

The Alternative Fuels Infrastructure Directive (AFID) is of great importance since it sets reference targets for Member states as an indication of a given density of infrastructure that should be achieved. In this regard, the AFID has been fundamental in the development of the CNG and LNG market.

In Italy much has been done since the adoption of the AFID (see figures below), but the target scenarios for CNG and LNG determined in the National Policy Framework in 2016 are still to be achieved.

From December 2016 (adoption of AFID in Italy) to April 2020, the **number of natural** gas refuelling stations has increased:

- CNG: + 216 new stations;
- LNG: + 64 new stations (in operation, + 40 in project).

No national subsidy was granted by the Italian Government for the construction/opening of new NG refuelling stations, so – apart from the grants under the CEF-TEN-T - the increase in CNG/LNG stations was essentially achieved through regulatory obligations and private investments.

As for LNG, in April 2020 Italy essentially still depends on foreign terminals (Marseille, Barcelona) for supplies to the LNG stations. However, thanks to the AFID as well, several LNG terminals are currently under construction (eg. Oristano and Ravenna).

Concerning interoperability and user information, in Italy the adoption of EN 16942:2016 was enforced in October 2018. Important results have been achieved in CEN TC 326 with the approval of the EN ISO 16923:2018 and EN ISO 16924:2018 concerning CNG and LNG refuelling stations. Moreover, different working groups of CEN TC 326 are at work on New Work Item Proposals and new standards to harmonise procedures, requirements and components.

In April 2020 Italy still is the leading natural gas market in Europe, with more than 1370 CNG refuelling stations (70 thereof selling LNG as well) and over one million NGVs circulating. Nonetheless, much still needs to be done to achieve the targets set within the NPF.

In some areas, especially of southern Italy, the number of CNG refuelling stations is still inadequate and the LNG infrastructure (stations and terminals) needs further development. The market penetration of NGVs (currently 2%) must be increased. What is more, the production and use of biomethane in transportation is currently at an early phase (12 publicly accessible biomethane stations in operation at the moment + 6 private biomethane stations for fleets), so further support is needed to enable and facilitate a more substantial, progressive replacement of fossil natural gas with biomethane and renewable gas.

In order to enable a faster and more effective switch to alternative fuels:

- the revision of the AFID should be based on the principles of technology neutrality and of affordability of ready-to-go options, so as to ensure a more rapid, cost-effective replacement of conventional vehicles with AFVs. All pieces of legislation (national, local or EU) supporting low emission vehicles and alternative fuels should be consistently based on these principles. These principles are particularly necessary until a Well-to-Wheel approach is adopted in assessing the decarbonisation effect among different solutions:
- measures should be adopted to enhance AFV demand (eg. EU exemption from the payment of the motorway toll for AFVs);

To accelerate decarbonisation, further measures should be adopted to support the switch to renewables. With reference to Natural Gas, these measures should support:

- the production of biomethane from waste biomasses coming from the agri-food and waste sector;
- the injection of biomethane and renewable gas in pipelines;
- the use of biomethane for private and public fleets.

Since the infrastructure of natural gas is necessary - and can be used without modifications - for the switch to biomethane and renewable gas, natural gas (CNG/LNG) and its infrastructure still need to be included in the scope of the AFID.

See also: Gas Decarbonisation Pathways 2020-2050 - April 2020 - Gas for Climate

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