

PASSION AND REASON

Citroën is unveiling C-Métisse at the 2006 Paris Motor Show. Through this concept car, inspired by passion and reason, the Marque is exploring new paths dedicated to automotive pleasure. C-Métisse is a coupé of character, boasting a high level of on-board comfort and performance while also respecting the environment.





With its elegant proportions, flamboyant bodywork, spectacular door design and extensive chrome, this elegant 4-seater 4-door coupe revives a passion for the most prestigious Grand Touring vehicles.

C-Métisse is not only a car to stir the soul of the onlooker. It also boasts real driving sensations with a driving position featuring the latest technologies, and a specially designed high-performance diesel hybrid drivetrain.

C-Métisse is based on the same future-oriented solution as the C4 HDi hybrid demonstration vehicle presented by Citroën at the start of the year apart from one key difference: the electric motors are installed in the rear wheels. This configuration is coherent with vehicle performance and optimises traction. Perfectly suited to the character of C-Métisse, the design reflects Citroën's expertise in the various hybrid architectures, as well as demonstrating its commitment to cutting fuel consumption and CO₂ emissions.

A high-spec vehicle, C-Métisse also places considerable emphasis on passenger comfort. The vast cabin features three exceptionally comfy seats upholstered in white leather.





C-MÉTISSE, NEW EMOTIONS AND DRIVING SENSATIONS

Everything about C-Métisse identifies it as a car to stir the soul.

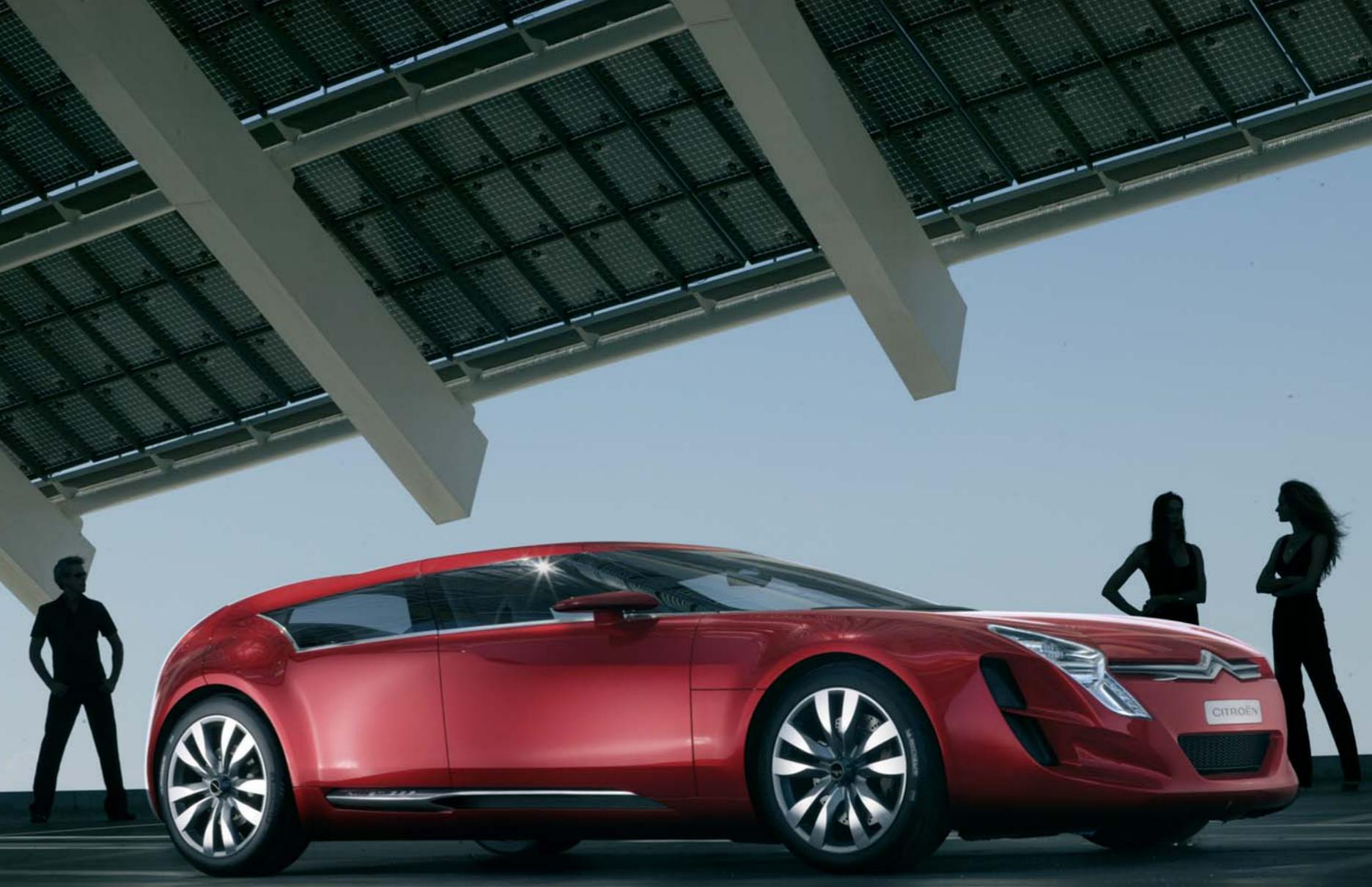
Its elegant proportions and flowing lines embody a harmonious design with a promise of power. The fascinating opening mechanism of the doors makes the observer want to step on board. The driving pleasure and comfort of the driver and three passengers are ensured by the premium materials used in cabin design, the exceptionally comfy individual seats and the sophisticated in-car technology.

A coupé of elegant design

Looking at C-Métisse is a visual shock in itself. Long (4.74 m), wide (2 m) and low (1.24 m), the car is sculptural and almost intimidating. It demands immediate respect. However, far from creating a sense of distance between the onlooker and the car, this respect is mingled with an irresistible appeal, an absolute attraction.

Whether we're looking at the rear wheel arches, the bonnet or even the boot, an astonishing sensuality is reflected in the car's curving, sleekly muscled volumes.

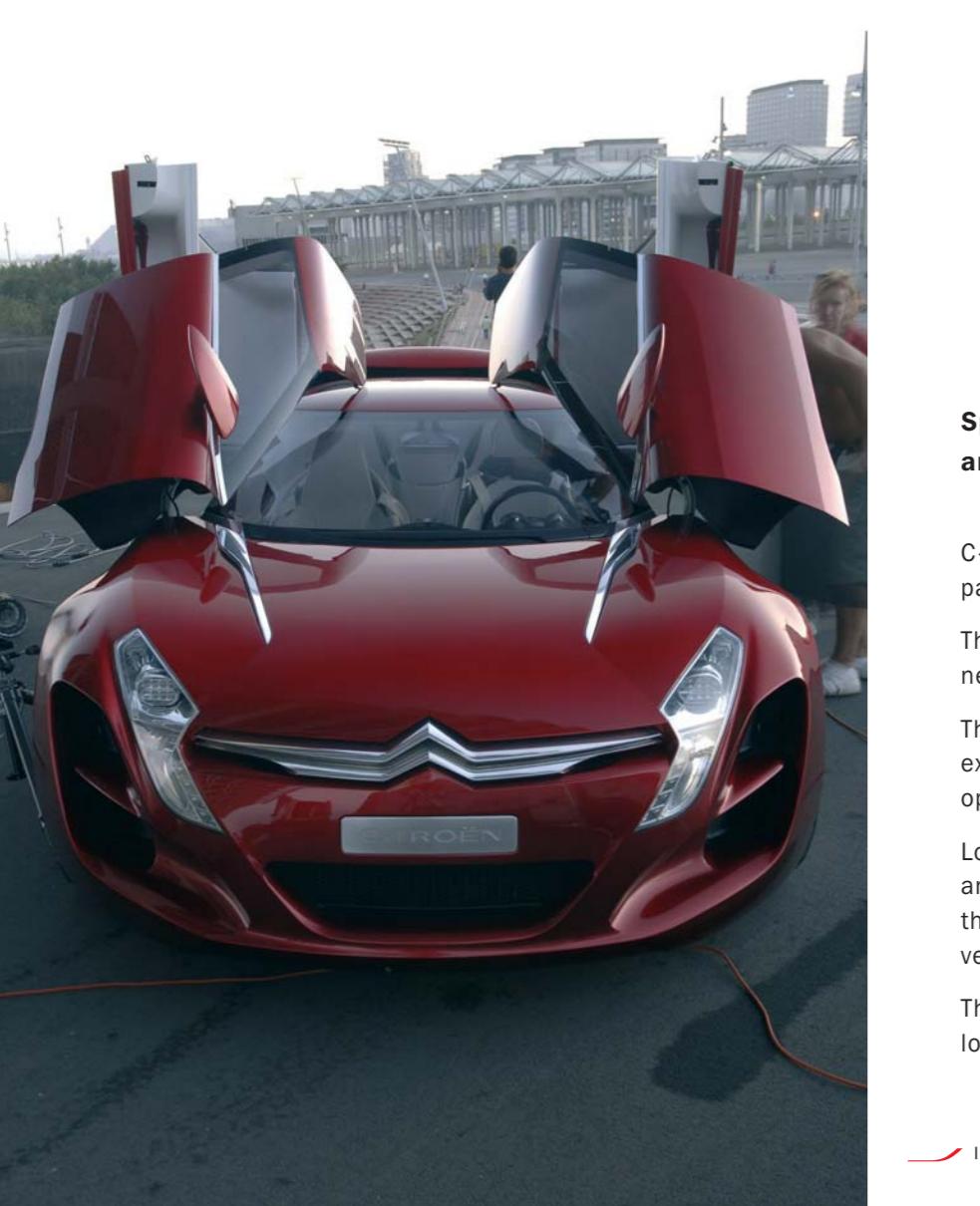
The seduction of C-Métisse is also expressed through a sense of latent power. Even when stationary, the body suggests movement. With its very long bonnet and virtually nonexistent rear overhang, C-Métisse brings to mind the design balance of vehicles seen during the golden age of Grand Touring.





The design lines of C-Métisse also reflect the quest for outstanding aerodynamics, delivering improved fuel economy and lower pollutant emissions while also integrating the latest technological developments. Positioned either side of the double chevron badge on the radiator grille, the headlamps are equipped with a row of LEDs that light up progressively, depending on the steering-wheel angle and vehicle speed. This feature ensures

excellent lighting when driving on winding roads by night. At the same time, the Michelin tyres with their central wheel nuts contribute to the sporting character of the coupé. More specifically, the development of these tyres was integrated with the vehicle design process, in order to optimise resistance to air and thus contribute to the vehicle's excellent drag coefficient (Cd of 0.30).



Spectacular door design and easy access

C-Métisse implements a number of astonishing technical solutions, particularly in terms of door design.

The first surprise is the presence of rear doors on a vehicle that is nevertheless the embodiment of a well designed coupé.

The second lies in the ballet that takes place when the doors open, extending an impressive welcome to passengers: the front doors open gull-wing style while the rear doors spin round.

Looking beyond the stunning visual effect, this is actually an efficient solution for easy access. The doors rise up slightly on the roof – a major obstacle when getting into extremely low vehicles – to provide outstanding accessibility.

The parallelogram boot opening also contributes to the overall looks of the car.





A driving position adapted to the driver

The driving position takes full advantage of technological progress to integrate functions that allow the driver to concentrate fully on the road, while also maximising driving pleasure.

The following equipment is provided:

- a fixed-centred controls steering wheel that brings the main comfort functions and driving aids (radio, speed limiter, on-board computer, lighting, indicators and windscreen wiper) within easy reach. This layout, along with the steering-wheel mounted gear paddles, avoids any unnecessary movements on the part of the driver, who is able to enjoy driving pleasure to the full;
- contact and start-up buttons on the roof console, reinforcing the sensation of being in a fighter jet;
- a driving position corresponding to the optimum position of the driver's eye, with a single height adjustment to match this point; a suspended head restraint anchored to the roof, and two rest electrical functions to adjust the leather steering wheel and aluminium pedal assembly. This innovative layout optimises the driving position while maintaining space for passengers in the back.



This high-tech equipment perfectly matches the design of the driving position whose original central console is divided by five extensions. Positioned between these extensions are the aluminium gear shift lever and other functions including the navigation system controls; seat, steering wheel and pedal assembly adjustment; boot controls, body height adjustment and the sport mode of the suspension system.

The central console extends into the cabin via three illuminated strips featuring a play of light that informs passengers of the current mode of hybrid propulsion (ZEV - Zero Emission Vehicle -, recharge, boost, etc.). This play of light is accompanied by sound effects that are perceptible as soon as the doors are opened. These sounds accompany certain driver actions (getting behind the wheel, starting the car, navigation in the on-board computer) and indicate the deployment of the aerodynamic airfoils. With these features, C-Métisse comes alive. It transcends the usual coldness of high-tech objects to take on a form of existence that is almost "animal" in nature.





A high-spec passenger compartment

Upholstered in white leather, the space reserved for the three passengers features an uncluttered design that creates an atmosphere of total relaxation.

Through their design, the three independent seats suggest comfort and lightness. This impression is reinforced by the airy shapes and hollowed volumes of the cabin, in which the leather trim and aluminium inserts clearly confirm C-Métisse as belonging to the world of exceptional cars.

For truly exceptional passenger comfort, each seat has independent air conditioning controls – stamped into the leather door panels – along with individual roof lighting.

C-Métisse makes full use of its generous wheel base (3 m). The space provided for rear passengers is exceptional for this type of vehicle. Knee room, in particular, corresponds to limousine standards.

With its leather trim, the luggage compartment is coordinated with the passenger compartment. In addition to the boot, with its parallelogram opening, the passengers of C-Métisse have two other compartments behind the wheels to place the line of Citroën luggage designed exclusively for this concept.



REMARKABLE LEVELS OF PERFORMANCE
THAT RESPECT THE ENVIRONMENT

The intelligent design of C-Métisse combines:

- a diesel hybrid drivetrain
- optimised aerodynamics
- limited weight.

As a result, it is able to combine remarkable levels of performance with fuel economy and respect for the environment.





**Diesel hybrid technology serving the environment,
driving pleasure and safety**

C-Métisse features a diesel hybrid drivetrain combining:

- a diesel combustion engine: the V6 HDi DPFS, mated to a 6-speed automatic gearbox developing 150 kW (208 bhp) that drives the front wheels
- two electric motors in the rear wheels, each developing torque of 400 Nm with output of 15 kW (20 bhp).

With its diesel hybrid technology, C-Métisse respects the environment. This is particularly true in the city in ZEV (Zero Emission Vehicle) mode – an “extended”, completely silent all-electric mode with a range of around 3 km at 30 kph – as well as on roads demanding successive acceleration and deceleration. In this second case, the hybrid architecture makes it possible to limit consumption by using the two forms of energy together.

On motorways, the V6 HDi diesel combustion engine with a DPFS (particulate filter) sets high standards of efficiency, based on its intrinsic qualities.

By controlling fuel consumption and thus pollutant emissions, C-Métisse boasts combined cycle consumption levels of 6.5l/100 km for CO₂ emissions of 174 g/km.

No sacrifices have been made in terms of driving pleasure, which remains a key priority for motorists. If the driver makes prolonged use of the accelerator pedal, the boost function kicks in to provide the immediate torque required. This function combines the torque of the combustion engine with that of the electric motors to endow C-Métisse with a level of performance worthy of a high-spec sports vehicle, without pushing up fuel consumption. C-Métisse accelerates from 0 to 100 kph in 6.2 seconds and takes 25.4 seconds to cover 1,000 m from a standing start.



Rather than pursuing the quest for ever higher speeds that are not practicable in normal traffic conditions, the emphasis has been placed on driving pleasure with clean, fast acceleration. For example, C-Métisse accelerates from 80 to 120 kph in 4.2 seconds.

Also, the vehicle remains in 4-wheel drive mode while the boost function is active, since the electric motors drive the rear wheels while the combustion engine drives the front wheels. Thus ensuring impeccable traction.

Also, when the ESP sensors report low grip conditions, C-Métisse can activate its electric motors and thus adopt a 4-wheel drive configuration. The electric motors deliver improved traction and ensure full use of the potential of C-Métisse in all conditions and in complete safety.

Alongside the engine and motors, the drivetrain comprises a pack of high-voltage batteries supplying the electric motors. Positioned in the centre of the vehicle, the pack is recharged by the electric motors during deceleration phases, thus converting the vehicle's kinetic energy into electric energy.

The drivetrain and braking control unit – the nerve centre of the system – automatically manages the energy configuration: transition from 2- to 4-wheel drive, energy recovery and recharging of batteries.





Aerodynamics optimised to combine high standards of performance with respect for the environment

Special emphasis was placed on the aerodynamics and flowing design of C-Métisse, these being key Citroën values. The objective was to enhance the vehicle's dynamics, road manners and performance while showing respect for the environment.

Far from being a gratuitous styling exercise, the forms of C-Métisse combine visual appeal with dynamic efficiency. C-Métisse boasts a Cd of 0.30 obtained by its taut, flowing lines, as well as by a series of innovative features such as the enlarged air intakes at the front, the flat underside of the car, the two retractable rear airfoils and the rear fixed-fin spoiler. All these features play an active role in reducing aerodynamic drag and lift, thus pushing the car to the ground and improving roadholding.





Limited weight for performance and fuel economy

Particular efforts were made to reduce vehicle weight in order to achieve both performance and fuel economy.

With its carbon body and carbon trellis supporting the powertrain and front axle, C-Métisse weighs just 1,400 kg, batteries included. A remarkable figure for a vehicle of this size.

The architecture of the diesel hybrid powertrain also contributes to this result. The positioning of the electric motors in the rear wheels and the position of the battery pack in the centre of the vehicle distributes the weight perfectly between front and rear, for improved road behaviour.

A car of astonishing style and equally astonishing performance with its diesel hybrid powerplant, C-Métisse combines the concept of ecology with automotive emotions and sensations. Through its ability to challenge received ideas, it illustrates an objective long pursued by Citroën: to develop vehicles that reflect the spirit of the times, without losing sight of the essential – driving pleasure.



TECHNICAL CHARACTERISTICS

Dimensions

Length: 4 740 mm
Width: 2 000 mm
Height: 1 240 mm
Wheelbase: 3 000 mm
Gross vehicle weight (GVW): 1,400 kg (batteries included)

Performance and fuel consumption

0 to 400 m: 14.2 seconds
0 to 1,000 m: 25.4 seconds
0 - 100 kph: 6.2 seconds
30 - 60 kph: 1.9 seconds
80 - 120 kph: 4.2 seconds
Top speed: 250 kph
Combined consumption: 6.5 l/100 km
CO₂ emissions: 174 g/km

Diesel hybrid drivetrain

V6 HDi diesel engine developing 150 kW (208 bhp) with a DPFS and 6-speed automatic transmission
Two electric motors in the rear wheels:
- each with torque of 400 Nm
- and developing 15 kW (20 bhp)
ZEV mode (range of 3 km at 30 kph)

Aerodynamic features

Flat underside
Enlarged air intakes at the front
Two retractable rear airfoils
Rear fixed-fin spoiler

Cd: 0.30
CdA: 0.6 m²
Cl: - 0.1

Running gear

Hydraulic suspension
Double wishbone suspension on all four wheels
Special Michelin tyres: 255/40/R20

Main equipment

Fixed-centred controls steering wheel
6-speed gearbox, manual mode controlled by steering-wheel paddles, or fully automatic mode controlled by a selection lever on the central column
Directional headlamps
Electrically adjustable steering wheel and pedal assembly
Aluminium wheels with a central nut

