

## LPG vehicles in Underground Parking

### Background information

Despite general concerns regarding the danger of parking LPG cars underground, AEGPL wants to clarify that LPG is safe in underground parking installations. In fact, since 2001 comprehensive safety regulations have been in place concerning this issue and almost every country in Europe allows LPG vehicles in underground parking facilities. LPG tanks and fuel systems are now fitted with active safety mechanisms that minimise the risk of explosion or leakage, making it safe to park vehicles also in multi-story and underground car parks

AEGPL has therefore queried his members about national positions regarding LPG cars in underground parking to have an overview of the different legislations in place. We believe that underground parking is only fully banned in Hungary, Czech Republic and Turkey. In the rest of the countries, it is authorized although some practical restrictions may remain. Due to a lack of evidence, we have not included any information on Croatia, Cyprus, Estonia, Finland, Ireland, Latvia, Lithuania, Romania, Slovakia, Sweden, but we believe that LPG cars are not banned in underground parking in these countries. For all the other European countries, please find a more detailed assessment of current situation in the table below.

Country	Status	Relevant legislation/Source	Specific requirements	Additional remarks	Advocacy activities
Austria	Authorised in principle, as there is no regulation at federal level	<p>erdgas öö., "Seit 1. Jänner 2009 erlaubt - mit Erdgas-Autos in die Tiefgarage",  <a href="http://www.erdgasooe.at/eooe/leistungsangebot/fahren_erdgas/aktuelles/index.aspx">http://www.erdgasooe.at/eooe/leistungsangebot/fahren_erdgas/aktuelles/index.aspx</a></p> <p>"Wiener Garagengesetz, geändert am 12.10.2006",  <a href="http://www.bauordnung.at/oesterreich/wien_garagengesetz.php">http://www.bauordnung.at/oesterreich/wien_garagengesetz.php</a> , 2006</p> <p>"Niederösterreichische Bautechnikverordnung 1997, geändert am 26.12.2007",  <a href="http://www.bauordnung.at/oesterreich/nieder_oesterreich_bautechnikverordnung.php">http://www.bauordnung.at/oesterreich/nieder_oesterreich_bautechnikverordnung.php</a></p> <p>"Salzburger Bautechnikgesetz BauTG, geändert am 19.04.2008",  <a href="http://www.bauordnung.at/oesterreich/salzburg_baute.php">http://www.bauordnung.at/oesterreich/salzburg_baute.php</a></p> <p>"Steiermärkisches Baugesetz - Stmk. BauG, geändert am 21.08.2008",  <a href="http://www.bauordnung.at/oesterreich/steiermark/steiermark_baugesetz_paragraph_85.php">http://www.bauordnung.at/oesterreich/steiermark/steiermark_baugesetz_paragraph_85.php</a></p>	<p>In practice, requirements for access to underground parking are set at the level of the provinces, with variations from one to the other. LPG is banned in garages in Oberösterreich and in the city of Mürtzschlag. In other regions the garages should fulfil certain requirements and be clearly signed to allow LPG (e.g. Niederösterreich, Salzburg, Steirmark)</p>	<p>In practice LPG drivers can park in underground garages</p>	<p>This is not seen as a challenge by motorists therefore no further advocacy activities are being considered</p>

<b>Belgium</b>	Authorised in principle, but some restrictions in practice	17 MAI 2007. - Arrêté royal fixant les mesures en matière de prévention contre l'incendie et l'explosion auxquelles les parkings fermés doivent satisfaire pour le stationnement des véhicules LPG, p. 33995. (MB 2007.06.20	Specific requirements related to the ventilation and the installation of dedicated gas detectors are mandatory for LPG vehicles to access underground parking of more than 10 spots.		
<b>Bulgaria</b>	Authorised in principle, but some restrictions in practice	Lack of evidence			
<b>Czech Republic</b>	Banned in general, but can be specifically authorised	Local technical legislation CSN 736058 "The Individual and Public Parking Garages" and Decree 268/2011 "Technical conditions for fire protection of buildings"	Underground parking can be specifically authorised by relevant governmental body, with the approval of the Fire Rescue Service. The parking owner must comply with requested volume of air exchange rates in both normal and dangerous operational modes, and equip the garage with special gas detectors.	The reason of those rules is explained by fact that Czech technical standard (CSN) requests lower air exchange rates in a standard operational mode than other countries	

Denmark	Authorised without condition	<a href="https://www.sik.dk/Virksomhed/Gas-kloak-vand-og-afloeb-for-fagfolk/Love-og-regler-om-gas-og-vvs/Gasreglementet">https://www.sik.dk/Virksomhed/Gas-kloak-vand-og-afloeb-for-fagfolk/Love-og-regler-om-gas-og-vvs/Gasreglementet</a>	n/a		
France	Authorised without condition	Decree-law no. 2006-646 of 31 May 2006: <a href="http://www.ineris.fr/aida/consultation_document/2719">http://www.ineris.fr/aida/consultation_document/2719</a>		<p>Despite the ban lift in 2006, ban signs are still posted at public underground parking entrances. It consequently sends a very negative message to everyone who might consider choosing LPG but who is not aware of the fact that it is actually authorized to park in public underground parking with an LPG car.</p> <p>These remaining ban signs also incite co-ownerships to post LPG ban signs while no regulation has been adopted in that case.</p>	<p>The rationale for withdrawing the ban was the fact that since 2001, all LPG vehicles are compliant with ECE Regulation 67-01 guaranteeing a high level of safety. Keep engaging with public authorities and parking operators to withdraw remaining ban signs. CFBP ran a communication campaign around the replacement of former prohibition signs by "LPG welcome" signs.</p>

<b>Germany</b>	Authorised by a non binding rule at federal level	"Muster-Garagenverordnung" (Model Garage Ordinance) of March 1993	Some technical requirements for underground car parks remain in the Federal States of Bremen and the Saarland. Authorisation with no condition in all the other states.	Underground parking is authorised nation-wide, but additional technical requirements can be set at the level of each state. Note as well that the owner of the garage can exclude Autogas cars if he wants to.	
<b>Greece</b>	Authorised	n/a	n/a	There is no legislation in Greece prohibiting the access to underground parking, however private underground parking can set a ban or specific conditions	
<b>Hungary</b>	Banned	Lack of evidence			
<b>Italy</b>	Authorised in principle, but some restrictions in practice	DECRETO 22 novembre 2002, Gazzetta Ufficiale N. 283 del 03 Dicembre 2002: <a href="http://www.gazzettaufficiale.biz/atti/2002/20020283/02A13602.htm">http://www.gazzettaufficiale.biz/atti/2002/20020283/02A13602.htm</a>	Parking is only authorised on the first underground floor (also in the case that the parking has several underground floors)	This provision was found as a compromise at the time of the negotiation of the decree in Italy, and there is no prospect to change the law at the moment	
<b>Luxembourg</b>	Banned in closed parking of over 20 spots	ITM-SST 1506.2: <a href="http://www.itm.lu/files/live/sites/itm/files/secure/sante/Conditions_types/new/1506-2-incendie-parkings-20-vehicules.pdf">http://www.itm.lu/files/live/sites/itm/files/secure/sante/Conditions_types/new/1506-2-incendie-parkings-20-vehicules.pdf</a>			

<b>The Netherlands</b>	Authorised in principle, but some restrictions in practice		LPG cars are authorised in underground parking in general, there are only few restrictions for old buildings		
<b>Poland</b>	Authorised in principle, but some restrictions in practice	Regulation MI April 12, 2002 on the technical conditions to be met by buildings and their location + amendment of 12 March 2009	Mechanical ventilation, control detectors for unacceptable level of concentration of propane-butane		
<b>Portugal</b>	Authorised in principle, but some restrictions in practice	Law 13/2013 of 31 January 2013 and Portaria 207-A of 25 June 2013	Ventilated, in compliance with Portuguese 2008 legal regime on fire safety in buildings		
<b>Slovenia</b>	Authorised in principle, but some restrictions in practice		In practice, most garage owners prohibit LPG cars because it is easier		Advocate with individual owners about the safety of LPG
<b>Spain</b>	Authorised without condition	ITC-BT 29	The building code foresees ventilation requirements applicable to all new parking.	In 2015, the last ban in one Autonomous region was lifted.	Last ban lifted based on evidence than emissions from Autogas vehicles are lesser than those of petrol cars
<b>Switzerland</b>	Authorised without condition	<a href="http://www.praever.ch/fr/bs/vs/arbeitshilfen/S-eiten/1002-03.pdf">http://www.praever.ch/fr/bs/vs/arbeitshilfen/S-eiten/1002-03.pdf</a>	n/a	The garage owner has the final decision on which vehicles may park in their garage.	

<b>Turkey</b>	Banned			The LPG industry is working with the government to lift the ban	
<b>UK</b>	Authorised without condition	n/a	n/a	Private owners can forbid gas vehicles in their garages	
<b>Ukraine</b>	Authorised without condition	n/a	n/a		

**Colour coding:**

<b>Fully authorised</b>
<b>Authorised in principle, but some restrictions in practice</b>
<b>Banned</b>

\* It should be noted that in many of these countries, underground parking authorisation is subjected to compliance of the vehicles with regulation ECE/ONU No.67 which is mandatory in most places anyway.

**Relevant sources and supporting evidence on the safety of LPG vehicles in underground parking (non exhaustive)**

Assessment by Bundesanstalt für Materialforschung (BAM – Federal Institute for Materials Research)

[New Energy Carriers in Tunnels, SP Technical Research Institute of Sweden](#)

TUV Reinhlnd Iberia Study for Repsol

Comportement d'un véhicule GPL en feu dans un milieu confiné, INERIS, 1999

### **About AEGPL (The European LPG Association)**

*AEGPL is the sole representative of the LPG industry at European level, representing national LPG Associations as well as distributors and equipment manufacturers from across Europe. Our mission is to engage with EU decision-makers and the wider policy community in order to optimise the contribution that LPG - as a clean and immediately available energy source - can make to meeting Europe's energy and environmental challenges.*