

Lotus City Car Concept Making its debut at the Paris Motorshow 2010, the Lotus City Car concept expertly blends the latest Lotus Engineering series hybrid drivetrain technology with Lotus Design sophistication. The Lotus City Car concept provides a showcase for Lotus Engineering's Electrical and Electronic Integration and Efficient Performance competencies, featuring an advanced series drivetrain with the Lotus Range Extender engine. This innovative concept car highlights the adaptability of the drivetrain technology and the exceptional capability of Lotus Design.

#### Advanced hybrid technology from Lotus Engineering

The Lotus City Car concept features a Lotus Engineering designed and integrated series hybrid drivetrain, with a single-speed transmission that delivers low emissions, optimised performance and electric-only operating range for city use.

The drivetrain provides the vehicle with an EV range of 60 km to cover the majority of daily journeys operating as a plug-in EV, with the Range Extender engine enabling longer trips and alleviating "range anxiety". Using Range Extender technology allows the vehicle to be specified with a smaller, lighter and less expensive battery pack than a regular EV.

The 500 km full range and quick refuelling capability of the range extended Lotus City Car concept highlight the flexibility of this technology for use beyond the city environment. The Lotus City Car concept draws on Lotus Engineering's established core competencies of Electrical and Electronic Integration and Efficient Performance to optimise the highly complex integration of the series hybrid drivetrain.

With a total vehicle weight of less than 1400 kg and 240 Nm of torque instantly available, the Lotus City Car concept has class leading acceleration; 0 - 50 km/h in only 4.5 seconds and 0 - 100 km/h in 9 seconds, when operating as an EV under battery power. The top speed of the Lotus City Car concept is 170 km/h, with a charge sustaining top speed of 120 km/h and all this performance is achieved by a drivetrain that returns CO<sub>2</sub> emissions of 60 g/km on the ECE-R101 test schedule.

The 1.2 litre, 3 cylinder Lotus Range Extender engine, specifically designed for hybrid vehicle applications, drives a 240 Nm, 54 kW continuous (162 kW peak) generator. The Lotus City Car concept boasts zero emission capability when running in EV mode and in keeping with Lotus Engineering's focus on sustainable transport, the Range Extender engine is designed for flex-fuel operation on ethanol and methanol as well as regular gasoline.

#### Exclusive Lotus Design

This stunning concept car created by Lotus Design brings Lotus exclusivity and brand character to a concept vehicle that revels in the city environment. It is beautifully sculptured, possessing a solid, purposeful sportscar stance, while offering features that maximise functionality in the city. With its chic body and overtly sporty nature, the Lotus City Car concept exudes style and sophistication. The distinctive Lotus mouth and diffuser give the car purpose, with the wide track, low ride height and big wheels reinforcing the sportscar styling.

The design features an impressive use of space with very efficient packaging constrained within the compact vehicle dimensions. The Lotus City Car concept provides enhanced visibility for the driver and low emissions to optimise use in urban life.

A dramatic glass roof is incorporated into the design to further increase visibility; under the glass roof

the interior is upholstered in a luxuriant green and yellow tartan fabric and immaculately finished with a technologically advanced Lotus steering wheel. The high specification of the Lotus City Car concept is emphasised by the mix of carbon fibre, sumptuous leather and high quality equipment.

Dany Bahar, Chief Executive Officer of Group Lotus said, “Lotus Design has created a vehicle that condenses the essence of Lotus into a low carbon Lotus City Car, with many inspired design touches. The progressive technology from Lotus Engineering gives the car an advanced drivetrain that can be operated in Zero Emissions EV mode or run on its flex-fuel engine.”

Adding “As you would expect from Lotus, the Lotus City Car concept is an exquisitely designed, highly efficient vehicle with class leading performance - in this concept car, Lotus Design and Lotus Engineering have provided the perfect solution for life in the contemporary city environment.”

#### Lotus City Car Concept Specification

Layout: 3 door, 4 seater, rear wheel drive

Drivetrain: Series hybrid drivetrain

Range Extender engine: 35 kW, 1.2 litre, 3 cylinder engine

Engine fuel: Flex-fuel (methanol, ethanol and petrol)

Battery Capacity: 14.8 kWh

Power/Torque: 162 kW peak (54 kW continuous)/ 240 Nm

0-50 km/h: 4.5 seconds

0-100 km/h: 9.0 seconds

Top speed: 170 km/h

Range: 500 km

EV range 60 km

CO2 emissions: 60 g/km on the ECE-R101 cycle

Weight: Less than 1,400 kg

Transmission: Single speed transmission