



Natural Gas - FUTURE



15th November, Lisbon



HAVI is a global, privately owned company focused on innovating, optimizing and managing the supply chains of leading brands. Since the early days sustainability has been an integral part of HAVI culture.

Environment

Being conscious of the fact that the logistics and distribution parts of a supply chain pose environmental challenges, HAVI is committed to reduce the resulting environmental impacts wherever and as much as possible.

In order to achieve reductions of carbon emissions, HAVI proceeds as follows:

1. Reduce the overall consumption of the fleet by deploying highly efficient trucks equipped with the latest technology in terms of engines, telematics, cooling units and aerodynamics – and even more important – which are driven by well-trained drivers.
2. Use as much alternative fuels as possible to minimize the carbon emissions.

The usage of alternative fuels can be compared to a puzzle where different pieces such as available infrastructure, maturity of the technology and operational viability have to be put together to assure success. The different pieces of the puzzle have to be put together differently from country to country given varying conditions and variables. HAVI has successfully identified the right formula for using alternative fuels in many of its markets. The type of alternative fuel used varies by market and ranges from various biodiesel types to compressed and liquefied natural gas.

Gas Trucks

In eight of their markets, HAVI currently operates more than 40 own gas trucks out of which the majority is run on compressed natural gas. Leveraging the existing CNG/LNG infrastructure in several European markets, HAVI has started to deploy CNG/LNG trucks in 2014 in the following countries:

- Italy, Russia, Portugal, Germany, Switzerland, Spain Netherlands and Ukraine.

The reasons for HAVI's commitment to gas trucks are manifold:

a) Technology

Gas engine technology is mature and has proven its reliability for years.

b) Pollution will change legislation

High pollution levels observed during fall 2016 in major urban areas across the globe have already triggered temporary restrictions and bans for diesel vehicles. Gas trucks will put logistics providers in advantageous positions given that this technology features more than 90% less particulate matter compared to conventional diesel trucks while also offering lower noise levels.

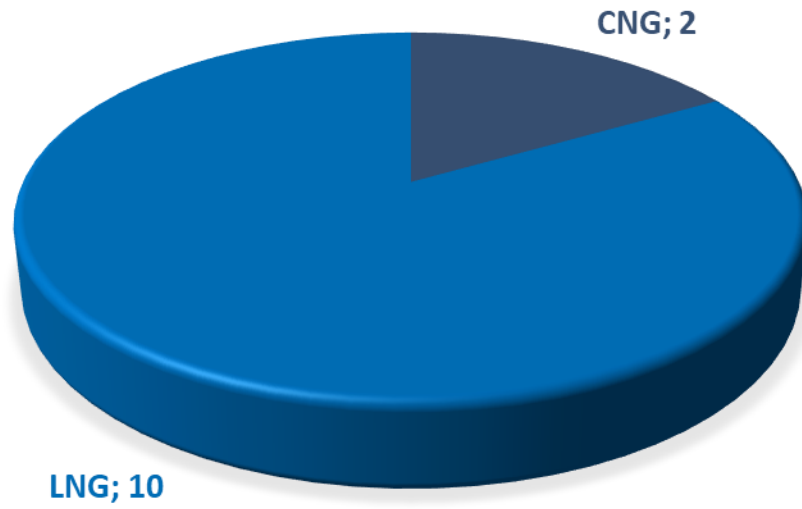
c) Potential migration to biogas

Natural gas can be blended up to 100% with biogas resulting in substantial carbon savings.

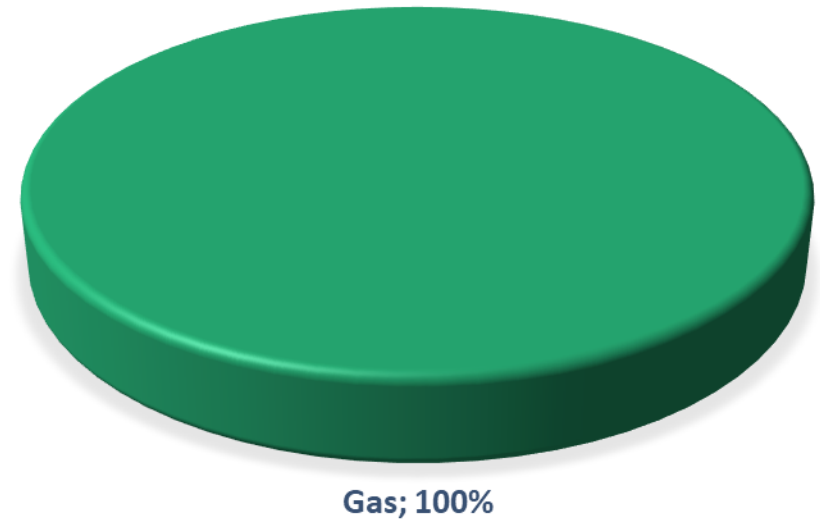


Gas Trucks - Portugal

NUMBER TRUCKS PER FUEL TYPE



NUMBER TRUCKS PER FUEL TYPE



Opening of the Gas Station - Portugal



Visit of the Secretary of State of Energy
From the Left to the right: Carlos Mendonça (Havi MD), Minister for Energy and Environment,
Nuno Moreira (President of Douro Gas), and Oficial Entities

Sustainability Award to HAVI Logistics Portugal



Challenge

- Infrastructural development all over the Europe;
- Trucks pricing acquisition;
- Local governmental support.

Closing

HAVI's positive experience with gas trucks in various markets has proven its sustainability strategy. We are looking forward to an expansion of the infrastructure which would support the further deployment of gas trucks in the future.

FUTURE ? Only Gas ?

THANK YOU