

## AN EXCEPTIONAL ENERGY CASE STUDY

# LPG ELECTRIC HYBRID TAXIS: THE BEST OF BOTH WORLDS

Automotive LPG, also known as Autogas, is the world most common alternative fuel in the transport sector. With 26.8 million vehicles already running on Autogas, serviced by a filling station network of over 76,000 sites, Autogas offers an alternative to conventional fuels in all vehicle segments.

Furthermore, vehicles running on LPG produce far fewer of the harmful emissions associated with traditional road fuels such as NOx and particulates that contribute to environmental and health problems. How to further reduce air pollution in cities?

The hybridization of Autogas vehicles allows to combine the benefits of electricity together with a longer range provided by a cleaner fuel. This technology is particularly suitable for taxis in urban areas.

This case study looks at specific experiences with LPG hybrids, and confirms that Autogas is available today but also ready for tomorrow.



WORLD LPG ASSOCIATION  
182 avenue Charles de Gaulle  
92200 Neuilly-sur-Seine - France  
[www.wlpga.org](http://www.wlpga.org)



# 1. LPG hybrid taxis in Melbourne

*"While the Toyota Camry Hybrid with its petrol-electric drive is already one of the most economical cars in the market, with a tri-fuel system using LPG, the vehicle delivers even more environmental and cost benefits"*

- Greg Hardeman, Fleet Operations Manager, 13CABS

Both passenger and driver friendly, the Toyota Camry Hybrid integrates the high torque of a battery-powered electric motor with the power of a combustion engine to deliver an efficient and impressive driving performance. Upon 13CABS request, the taxis have been equipped with state-of-the-art sequential vapour injection LPG systems, turning them into ultra-efficient-tri-fuel revolutionary cars.

## Results of the conversion:

- Payback on conversion of six months
- Fuel cost savings of up to 45% compared to the petrol powered Camry hybrid
- Carbon dioxide emission reductions by approximately 3.45 tonnes per vehicle
- Virtually no emission of NOx and particulates, highly contributing to air pollution



## 2. Toyota new JPN Taxi

Designed in the traditional deep indigo colour, the JPN taxi takes comfort and user-friendliness very seriously. This model features a low flat floor, making it easy for customers to ingress and egress from the taxi. Also it comes with a wide-opening, power rear sliding door and space to accommodate wheelchair users.

In terms of environmental and power performance, the Toyota JPN taxi offers a newly developed LPG hybrid system with a 19.4 km/litre fuel economy and sharply reduced CO2 emissions.

Toyota plans to use JPN Taxi to greet visitors from around the world in 2020, when Tokyo hosts the Olympic and Paralympic games.



On 23rd October 2017, Japan launched one of its most iconic LPG electric hybrid taxi designed to provide usability and comfort to a wide range of people across all age groups, wheelchair users and tourists – The JPN taxi.