

## **“Do gas trucks reduce emissions?” The answer is: YES**

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The paper *“Do gas trucks reduce emissions?”* published by T&E (Transport & Environment) gives us the opportunity to rectify some aspects and complement with educational elements and details about gas in transport.

T&E’s conclusions are mainly based on a set of emissions measurement campaigns run by TNO (the Netherlands Organisation for Applied Scientific Research). However, while reports from TNO are scientifically well proven, the conclusions drawn by T&E are misaligned with the measurements reported.

### **NOx emissions:**

T&E missed to include an intermediate 2018 report from TNO (R11448) in their analysis. The missing report which covers exactly the same vehicles, shows a **reduction of NOx emissions by more than a factor 6 compared to Diesel.**

A parallel experimental campaign ([www.projetequilibre.fr](http://www.projetequilibre.fr)) running extensive road measurements over a period of 2 years demonstrated that **natural gas trucks emit between 40% and 60% less NOx compared to their equivalent Diesel models.**

### **Particle emissions:**

T&E confuses PM (Particle Mass) with PN (Particle Number).

PM reduction of 95% compared to Diesel is certified from public homologation data.

PN emissions from spark ignited engines without filtering device, as correctly reported by TNO, result in line, and even lower, compared to Diesel with DPF (Diesel Particulate Filter). This is an excellent result obtained thanks to the specific characteristics of natural gas.

### **GHG emissions:**

The conclusions made by T&E do not reflect the measurements reported in the used TNO studies.

TNO 2019 report (R10193) is showing a 8% tailpipe CO<sub>2</sub> equivalent emissions reduction for spark ignited engines, raising to 20% for HPDI (High Pressure Direct Injection) technology.

When looking to the typical mission profile of an LNG truck (“Motorway” mode), the measured reductions are even higher: 10% for spark ignited engines and 22% for HPDI technology.

### **Well-to-Wheel (WtW):**

The mention of T&E to **WtW emissions** allow us to recall that carbon-neutral mobility is happening today in Europe thanks to bioCNG and bioLNG. More than 450 CNG stations are already delivering biomethane while bioLNG production is a concrete reality, supporting the development of a real circular economy model, replicable everywhere in Europe.

The [existing refuelling infrastructure](#) is perfectly compatible with all kind of renewable gases. And [the vehicles as well](#).

This means that the asset represented by today's technologies is ready to run 100% renewable.

**The T&E alternative for long haulage trucks:**

It is no surprise to read that the future must be zero emissions, through battery electric and/or hydrogen vehicles.

Targeting **net-zero emissions** in the long run is a must. But this needs to happen combining a portfolio of clean solutions that, **today**, can match two main conditions: complying with customer and market needs, and being affordable and accessible.

Without one of these two elements, we will not be able to make a positive impact on our environment and improve air quality in our cities.

Natural gas is ready to take this challenge already today.

**Andrea Gerini**  
Secretary General, NGVA Europe

**Download the full analysis of the T&E paper [here](#).**

*About NGVA Europe*

*The Natural & bio Gas Vehicle Association (NGVA Europe) is an European association that promotes the use of natural and renewable gas as transport fuel. Founded in 2008, its 127 members from 28+3 countries include companies and national associations from across the entire gas and vehicle manufacturing chain.*

*NGVA Europe is a platform for the industry involved in producing and distributing vehicles and natural gas, including component manufacturers, gas suppliers and gas distributors. It defends their interests to European decision-makers to create accurate standards, fair regulations and equal market conditions.*

*NGVA Europe creates networks among interested stakeholders to reach consensus on positions and actions to expand the market for the natural gas transport system. It also collects, records and communicates reliable facts and significant developments in the market.*