

Peugeot hybrid compressed-air car set for Paris Motor Show

September 18 2014, by Nancy Owano



Peugeot 208 HYbrid Air 2L

An 860-kilogram concept city car from Peugeot indicates impressive fuel economy. This latest concept "has its sights set on [meeting](#) the French government's goal of putting an affordable 2.0l/100km (141mpg) car into production by 2020," said Jordan Bishop in Auto Express. Peugeot will be showcasing its 208 HYbrid Air 2L at next month's Paris Motor Show. In announcing the car, Peugeot said it was applying skills across the gamut of automotive applications to continuously lower fuel consumption and CO2 emissions. To lower fuel consumption to 2.0 l/100km, company engineers and project partners used technologies previously reserved for competition and luxury models. Peugeot is

showcasing its 208 HYbrid Air 2L technology demonstrator at the Paris Motor Show. The show car is lighter than a standard 208 hatch—the concept is a [mix](#) of steel, aluminum and composites, according to HybridCars.com.

Richard Lane wrote in [ecomento.com](#) that to reduce the [weight](#) to 860 kg, the [car](#)-maker's engineers exchanged steel body panels for carbon fiber; the thickness of the steel exhaust system was reduced as well, enabling them to cut mass further.

Peugeot calls its showcase hybrid the 208 HYbrid Air 2L demonstrator. The company commented on its purpose to show the car: "The demonstrator provides a snapshot of the full range of technologies used in meeting the government's goal of achieving a fuel efficiency of just 2.0 l/100 km." The demonstrator, said Peugeot, sets the bar high with the bid to halve the consumption of an already highly efficient 208.

The car can run in three modes; petrol-only, air-only or a combination of both. It produces zero emissions when in air mode, good for short distances. In gasoline mode, the car is powered only by the 1.2-liter engine, designed for the driver who moves at steady speed on main roads and highways. The combined mode is for stop-and-go or, as Peugeot words it, "for transition phases" in city and suburban areas. Peugeot discussed parts of the system including a compressed-air tank below the boot; a low-pressure tank near the rear axle acting as an expansion chamber; and a hydraulic system consisting of motor and pump in the engine bay.

A monitoring system, displaying information to the driver, chooses what setting best fits the circumstances.

The idea of driving a car on compressed air is not new, but Peugeot might be turning a corner in getting it right. TorqueNews said earlier this

month, "The problems with compressed air power are many and the solutions are also plentiful, but so far, not realistic. That might have changed with the new Peugeot 208 HYbrid Air 2L Demonstrator." TorqueNews added that "It's an intelligent system that does away with most of the complexity of a gasoline-electric [hybrid](#) while retaining many of the benefits."

More information: [www.peugeot.com/en/news/peugeot ... -air-2l-demonstrator](http://www.peugeot.com/en/news/peugeot-208-hybrid-air-2l-demonstrator)

© 2014 Tech Xplore

Citation: Peugeot hybrid compressed-air car set for Paris Motor Show (2014, September 18) retrieved 9 April 2024 from <https://techxplore.com/news/2014-09-peugeot-hybrid-compressed-air-car-paris.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--