

Brussels, 22 December 2017

Dear Mayors,

On behalf of GasNaturally, a European partnership of six associations that represent the entire gas value chain, I am writing to you to present innovative solutions that could best improve the air quality in your cities.

Air quality is one of the largest environmental challenges that municipalities are currently facing. Despite the strengthening of emissions standards, particulate matter strongly affects air quality, often leading to respiratory and other health problems among urban populations.

To improve air quality, on top of technological breakthroughs, political courage is needed to promote a cultural change in how citizens use energy and to ensure the economic sustainability of city-led initiatives.

Compressed Natural Gas (CNG) and Liquefied Natural Gas (LNG) vehicles are ready, mature, and affordable solutions to improve cities' air quality. Given the low capital expenditures required to convert gasoline-powered vehicles to natural gas, fleet renewals can be quickly accelerated. CNG-powered cars can achieve over 90% reduction of particulate matter and emit more than 30% less CO₂ than petrol cars, without need for subsidies and without compromising on performance, as the engine is the same (see Annex I).

Natural gas is also the best partner to support low-emission mobility through wider use of renewable energy sources. For example, renewable gas produced from biomass conversion of municipal waste and/or from renewable electricity via power-to-gas processes is fully compatible with existing CNG vehicles.

GasNaturally welcomes the recent decisions of two major cities. Madrid's public transport company, EMT, announced that it will order more environmentally-friendly natural gas-fuelled buses, reaching 75% of its fleet by 2019. Equally positive is the adoption of alternative fuels by companies providing services to the City of Paris.

In conclusion, natural gas offers cost-effective and clean solutions to improve air quality and address climate change challenges. Further, it is readily available to any city in the world that aims at providing its citizens with cleaner air. At GasNaturally we are keen to promote additional ideas to foster progress in municipalities. We would be delighted to further discuss the cleaner solutions gas can deliver to the C40 cities and remain at your disposal to provide you with any additional information.

Yours sincerely,

Marco Alverà
GasNaturally President
president@gasnaturally.eu



To:

Ms Anne Hidalgo, Mayor of Paris, Chair of C40 Cities

CC:

Mr Sadiq Khan, Mayor of London

Mr Eric Garcetti, Mayor of Los Angeles

Mr Frank Jensen, Mayor of Copenhagen

Ms Ada Colau, Mayor of Barcelona

Mr Mauricio Rodas Espinel, Mayor of Quito

Mr Gregor Robertson, Mayor of Vancouver

Mr Miguel Mancera, Mayor of Mexico City

Mr Giuseppe Sala, Mayor of Milan

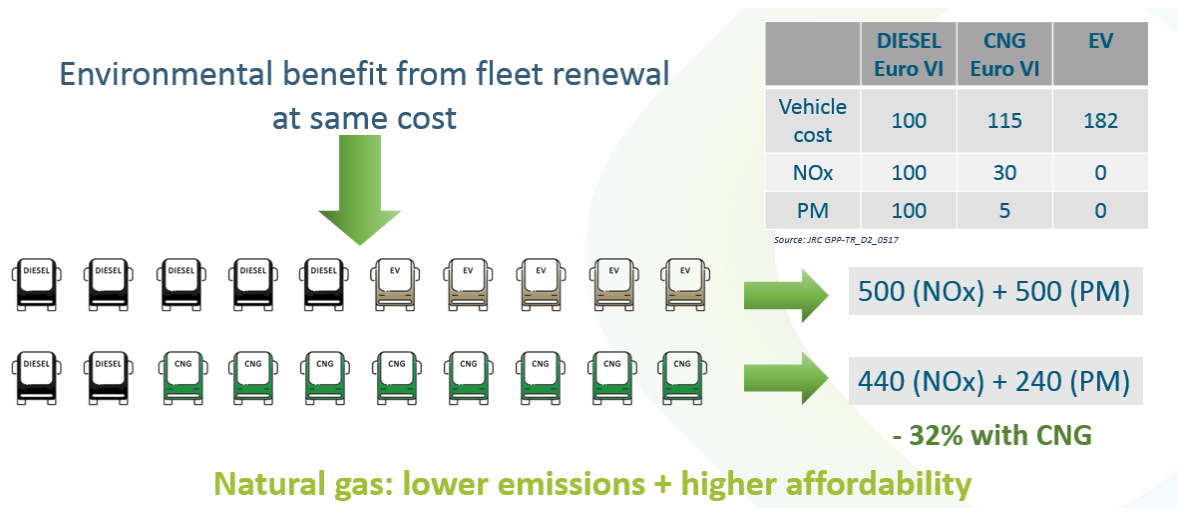
Ms Jenny Durkan, Mayor of Seattle

Mr Phil Goff, Mayor of Auckland

Ms Patricia de Lille, Mayor of Cape Town

Annex I

Adding natural gas vehicles to the fleet renewal process is more effective and cost-efficient than focusing only on electric vehicles. As shown in the figure below, renewing a bus fleet with natural gas-fuelled vehicles delivers greater environmental benefits than doing so with electric vehicles for the same cost.



Comparison of **Diesel** fleet renewal with **Electric vehicles** and **Gas-fuelled vehicles** at the same cost.

Cities have a particular interest in reducing non-methane hydrocarbons (NMHC). Due to the presence of nitrogen oxide in the atmosphere, when combined with sunlight these emissions have a direct harmful effect on the human respiratory tract. They also cause acidification and are therefore damaging to plants. As the formation of NMHCs in gas is particularly low, when compared with conventional fuels, natural gas offers ten times less reactivity to ozone formation. Under the Worldwide Harmonized Light Vehicles Test Cycles (WLTC) recently adopted in Europe, natural gas vehicles have the lowest level of ozone precursor formation.

Finally, reducing particulate matter can significantly improve air quality. Again, the use of natural gas in vehicle engines comes out ahead: tests show that engines using natural gas have up to 97% lower particulate emissions compared with those using conventional fuels.

GasNaturally (GN) is a partnership bringing together associations representing the entire gas chain and aiming to showcase the importance of natural gas in the transformation of the EU energy system. The members of GasNaturally are: International Association of Oil and Gas Producers (IOGP), Eurogas, Gas Infrastructure Europe (GIE), European Gas Research Group (GERG), the Technical Association of the European Natural Gas Industry (MARCOGAZ) and Natural & Biogas Vehicle Association (NGVA).