



CONVERT TO SUSTAINABLE TRAVEL

**TAKE CONTROL<sub>2</sub>  
RIGHT HERE,  
RIGHT NOW.**



**SCANIA**

THE CHALLENGE

# THE DAY'S COMMUTE SHOULDN'T TAKE ALL DAY

As the world's population grows, more people are flocking to cities to work and to live. Consequently, traffic congestion is stealing hours of productivity and reducing the quality of life for millions. Unless we act now, moving people in and between urban areas will be even harder tomorrow.

Our planet also struggles with serious health problems like pollution and climate change from local and global emissions. We need cleaner, sustainable ways to get around. The good news is the transition to alternative fuels and biofuels can help clean up the air while contributing to local energy security and job creation. We know this because we are doing it today.

With over 100 years of experience providing fuel-efficient, clean-running vehicles, we are proud to offer the industry's widest range of cost-effective, ready-to-go, alternative-fuel travel solutions today. But we bring more than attractive buses and coaches with reduced CO<sub>2</sub> and particulate emissions. We have all the expertise needed to help you create a sustainable urban, suburban and regional transport solution to be proud of already now. Please read on. No one likes to wait.



## THE CHALLENGE

# TIME TO CLEAR THE AIR

Today, the transport sector is a major source of global CO<sub>2</sub> emissions as well as local particulate and NOx emissions. That means we can also be a major contributor towards reducing these emissions and improving air quality, today.

At Scania, we believe the best way to clear the air depends on active participation in three key areas: Alternative fuels, Energy efficiency, and Smarter transport. This trio also presents the most practical, cost-effective and immediate way forward. All three are essential to your success.

It does not have to come with a big price tag either, since with Scania – being sustainable also means being profitable. For that, emission reductions must come with the best total operating economy. That's why a tailored Scania solution holistically promotes lowering fuel consumption from energy-efficient vehicle technologies, better logistics and more efficient driving.

Using the most cost-efficient alternative fuel available is also essential. With our partners, Scania supplies turnkey solutions for both vehicles and fuels. We use locally produced sustainable biofuels, or even turn sewage and organic waste into biogas, bioethanol or biodiesel to power local fleets. Not only are local jobs created but this local source of cleaner energy also reduces dependence on oil imports. Shifting to alternative fuels also means that you could leapfrog to Euro 6 – the cleanest emission standard available. The idea is to make it so everyone can breathe a little easier. Right now.



# DIESEL POWER WITHOUT DIESEL FUEL

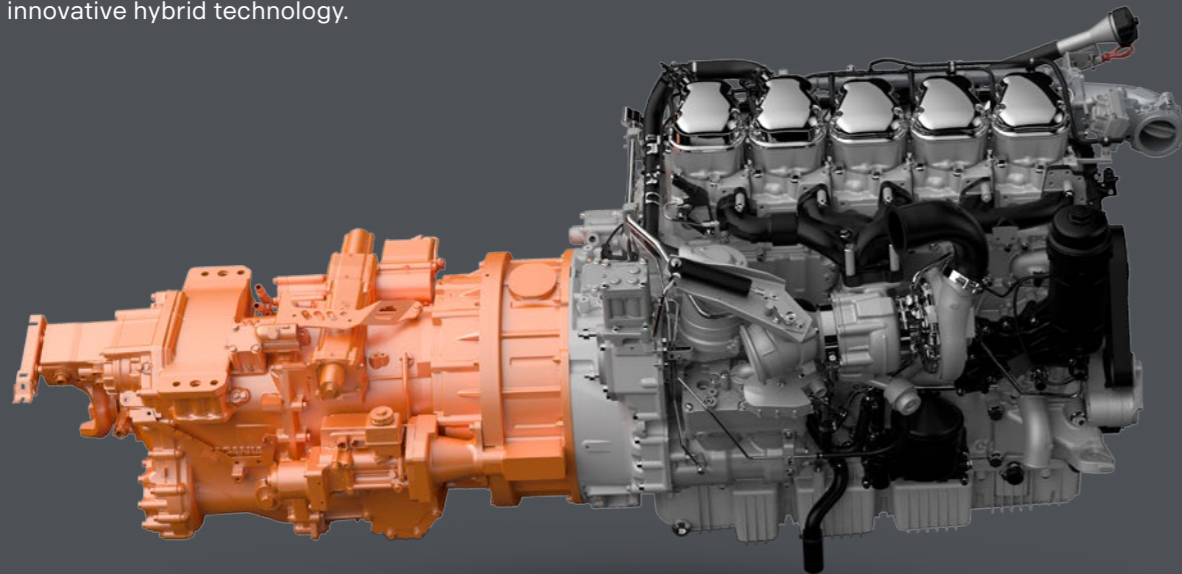
Today, renewable fuels cost-effectively deliver the driveline performance and reliability that demanding customers expect while also significantly reducing CO<sub>2</sub> emissions. That is sustainability on a daily basis.

To have a competitive, total operating economy extremely high uptime is required. That is where our durable and modular driveline design philosophy plus a well-established global supply chain of parts and service all help to keep your entire fleet running clean.

Over three decades ago Scania began modifying diesel drivelines to efficiently run on lower-grade biodiesel blends and 100% bioethanol. Today, our robust drivelines and modular design technology give customers dependable, commercially viable options with six alternative fuels – some alternative fuels are also available in combination with innovative hybrid technology.

With unmatched experience and expertise, Scania's full range of drivelines make a significant contribution to the reduction of CO<sub>2</sub> emissions 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 passenger transport solutions as smooth a ride as possible.



## Biodiesel

Biodiesel (or FAME as in Fatty Acid Methyl Ester) can be made from various sources like rapeseed, plants, and waste cooking oil. 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...



Reduction in CO<sub>2</sub>-emissions

## HVO

Hydrogenated Vegetable Oil (HVO) is a modern way to produce high quality bio-based diesel fuels without compromising fuel logistics, drivelines, exhaust after-treatment devices, or exhaust emissions. HVO can be made from different sources e.g., waste oil, rapeseed 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...



Reduction in CO<sub>2</sub>-emissions

## Biogas

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. It can be stored either in compressed form (CNG) or in a cooled down liquid form (LNG). Compared to standard diesel, an optimal CO<sub>2</sub> reduction can reach up to...



Reduction in CO<sub>2</sub>-emissions

## Natural gas

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. It can be stored either in compressed form (CBG) or in a cooled down liquid form (LBG). Compared to standard diesel, an optimal CO<sub>2</sub> reduction can reach up to...



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 sugar cane, wheat, cellulose and organic waste. In addition, bioethanol is comparatively easy to produce, even on a small scale. When bioethanol is used in the Scania diesel-type engine, the fuel is known as ED95. Compared to standard diesel, an optimal CO<sub>2</sub> reduction can reach up to...



Reduction in CO<sub>2</sub>-emissions

## Hybrid

Both an electrical driveline and a traditional engine using a sustainable biofuel power the hybrid. This greatly reduces the fuel consumption that, in turn, leads to lower emissions. Also, noise levels are reduced. The biofuel hybrid delivers the highest fuel savings in suburban type traffic, where average speeds are higher. In a typical city, this is also where most of the fossil fuel use and CO<sub>2</sub> emissions are found, which makes the biofuel hybrid the perfect choice for cost-efficient CO<sub>2</sub> reduction in suburban areas. Compared to standard diesel, an optimal CO<sub>2</sub> reduction can reach up to...



Reduction in CO<sub>2</sub>-emissions

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



# WE ARE ALL IN THIS TOGETHER

Every journey is different but the goals are the same:  
Finding the best way forward to sustainable travel.

OPERATIONS & OPTIONS

# TAKE COMFORT WITH THE WIDEST RANGE OF POSSIBILITIES

For flexible operations, cost-effective solutions, ultimate comfort and a lower carbon footprint, Scania provides the widest range of buses in the world.

Whether you operate city, suburban, BRT, intercity or coach routes, Scania's environmental approach is to help you do more with less fuel. In addition, we can always find a solution to power your fleet with a clean biofuel, produced locally.

The world's broadest range of ready-to-go Euro 6 gas, hybrid, bioethanol, biodiesel and HVO buses and coaches is ready to serve. Let's work together to improve commutes and reduce CO<sub>2</sub> and other emissions.



## CITY/SUBURBAN

From stop-and-go city traffic to higher speed suburban routes, there is a Scania bus perfect for every route. Our city and suburban buses are built to operate 24/7/365 – year after year – providing comfortable, reliable, public transportation services that are attracting more people to travel by bus.

Available options

- Biodiesel
- Biogas
- Bioethanol ED95
- HVO
- Hybrid
- Natural Gas



## INTERCITY

From scheduled airport shuttles to long-distance routes, Scania intercity buses deliver cost-effective travel for more passengers every year. Whether for shorter routes where maximum passenger capacity and standing room are important or for longer journeys to-and-from cities where seated comfort and luggage space are priorities, our made-to-order attention to detail sets the standard. Ask anyone who drives one.

Available options

- Biodiesel
- Biogas
- Bioethanol ED95
- HVO
- Hybrid
- Natural Gas



## BUS RAPID TRANSIT (BRT)

From custom-tailored buses to dedicated bus lanes, Bus Systems by Scania are the fastest way to reduce today's chaotic traffic congestion. Our integrated system is increasing ridership and improving passenger satisfaction by cutting commuting time significantly – in some cases saving travellers hours each way. When more people have a viable option to leave their cars behind and take the bus to work, people start to reclaim their cities from cars and parking lots.

Available options

- Biodiesel
- Biogas
- Bioethanol ED95
- HVO
- Hybrid
- Natural Gas



## OCCASIONAL SERVICE

From local sightseeing tourist trips to longer distance international adventures, Scania coaches are world-class examples of sustainable travel. The well-designed and ergonomic driver's area lets drivers enjoy their work with confidence so everyone can enjoy a safe, relaxing journey. With high comfort levels and many possibilities to customise the passenger experience, more travellers – who might otherwise fly or drive themselves – are discovering the benefits of travelling by coach.

Available options

- Biodiesel
- HVO



# REDUCE CONSUMPTION

With a proud history of over 100 years as a leading manufacturer of reliable, fuel-efficient powertrains and with a unique understanding of today's specific passenger transport needs, Scania is miles ahead and still taking fuel efficiency further. We know the smartest way to reduce emissions is to burn less fuel. We can help you do that and lower your total cost of passenger transport here and now. Here's how:

#### Optimised specification

The bus is specified to perform in a way that reduces fuel consumption without compromising engine power. The process covers areas such as choice of engine, gearing, 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. An optimised training typically reduces fuel consumption by up to 10% or more.

Scania also offers innovative technical solutions that can help drivers drive more economically. For example, Scania's Cruise Control with Active Prediction uses known topological data of the road ahead to optimise a vehicle's speed, saving fuel.

#### 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 and more. All these actions contribute to reduce fuel consumption further.



SMARTER TRANSPORT

# A FASTER WAY TO WORK

The fastest way to relieve traffic congestion is to get people out of their cars and into buses.

## Reduce congestion

One bus can take 60 cars off your streets. Bus Systems by Scania can be implemented in stages, one step at a time. It's flexible, so creating a Bus Rapid Transit (BRT) system will not paralyse your city, nor break the bank – we can help with financing. Like a subway system, a BRT system has many advantages to speed travel, like faster fare collection and boarding, yet it won't take 30 years to build.

## Improve commutes

A successful BRT project is bigger than a great bus. It requires expertise from traffic and infrastructure planning to system analysis and optimisation. And perhaps most importantly, it requires a seamless fare collection concept that speeds bus stops and encourages ridership while funding all the above. Scania can bring every competence you need right now to make your vision of a better commute a reality fast.

## Get connected

Today, data drives change so all Scania vehicles are built to travel the internet, too. With Scania web-connected services, you can gather actionable business intelligence in real-time for immediate and long-term analysis. For example, with Scania's Fleet Management Services, you can monitor each vehicle in your fleet regardless of make. You'll get detailed monthly reports that make it easier to spot trends and find opportunities for continuous improvement. What's more, connected buses let waiting passengers know when the next bus will arrive, increasing rider satisfaction with your service.



## SUSTAINABLE TRAVEL TAKE CO<sub>2</sub>NTROL. RIGHT HERE, RIGHT NOW

With Scania, switching to a sustainable passenger transport solution is easy. Just phone your local Scania representative. The process that follows has three simple steps

### Step 1

#### The meeting

Initially, the local Scania representative will arrange a meeting to hear about your passenger transport situation and to discuss what Scania can offer.

### Step 2

#### The analysis

If you decide to proceed with Scania's offering, a Scania expert will take a closer look at your operation. We will discuss the necessary measures needed to tailor-make a solution to your operation's specific needs. This meeting can include all parts involved in today's passenger transport solution.

### Step 3

#### The switch

Finally, Scania implements the agreed solutions such as new buses running on alternative fuels, energy saving actions and ways to make your passenger transports smarter, cleaner and CO<sub>2</sub>-efficient.

Now you're moving sustainably.

**Contact your local Scania representative for more information.**



# SUSTAINABILITY AROUND THE WORLD

Learn more about how Scania transport solutions are at work right here, right now, with these progressive partnerships from around the world. Their full stories can be found on [scania.com](http://scania.com)



## Accra, Ghana

What do you do when some 70 percent of your road network is overloaded and the number of cars grows by a factor of five in the past 15 to 20 years?

Like other major cities in developing nations, Accra, Ghana's capital city of 4 million people, has traffic problems growing faster than their budget to deal with them. So a progressive partnership with Scania was created and 2 years later, we've rolled out our most comprehensive bus system ever.

In addition to 245 connected buses and buses running on dedicated lanes, the Scania

BRT system in Accra involves long-term financing, an electronic cash-free ticketing system, a modern workshop for service and maintenance of all the vehicles, training for 600 bus drivers, and advice and support on starting up and operating the BRT system. The buses are also adapted for those with disabilities. In addition to improving mobility and traffic flow, the climate and environmental aspects of the new bus system also add up to good business.



## Jakarta, Indonesia

There are 10 million people in the city of Jakarta. Gridlock is common but not at all popular nor productive nor healthy nor sustainable. Despite an expansion since 2004 that includes 12 corridors and serves around 350,000 passengers a day, convincing more commuters to switch to buses is crucial. Comfortable, reliable Scania buses are part of the attraction.

During 2015, the first of more than 100 Scania Euro 6 gas buses were introduced on the prestigious downtown No. 1 bus system corridor. The route passes by the

iconic national monument, Monas, and because of their better comfort, these buses have immediately become so popular that passengers actually let other buses go by to wait for the Scania bus. What is more, with the positive word of mouth from passengers, more people are moving from their own private vehicles to public transportation.

## Moving people. Changing minds.

At Scania, we have contributed to more than a century of bus evolution. This journey has taught us plenty and made us curious about society. How do people want to travel? What makes a good day for a bus driver? What is needed to make a bus the best choice for moving people from point A to B?

We believe that buses are a win for everyone – for you, for us, for communities and for passengers around the world. We want to move people both physically and emotionally in order to change their minds about bus transportation.

**Contact your Scania representative. Together we can help your community renew mass transit and the quality of life with sustainable city, suburban, intercity and long distance bus transportation.**