The Citaro hybrid.

The benchmark.

Mercedes-Benz

The standard for buses.
Experience the ‘eco’ in economics. The Citaro hybrid.

Secure a decisive lead — and that great feeling of doing your best for your passengers, the environment and your company. With the Citaro hybrid, you can rely on a perfect combination of economy and sustainability. The compact hybrid system makes your city bus an economical and ecological all-rounder in urban centres.
A new chapter in the evolution of city and interurban bus drive systems. The Citaro hybrid was developed especially to meet the demands of schedules services in urban areas, and it beautifully embodies contemporary mobility with reduced consumption. The economical diesel or gas engine is supported by the additional power of a highly efficient, compact hybrid module. The 14 kW electric engine generates energy when coasting and braking. When starting, it also supports the diesel or gas engine, reducing fuel consumption by up to 8.5 per cent, depending on the application.

Every hybrid model is a true Citaro. Thanks to the space-saving design and low weight of the auxiliary units, the original vehicle from the Citaro series has changed only minimally. Its height and transportation capacity remain virtually unchanged. The hybrid technology is available as an option on an exceptionally wide range of Citaro city buses with diesel and gas engines.
Every bus costs money. The Citaro hybrid saves money.

Many factors in the running of a bus generate costs. And you can contribute significantly to making your bus even more cost effective. We will be happy to show you how to maximise the economic advantages of our service and business with regard to investment, consumption, repair & maintenance, and residual value.

Cost-effectiveness is a matter of technology. With every Citaro hybrid, you have a comprehensive economical solution in your fleet. It shows a lower overall technology towards entirely electric driving. On the contrary, it, Mercedes-Benz is optimising the Euro VI combustion engines to maximum efficiency in a unique way. The result: the Citaro hybrid with its favourable Total Cost of Ownership pays off.

Investing in a new bus is a decision that needs to be planned. Regular maintenance guarantees transparent costs at all times and a predictable residual value. The residual value of your bus is almost as important as the original investment. On request, Mercedes-Benz will guarantee the residual value, and buy back your vehicle at the end of a defined period of use. Additionally, with many vehicles, you have an EU 2017 residual guarantee on the complete power train, as well as individual buying in remaining parts via our partner, BusStore.

Profitability through Financial Services. With the Citaro hybrid, you benefit from attractive financing options and insurance solutions. Premiums calculated exactly according to your individual use ensure a clear economic advantage for you.

Investments that pay off. Our OMNIplus ECOtraining shows that fuel savings and respecting the timetable are not mutually exclusive. Together with digital services from OMNIplus ON, all the advantages of our buses and service with regard to investment, consumption, repair & maintenance, and residual value.

Total Cost of Ownership
Example calculation using average values from the German market. TCO calculations using the example of Citaro hybrid, Euro 6, 540 Seater, 10 years à 60,000 km, former model: Citaro cost basis: September 2017.

Cost-effectiveness is the key to making your bus even more cost effective. Regular maintenance guarantees transparent costs at all times and a predictable residual value. The residual value of your bus is almost as important as the original investment. On request, Mercedes-Benz will guarantee the residual value, and buy back your vehicle at the end of a defined period of use.

Service whenever you need it. Mercedes-Benz buses are on the road practically everywhere in Europe. Reason enough for us to offer the most comprehensive bus-specific Service Network. Quick assistance and short downtimes in the case of an emergency. And, of course, around the clock with our reliable 24h SERVICE.

Costs/Item

<table>
<thead>
<tr>
<th>Item</th>
<th>Percentage</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital costs</td>
<td>13%</td>
<td></td>
</tr>
<tr>
<td>Fuel costs</td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td>Insurance, tax &amp; administration</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>Tyres</td>
<td>1%</td>
<td></td>
</tr>
<tr>
<td>Vehicle preparation for service</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>Maintenance</td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>Energy costs</td>
<td>15%</td>
<td></td>
</tr>
</tbody>
</table>

Investment

- Total Cost of Ownership (TCO) at a glance: Find out more about the cost factors involved when operating your bus.
- http://overall-economy.bus.mercedes-benz.com

Consumption

- Energy consumption is an important cost factor for your Citaro hybrid. The measurement will show your bus’s energy consumption, which can be actively influenced. We will be happy to show you how to maximise the economic advantages of your bus and service with regard to investment, consumption, repair & maintenance, and residual value.

Residual value

- A first-class bus is an investment in the next one, since the residual value of your bus has a direct impact on the original investment. On request, Mercedes-Benz will guarantee the residual value, and buy back your vehicle at the end of a defined period of use. Additionally, with many vehicles you have an EU 2017 residual guarantee on the complete power train, as well as individual buying in remaining parts via our partner, BusStore.

Residual value

- Your vehicle’s air-conditioning system and refrigerator are filled with the R-134a refrigerant. Use of alternative refrigerants or refrigerant blends is not permitted.

- Your vehicle’s air-conditioning system and refrigerator are filled with the R-134a refrigerant and contain fluorinated greenhouse gases. The network deals with detailed information on the type of refrigerant used in the refrigeration system. Please refer to your vehicle’s operating instructions. For more detailed information, please refer to the respective technical information data sheet.

- The Citaro hybrid’s refrigeration system and refrigerator are filled with the R-134a refrigerant and contain fluorinated greenhouse gases. The network deals with detailed information on the type of refrigerant used in the refrigeration system. Please refer to your vehicle’s operating instructions. For more detailed information, please refer to the respective technical information data sheet.

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Digital services for your Mercedes-Benz.

Your new service world: the OMNIplus ON portal combines all the digital services you need. OMNIplus ON integrates existing as well as new services such as OMNIplus Uptime— for the intelligent networking of vehicle, driver, company and service. With a single portal, you can take advantage of personalized access to a variety of services. OMNIplus ON Advance monitors the technical “health status” of the fleet and ensures the highest possible vehicle availability. OMNIplus ON Monitor guarantees the best possible efficiency in operational fleet management. OMNIplus ON Drive simplifies many of your drivers’ daily tasks while making communication more efficient. OMNIplus ON commerce enables open parts to be procured around the clock from the OMNIplus eShop.

More information is available at www.omniplus-on.com

OMNIplus Uptime—Thinks ahead. Keeps you on the road.

The intelligently connected service for maximum vehicle availability. With the optional OMNIplus Uptime, a service is available to you which automatically identifies a repair or maintenance requirement and, depending on the urgency, forwards it to the pan-European OMNIplus 24h SERVICE, an authorized service center or yourself. In doing so, OMNIplus Uptime differentiates between three levels of urgency: avoiding breakdowns, proactive repair and maintenance management as well as transparency regarding pending maintenance measures. With OMNIplus Uptime, breakdowns can be reduced and workshop stays ideally planned. This increases vehicle availability while lowering your overall costs. The technical prerequisite for the use of OMNIplus Uptime is an installed Bus Data Center.

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A diversified offering — the Citaro hybrid.

The Citaro hybrid is a milestone for Mercedes-Benz in the hybrid segment: hybrid technology is available as special equipment for an exceptionally wide range of city buses with diesel and gas engines. Instead of individual independent hybrid buses, numerous Citaro models with the 936 engine series benefit from the forward-looking hybrid module.

The Citaro hybrid
2 and 3 doors
The first bestselling milestone.
- City and interurban
- A total of 4 left- and 2 right-hand drive variants

Length
12.14 m

The Citaro K hybrid
2 and 3 doors
A specialist for tight inner cities.
- A total of 2 left- and 2 right-hand drive variants

Length
10.63 m

The Citaro G hybrid
3 and 4 doors
A real expert in regular service.
- 2 left-hand drive variants

Length
18.13 m

The Citaro NGT hybrid
2 and 3 doors
Our climate protector for your city.

Length
12.14 m/18.13 m*
* Also as Citaro G NGT hybrid (2 left-hand drive variants)

The Citaro LE hybrid
2 and 3 doors
A clever connection.
- City and interurban
- 5 left-hand drive variants

Length
12.17 m/13.2 m
The intelligent use of kinetic energy.

Technology that pays off. The basic function of the Citaro hybrid is very simple: the disc-shaped and very robust electric engine is integrated between the internal combustion engine and the automatic transmission. It acts, among other things, as a generator when slowing down the bus and converts coasting energy into electricity — when braking and removing the gas. The generated electricity is stored as electrical energy. Without hybrid technology, this energy would be lost in the recuperation phase — the Citaro hybrid uses and saves it: as soon as the bus starts up from a stationary position, the electric engine assists the diesel or gas unit with its torque — the so-called boost phase. In this way, the internal combustion engine can temporarily apply less power during start-up, therefore saving fuel. Additionally, the electric engine supports idling operation. This improves the efficiency of the internal combustion engine and contributes to significantly reduced fuel consumption and therefore reduced emissions.

As powerful as you've come to expect. The electric engine does not serve to increase the maximum performance. The performance and torque of the Citaro hybrid therefore remain unchanged compared to a pure combustion engine of the same design. The speed of the internal combustion engine is not reduced during the boost phase. Only the peak power is imperceptibly reduced and supplemented by the electric engine.

Technical information: all details are now online.

More efficiency, lower consumption.

The Citaro hybrid fully capitalises on the efficiency potential of its drive. For this purpose, the electric engine is linked as standard with two other energy-saving components: the intelligent eco steering steering system and the innovative lightweight running axle*. Both increase the cost-effectiveness of the Citaro hybrid.

The interplay of the internal combustion engine for the base load and the electric engine for peak loads ensures a high degree of drive energy efficiency during driving. The components designed for heavily changing loads are very robust. Their long life is comparable to those of conventional combustion drives.

The efficiency-optimised lightweight running axle also contributes to increased efficiency in the Citaro hybrid: on the one hand, through fuel savings due to the lower running resistance, and on the other, through lower maintenance and a prolonged maintenance interval — from 180,000 to 240,000 km.

In the Citaro hybrid, the intelligent eco steering electrohydraulic steering system also contributes to high energy efficiency. It works in a way that is requirements-optimised, while contributing to reduced fuel consumption in public service applications.

* Not in the case of Low Entry variants.
A new drive system.  
The same great handling.

Switching without having to change. On the inside, the Citaro hybrid is virtually indistinguishable from the same body versions with internal combustion engines. This is especially beneficial for the driver—everything remains the same at his work area when he switches from a Citaro with an internal combustion engine to the Citaro hybrid. The instrument panel, ergonomically positioned controls and the multifunction steering wheel are unchanged, without any additional switches or displays. From the elevated driver’s seat with ideal all-round visibility, the Citaro hybrid can be operated as comfortably as any other Citaro. A clear view is ensured by the AquaBlade® windscreen wipers, which reduce fuel consumption and driving noise thanks to their dynamic design. Conversion to the new driver’s work area or driver training are therefore not required.

The best remains. The Citaro hybrid offers its passengers all the comfort that the tried and tested Citaro models offer. No interior fittings are compromised by the hybrid technology, which is invisible to passengers and drivers. Even on boarding, you’ll feel you’re in good hands. Among other things, the spacious interior concept, comfortable seats, ergonomically optimised support bars and comfortable standing height ensure this. Individual equipment variants can be selected for each intended application. You are bound to find exactly the right vehicle for your application. Depending on the equipment variant, a powerful air-conditioning system*, the integrated roof heating and side wall heaters can make the journey even more pleasant.

The only difference between the Citaro hybrid and the vehicles in its series with pure combustion engines is the fact that up to three standing places are missing in the theoretical maximum capacity, due to the comparatively lightweight 156-kg hybrid components. In everyday operation, however, this is rarely an issue.

* See comment ** on page 6.

We take safety seriously.  
More safety for passengers and drivers: UN ECE Regulation 118.

The new version of UN ECE Regulation 118.02 requires newly registered buses from summer 2020 to have additional fire test certificates for materials in the interior, engine compartment, and separate heater compartments. Having the greatest possible safety is a core value for Daimler Buses and compliance with the statutory requirements a self-evident duty. Therefore all materials now used in the interior of our buses are being tested, and where necessary respecified. The modifications undertaken for plastics are not noticeable to the eye or touch. As part of the qualification in accordance with UN ECE Regulation 118.02 the collection of all seat cover materials is being changed. The only restriction will be in the variety of colour shades and patterns (designs) available. The quality requirements of Daimler Buses for the textiles of the seat materials in their collection will remain at the existing high level. We would ask you to be aware that the appearance and feel of the illustrated seat cover materials may change due to these design optimisations in the interest of safety.

For years, Mercedes-Benz has pursued its vision of accident-free driving. The integral safety concept covers all phases of automotive safety—safety when driving and in dangerous situations, protection in the event of an accident and minimizing the impact of an accident. Safety is also integrated into the Citaro hybrid as standard. The body itself protects the passengers in the event of side impact. In the event of a rear-end collision, the reinforced front end minimizes the impact of an accident while protecting the driver.

More visibility, more safety.

The optional long-life LED headlamps ensure enhanced safety through optimal driver visibility. They provide exceptionally good road illumination thanks to precisely adjustable light beam–the colour of the light corresponds approximately to that of daytime—resulting in less eye fatigue.

Safe integrated hybrid technology.

The virtually maintenance-free hybrid storage module is located outside the crash area—at the back of the roof. By using the innovative 48 V low-voltage technology, the new Citaro hybrid poses no increased safety risk and, moreover, the low-voltage technology requires no change in service and maintenance—saving additional costs.

Clever assistants.

Numerous assistance systems support the driver. In fact, Mercedes-Benz was the first bus manufacturer worldwide to use the Anti-lock Braking System (ABS) and the Electronic Stability Program (ESP®). On the Citaro G hybrid, the Articulation Turntable Controller (ATC) ensures optimum steering performance thanks to the fast, needs-based hydraulic damping of the joint. The Acceleration Skid Control feature (ASR) prevents the drive wheels from slipping. With the Electropneumatic Brake System (EBS), the stopping distance is significantly shortened, since the brakes are controlled more quickly and precisely.

With the Preventive Brake Assist feature, Mercedes-Benz is offering the first Active Brake Assist for city line buses worldwide. The assistance system warns of a potential collision with moving pedestrians as well as stationary or moving objects and automatically initiates a braking manoeuvre with partial braking in the event of an acute collision hazard. Warning cascade and braking intervention are designed for use in city traffic. In the event of an imminent collision with pedestrians and with moving or stationary objects, the Preventive Brake Assist warns the driver visibly by a red illuminated triangle with a vehicle symbol in the central display as well as acoustically, while initiating partial braking. This is held until either the driver intervenes or the bus comes to a stop. The platform for the Preventive Brake Assist is a new generation of radar technology: the radar system continuously scans an area of up to 250 metres in the lane in front of the bus and works reliably even at night and adverse weather conditions.

Sideguard Assist

The Sideguard Assist turning assistant feature considerably increases the safety of unprotected road users, especially in cities, since it helps the driver recognize critical situations in a timely manner when turning. The system operates in different stages: in a first stage, it informs the driver, and in a second stage, it provides an additional warning. If a moving object is located in the lateral monitoring zone, an LED light in a triangular shape illuminates yellow in the A pillar on the passenger side. It intuitively directs the attention to the situation next to the vehicle. Additionally, a warning message appears in the central display. If the driver initiates or continues an action that could lead to a collision, an additional visual warning is given: the LED light flashes several times red with higher luminosity and then permanently. In addition to this, a tactile vibration acts as a warning in the driver’s seat. Moreover, Sideguard Assist warns the driver of stationary obstacles in the coach’s turning curve and can also take on the task of a lane changing assistant, in which case it operates with the same warning cascade.

Preventive Brake Assist

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2120
Electric engine

On the one hand, it supports the internal combustion engine at idling speed as well as at when starting. On the other hand, as a generator, it produces electrical energy during braking and coasting when the gas is withdrawn. The electric engine is water cooled, provides up to 14 kW and can provide a torque of up to 220 Nm.

Inverter

Its electronics convert the electrical energy stored as direct current into alternating current to drive the electric engine. Its separate water cooling ensures high operational safety.

Energy storage

With their high power density, the innovative Supercaps in capacitor technology save the electrical energy from and for the electric engine in a way that is very space-saving and safe. They are designed for continuous, fast charge and discharge rates. In the typical city bus cycle – and they have a long service life as well.

Outstanding down to the smallest detail.

Since the invention of the automobile drive by Gottlieb Daimler and Carl Benz, our developers have always led new drive innovations to success. All around the globe, urban spaces are becoming increasingly dense, and we want to ensure mobility in metropolitan areas for future generations as well — with economical, clean and efficient vehicles such as the Citaro hybrid.

Inverter

Its electronics convert the electrical energy stored as direct current into alternating current to drive the engine. Its separate water cooling ensures high operational safety.

Intelligent eco steering

It is requirements-oriented: unlike a conventional hydraulic steering system, the power assistance in the intelligent eco steering is not used continuously, but only when required, i.e. when the driver turns the steering wheel.

Lightweight running axle*

With several design improvements and the use of a special partially synthetic oil, the lightweight running axle ensures that the operating costs for the Citaro hybrid are permanently reduced. The acoustically improved gantry wheels also ensure particularly quite operation.

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Contact us today if you want to set standards for tomorrow.

OMNIplus Service for your pit stop. OMNIplus ensures you save time and money. Increase the operational readiness of your fleet with the comprehensive BusDepot Management service, or take advantage of the flexible BasicPlus and Premium service contracts for repair and maintenance. Choose from the various annual mileage plans, and combine these with the service life that fits the requirements of your company. OMNIplus is also your point of contact for original parts and accessories, as well as reconditioned parts with certified quality. Whether you need a V-belt, blower or brake discs — OMNIplus has the right original part for your Mercedes-Benz bus or coach.

OMNIplus service on the move. OMNIplus ensures that your Mercedes-Benz stays on the road — e.g. with the most extensive bus-specific Service Network in Europe with more than 60 authorized Service Points as well as the highly advantageous ServiceCard. The reliable 24h SERVICE is also being further optimised through Telediagnosis. Preventive service is possible with OMNIplus Uptime*. OMNIplus also delivers reliable assistance in the event of a breakdown.

It’s safe to say you’ll get the right training. Our experienced OMNIplus training specialists offer practical solutions for current training, be this safety, environmental, vehicle or emergency training, the latest technical knowledge for repair and servicing work, or training for drivers or workshops staff. OMNIplus provides the right training for every requirement.

The partner for your used vehicle. BusStore, the brand for pre-owned vehicles in Europe, is your reliable partner for the sale of your bus. If you decide to buy a new Mercedes-Benz bus, you can trade-in your used vehicle at a price in line with market conditions. Your Mercedes-Benz contact person will handle the details and process the entire transaction with BusStore.

Financial services for buses and coaches. Mercedes-Benz Financial Services** is the specialist for high-performance finance solutions for Mercedes-Benz coaches and buses. Because we know the industry and its requirements inside out, you can count on extremely competitive financing, leasing and insurance services. Our experts will advise you personally and develop highly attractive offers for you. For instance, over and above standard financing, we also offer seasonal rates or final instalment financing to enable you to remain financially flexible, or even fully customised financing strategy to meet your individual needs.

** This service is not available in all countries.  
* The technical requirement for the use of OMNIplus Uptime is a built-in Bus Data Center.
Important for you. Important for us. Technical data stored in the vehicle.

Electronic vehicle components (e.g. Engine Control Unit) contain data storage for vehicle technical data, including but not limited to Diagnostic Trouble Codes in the event of a malfunction, vehicle speed, braking force, or operating conditions of the Restraint System and Driver Assistance Systems in case of an accident (no audio and no video data recording). This data is either stored as a volatile e.g. Diagnostic Trouble Codes, over a short period of time (a few seconds only) e.g. in case of an accident or in aggregated form e.g. for component load evaluation. The data can be read using interfaces connected to the vehicle. Trained technicians can process and utilise the data to diagnose and repair possible malfunctions. The manufacturer can use the data to analyse and improve vehicle functions. When requested by the customer, technical data can form the basis of additional optional services. In general, data from the vehicle is transferred to the manufacturer or a third party only where legally allowed, or based on a contractual customer consent in accordance with data protection laws. Further information regarding storage of vehicle technical data is provided in the vehicle owner’s manual. Mercedes-Benz Buses and Coaches naturally handles customer data confidentially.

About the information in this brochure.

Information about the product is subject to change after this brochure went to press (04/19). The manufacturer reserves the right to make changes in the design or form, deviations in colour, and changes to the scope of supply during the delivery period; insofar as the changes or deviations are reasonable for the customer, having regard to the interests of the seller. The illustrations may also show accessories and special equipment optional extras that do not form part of the standard scope of supply. Colours may vary for typographical reasons.

This brochure may also contain models and support services that are not available in some countries. Statements about statutory, legal and tax regulations and their effects are only applicable in the Federal Republic of Germany at the time this brochure went to press. Therefore please contact your Mercedes-Benz sales representative for the latest binding version.

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