

Peugot to sell hybrid cars that run on gas and compressed air (w/ Video)

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Hybrid Air. Credit: PSA Peugeot Citroën

Troubled French automaker Peugeot has announced that it plans to begin selling cars within a couple of years that use compressed air (nitrogen actually) as a means of partial power for some of its smaller 3-cylinder vehicles.

Using compressed [air](#) as a power source is not new, even for a car—the

reason it hasn't become routine is that it takes a lot of energy to compress air, which makes the whole process rather moot. In this new endeavor, Peugeot has sidestepped that problem by using the energy of a moving vehicle to compress [nitrogen gas](#) in a tank—a piston squeezes it whenever the car is coasting or the brakes are activated.

Technically speaking, it's not air that moves the car, its hydraulic fluid. When power is required the piston in the nitrogen tank works in reverse, pushing hydraulic fluid through a motor that turns the wheels of the vehicle. Thus, the car is constantly moving between adding pressure to the nitrogen in the tank and releasing. It will work best, Peugeot reps have told the press, when running in the city, due to the constant stopping and starting.

The same reps claim the car will cost less than the average gas/electric hybrid, and will allow for achieving up to 118 miles per gallon. It will automatically shift between gas and air and will attempt to run exclusively on air power when the car is traveling at speeds below 43mph. Also, because of the way it's been engineered, the system can be installed on virtually any vehicle and can be seen as a system that replaces the expensive battery needed for current [hybrid vehicles](#), with something that is cheaper—also it won't need replacing for the entire life of the vehicle. As if all that isn't enough, the car, if successful, will likely be the greenest on the road. When running in air mode, it will have zero emissions.

Peugeot has reportedly been working on the concept for two years, investing heavily in the technology, betting that its strategy will pay off in the long run, helping the company finally dig its way out of its financial woes. They expect the first vehicles to be sold with the new system to be available to the public by 2016.

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