



New economical and ecological engines for Dacia

New engines

- Dacia broadens its offer of economical and ecological engines.
- In keeping with its environmental strategy, Dacia is now offering engines running with alternative energies, LPG and E85 bioethanol, along with the new 1.2 16V petrol engine.
- Introduced across Europe in 2009:
 - Sandero 1.4 LPG, Logan 1.4 LPG and Logan MCV 1.6 LPG
 - Sandero 1.6 E85
 - Sandero 1.2 16V and Logan 1.2 16V

1.4 LPG (75hp) and 1.6 LPG (90hp) ENGINES*

LPG FUEL

An **ecological** fuel:

- CO₂ emissions reduced by up to **12 per cent** compared with petrol power.
- reduced polluting emissions (NOx, particulates, etc.).

An **economical** fuel:

- a **very competitive** price at the pump.
- eligible for **tax incentives** in several countries (France, Italy, Ireland, Portugal, Germany, etc.).

A **readily available** fuel:

- 32,000 service stations serve LPG in Europe.

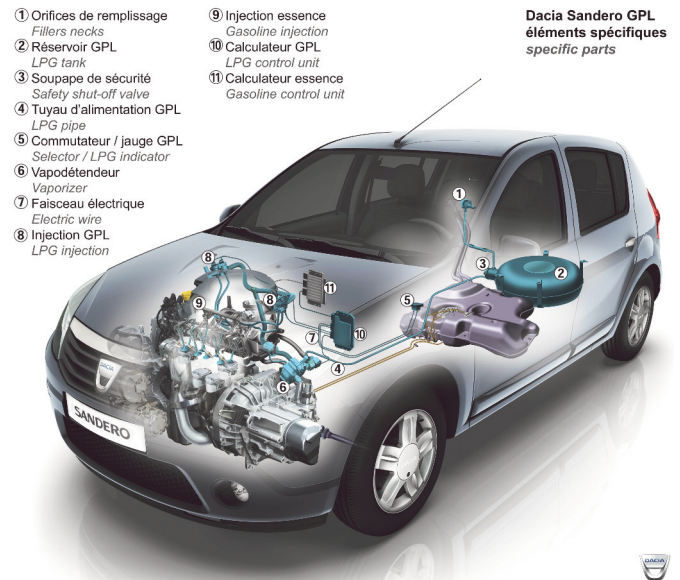
LPG VEHICLES

LPG vehicles are **silent** (60% quieter than diesel-powered vehicles).

LPG vehicles are **dual-mode** petrol/gas vehicles (the driver only has to activate a switch to select the petrol or gas mode) and benefit from **record range**. Sandero 1.4 LPG: up to **1 200 km** covered with a full tank of petrol and a full tank of LPG.

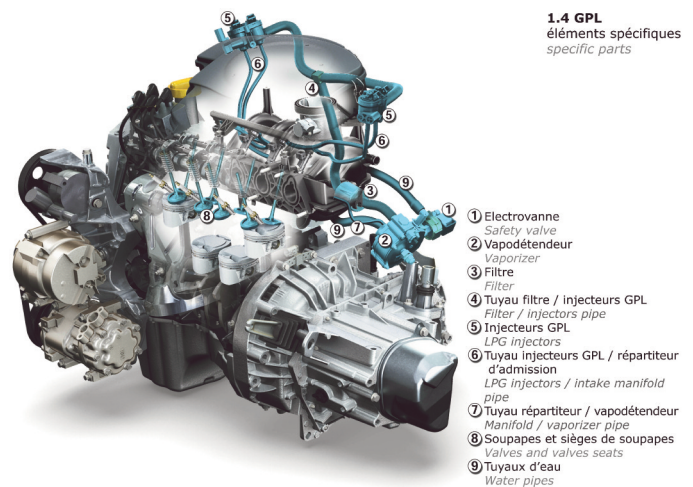
LPG vehicles are **safe**: safety standards enforced in Europe are very strict. **The fuel tank** (steel and composite materials) is **extremely resistant** and is equipped with five safety accessories: a non-return valve, an 80 per cent tank-fill limiter, fuel flow limiter, solenoid and **shut-off valve**.

LPG vehicles are **easy to service**: servicing intervals identical to those of petrol engines (every 30,000km or two years) with maintenance of specific LPG elements.



- ① Orifices de remplissage
Fillers necks
- ② Réservoir GPL
LPG tank
- ③ Soupape de sécurité
Safety shut-off valve
- ④ Tuyau d'alimentation GPL
LPG pipe
- ⑤ Commutateur / jauge GPL
Selector / LPG indicator
- ⑥ Vaporisateur
Vaporizer
- ⑦ Faisceau électrique
Electric wire
- ⑧ Injection GPL
LPG injection
- ⑨ Injection essence
Gasoline injection
- ⑩ Calculateur GPL
LPG control unit
- ⑪ Calculateur essence
Gasoline control unit

Dacia Sandero GPL éléments spécifiques specific parts



1.4 GPL éléments spécifiques specific parts

- ① Electrovanne
Safety valve
- ② Vaporisateur
Vaporizer
- ③ Filtre
Filter
- ④ Tuyau filtre / injecteurs GPL
Filter / injectors pipe
- ⑤ Injecteurs GPL
LPG injectors
- ⑥ Tuyau injecteurs GPL / répartiteur d'admission
LPG injectors / intake manifold pipe
- ⑦ Tuyau répartiteur / vaporisateur
Manifold / vaporizer pipe
- ⑧ Soupapes et sièges de soupapes
Valves and valves seats
- ⑨ Tuyaux d'eau
Water pipes

1.6 E85 BIOETHANOL (90hp)*

E85 BIOETHANOL

An **ecological** fuel:

- a **renewable**, diversified form of energy which reduces dependency on fossil fuels.
 - **up to 70 per cent less** 'well-to-wheel' CO₂ emissions compared with an all-petrol engine (i.e. from the source of production, including plant-growth, to end-use, including transport or distribution).
- Sandero 1.6 E85:** 'well-to-wheel' emissions of **130g CO₂/km** running on sugar beet/wheat-based E85 fuel as produced in France, and **60g CO₂/km** with sugarcane-based E85 fuel as available in Sweden.

An **economical** fuel:

- a **very competitive** price at the pump.
- eligible for **tax incentives** (France, Sweden, Czech Republic, etc...).

THE 1.6 E85 ENGINE

A **dual-fuel** petrol/E85 engine.

A **robust and reliable** engine:

- an engine which benefits from all Renault expertise in the bioethanol field. Renault has been manufacturing and commercializing Flex Fuel engines running with E100 ethanol since 2004.
- specific engine elements: sodium-filled valves which are extremely resistant to high temperatures, optimized cylinder head cooling and oil jet-cooled pistons.

Genuine driving pleasure, even at low revs: performance identical to that of the 1.6 petrol engine.

THE 1.2 16V ENGINE (75hp)*

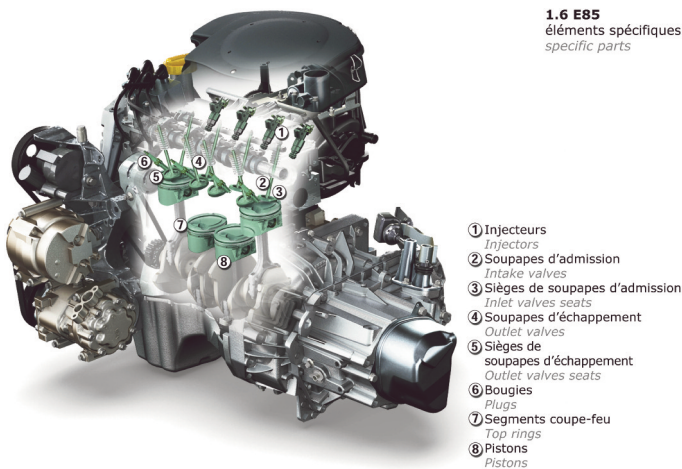
An **ecological** engine:

- Sandero 1.2 16V and Logan 1.2 16V emit just **139g of CO₂/km**.

An **economical** engine:

- combined cycle fuel consumption of just **5.9 litres/100km**.
- development work has enabled the idle speed to be lowered to 650rpm (instead of 750rpm) for a **fuel consumption gain in built-up areas of between 2 and 3%**. It is the first Renault engine to run with such a low idle speed.

Easy-to-service: servicing intervals every 30,000km or two years.



* For engine technical data, please refer to the back of each vehicle sheet.



Dacia eco², economical and ecological

- With Dacia eco², Dacia shows that marketing affordable cars that are respectful of the environment is achievable.
- The Dacia eco² signature has been launched at the Paris Motor Show in September 2008 and introduced in showrooms from the start of 2009.
- The Dacia eco² signature is based on criteria as exacting as those which apply to the Renault eco² signature.
- Dacia is making a direct contribution to the Renault group commitment to figure among the top-three European carmakers with regard to CO₂ emissions.

Dacia eco² vehicles meet the same exacting standards as Renault eco² vehicles:



- ON THE ROAD: CO₂ indice emissions less than or equal to 140g/km, or biofuel compatible.



- PRODUCTION: all Dacia vehicles are produced in one of two ISO 14 001-certified plants: the Somaca factory in Casablanca, Morocco, which has been certified since February 2008, and the Pitesti factory, Romania, which has been certified since May 2005.



- RECYCLING: Dacia vehicles are 95 per cent end-of-life recoverable by weight and at least five per cent of the plastic they contain is sourced from recycling.

The Dacia eco² range features the following models:

	dCi 70	dCi 85	1.2 16V	1.4 GPL	1.6 E85
	120g CO ₂ /km	120g CO ₂ /km	139g CO ₂ /km	< 140 g CO ₂ /km* ¹	130 g CO ₂ /km* ²
	120g CO ₂ /km	120g CO ₂ /km	139g CO ₂ /km	< 140 g CO ₂ /km* ¹	-
	140g CO ₂ /km	137g CO ₂ /km	-	-	-
	140g CO ₂ /km	137g CO ₂ /km	-	-	-
	140g CO ₂ /km	137g CO ₂ /km	-	-	-

*¹ Homologation in progress.

*² 'Well-to-wheel' CO₂ emissions: 130g/km running on sugar beet/wheat-based E85 fuel as produced in France, and 60g/km with sugarcane-based E85 fuel as available in Sweden.