



Fit for 55 Package: Proposed SEA-LNG feedback

Introduction

This document sets out SEA-LNG feedback for the following Fit for 55 policy files having direct impact on LNG as a marine fuel and SEA-LNG's advocacy work:

- FuelEU Maritime
- Revision of Directive on Deployment of Alternative Fuel Infrastructure (AFIR)
- Amendment to the Renewable Energy Directive III (RED III)
- Revision of the Emission Trading System (ETS)
- Revision of Energy Taxation Directive (ETD)

The responses for each file were submitted separately, as per the formal feedback process. They are presented for review in this single document so the linkages between the different policy files are clear.



1. SEA-LNG feedback on FuelEU Maritime

Founded in 2016, with numerous high-profile members including shipping companies, ports, LNG suppliers, bunkering companies, infrastructure providers and OEMs (Original Equipment Manufacturers), classification societies, banks and brokers, SEA-LNG is a multi-sector industry coalition whose members work together to demonstrate the benefits of LNG as a marine fuel throughout the entire value chain and the pathway it provides for maritime decarbonisation.

Summary

SEA-LNG fully supports the objectives of the European Commission to create a common EU regulatory framework to increase the share of renewable and low-carbon fuels in the fuel mix of international maritime transport.

We understand that FuelEU Maritime is one of a basket of policy measures with the intention of addressing maritime greenhouse gas (GHG) emissions in line with European Green Deal objectives.

We support the fact that the proposed policy measures are goal-based and technology neutral. In particular, FuelEU Maritime recognises the need for the GHG emissions intensity of marine fuels to be calculated on a Well-to-Wake basis and to include all major GHGs (carbon dioxide, methane and nitrous oxides). We recognise that the proposed legislation is supportive, in principle, of LNG and the decarbonization pathway it offers through bioLNG and synthetic LNG (e-LNG). However, we have a number of concerns which if not addressed will significantly inhibit the ability of the measure to deliver on its objective and purpose.

SEA-LNG's key concerns relate to:

- the absence of clear definition of renewable and low-carbon fuels (RLF) in which bioLNG and synthetic LNG (e-LNG) should be explicitly included;
- the use of default only emission factors to calculate the emissions performance of fossil fuels versus default or actual and certified emission factors for renewable and low-carbon maritime fuels which is likely to be unworkable;
- issues with the methodology proposed to calculate the greenhouse gas intensities and associated emissions factors, in particular those relating to bioLNG and e-LNG;
- the determination of a reference value against which greenhouse gas intensity reduction targets are set which may penalise the most progressive companies which have already opted for lower carbon fuels;
- potential issues of coherence between FuelEU Maritime and RED II and RED III.

Finally, SEA-LNG strongly suggests that the measures proposed in FuelEU Maritime are co-ordinated with IMO to ensure that there is a level, global playing field for shipping.



General feedback

SEA-LNG fully supports the objectives of the European Commission to create a common EU regulatory framework to increase the share of renewable and low-carbon fuels in the fuel mix of international maritime transport.

We understand that FuelEU Maritime is one of a basket of measures, including revisions to European Emissions Trading System (ETS), the Energy Taxation Directive (ETD) and the Alternative Fuels Infrastructure Directive (AFIR) and amendments to the Renewable Energy Directive (RED III) to address maritime greenhouse gas (GHG) emissions in line with the European Green Deal objectives.

We support the fact that the proposed policy measures are goal-based and technology neutral. In particular, FuelEU Maritime recognises the need for the GHG emissions intensity of marine fuels to be calculated on a Well-to-Wake basis and to include all major GHGs (carbon dioxide, methane and nitrous oxides) are in scope.

We recognise that the proposed legislation is supportive, in principle, of LNG and the decarbonization pathway it offers through bioLNG and synthetic LNG (e-LNG). However, we have a number of concerns which if not addressed will significantly inhibit the ability of the measure to deliver on its objective and purpose. We set these out below.

Detailed feedback on FuelEU Maritime

Definitions of renewable and low-carbon fuels

There is no clear definition of renewable and low-carbon fuels (RLF) in Article 3 (Definitions). It appears as if BioLNG and synthetic LNG are in the scope of renewable and low-carbon fuels. For example, in the Impact Assessment (Section 1.1) reference is made to decarbonised gas which includes bioLNG and e-gas. Elsewhere the terms bio-LNG, e-LNG and synthetic gas are used.

There needs to be an explicit definition of and nomenclature for renewable and low-carbon fuels which includes bioLNG and synthetic LNG (e-LNG) and which is used consistently in FuelEU Maritime and other related policy files, including the revisions to the Energy Taxation Directive (ETD) and the Alternative Fuels Infrastructure Directive (AFID) and amendments to the Renewable Energy Directive (RED II).

Limits to the yearly greenhouse gas intensity of the energy used onboard by a ship

Article 4 proposes that the yearly average greenhouse gas intensity reduction targets for the energy used on-board by a ship, namely:

-2% in 2025 | -6% in 2030 | -13% in 2035 | -26% in 2040 | -59% in 2045 | -75% in 2050

will be determined against a reference value reflecting the “fleet average” greenhouse gas intensity of energy used on-board by ships in 2020.

The determination of this reference value is unclear. If it corresponds to a “fleet average” at a company level, the most progressive companies which have opted for lower carbon fuels, such as LNG, will be penalised as they will start from a lower intensity baseline. If this is the case then an alternative could be considered in which the fleet average proposed is calculated at an EU level, based on MRV data. Further, calculating a reference value based on a single year may have unintended consequences if that year was atypical. For example, the global economy and shipping industry was heavily impacted by COVID-19 in 2020.

Well-to-wake performance of renewable and low-carbon maritime fuels

Section 17 of the proposal states: “*The well-to-wake performance of renewable and low-carbon maritime fuels should be established using **default or actual and certified emission factors** covering the well-to-tank and tank-to-wake emissions. The performance of fossil fuels should **only be assessed through the use of default emission factors** as provided in the proposed regulation.*”

The rationale for the use of default only emission factors for fossil fuels is unclear. It may also be unworkable, as meeting FuelEU greenhouse gas intensity targets is likely to involve the use of fuel blends, where fossil fuels are mixed with renewable and low carbon fuels. Further, the use of default emission factors may weaken the incentives for engine manufacturers to improve the efficiency of their fossil fuel engine technologies, for example, by addressing methane slip. A similar argument could be made for the weakening of incentives for fuel suppliers to reduce upstream greenhouse gas emissions from fossil fuel production and supply, for example, fugitive methane.

SEA-LNG recommends that the well-to-wake performance of all maritime fuels should be established using default or actual certified emission factors.

If the proposed process to establish fossil fuel performance is not amended, then a mechanism should be introduced for reviewing and updating default emission factors in line with supply chain improvements and engine technology developments.

Coherence with RED II / RED III

In the Explanatory Memorandum, reference is made to the basket of policy measures including the revision of RED II (RED III) which are required in combination with FuelEU Maritime Major to decarbonize the maritime sector.

However, in Annex I and II of the proposal which sets out the methodology for establishing the greenhouse gas intensity limit on the energy used on-board by a ship, reference is only made to RED II. RED II was initially set up for liquid fuels, not gaseous fuels. Furthermore, it is not designed to cover marine fuels.

Methodology for calculating greenhouse gas intensity limits and emission factors

There are a number of significant issues with the methodology proposed to calculate the greenhouse gas intensities set out in Annex I and the associated emissions factors described in Annex II, which may work against the intended direction of the proposed policies. The main points of feedback are as follows.

Annex I: Methodology

1. Greenhouse gas intensities are calculated on the basis of emissions per MJ fuel input and hence do not appear to take into account the range of engine efficiencies (typically 45%-55%) for main propulsion systems and for auxiliary power.
2. Pilot fuel for dual-fuel engines is not considered. Equation (1) (page 39) calculates the GHG intensity associated with dual fuel engines. However, the share between the main fuel and pilot fuel is not taken into account.
3. The methane slip adjustment factor also includes additional adjustments for carbon dioxide and nitrous oxides. The term $CO_{2eq\ TtW, slippage, j}$ as defined in Equation (2) appears not be correct. Since fuels themselves contain neither carbon dioxide nor nitrous oxides, these gases cannot be slipped. Only fuel is slipped, ie methane or ammonia. And only methane slip should be multiplied with a GWP_{CH_4} factor.
4. On page 43 it states that the emissions factors of biofuels, biogas, renewable fuels of non-biological origin and recycled carbon fuels shall be determined with reference to RED II. However, as stated above, RED II was initially set up for liquid fuels, not gaseous fuels. Further, it is not designed to cover marine fuels, and there are a number of issues with it:
 - a. RED II fuels do not include emissions associated with the transportation of the fuel to bunkering locations and the bunkering process itself.
 - b. RED II does not explicitly include bioLNG, only biomethane.
 - c. RED II does not explicitly include e-LNG (synthetic LNG)

Annex II: Emission factors

1. Incorrect assumptions are made about typical operating loads for LNG-fuelled engines to derive methane slip values. In Column 9 the methane slip values are referred as being established for an engine load of 50%. This seems arbitrary. While fuel oil engines/vessels maybe operated at 50% load due to efficiency and cost minimum reasons, the cost optimal load point for LNG engines is higher. We recommend using a standardized cycle, such as the IMO E2/E3 cycle.
2. Column 3 – it is unclear why LCV values for bioLNG and e-LNG should differ.
3. In Column 4 it states that well-to-tank emissions for non-fossil fuels shall be calculated by using the methodology or the default values as per RED II deducted of the combustion emissions considering full oxidation of the fuel. It is unclear how the impact of methane slip will be handled.
4. Under RED II bioLNG (bio-LNG) has a zero emission factor (as it recognises the biogenic CO₂ source) but in FuelEU Maritime bioLNG (and e-LNG) has a gCO₂/gfuel tank-to-wake emission factor of 2.755, despite the fact that FuelEU offers a total well-to-wake perspective. It is unclear how this works as the corresponding well-to-tank emission factor (gCO_{2e}/MJ) refers to RED II for the relevant values for bioLNG (and e-



LNG). This needs to be clarified and consistently addressed across the different regulations to account for the biogenic CO₂ source.

Ensuring a level playing field

SEA-LNG strongly suggests that the measures proposed in FuelEU Maritime are coordinated with IMO to ensure that there is a level, global playing field for shipping.



2. SEA-LNG feedback on amendments to the Renewable Energy Directive (RED III)

Founded in 2016, with numerous high-profile members including shipping companies, ports, LNG suppliers, bunkering companies, infrastructure providers and OEMs (Original Equipment Manufacturers), classification societies, banks and brokers, SEA-LNG is a multi-sector industry coalition whose members work together to demonstrate the benefits of LNG as a marine fuel throughout the entire value chain and the pathway it provides for maritime decarbonisation.

Summary

SEA-LNG fully supports the objectives of the European Commission to increase the EU-wide target for the use of renewable energy sources (RES) in transport for 2030 from 14% to 27-29%.

We understand that RED III is one of a basket of policy measures intended to address maritime greenhouse gas emissions in line with European Green Deal objectives. However, we have a number of concerns which if not addressed will significantly inhibit the ability of the measure to deliver on its objective and purpose.

SEA-LNG's key concerns relate to:

- the absence of a Guarantee of Origin system - with certificates traded separately from the physical gas molecules – which will undermine market liquidity and hinder the ramp-up of renewable gases such as biomethane and synthetic methane (e-methane) and their liquefied equivalents bioLNG and synthetic LNG (e-LNG);
- the absence of clear definition of renewable and low-carbon fuels (RLF) in which bioLNG and synthetic LNG (e-LNG) should be explicitly included; and
- potential issues of coherence between FuelEU Maritime and RED II and RED III.

General feedback

SEA-LNG fully supports the objectives of the European Commission to increase the EU-wide target for the use of renewable energy sources (RES) in transport for 2030 from 14% to 27-29%.

We understand RED III is one of a basket of policy measures, including FuelEU Maritime and revisions to the European Emissions Trading System (ETS), the Energy Taxation Directive (ETD) and the Alternative Fuels Infrastructure Directive (AFIR) intended to address maritime greenhouse gas emissions in line with European Green Deal objectives.

Detailed feedback on RED III

Guarantee of Origin

The objective of the key FuelEU Maritime proposal is to incentivise a shift to renewable and low-carbon fuels, including bioLNG and synthetic LNG (e-LNG) in international maritime



transportation. However, this objective risks being undermined by the proposal by the Commission in RED III to track individual transactions within a single mass-balanced system in the Union Database.

The tracking of transaction information is inconsistent with the mass balance approach and incompatible with the current gas market architecture. Ultimately, implementing such requirement would undermine market liquidity and hinder the ramp-up of renewable gases such as biomethane and synthetic methane (e-methane) and their liquefied equivalents bioLNG and synthetic LNG (e-LNG) which are increasingly in demand as maritime bunker fuels.

RED III should propose in clear terms a Guarantee of Origin system resulting in certificates that could be traded separately from the physical gas molecules – across all member states of the EU - as soon as the renewable methane is either liquified or injected in a grid. Guarantees of Origin would lower the complexity of supply chain logistics, create a deeper, more liquid market in renewable methane and lower bioLNG and synthetic LNG (e-LNG) costs to shipping.

Definitions of renewable and low-carbon fuels

Terminology needs to be used consistently between the different policy files comprising the Fit for 55 package. More specifically, there needs to be an explicit definition of and nomenclature for renewable and low-carbon fuels which includes bioLNG and synthetic LNG (e-LNG) in RED III, FuelEU Maritime and other related policy files, including the revisions to European Emissions Trading System (ETS), the Energy Taxation Directive (ETD) and the Alternative Fuels Infrastructure Directive (AFIR).

Coherence with FuelEU Maritime

In the Explanatory Memorandum, reference is made to the basket of policy measures including the revision of RED II (RED III) which are required in combination with FuelEU Maritime to decarbonize the maritime sector.

However, in ANNEX I and II of the FuelEU Maritime proposal which sets out the methodology for establishing the greenhouse gas intensity limit on the energy used on-board by a ship, reference is only made to RED II. RED II was initially set up for liquid fuels, not gaseous fuels. Furthermore, it is not designed to cover marine fuels.



3. Revision of Directive on Deployment of Alternative Fuel Infrastructure (AFIR)

Founded in 2016, with numerous high-profile members including shipping companies, ports, LNG suppliers, bunkering companies, infrastructure providers and OEMs (Original Equipment Manufacturers), classification societies, banks and brokers, SEA-LNG is a multi-sector industry coalition whose members work together to demonstrate the benefits of LNG as a marine fuel throughout the entire value chain and the pathway it provides for maritime decarbonisation.

Summary

SEA-LNG is pleased to see that LNG retains its status as a Transition fuel in the AFIR proposal and hence access to EU funding as well as the mandate and targets for LNG supply in maritime ports. This can facilitate the decarbonisation pathway offered by LNG, starting now and moving forward through the increased uptake of bioLNG and synthetic LNG (e-LNG).

We understand that the proposed revision of Directive on Deployment of Alternative Fuel Infrastructure (AFIR) is one of a basket of policy measures intended to address maritime greenhouse gas emissions in line with European Green Deal objectives. However, we have a number of concerns which if not addressed may significantly inhibit the ability of the measure to deliver on its objective and purpose.

SEA-LNG's key concern relates to:

- a lack of clarity on targets for LNG bunkering infrastructure; and
- the absence of a clear definition of synthetic LNG (e-LNG) in the proposal.

General feedback

SEA-LNG is pleased to see that LNG retains its status as a Transition fuel in the AFIR proposal and hence access to EU funding as well as the mandate and targets for LNG supply in maritime ports. This can facilitate the decarbonisation pathway offered by LNG, starting now and moving forward through the increased uptake of bioLNG and synthetic LNG (e-LNG).

We understand the proposed revision of Directive on Deployment of Alternative Fuel Infrastructure (AFIR) is one of a basket of policy measures, including FuelEU Maritime and revisions to the Energy Taxation Directive (ETD) and the amendments to the Renewable Energy Directive (RED III) intended to address maritime greenhouse gas emissions in line with European Green Deal objectives. However, we have a number of concerns which if not addressed may significantly inhibit the ability of the measure to deliver on its objective and purpose. We set these out below.



Detailed feedback for AFIR

Enabling infrastructure for decarbonisation

We note that in the measures proposed by AFIR LNG retains its status as a Transition fuel and hence access to EU funding and also the mandate and targets for LNG supply in maritime ports ie LNG Port infrastructure at all TenT ports by 2025.

This is key as it will facilitate the decarbonisation pathway offered by LNG, starting now and moving forward through the increased uptake of bioLNG and synthetic LNG (e-LNG) which will utilise existing vessels and supply infrastructure.

However, we would like to see more clarity on targets for LNG bunkering infrastructure. Article 11 states *“Member States shall ensure that an appropriate number of refuelling points for LNG are put in place at TEN-T core maritime ports.”* We note that budget allocations from Member States to waterborne transport fuelling infrastructure has been limited. The March 2021 Report on the application of Directive 2014/94/EU on the deployment of alternative fuels infrastructure States *“The amount allocated to waterborne transport was below 5% of the total financing”* during the period 2016-19.

Definitions of renewable and low-carbon fuels

Terminology needs to be used consistently between the different policy files comprising the Fit for 55 package. More specifically, there needs to be an explicit definition of and nomenclature for renewable and low-carbon fuels which includes bioLNG and synthetic LNG (e-LNG) in the revisions to the Directive on Deployment of Alternative Fuel Infrastructure (AFIR), FuelEU Maritime and other related policy files, including the revision to the European Tax Directive (ETD) and the amendments to the Renewable Energy Directive (RED II).

In particular, in the AFIR proposal, synthetic LNG's (e-LNG's) definition is not explicit. The proposal refers to bio-LNG and synthetic gaseous fuels (e-gas).

4. Revision of the Emission Trading System (ETS)

Founded in 2016, with numerous high-profile members including shipping companies, ports, LNG suppliers, bunkering companies, infrastructure providers and OEMs (Original Equipment Manufacturers), classification societies, banks and brokers, SEA-LNG is a multi-sector industry coalition whose members work together to demonstrate the benefits of LNG as a marine fuel throughout the entire value chain and the pathway it provides for maritime decarbonisation.

Summary

SEA-LNG is supportive of the revisions to the European Emissions Trading System (ETS), as one of a basket of policy measures intended to address maritime greenhouse gas emissions in line with European Green Deal objectives.

We understand that the proposed revision should favour LNG as a marine fuel over traditional oil-based marine fuels because of its lower carbon dioxide emissions. However, we have a number of concerns which if not addressed will significantly inhibit the ability of the measure to deliver on its objective and purpose.

SEA-LNG's key concerns relate to:

- the fact that other important greenhouse gases such as methane and nitrous oxides are not in the scope of EU ETS; and
- the focus on tank-to-wake emissions only, which may lead to renewable and low carbon fuels such as bioLNG and synthetic LNG (e-LNG) being severely disadvantaged against fuels such as ammonia and hydrogen, if they are produced outside the EU from fossil fuels.

Finally, SEA-LNG strongly suggests that measures in the proposed revisions to EU ETS be co-ordinated with IMO to ensure that there is a level, global playing field for shipping.

General feedback

SEA-LNG is supportive of the revisions to the European Emissions Trading System (ETS), as one of a basket of policy measures, including FuelEU Maritime and revisions to the Alternative Fuels Infrastructure Directive (AFIR) and Energy Taxation Directive (ETD) and the amendments to the Renewable Energy Directive (RED III) intended to address maritime greenhouse gas emissions in line with European Green Deal objectives.

We understand that the proposed revision should favour LNG as a marine fuel over traditional oil-based marine fuels because of its lower carbon dioxide emissions. However, we have a number of concerns which if not addressed will significantly inhibit the ability of the measure to deliver on its objective and purpose. We set these out below.

Detailed feedback for proposed revision of ETS

Scope of greenhouse gases included

While recognising the extension of the EU ETS to the maritime transport sector is a complementary measure to FuelEU Maritime, initially focused on driving efficiency by pricing emissions of carbon dioxide, and limited by current EU MRV Regulation, we suggest that other greenhouse gases such as methane and nitrous oxides should be brought into scope so that incentives may be harmonised. For example, some technology solutions which produce no carbon dioxide emissions on combustion eg ammonia, may produce significant volumes of other greenhouse gases – in the case of ammonia, nitrous oxide - which has a GWP 265-298 times higher than that of carbon dioxide for a 100-year timescale.

Tank-to-Wake versus Well-to-Wake

The EU ETS applies to carbon dioxide emitted when marine fuels are consumed in the combustion process ie carbon dioxide produced on a tank-to-wake basis. It does not take into account the upstream emissions associated with fuel production and supply ie carbon dioxide produced on a full lifecycle, Well-to-Wake basis. Upstream emissions are, in principle, taken into account through the application of EU ETS to the installations where fuel is produced, such as refiners, regasification plants, hydrogen and ammonia manufacturing facilities. However, for fuels produced outside the European Union, then these upstream emissions are not taken into account and there appears to be no measures in the proposed Carbon Border Adjustment Mechanism (CBAM) to make the necessary price adjustment to marine fuels.

This could lead to renewable and low carbon fuels such as bioLNG and synthetic LNG (e-LNG), which produce carbon dioxide emissions on combustion but which are carbon neutral if accounted for correctly on a Well-to-Wake basis, being severely disadvantaged against fuels such as ammonia and hydrogen, containing no carbon, if they are produced outside the EU from fossil fuels. Ammonia and hydrogen generate no carbon dioxide emissions on combustion but have far higher emissions on a full lifecycle basis than LNG and traditional marine fuels, if they are produced from fossil fuels without abatement. It should be noted that almost all (>99%) of ammonia and hydrogen is currently produced from fossil fuels.

This issue could be addressed for bioLNG if the zero-emission factor associated with biomethane under the Commission's 2020 revisions to EU ETS MRR is extended to bioLNG.

The user of synthetic LNG (e-LNG) should be exempt from any obligation to surrender EU ETS allowances since carbon dioxide emissions should be accounted for upstream (from industrial sources) or considered neutral (from direct air capture or biogenic sources). Recital 40 already sets out the direction: *“Renewable liquid and gaseous fuels of non-biological origin and recycled carbon fuels can be important to reduce greenhouse gas emissions in sectors that are hard to decarbonise. Where recycled carbon fuels and renewable liquid and gaseous fuels of non-biological origin are produced from captured carbon dioxide under an activity covered by this Directive, the emissions should be accounted under that activity.”*



Ensuring a level playing field

SEA-LNG strongly suggests that measures in the proposed revisions to EU ETS be coordinated with IMO to ensure that there is a level, global playing field for shipping.

5. Revision of Energy Taxation Directive (ETD)

Founded in 2016, with numerous high-profile members including shipping companies, ports, LNG suppliers, bunkering companies, infrastructure providers and OEMs (Original Equipment Manufacturers), classification societies, banks and brokers, SEA-LNG is a multi-sector industry coalition whose members work together to demonstrate the benefits of LNG as a marine fuel throughout the entire value chain and the pathway it provides for maritime decarbonisation.

Summary

SEA-LNG is supportive of the proposal to set minimum tax rates on marine and other fuels based on both the fuel's energy content and environmental performance.

We understand that the revisions to the Energy Taxation Directive (ETD) is one of a basket of policy measures intended to address maritime greenhouse gas emissions in line with European Green Deal objectives.

We recognise that the proposed taxation rates, favour LNG as a marine fuel over traditional, oil-based marine fuels and that suggests that bioLNG and synthetic LNG (e-LNG) would not be disadvantaged against other renewable and low-carbon fuels maritime fuels. However, we have a number of concerns which if not addressed may significantly inhibit the ability of the measure to deliver on its objective and purpose.

SEA-LNG's key concerns relate to:

- the need for all vessels to be treated equally;
- a lack of clarity regarding the application to international shipping;
- potential issues of coherence between the Revision to ETD and RED II and RED III; and
- the absence of clear definition of renewable and low-carbon fuels (RLF) in which bioLNG and synthetic LNG (e-LNG) should be explicitly included.

General feedback

SEA-LNG is supportive of the proposal to set minimum tax rates on marine and other fuels based on both the fuel's energy content and environmental performance.

We understand that the revisions to the Energy Taxation Directive (ETD) is one of a basket of policy measures, including FuelEU Maritime and revisions to the European Emissions Trading System (ETS) and the Alternative Fuels Infrastructure Directive (AFIR) and the amendments to the Renewable Energy Directive (RED III) intended to address maritime greenhouse gas emissions in line with European Green Deal objectives. However, we have a number of concerns which if not addressed may significantly inhibit the ability of the measure to deliver on its objective and purpose. We set these out below:

Detailed feedback on proposed revision to ETD

Tax rates for marine fuels

We recognise that the proposed taxation rates, as described in Article 15, favour LNG as a marine fuel over traditional, oil-based marine fuels over the course of the 10-year transition period (2023-33).

In Section 7 of the Detailed explanation of the specific provisions of the proposal, it states: *The uses for intra-EU maritime and inland waterways regular service navigation, fishing and freight transport, the minimum levels of taxation should be the ones applicable to motor fuel use for specific purposes (therefore lower than the ones applicable to general motor fuel use). In order to provide an incentive to their use, sustainable alternative fuels (including sustainable biofuels and biogas, low-carbon fuels, advanced sustainable biofuels and biogas, and renewable fuels of non-biological origin) and electricity would have a minimum rate of zero for ten years.*

This suggests that BioLNG and synthetic LNG (e-LNG) would not be disadvantaged against other renewable and low-carbon fuels maritime fuels such as advanced biofuels and renewable ammonia, methanol, and hydrogen ie they would all benefit from zero taxation in the period 2023-33. However, explicit definitions for different marine fuels are needed.

Finally, we recommend that all vessels should be treated equally. In Article 15 it states that the lower taxation rates are limited to *regular service navigation* which is defined as being Ro-Ro passenger ship, high-speed passenger craft or a series of voyages from and to the same port without intermediate calls. De facto, this excludes cruise vessels – it should be recognised that the cruise industry has played and continues to play a pioneering role in the introduction of alternative marine fuels, including LNG.

Application to international shipping

The proposed legislation only applies to intra-EU shipping and inland waterways and not to extra-EU shipping. How this can be applied to ships operating on routes with a mixture of EU and non-EU port calls is unclear. In Section 7 of the Detailed explanation of the specific provisions of the proposal, it states: *For extra-EU waterborne navigation, Member States may exempt or apply the same levels of taxation mentioned before, according to the type of activity.*

Coherence with RED II / RED III

In Articles 1 and 2 of the proposed revisions, specific reference is made to values and definitions set out in annexes of Directive (EU) 2018/2001 (RED II) but RED II is due to be amended by RED III, as part of the Fit for 55 package.



Definitions of renewable and low-carbon fuels

Terminology needs to be used consistently between the different policy files comprising the Fit for 55 package. More specifically, there needs to be an explicit definition of and nomenclature for renewable and low-carbon fuels which includes bioLNG and synthetic LNG (e-LNG) in the proposed revision to the Energy Taxation Directive (ETD), FuelEU Maritime and other related policy files, including the revision to the Alternative Fuels Infrastructure Directive (AFIR) and the amendments to the Renewable Energy Directive (RED III).