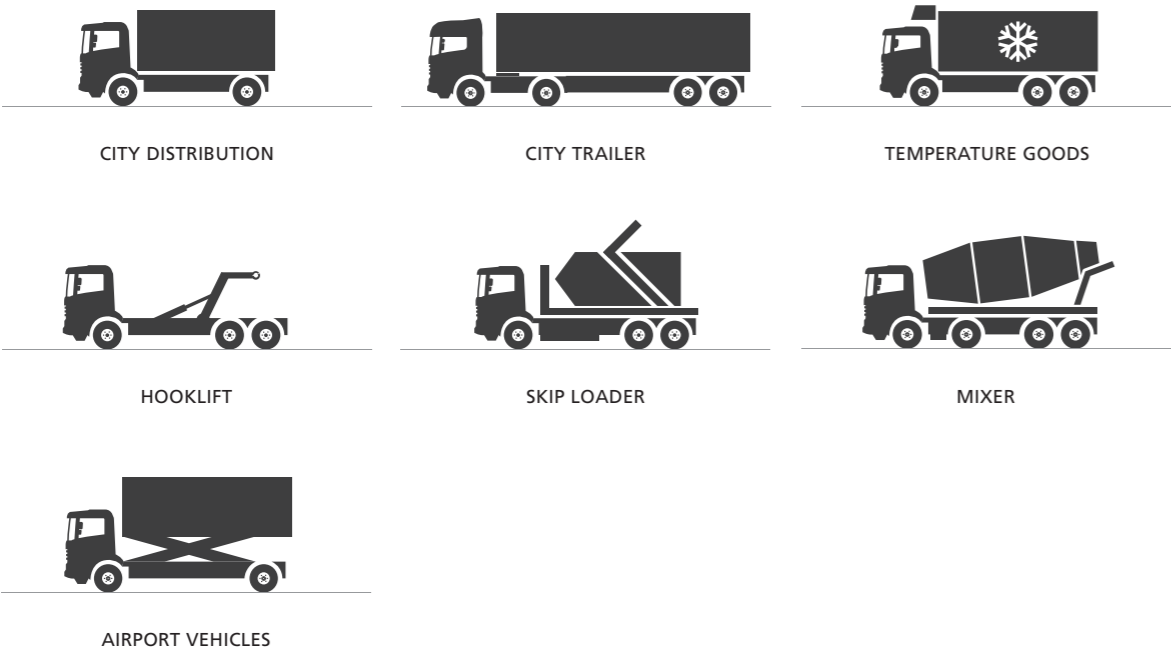
OUR ETHANOL ENGINE is a modified diesel engine born from the Scania modular system of engine design. For our fourth generation ethanol engine, components such as seals and gaskets have been materially enhanced for better longevity. Pistons and cylinder heads have been newly designed and machined to increase the compression needed to more efficiently ignite the fuel. The fuel injection system and engine management system have also been re-engineered to further improve performance and efficiency.

The most remarkable advance for our fourth generation ethanol engine may seem insignificant because it's just a matter of degrees but it makes a huge difference to every drop of fuel. Our patented Air-Intake-Management system keeps air temperature at 40° Celsius so ethanol performs at its peak. This helps us reduce the output of emissions without reducing the output of power.



MATCH IT RIGHT

Applications available for the Euro 6 ethanol engine



CAB RANGE

CABS	SHORT CABS	DAY CABS	SLEEPER CABS		
			Low	Normal	Highline
P					

SCANIA P SERIES

Lightweight, economical and high standard working accommodations within compact dimensions.

REFUELLING INFRASTRUCTURE

To make it easier for more vehicles to make the switch from diesel fuel, Scania is pro-active in supporting the development of an efficient infrastructure that further increases the availability and use of biofuels like the ethanol fuel ED95.

Through partnerships and cooperation with fuel suppliers and key decision makers our development of proven turnkey solutions for biofuel refuelling stations simplifies adoption.

The ethanol fuel ED95

ED95 fuel consists of 95% hydrous ethanol and 5% performance additives specifically formulated for optimal ethanol combustion in compression ignited engines.

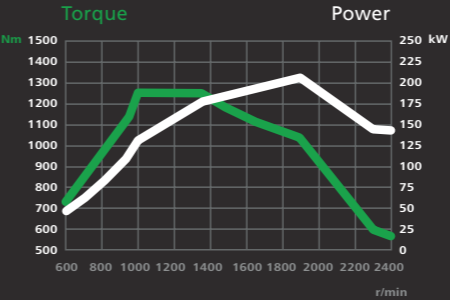
- Local production possible
- Liquid fuel, easy to handle
- Up to 90% CO₂ reduction



ENGINE

The Scania 5-cylinder Euro 6 ethanol engine is optimized for maximum performance and operating economy.

280 hp ethanol



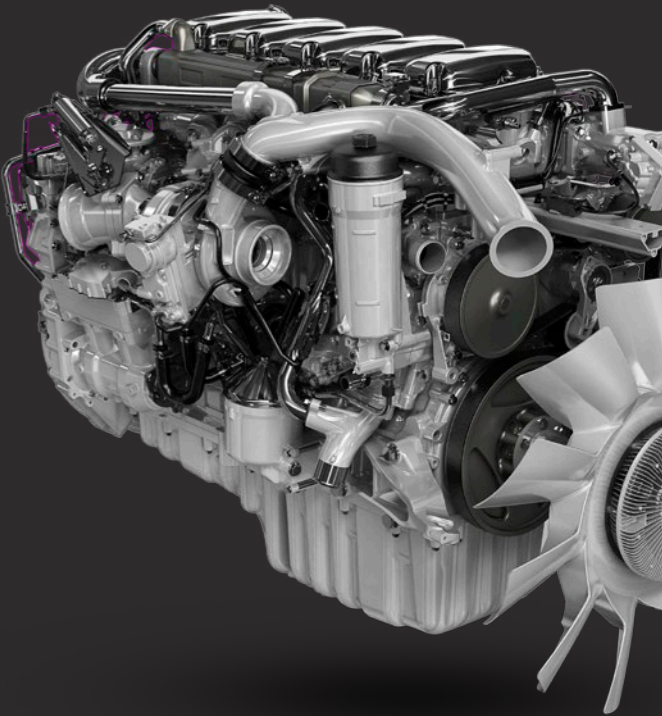
SWEPT VOLUME: 9.3 litres

MAXIMUM POWER: 280 hp (205 kW) at 1900 r/min

MAXIMUM TORQUE:1250 Nm between 1000 and 1350 r/min

ENGINE PTO: 600 Nm

EURO 6 TECHNOLOGY: Modified engine management system, Oxycat – DOC, Particulate Filter – DPF, Selective Catalytic Reduction – SCR





” *After having operated ethanol trucks for a few years, we still firmly consider them, by far, as the best alternative fuel available*

ROBERT BARKENSJÖ
Managing Director, Kyl och Frysexpressen
Transport Company, Stockholm

When reducing emissions is key

In 2015, the results of the Stockholm “Clean Truck” project to test alternative fuels in a number of heavy-duty applications like buses, waste trucks and distribution trucks, found that Scania’s ethanol trucks achieved the highest CO₂ savings.

One test participant, Robert Barkensjö, Managing Director, Kyl och Frysexpressen Transport Company became a strong advocate for ethanol but agrees that there are several sustainable options for commercial truck operations available right here, right now.

“In my experience, there is no difference between operating and driving a truck using ethanol compared with one fuelled by diesel”

ROBERT BARKENSJÖ
Managing Director, Kyl och Frysexpressen
Transport Company, Stockholm



” *If we don’t have vehicles with low environmental impact, some stores don’t want us to deliver to them in Paris or in the Paris region*

KARA MENDJEL
CEO of STAF Transport Company, Paris

Ethanol made from winemaking waste

One of the world’s largest retailers, Carrefour, along with their haulage partner, STAF, are participating in a trial of ethanol trucks in France, using ethanol produced from the waste products of winemaking.

STAF, which has a fleet of almost 600 trucks, has invested in ethanol vehicles because customers want more sustainable transport services. According to STAF CEO, Kara Mendjel, their company’s brand has been strengthened by its investment. He is a strong advocate not only because of ethanol’s impressive

reduction of CO₂ emissions by at least 70%, but also because of its clean-burning, particle-free qualities. “The rules are very strict, especially in Paris, when it comes to particulates from truck engines,” he says.

“Now that we have acquired these vehicles, I cannot foresee that we will stop using ethanol. Ethanol is here to stay and will probably become more common.”

KARA MENDJEL
CEO of STAF Transport Company, Paris

Scania Euro 6 Ethanol Trucks Fourth generation intelligence

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For further information in these respects, please contact your local dealer or visit www.scania.com.

