

# CROSSWAY LOW ENTRY THE UNIVERSAL BUS



**IVECO**  
**BUS**

Your partner for sustainable transport





# CROSSWAY LOW ENTRY

Designed with transport productivity in mind, Crossway Low Entry is a bus that performs perfectly in both city and intercity operations.

- ⊕ The Low Entry concept guarantees excellent accessibility for all passengers entering and exiting the vehicle
- ⊕ The power train, based on the proven Crossway normal-floor vehicle, enables fast and economical transport on intercity high-speed roads as well as in the city environment

Crossway Low Entry is available in:

Two versions: **CITY** and **LINE**

Four lengths: **10.8 m**, **12 m**, **13 m** and **14.5 m** with three axles

Three drivelines: **Diesel HI-SCR Tector 7** and **Cursor 9** and **Cursor 9 Natural Power\***

\*12 m only.

## CONTENTS

---

<b>PRESENTATION</b>	<b>4</b>	<b>MORE PASSENGERS, MORE PROFIT</b>	<b>18</b>
<b>ACCESSIBILITY</b>	<b>7</b>	<b>OUTSTANDING MANOEUVRABILITY</b>	<b>19</b>
<b>DRIVER AREA</b>	<b>8</b>	<b>STRONG &amp; RELIABLE</b>	<b>20</b>
<b>EFFICIENCY</b>	<b>9</b>	<b>ENGINES</b>	<b>21</b>
<b>VERSATILITY</b>	<b>10</b>	<b>SEATS</b>	<b>22</b>
<b>A WIDE VARIETY OF NEW MODELS</b>	<b>11</b>	<b>QUALITY</b>	<b>24</b>
<b>SUSTAINABLE BY NATURE</b>	<b>13</b>	<b>SAFETY</b>	<b>25</b>
<b>SMART DESIGN</b>	<b>14</b>	<b>IVECO BUS. ALWAYS BY YOUR SIDE</b>	<b>26</b>
<b>OPTIMISED TCO</b>	<b>15</b>		



# PRESENTATION

## BEST EXPERIENCE

Over 80 years' experience in bus manufacturing have taught us that the top priority for our vehicles is reliability.

Our Crossway buses represent the best solution to today's challenges in the world of public transport, carrying millions of people across Europe in a safe and comfortable environment, while combining ground-breaking and reliable technology with the most competitive prices in the market.

With its different lengths and versions, the Crossway is the undisputed leader in its category in Europe. The Crossway has already sold nearly 33,000 units since its launch more than 10 years ago: a real success story.

Our long experience in the transport business is in itself a guarantee of quality, but we also perform the most demanding of tests on a vast number of prototypes for each new generation of vehicles. Tests are carried in real traffic conditions and more particularly in extreme climate and operating conditions.

**Market leader in Europe. Best experience.**



## **A LONG TRADITION**

### **Road & functional tests**

1,000,000 km per range

### **Endurance tests**

Equivalent of 6,000,000 km on European Roads per range

### **Reliability tests**

1,600,000 km in real transport conditions

Overall number of Buses produced at the Vysoké Mýto plant 130,000

**The foundation for quality production.**



# CROSSWAY LOW ENTRY



Designed for city and interurban transport, Crossway is a reliable and universal hard worker, the perfect option for short- and medium-distance line services. It delivers the highest passenger capacity combined with excellent manoeuvrability at the very best price.



## ACCESSIBILITY

EASY IN AND OUT ACCESS  
EASY PASSENGERS FLOW

## DRIVER AREA

VDV/EBSF COMPLIANT  
GENEROUS SPACE  
& THERMAL COMFORT  
OPTIMISED STORAGE

## EFFICIENCY

HI-SCR  
OPTIMISED DRIVELINE  
LED LIGHTS

## VERSATILITY

FOUR LENGTHS  
(10.8 m – 12 m – 13 m – 14.5 m)  
A WIDE RANGE OF SEAT LAYOUTS



## ACCESSIBILITY

### LOW ENTRY, HIGH FLEXIBILITY

The Low Entry transport mission is led by two models:

- ⊕ Low Entry LINE for intercity operations
- ⊕ Low Entry CITY for urban and suburban routes

The low floor between the front and middle doors allows for easy access for all passengers.

Vehicles can be equipped with manual or electric ramps with a dedicated internal area for disabled persons.

Low Entry CITY comes in two- and three-door versions.

# DRIVER AREA

## DRIVING THE CROSSWAY IS EASY

The dashboard has been redesigned with new control commands. More space and a new look make the driver cabin a comfortable place for everyday operations. Radio controls on the steering wheel and a single integrated panel allow for a safe and easy control of the main functions, including climate in the driver area and passenger compartment, and independent heating.

## VDV/EBSF DRIVER'S WORKPLACE

The use of the VDV/EBSF\* standards in the driver's workplace guarantees that drivers will always find buttons and switches in the same place and have the same ergonomic impression regardless of the vehicle type.

The main purpose of these international standards is to provide higher comfort and safety. The IVECO BUS driver's workplace fully meets the parameters required in the fields of ergonomics, workplace accessibility, heating and ventilation, and is among the best performers in terms of visibility, internal noise level and stowage space.

\*VDV options available for Crossway Low Entry, city and intercity versions, all lengths.

Space for operator's mobile phone, wallet etc.

New waterproof central climate control, position according to VDV/EBSF: intuitive & multiple choice

Seat rotation: easy accessibility

Space for operator's bag  
Volume according to VDV/EBSF, integrated in driver door

Space dedicated to operator's system terminal (VDV/EBSF specs)





# EFFICIENCY

## EURO VI DIESEL ENGINES: REGENERATION? NO THANKS!

The HI-SCR patented technology, with over six years' experience and 250,000 engines produced, allows our engines to meet Euro VI standards without resorting to EGR, guaranteeing a very high NOx conversion efficiency (over 95%):

- ⊕ Up to 8% more power and up to 9% more torque for the Tector engine
- ⊕ Up to 9% more power and up to 12% more torque for the Cursor engine
- ⊕ Increased driveability due to lower noise and vibrations
- ⊕ Low operating costs thanks to low engine wear and long maintenance intervals
- ⊕ Compact and lean design, lowering total weight and allowing for easy installation

## BEST TOTAL COST OF OWNERSHIP (TCO) IN CLASS

## NATURAL POWER ENGINE

Cursor 9 Natural Power delivers 360 HP and represents the best solution for city and intercity line operations, offering autonomy from 500 to 600 km according to the kind of missions.

Natural gas is the most eco-friendly fuel for internal combustion engines, yielding significant environmental advantages.

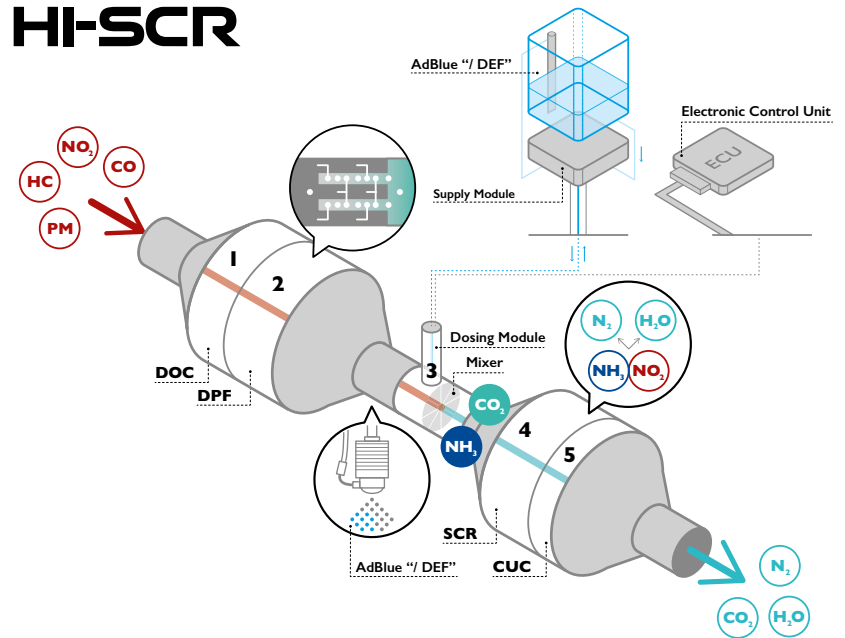
The benefits are particularly impressive in terms of particle levels and noise emissions.

With natural gas, particle levels are close to zero and NOx emissions are reduced by more than one third.

Noise levels are also cut, offering an exceptionally quiet service for the driver, passengers and even residents.

The Natural Power range is 100% compatible with biomethane produced from recycled waste. IVECO BUS vehicles ensure an excellent carbon footprint and represent a tangible step towards energy transition. The environmental benefits include CO<sub>2</sub> emissions reduction of up to 95%!

# HI-SCR





# VERSATILITY

## A COMPLETE RANGE FOR ALL MISSIONS

Crossway can easily satisfy all customer needs in every passenger transport mission thanks to its versatility and the range of available versions.

## CITY VERSION

One of the best vehicles on the market for low-floor public transportation, primarily designed for urban traffic, with easy passenger access thanks to the low floor between the front and middle doors.

## LINE VERSION

The ideal choice for short-distance and medium-distance passenger transport, featuring low fuel consumption, longer service intervals and a driver area designed to meet the highest ergonomic standards, all in a safe and comfortable environment.



# A WIDE VARIETY OF NEW MODELS

## CROSSWAY LOW ENTRY NATURAL POWER

Patented full integration of gas bottles in the roof yields the lowest height on the market (3.210 m), perfect for any route and giving maximum stability on the road. This new model allows full access to every part of the city with no circulation restrictions, while guaranteeing the TCO of an Intercity vehicle and functionality of a Citybus.

## CROSSWAY LOW ENTRY 3 AXLES

The perfect solution to welcome more passengers aboard under the best possible conditions with optimised weight and length for maximum performance. The third axle with electro-hydraulic steering system integration and the best turning circle in its class (23.8 m) allow for easy manoeuvrability.

The New Crossway Low Entry Natural Power and Crossway Low Entry 3 axles are available in both versions: CITY and LINE.



# CROSSWAY LOW ENTRY NATURAL POWER

The New Crossway Low Entry Natural Power provides an eco-friendly solution for intercity transport. Economical and suited to all transport needs, the Natural Power solution puts the IVECO BUS expertise at the service of sustainable transport.



**INTERCITY 2018**



## **SUSTAINABLE BY NATURE**

FEWER EMISSIONS, QUIETER  
BIOMETHANE READY  
NO CIRCULATION RESTRICTIONS

## **SMART DESIGN**

PATENTED INTEGRATED GAS TANKS  
INTO THE ROOF  
LOWEST HEIGHT ON THE MARKET  
3,210 m  
DESIGNED FOR MAXIMUM STABILITY

## **OPTIMISED TCO**

REDUCED FUEL COSTS  
NEW CURSOR 9 NP ENGINE WITH 360 hp  
EASY MAINTENANCE AND PROVEN  
RELIABILITY

## **COMFORT AND ACCESSIBILITY**

EASY IN AND OUT  
EASY ACCESS FOR DISABLED PEOPLE  
THERMAL AND LIGHTING COMFORT



## SUSTAINABLE BY NATURE

Over the last 20 years, IVECO BUS has developed Natural Power as an alternative driveline to fight urban pollution. With more than 5,500 buses currently in service through Europe, IVECO BUS is a strong leader fully involved in ecological transition.

### THE BUS THAT MAKES PEOPLE TRANSPORT SUSTAINABLE

The benefits are particularly impressive in terms of particles levels and noise emissions. With natural gas, particle levels are close to zero and NOx emissions are reduced by more than one third. Noise levels are also cut in half, offering an exceptionally quiet service for the driver, passengers and even residents.

### 100% BIOMETHANE COMPATIBLE

Also available in a biomethane version, the New Crossway Low Entry Natural Power ensures an excellent carbon footprint and represents a tangible step towards energy transition, with emissions reduced by up to 95%.

**These new features allow the New Crossway Low Entry Natural Power to perform easily even in complex city environments with restricted traffic areas.**





## SMART DESIGN

The New Crossway Low Entry Natural Power implements technical solutions inherited from City Bus Natural Power long lasting expertise, such as optimisation of vehicle weight and passenger capacity.

The exceptionally smart design of this sustainable vehicle is largely due to the fact that the patented integrated gas tanks have been integrated into the roof space. This compact design allows New Crossway Low Entry Natural Power to achieve the best vehicle height in its class, measuring 3,210 mm from wheel to roof and guarantees maximum stability on the road due to its low centre of gravity.

This makes the New Crossway Low Entry Natural Power the perfect bus for any route, regardless of road infrastructure constraints such as bridges for instance.

Thanks to this smart design, the maximum internal headroom remains high enough and identical to a Crossway coach.



# OPTIMISED TCO

## TCO OF AN INTERCITY BUS AND FUNCTIONALITY OF A CITYBUS

The New Crossway Low Entry Natural Power is designed for growing suburban missions and powered by the Cursor 9 NP/360 HP engine for high performance and low emissions.

Natural gas is a real alternative to diesel. It is cheaper with greater price stability, which is a further benefit when calculating fuel costs, one of the biggest TCO factors.

The vehicle's proven reliability is inherited from the Crossway range. Easy opening of the reinforced roof structure facilitates CNG bottle maintenance since no specific tools are required, significantly reducing work times.



# CROSSWAY LOW ENTRY 3 AXLES

The New Crossway Low Entry 3 axles provides outstanding passenger capacity thanks to the third axle, while also ensuring excellent vehicle handling given its length. It is the ideal partner for both city and intercity missions such as line operations on regional / national roads requiring significant passenger capacity.

The New Crossway Low Entry 3 axles is the perfect solution to welcome more passengers on board with maximum comfort and safety.



## **MORE PASSENGERS, MORE PROFIT**

BEST IN CLASS FOR PASSENGER  
CAPACITY  
EXCELLENT TCO WITH EXCLUSIVE  
HI-SCR TECHNOLOGY

## **OUTSTANDING MANOEUVRABILITY**

BEST TURNING CIRCLE IN ITS CLASS  
(23.8 m)  
EASY MANOEUVRABILITY

## **STRONG AND RELIABLE**

ROBUST AND RELIABLE STRUCTURE  
OPTIMISED WEIGHT AND LENGTH

## **ACCESSIBILITY FOR ALL**

EASY IN AND OUT ACCESS  
SMOOTH PASSENGER FLOW  
EASY ACCESS FOR DISABLED PEOPLE







## MORE PASSENGERS, MORE PROFIT

### BEST IN CLASS FOR PASSENGER CAPACITY

With a total length of 14.5 m, the main advantage of the New Crossway Low Entry 3 axles is its huge passenger capacity.

In the CITY version, total passenger capacity (sitting + standing) is increased by 50, bringing maximum capacity to 138 passengers.

In the LINE version, passenger capacity is increased by 30, bringing maximum capacity to 104 passengers as compared to 74 for the 13 m / 2 axle version.

Furthermore, the third axle provides comfortable seating space (min. 710 mm) with 61 seats in the LINE version and 45 in the CITY version.

The configuration for both CITY and LINE versions has been modified in line with the new length. The chassis structure and floor substructure have been adapted to the third axle, with lateral glazing lowered in flat floor version to take account of the position of seated passengers.

The New Crossway Low Entry 3 axles guarantees an excellent TCO with exclusive HI-SCR technology to reduce fuel costs and emissions, as well as know-how inherited from the Crossway range.



# OUTSTANDING MANOEUVRABILITY

## BEST TURNING CIRCLE IN ITS CLASS

In the three-axle configuration, the total length of the New Crossway Low Entry is extended to 14.5 m, while retaining all of the manoeuvrability features (turning radius) of the 13 m version.

The third axle with electro-hydraulic steering system integration allows a turning circle of 23.8 m – the best in its vehicle class.

The tag axle is equipped with an independent electronically controlled steering system, ensuring perfect vehicle control and low tyre wear in a fully automatic mode.

The axle is actively steered in forward and reverse driving in low and medium speed ranges. In the higher speed range, steering is inhibited to enhance directional stability.





## **STRONG & RELIABLE**

### **OPTIMISED WEIGHT AND LENGTH FOR MAXIMUM PERFORMANCE**

#### **THIRD AXLE IMPROVEMENTS**

The New Crossway Low Entry 3 axles benefits from proven components of the third axle from IVECO Truck origin & steering logic, allowing high-speed stability, cornering ability in curve and outstanding manoeuvrability at low speed.

#### **THIRD AXLE LOAD SHEDDING FUNCTION**

In poor-adhesion road conditions, the traction of the driven second axle can be improved by load transfer from the third to the second axle – manually activated by the driver using the load shedding activation button, when at standstill or at speeds under 30 km/h. The button deactivates automatically at speeds of over 30 km/h.

When the 45 km/h barrier is passed, the rear axle is centred and hydraulically locked for enhanced stability in straight-on driving, while the tag axle steering system stays in a dead band (centre position) until a front steering angle of approximately 90° on steering wheel is exceeded.

#### **OVERLOAD PROTECTION**

In case of vehicle load exceeding technical limits, an overload pictogram warning appears, signalling second axle load of approximately 12 tonnes. The third axle is protected automatically against loads higher than 6.3 tonnes.



# ENGINES

The Crossway Low Entry range is versatile enough to accommodate different engine layouts, such as: Tector 7 for Diesel / HVO / XTL, Cursor 9 for the two energies DIESEL / HVO / XTL and Natural Power for CNG or biomethane.

## TECTOR 7 DIESEL / HVO / XTL HIGH EFFICIENCY

- ⊕ Lighter, downsizing, longitudinal position
- ⊕ Higher capacity: 10% more than Euro V vehicles
- ⊕ High performance with 286 HP
- ⊕ Excellent fuel savings

## CURSOR 9 DIESEL / HVO / XTL HIGH PERFORMANCE

- ⊕ Up to 1,700 Nm torque to cope with any slopes
- ⊕ Optimized accessibility for maintenance
- ⊕ Transversal installation providing excellent rear-door passenger flow
- ⊕ Easier A/C installation for demanding climatic performance

## CURSOR 9 NATURAL POWER HIGH EXPERIENCE

- ⊕ High performance with 360 HP
- ⊕ Low emissions and Biomethane compatible
- ⊕ Up to 1,620 Nm torque
- ⊕ Optimized accessibility for maintenance

LENGTH (m)	VERSIONS	DIESEL / HVO / XTL			NATURAL POWER
		TECTOR 7		CURSOR 9	CURSOR 9 NP
		286 hp – 210 kW	320 hp – 228 kW	360 hp – 265 kW	360 hp – 265 kW
10.8	CITY	■	■	■	
12		■	■	■	■
13		■	■	■	
14.5				■	
10.8	LINE		■	■	
12			■	■	■
13			■	■	
14.5				■	

# SEATS

## VARIABLE LAYOUT OPTIONS\*

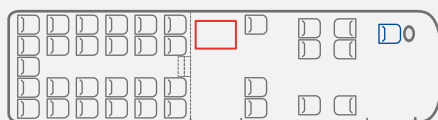
### CITY

### LINE

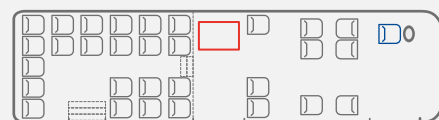
#### TWO DOORS

#### THREE DOORS

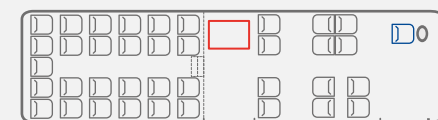
10.8 m



34 passenger seats + 1 wheelchair space

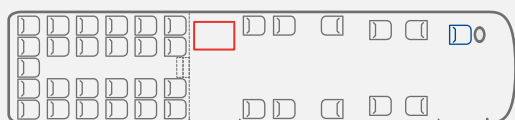


30 passenger seats + 1 wheelchair space



37 passenger seats + 1 wheelchair space

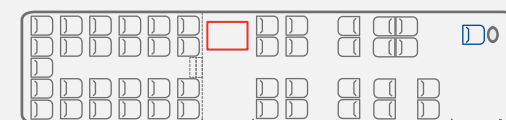
12 m



35 passenger seats + 1 wheelchair space



31 passenger seats + 1 wheelchair space



45 passenger seats + 1 wheelchair space

13 m



37 passenger seats + 1 wheelchair space

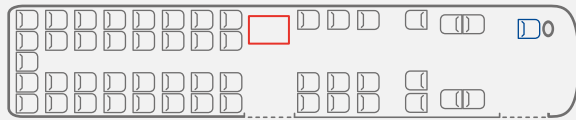


33 passenger seats + 1 wheelchair space

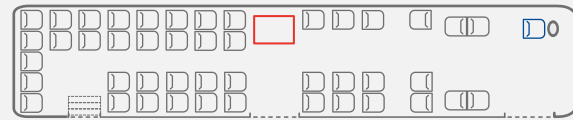


49 passenger seats + 1 wheelchair space

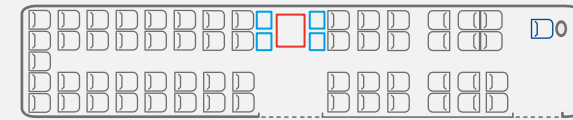
14.5 m



49 passenger seats + 1 wheelchair space



45 passenger seats + 1 wheelchair space



61 passenger seats + 1 wheelchair space

\* For further options, please contact IVECO BUS commercial staff.

Passenger seats

Driver seat

Folding seats

Wheelchair space

## SEAT AVAILABILITY

VERSIONS	STER 6MS	SCOLEO	LINEO FIX	LINEO
<b>CITY</b>	■			
<b>LINE</b>		■	■	■

### STER 6MS

Ideal for city and suburban vehicles thanks to plastic main shell, fast and easy upholstery assembly, low weight and modern design.



### SCOLEO

All-utility properties of Scoleo seats optimise the vehicle for school transport, including optional anti-vandalism backrest shell.



### LINEO FIX & LINEO

Intended for regular line transport, mainly on peri-urban and intercity regional routes. The comfortable firm-back seat shape is an ideal ergonomic solution.





# QUALITY



## TOP QUALITY CONTROL

**Quality control in the Vysoké Mýto factory is among the most demanding worldwide**

The entire production process is managed using the WCM programme (World Class Manufacturing), derived from and based on Japanese car making experience and procedures. The essential principle of this system is simple but strict: defective products must be detected directly in the workplace where the error occurred and each failure must be corrected immediately.

The main goal is to create a process where no defective spare parts can be produced.

This is why we keep introducing new production procedures and improving our tried and tested methods.

We also use 2D and 3D laser centres, welding robots, and giant mobile and stationary 3D scanners to control the dimensions of the whole frames precisely. Our unique painting shop ensures a high lifespan for vehicle bodies. It uses cataphoresis, working on the electro-chemical galvanisation principle. For this purpose, we use a single 300 m<sup>3</sup> capacity cataphoresis tank. The final paint is made in fully robotised painting boxes.

But all of this would mean little without a flawless assembly. The process is controlled centrally and the operation of all important instruments is monitored online by the controlling server via Wi-Fi. If an anomaly is discovered, an order is given to remedy the flaw in real time.

The production process for each vehicle concludes with a series of so-called diagnostic tests.

All vehicles are tested on the road before dispatch and delivery to the client.



# SAFETY

## ADVANCED SAFETY SYSTEMS

### Brake control

Integrates basic functions such as:

- + ABS (Anti-lock braking system)
- + ASR (Anti Slip Regulation)

### Quicker response time and shorter braking distance

- + ESP (Electronic Stability Program)

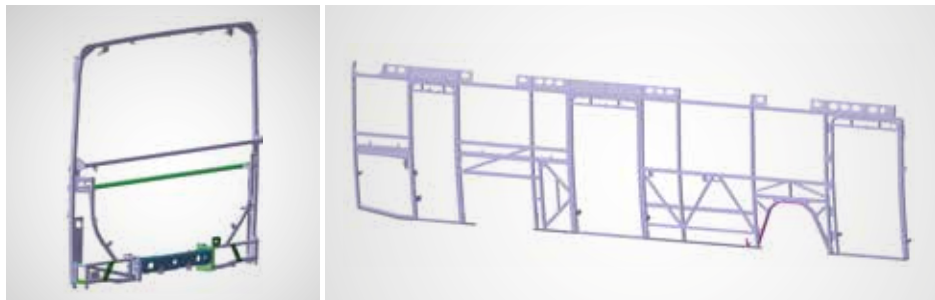
### Lower risk of loss of control of vehicle

### Cataphoresis

The vehicle structure and components are protected by cataphoresis, the most efficient industrial solution against corrosion.

### Compliance with Standard R66/02

This guarantees a survival cell in the event of vehicle rollover: IVECO BUS solutions optimise safety without increasing the vehicle weight.



# IVECO BUS. ALWAYS BY YOUR SIDE.

## IVECO CAPITAL

IVECO CAPITAL is the captive financial services Brand of IVECO, and offers a full range of financing, leasing, rental and ancillary services for buses, trucks & commercial vehicles.

Extended warranty, maintenance and repair services, and various types of insurance can be also included in the pack.\*

**All financial solutions can be tailored to the Customer's needs, and apply to new, used vehicles and conversions.**

IVECO CAPITAL provides you professional advice to select the product that best matches the **financial and fiscal requirements of your business. For more information, contact your IVECO Dealer.**

**\*Subject to credit approval. Offerings and products may vary by country depending on the local fiscal and accounting regulations.**

## ELEMENTS

To ensure you always get the best, IVECO has created ELEMENTS: a wide range of tailored service packages, devised to keep your vehicle in perfect condition.

The flexibility of ELEMENTS always offers you the most advantageous service possible, made to measure. Indeed, with ELEMENTS, you can choose the best service levels for your business, with the assurance of fixed, controlled costs.

The packages can be further personalized with specific additional coverages in order to suit your needs.

## ALWAYS READY, ALWAYS BY YOUR SIDE. WHEREVER YOU ARE.

IVECO Assistance Non-Stop, 24 hours a day, 7 days a week.

IVECO is always available to keep your business up and running.

In case of vehicle breakdown, IVECO Assistance Non-Stop can be reached in three ways:

- With a simple phone call
- Using the on-board IVECONNECT telematics system
- Using the IVECO Non Stop mobile app

The IVECO Non Stop app can also be used to book in advance a repair work for your vehicle, not just in case of urgency. You can select the time window and the location (current position, workshop or specific address) and the app will give you a confirmation of the booking.

**IVECO  
CAPITAL**

**CNH** | **CAPITAL**  
**INDUSTRIAL**



**IVECO**  
**0080048326000**  
*Assistance Non-Stop*



## GENUINE PARTS

High performance, comfort and safety for both the driver and passengers, sustainable mobility: all of which can be guaranteed in the long run only with the proper vehicle maintenance offered by the IVECO Network of Workshops that provide professional servicing and the quality of genuine parts.

IVECO BUS Genuine Parts are the result of a careful selection of suppliers, materials and of many ours of conformity, reliability and durability tests.

IVECO BUS offers a wide range of new and remanufactured replacement parts, maintenance kits and service packs to keep maintenance costs down and limit environmental impact.

## LEADING LOGISTIC SERVICES

IVECO BUS knows that time is important for its customers. This is why we rely on an advanced and highly efficient system of Parts provision and distribution for delivery both day and night within 24 hours from order in any country, 7 days a week.

## OK BUS

IVECO BUS has developed a certification label, a guarantee of quality and excellence for any customer who wants to buy a pre-owned vehicle that is safe, reliable and warranted by IVECO BUS. The OK Bus European team has six centres across four countries: France (Mitry-Mory, Corbas and Rorthais), Germany (Ulm), Italy (Verona) and Spain (Madrid). At main European crossroads, the goal of these centres is to be real references platforms in the world of buses and coaches, and to share their experience with all the actors of the market.

## OUR TECHNICIANS, YOUR PARTNERS

IVECO BUS offers an extensive support network for its entire vehicle range guaranteeing customers the best assistance through continuously trained and skilled technicians. Thanks to Teleservices, remote assistance operations can be carried out with the best effectiveness. IVECO BUS offers on Euro VI vehicles an improvement in components accessibility, a rationalization of maintenance plans and consequently a reduction of service-stop frequency. IVECO BUS vehicles have been engineered to guarantee a simplified and cheaper maintenance.



IVECO BUS is a brand of CNH Industrial N.V., a global leader in the capital goods sector that, through its various businesses, designs, produces and sells agricultural and construction equipment, trucks, commercial vehicles, buses and specialty vehicles, in addition to a broad portfolio of powertrain applications. It also distributes high performance genuine parts for all CNH Industrial Commercial Brands.

**IVECO**  
**BUS**

Your partner for sustainable transport