Total welcomes the initiative of the European Union to create a clear pathway for the demand of sustainable alternative fuels in maritime transport and commits to contribute actively to the emission reductions of this sector.

As indicated in the Inception Impact Assessment, the objective of this policy is to enhance predictability and provide sufficient incentive for the important research and development efforts and investments that will be required in Europe, while taking the appropriate measures to avoid carbon leakage and keeping the opportunities open for a wide variety of solutions.

Total encourages the European Union to continue to play a prominent role in the International Maritime Organisation in order to promote emission reductions on a global scale. Any initiative on European scale has to take into account compatibility with future global action. Particular attention is also required to avoid that the new measures would lead to carbon and investment leakage.

LNG will play an important role in the pathway towards a low emissions maritime transport, as a solution that is already available on a large scale to reduce vessel greenhouse gas emissions by about 20%. At the same time, LNG also reduces particle emissions (which are also contributing to the greenhouse effect) by 99%, sulphur oxide emissions by 99% and nitrogen oxide emissions by up to 85%. In the longer run, LNG could be supplemented by other alternatives like hydrogen, methanol, ammonia or replaced gradually by biogas or synthetic gas. The natural gas sector is rapidly mastering its methane emissions, with best performers spreading their good practices in the entire sector (through initiatives from OGCI, IPIECA, Methane Guiding Principles, ...), while the methane slip in new generation motors is divided by two.

Liquid biofuels and synthetic fuels have a large potential for emission reductions in the maritime and aviation sector. Today, biofuel use is very limited due to the huge economic gap between its production cost and the cost of the fossil-based alternatives. The industry is working to reduce its cost, which together with a supportive regulatory framework\(^1\), will result in a competitive answer to market demand. Total recognises that biofuel development is facing several challenges, among which scarcity and limited supply volumes in competition with the demand for decarbonisation of the road and aviation transport.

Overall the sector decarbonisation will rely on a mix of various feedstocks and technologies among which each and every one will play an important role.

**TOTAL welcomes the initiative of European Commission and is willing to participate in any workshops and/or consultation to facilitate and support the work of the Commission.**

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\(^1\) Inclusion of the maritime transport sector in the EU-ETS would put a carbon price on the maritime emissions and would already help the transition from liquid fuels to LNG but will not be sufficient to provide the right price signal for the development of other sustainable fuels.