



European Sustainable Shipping Forum
7th Plenary Meeting

Brussels, **24 January 2017**

Update to the Final Report Submission from ESSF Sub-Groups

Submission from (please choose):

ESSF sub-group on Financing



1. INTRODUCTION

a) Mandate of the sub-group

The ESSF Sub-group on Financing Aspects was set up under the ESSF Plenary on the 27th of November 2013 with the aim to accelerate the materialization of the Sustainable Waterborne Transport Toolbox for a cost efficient and coherent implementation of the directive 2012/33/EU¹ (hereafter "Sulphur Directive"). As a primary assignment, it was envisaged to explore relevant financing opportunities for the European maritime sector, as well as to assess and recommend tailored financial mechanisms within and beyond the existing EU financial framework.

b) Stakeholders represented

This Sub-group consisted of stakeholders representing the main actors operating in the maritime sector: ship-owners, ports, manufacturers, shipyards, Member States, and was also supported by experts from the European Commission (EC), Innovation and Networks Executive Agency (INEA), European Investment Bank (EIB) and the European Maritime Safety Agency (EMSA) as a technical secretariat.

c) Meetings

7 meetings of the Sub-group took place between 2013 and 2016:

- 14 January 2014;
- 12 May 2014;
- 25 September 2014;

¹ Directive 2012/33/EU of the European Parliament and of the Council of 21 November 2012 amending Council Directive 1999/32/EC as regards the sulphur content of marine fuels

- 24 March 2015;
- 20 October 2015;
- 7 April 2016;
- 12 October 2016.

As of 25 September 2014 the meetings were organised jointly with the ESSF Sub-group on Competitiveness.

d) Achievements

In 2014 the Sub-group performed an extensive examination of the market situation, and explored the potential and conditions of relevant private and public financial mechanisms. A Final Report summarising the discussions within the Subgroup was subsequently submitted to the ESSF Plenary and approved in December 2014.

At the same time however, taking into account the importance of the topic, **the Plenary decided to mandate the Sub-group to continue its activities regarding the development of a concrete concept of the market based tool, which would improve the access to financing investments in clean technologies for the shipping industry.** Furthermore, the Plenary endorsed the idea of a vade-mecum for a better utilisation of EU instruments, which would represent a comprehensive guidance on a variety of different funding programmes available for the stakeholders operating in the maritime sector.

Following series of meetings and extensive discussions involving members and observers of the Sub-group on Financing, as well as representatives of EC, EIB and INEA, **an elaborated concept of the financial instrument was submitted to the ESSF Plenary in June 2015, under the working label "Green Shipping Financing Tool".** The Plenary approved the concept and endorsed it as the official deliverable of the ESSF Sub-group on Financing.

Consequently, EC, together with EIB took on designing the parameters of the instrument, and entered in detailed discussions with Member States and financial institutions interested in its implementation. As a result, **in June 2016, the EIB Board made a decision to officially launch the Green Shipping Guarantee Programme (GSG) as a financial product supporting European shipping industry.**

The other task assigned to the Sub-group on Financing, namely the **vade-mecum for a better utilisation of EU instruments** was also submitted **to and endorsed by the ESSF Plenary in June 2016.**

2. ANALYSIS OF FINDINGS

a) Examination of the market situation, and review of relevant private and public financial mechanisms

The Sub-group established a state-of-the-art with respect to the current market situation and explored the potential and conditions for relevant private and public financial mechanisms, which could support the maritime sector in its transition to the green shipping technologies.

In particular, the Sub-group carried out the analysis of the performance and utilization of existing financial instruments, and addressed recommendations on concrete remedial actions about investment risks and possible barriers for access to finance.

The Sub-group demonstrated that **shipping is in a constant structural change** resulting from a variety of factors, such as market fluctuations in transport demand, cooperation/competition with other transport modes, availability of new technologies, as well as environmental regulations (e.g. the "Sulphur Directive", upcoming ballast water regulation, the Energy Efficiency Design Index² etc.)

In general the current state of the shipping industry is characterized by **overcapacity, limited earnings, falling ship values and equity problems**. Looked at from a financial perspective the situation is influenced by the aftermath of the financial crisis, new banking regulations aiming at securing a robust banking system, banks trying to bring down their shipping balances and a reduced risk appetite. From an equity point of view new players like capital funds have entered.

A range of **funding programmes (e.g. Horizon 2020, Connecting Europe Facility)** providing grants to support the structural changes are available at the EU level. However they are not specifically tailored to address all the urging needs of the shipping industry. Therefore the **new financial instruments offered under the Connecting Europe Facility (CEF) and the European Fund for Strategic Investments (EFSI) open up new opportunities** for companies willing to catch up with the structural changes in shipping by investing in sustainable and efficient maritime technologies.

A full analysis addressing these topics was presented to the ESSF Plenary in the Final Report of December 2014 (Annex 1).

b) A concept of the **Green Shipping Guarantee Programme**

As explained in Chapter 1, the idea of the Green Shipping Guarantee programme has been conceived in order to address challenges related to financing green investments in the European shipping sector, and to improve its competitiveness. The Sub-group considered these challenges in principle in the context of a crisis of overcapacity, entailing weak cash flows and limited access to credit despite the growing cost of environmental adaptations.

GSG programme is aimed at accelerating investments in sustainable technologies (LNG, Exhaust Gas Cleaning Systems (EGCS) operating in closed loop mode, ballast water, energy efficiency), to comply and to go beyond the EU environmental legislation, and in particular to facilitate the implementation of the "Sulphur Directive". It does not take the form of a grant programme, but rather an innovative financial instrument attracting back commercial lenders to the shipping sector by providing mitigants that reduce the credit risk of the loans for environmentally focused investments. This instrument is designed both for the general fleet renewal and the retrofitting of existing fleets.

A first version of the concept (called Green Shipping Financing Tool) was agreed by the Sub-

² <http://www.imo.org/en/OurWork/Environment/PollutionPrevention/AirPollution/Pages/Technical-and-Operational-Measures.aspx>

group in March 2015, on the basis of a proposal submitted by a dedicated working group, composed of EIB, EC, INEA and relevant industry representatives. This version was endorsed by the ESSF Plenary in June 2015 (Annex 2).

The subsequent calibration of the instrument by EC and EIB, nevertheless showed the need to introduce some relevant adjustments to the initial concept, in order to make it acceptable for the financial institutions, expected to play an important role in rolling out the programme on the market. An updated version of the concept (Annex 3) was therefore discussed at the Subgroup meeting in October 2015, and then presented to the ESSF Plenary in January and June 2016, where it received strong support.

Overall, the development of the concept and the technical design of the scheme were based on solid grounds, including a market needs survey carried out by EC in cooperation with the Sub-groups on Financing and Competitiveness (Annex 4), as well as tailored market research performed by EIB in countries expressing their interest to participate in the programme.

GSG programme is developed within the financial framework established by the Connecting Europe Facility (CEF), the trans-European transport network guidelines (TEN-T) and the European Fund for Strategic Investments (EFSI).

The programme was officially adopted by the EIB in June 2016³. The total financial envelope amounts to EUR 750 million, where EUR 250 million is ensured by CEF and EUR 500 million is covered by EFSI.

The first framework agreement was signed between EIB and the French bank Societe Generale in November 2016⁴.

c) Vade-mecum for a better utilisation of EU instruments

The document was envisaged to provide a comprehensive list of relevant EU financing tools, according to their type, scope and target, and was intended to advise the users how to prepare their projects in the context of different funding opportunities.

The vade-mecum was officially submitted to the ESSF Plenary in June 2016 (Annex 5).

The vade-mecum lists and explains the available financial tools within the European Union in a practical way. It was designed in particular to:

- orient project managers towards the relevant tools according to the profile of their project: size, maturity, and possible improvements needed in order to comply with the criteria set by European rules;
- present the main points of the understanding of the tools on the basis of relevant European regulations for the period 2014-2020;
- address the possibility of blending different types of financial instruments (where allowed by specific rules) in order to optimize their effectiveness and efficiency;

³ <http://www.eib.org/infocentre/registers/register/67288970>

⁴ <http://www.eib.org/infocentre/press/releases/all/2016/2016-271-la-france-pionniere-pour-le-verdissement-du-secteur-maritime.htm>

- offer a "check-list" for each tool and advise applicants on the way forward in terms of managing their applications and projects;
- provide some relevant example success stories.

The document consists of four parts:

- i. a summary table of the EU funding corresponding to different kind of projects;
- ii. a presentation of the EU financial support (rules and practical advises for CEF Transports, H2020, ESI funds, Life, State aids, EIB mechanisms and EFSI)
- iii. general questions on the EU funds and their compatibility
- iv. records of the latest calls: sustainable shipping projects

All the editorial works were based on inter-active processes, namely exchanges with EU institutions (questions & answers), successive reviews of the text and relevant recommendations from members of the Sub-groups on Financing and Competitiveness.

The document has the potential to represent a high value added for the maritime community, provided some necessary processing towards a version meeting high communication standards is envisaged. Such further processing could be part of **outstanding issues as referred to in Chapter 4.III of this report.**

3. SUMMARY

The Final Report from the Sub-group on Financing Aspects was approved by the Plenary already in December 2014. However, the Plenary recommended the Sub-group to continue its activities with the development of a concrete concept of a market based instrument, which could improve access to financing for the maritime sector, and reduce commercial risks of investing in clean technologies.

The elaborated concept of such an instrument was presented to the ESSF Plenary already in June 2015, where it was officially endorsed. The Plenary was kept informed on the subsequent progress with the technical design of the scheme, and its implementation in the context of the Connecting Europe Facility and European Fund for Strategic Investments.

The other task attributed to the Sub-group on Financing, namely the vade-mecum for a better utilisation of EU instruments was also officially submitted to the ESSF Plenary and endorsed at its last meeting in June 2016.

Consequently, the Sub-group has fulfilled its mandate under which it was established in 2013.

4. REQUESTS TO THE PLENARY

Following the fulfilment of the mandate of the ESSF Sub-group on Financing Aspects, the Plenary is invited to:

- I. **Approve the present Final Report** submission along with its annexes;
- II. **Officially close the activities of the Sub-group under the European Sustainable Shipping Forum.**

However, the activities of the Sub-group on Financing may still require follow up. Due to the strong correlation with the mandate of the Sub-group on Competitiveness, it is suggested that the latter deals with outstanding issues, and be entrusted with occasional and ad-hoc tasks, which otherwise would have fallen under the remit of the Sub-group on Financing.

Therefore, pending relevant decisions to be made by the Plenary with respect to the points I and II stipulated above, it is further recommended that:

- III. **The ESSF Sub-group on Competitiveness follows up relevant actions and deliverables related to the topics dealt with by the Sub-group on Financing;**
- IV. **The ESSF Sub-group on Competitiveness is open up for new members (including the former members of the Sub-group on Financing), which would provide complementary expertise in the scope of financing matters.**

ANNEXES

Annex 1: Final Report of the ESSF Sub-group on Financing Aspects, December 2014

Annex 2: A concept of the Green Shipping Financing Tool, June 2015

Annex 3: A final concept of the Green Shipping Guarantee Programme, June 2016

Annex 4: Results of the market survey, October 2015

Annex 5: Vade-mecum for a better utilisation of EU instruments, June 2016



EUROPEAN COMMISSION
DIRECTORATE-GENERAL FOR MOBILITY AND TRANSPORT

Directorate D - Logistics, maritime & land transport and passenger rights
D.1 - Maritime transport & logistics

European Sustainable Shipping Forum 3rd Plenary Meeting

Brussels, 04 December 2014

Final Report Submission from ESSF Sub-Groups

Submission from:

ESSF sub-group on Financing



This document reflects the outcomes of deliberations of the Financing subgroup of the European Sustainable Shipping Forum of which the European Commission is part. It is not an official document adopted by the European Commission.

1-INTRODUCTION

Mandate and achievements of the sub-group

The Sub-group on Financing Aspects was set up under the ESSF plenary (the 27th of November 2013). It aims to advance the implementation of the Sustainable Waterborne Transport Toolbox for a cost efficient and coherent implementation of the directive 2012/33/EU by exploring all financing opportunities, assess and recommend financial mechanisms within and beyond the EU financial framework. The report on the activities of the group during 2014 underlines that :

1. the challenges of SECA provisions reveal specific costs for existing financial mechanisms so as the sub-group has to work on the specific solutions to finance environmentally-friendly devices (*having precised that financial supports should focus on healthy companies according with risk absorption policy of every financial institutions*);
2. ESSF works accompany a shift towards a wider utilization of public financial instruments;
3. flexibility and innovative ways of financing may overcome existing barriers and leverage private financing to support a greener SECA shipping;
4. some best practices for access to public and private investments may inspire economic operators;
5. specific documents in annexes will advice those who seek financing.

This Sub-group consists of representatives of ship-owners, representatives of ports, of manufacturers and shipyards, representatives of Member States and experts in shipping who worked with INEA, DG MOVE, EIB and EMSA's European functionaries. It has examined public financial supports and pointed to the need for leveraging private financing to offer a complete solution for operators involved with SECA's compliance investments.

After the ESSF meeting 26 June 2014 a joint meeting between the Sub-group on Financing and the Sub-group on Competitiveness was held 25 September 2014. A central outcome of this meeting was a decision on a joint ECSA, Commission and INEA meeting on the industry's need for financing in relation to "the ideas for a private public partnership (PPP) retrofit fund and/or bond instrument for financing environmental SECA retrofit investments for the existing fleet on the basis of mature technology.", re. the recommendation to the Plenary's meeting 26 June.

Furthermore, the retrofit bond/instrument could be expanded to energy-efficiency investments and hereby improving the business case for SECA retrofit investments.

The Connecting Europe Facility (CEF) through the new financial instruments can create the necessary leverage for a fund/bond instrument.

2. ANALYSIS OF FINDINGS

1. The state of play and the potential and conditions of all relevant private and public financial mechanisms

The sulphur rules apply to every ship, both new-building and existing vessels: the Directive refers to international Convention (Marpol, Annex VI) of which retroactivity implies specific costs for vessels whatever the strategy adopted by shipowners.

The costs entailed by the different ways to comply with the rules are, for the present time, far from allowing a possible return on investment : to become attractive solutions for investors, they need for mechanized process of installation or mature grids for the supply of bunkering provisions (LNG for example).

Shipowners can switch to desulphured fuels (<0,1%) and accept a significant increase of OPEX (operational costs) without investing a lot (conversion of the motors needs limited operations at a cost estimated from 100 000 to 200 000€). The choice of low-sulphured fuels implies a higher and fluctuating cost of MGO versus HFO despite the recent decrease of the oil prices. The differential of prices may approach 30 to 40 % of the current bunkering prices. The cost may grow higher if the distance crossed in SECA is longer. On the long term evolution, MGO's prices should fluctuate a lot but shall remain costlier than HFO and may aggravate the voyage costs as far as threatening the competitiveness of shortsea shipping companies.

Shipowners can invest in abatement technologies such as exhaust gas cleaning systems (scrubbers) and new motorisations with appropriate tanks for the use of LNG). Such choices imply high investments which may represent an impediment in the context of shipping crisis.

Eventually, a strategy of investment in abatement technologies may be economical

despite the important initial costs. For scrubbers (estimated at 4 M€ on purchase), the cost of an installation may extend to 15M€ (depending on both the kind of technology and the type of the vessel). For LNG retrofitting, prices may start from 12M€ to more than 30M€. The scale of the works nears new-build costs rather than repairs and maintenance operations. A document in the annex lays out the main costs for different types of vessels.

Some shipowners have released some estimated general costs: it was mentioned that the implementation of Annex VI Marpol costs the sector 3 billion euros (integrating other charges of compliance within a general increase of the environmental requirements). It appears that the cost of compliance may carry weight in several sectors and principally on short-sea shipping. If most shipowners can pass on the costs in the prices they charge because of the lack of transport alternatives, shortsea shipping has to compete with multi-modal ways which aren't affected by the new rules (aerian and land-based services of transport) despite big differences in economic strengths and competitiveness.

Long-trip ships shall switch to MGO while entering SECA whereas feeders and ferries which operate quite totally within SECA will not bear the operational costs in the same way. For instance, the exploitation of ferries reveals specific questions and needs tailored solutions because these expensive ships entail higher costs for SECA compliance with adapted scrubbers for ferries, or special LNG retrofittings. Exploitation life of these ships is longer than other ships (25 to 30 years); the renewal of the fleets is slower elsewhere. We should take into consideration the lower mobility for ferries (links adapted and connected to ports infrastructures) limiting their second-hand market; profits may be weaker and contained within narrow spreads (compared to freight shipping) whereas the modal competition (air, railways and roads) limits the capacity to modify the prices according to the new costs.

Seeking financing solutions for their compliance strategies, shipowners have to succeed in a context of lower margins because of a six-year on-going crisis in the shipping (low charters-rate and weak cashflows) whereas the access for liquidity and maritime loans particularly narrowed. Commercial banks have reduced their exposure to maritime sector and made more severe their criteria of risks analysis before granting any loan.

However, the task of the sub-group should not consist in seeking a global response to the crisis in the sector or to tackle with particular economic difficulties. Anyway, financial solutions have to comply with the EU framework and its guidelines. Whatever the way of financing (private or public), the applicant(s) must have the financial capacity to complete the action for which the grants are sought. State aids and European funding cannot support enterprises in difficulty and banks incur sanctions if they provide « abusive support » to entities without creditworthiness. Moreover, difficulties arise from several and mixed reasons so that problems may not be caused solely by the requirements following the entry-into-force of Marpol Annex VI.

The dilemma between investing in abatement technologies (CAPEX) or bearing the increasing bunkering charges (OPEX) remains the central uncertainty. Each solution leans upon different evolutive scenarii which could jeopardize the financial strategies. Without a clear vision of bunkering future prices (and the risks of a shortfall of appropriate fuels implying soaring costs) or a complete analysis of feasibility on abatement technologies (keeping in mind technical, environmental and economic risks), environmental projects might keep investors at bay

2. Analysis of the performance and utilization of existing financial instruments

Although several financial support programmes exist at EU level, the TEN-T Programme from 2007-2013 has been the main programme offering grant funding support available for retrofitting of the affected vessels in case of investing strategy in abatement technologies within its particular rules (rates of co-financing, sizes of its budgets).

EU financial support directly for TEN-T projects comes in two forms: grants and financial instruments. Grants are implemented and managed by INEA, the financial instruments are implemented and managed by the EIB. The financial instruments offered through either the TEN-T Programme or now through the CEF, are often referred to as risk-sharing instruments because the EU funds from the Commission are used to risk-share with the EIB. Therefore the EIB can offer better terms and consider projects with higher risk than their usual guidelines allow. The most visible example of this is the project bond instrument, which was piloted in the TEN-T Programme.

There are two main points respecting the CEF:

- Grants: the eligibility of investments to receive grant funding and the amount of grant funding available have increased relative to the TEN-T programme;
- Financial instruments: the flexibility to develop new financial instruments, such as the possibility of a dedicated investment vehicle (the retrofit fund/bond), is much greater under CEF than it was under the TEN-T Programme. There is a need for an ex-ante assessment to confirm the need for a new financial instrument, but the possibility exists. A key conclusion of the work of the ESSF group should be to support an ex-ante assessment for the development of a financial instrument for sustainable shipping issues, notably improving environmental performance and increasing energy efficiency. Some of the output of the ESSF sub-group makes a contribution to this assessment.

Although the TEN-T Programme also offered financial instruments such as the LGTT and the pilot phase of the project bond instrument through the EIB, both instruments targeted primarily large infrastructure projects procured as project finance investments. The range of financial instruments offered under the Connecting Europe Facility can be expanded and thus creates opportunities for the development of financial instruments more targeted to the needs of the ESSF stakeholders.

As a first Work-Package, some shortcomings of the TEN-T Programme were analysed by shipowners (Brittany Ferries and Interferry). The historic focus of the TEN-T co-funding aims at infrastructure while ships are generally not considered to be infrastructure. Ferry companies will have to adapt their entire fleet while TEN-T grant-funding for ship retrofits has been focussed on pilot projects and not implementing of fleet equipment, in particular for innovative elements. Scarcely, limited operations on ships reach international level for partnerships which are required to get European visibility (involving at least two Member States).

Both DG MOVE and INEA provided an in-depth reply to the requests. Although it's impossible to solve the challenges, CEF provide a real leverage instrument. At first, the amount of grant-funding available for maritime projects have been increased in the

transport sector of the new Connecting Europe Facility (with €250M for the Motorways of the Seas plus an additional €100 M for Member states eligible to cohesion funding in 2014 and with additional allocations under other priorities and objectives of the call). The available amount granted to improve the environmental performance of maritime transport shall be higher than the previous one in the entire financial framework (up to €900 million for MoS plus additional allocations under other objectives).

Innovative pilot actions which foresee 50 % of co-funding should have a clear innovative element. Otherwise, the 30 % co-funding rate applies and the 'up-grading' of Motorways of the Seas link' requires a consortium of at least two ports and a shipowner operating between those ports. The pre-selection required in the previous programme at regional level disappears under the CEF.

The last Call under the former TEN-T Programme, launched in December 2013 allowed applications of maritime projects focused on Marpol Annex VI requirements: scrubbers and LNG were considered as a priority. Several projects were recommended by INEA and its experts for co-funding under the multi-annual work programme.

The European Investment Bank offers different available mechanisms for financing shipping sector which consists of project loans and intermediate loans. Project loans can be directly borrowed for individual projects for which the total investment costs exceed €25 million and can cover up to 50 % of the total cost for both public and private sector borrowers. EIB pays special attention that the ships it finances use the best available technologies and that the borrowers use sound environmental management practices.

It was mentioned that for many shipowners, especially in relation to retrofitting, the required €25 million as minimum loan is often too high. The Bank's intermediated loans are loans below the €25 million provided through local banks and other intermediaries. However, this mechanism does not help the applicants since the risk remains with the local bank: it implies that nothing changes in comparison with normal private lending. Only companies with an excellent credit rating can still profit of the system which doesn't share the risks between local banks and EIB.

State aids complete the public support. They depend on national policies and are based on EU guidelines (especially for environmental protection).

The updated guidelines include state-aid for the purpose of compliance above existing standards (can be granted up to 60% in the case of small companies, 50% for SMEs and 40% for large companies) and aid for early adaptation. However, since the low sulphur requirements already enter into force on 1/1/2015 and is mandatory for all ships, the so-called 'incentive effect' for such early adaptation is not applicable. State-aid for retrofitting can be given to one year before the entry into force of the new requirements.

In case of a scheme for aid to go beyond applicable standards, this would have to go below the 0,1% which would work for LNG fuelled vessels which have basically 0% sulphur emissions. However in that case the aid can only be granted to the involved costs for going beyond the existing standard of 0,1% (so the margin from 0,1% to 0% sulphur emissions). Scrubbers¹ which also may provide an improvement of CO₂ and PM

¹ The superior performance of vessels burning HFO in combination with a scrubber with respect to PM and CO₂ values versus burning MGO should be proved. Whereas the PM reduction is well documented in various actual, the claim that HFO/Scrubber solution is also beneficial to CO₂ levels is less documented. It may thus be relevant to include a reference here. This could be by referring to EN 16258:2012 (E), table A.1. where the CO₂ emissions on a well-to-

emissions can receive state-aid for that as long as there are no binding EU requirements/standards for those emissions. However, it is to be proved that the aid was granted to investments in the particular field of PM or CO2 reduction.

Finnish and French schemes were presented during the meetings (see annexes): the Finnish scheme works under the previous guidelines for the protection of environment (2008) whereas French Call for projects ('investing in clean ferries') applies the new guidelines (2014).

The sub-group addressed recommendations on concrete remedial actions about investment risks and possible barriers for access to finance ;

Taking into consideration the shortcomings of current financial instruments, including EU financial support ; the sub-group pointed towards two paths to explore and recommended the following submissions to the plenary (26th of June 2014)

- At first, it insisted on TEN-T financial support and the need for flexibility and global information on EU funding to orient the applicants.

In view of the challenge for the maritime transport industry to meet environmental requirements, CEF/TEN-T calls should contain, in line with the TEN -T work programme, a high priority and flexibility for projects implementing solutions to meeting these environmental requirements

The plenary agreed to recommend to the associations of the industry and public (regional and local) authorities to provide tailored information and create better awareness among their members / stakeholders on the (new) possibilities, including financial instruments in addition to grant support of the Connecting Europe Facility (CEF) and other EU-Funds (including ERDF, Interreg, EMFF). The sub-group accepted to be tasked to identify/assemble, in cooperation with the European Commission / INEA appropriate information material to that regard. A guiding document achieving this objective accompanies the present report.

- Second, the analysis of current barriers brought to light a real difficulty to leverage private funding despite State aids or EU fundings (WP 2). As a matter of fact, it appeared that a solution may consist in risk-sharing mechanisms.

On one hand, there were prospective works about EIB credit policy and shipyards stakes (see annexes) ; on the other hand an innovative idea was proposed during the plenary (26th) to the members of the forum who enhanced the works in order to set-up a "European retrofiting fund/bond".

A PPP retrofit fund and/or bond instrument for financing environmental SECA retrofit investments for the existing fleet on the basis of mature technologies could be a solution. Such a dedicated investment vehicle should be seen as a facilitator based on economic considerations but with a higher risk profile than for existing lending. Developing a portfolio of loans according to an eligible investments and borrower profile and

wheel basis is given as 3.92 for MGO and 3.41 HFO or a 15% difference. These figures do naturally not take in to account that the additional 15 mill ts of MGO demand Europe will require from 1.1.2015 will have to be imported and a similar amount of HFO will have to be exported from Europe, nor the CO2 effect of the modal shift.

administered by fund managers (with shipping knowledge) responsible for evaluating and monitoring the individual lending transactions. However, the high risk profile needs to be mitigated possibly through risk-sharing mechanisms such as capital contributions using EU and national funds and the use of instruments such as the Project Bond Credit Enhancement (PBCE) product provided by the EIB for the debt portion of the capital structure of the dedicated investment vehicle.

Several best practices for access to public and private investments were discussed (see annexes)

One may consider the Norwegian NOx Fund as a possible model. The Fund is basically a joint programme of the government and the wider industry (all NOx emitting sources subject to the fiscal NOx tax). The NOx Fund has granted a lot of support to LNG related projects and allows for up to 80% funding of the additional investment costs in case sufficient reduction of NOx emissions can be achieved. As of November 2014 75 LNG fuelled ships projects have received grants for up to 250 million€ which has resulted in a reduction of up to 7700 NOx ton/year. The programme will run until the end of 2017 and its continuation depends on that a renewed agreement between the industry and authorities can be established and the assessment of whether it complies with renewed environmental state aid rules. According to Norwegian law one has to pay a tax for emitting NOx. However it is possible to join the NOx Fund, get a tax exemption and pay a fee to the Fund for emitting NOx. This fee is lower than the NOx tax and implementation of mitigating measures can be a prerequisite, e.g. LNG or catalytic converters. The fees collected by the NOx Fund are solely used for investments in mitigating measures and the companies have the possibility to apply for partial funding of investments.

Under the umbrella of the International Association of Ports and Harbours (IAPH) the World Ports Climate Initiative (WPCI) was set-up. One of the work items in the WPCI is the use of the Environmental Ship Index among the largest possible number of ports globally participating in the WPCI. The Environmental Ship Index provides a tool for measuring the environmental performance of seagoing ships (air emissions) relative to IMO rules. The tool is based on credits that ships can obtain in accordance with their environmental performance. The way of calculating the credits is equal for all participating ports, however, the advantages a ship can obtain in terms of reduction of port dues is left to the individual port (the higher the score, the more reduction a ship can obtain

The Environmental Ship Index is a voluntary system and leaves most part of the responsibility with the ship owner. The tool is suitable for all sizes and types of ships (all kinds of ships are participating in the system). Currently there are 2362 participating ships of 153 companies and 29 ports worldwide using the Environmental Ship Index.

Reference was made to eco-bonus system as another good example of obtaining reductions as a consequence of 'greener performance' of a ship : incentives may be efficient if their's a real financial support

SUMMARY

Shipping is in a constant structural change. Looked at from the market, changes in transport demand, cooperation/competition with other transport modes and new technologies are important drivers. Looked at from a regulation point of view the new

sulphur regulation in North European Waters, the (coming) ballast water regulation and the Energy Efficiency Design Index can be mentioned.

In general the current state of the shipping industry is characterized by overcapacity, limited earnings, falling ship values and hereby equity problems. Looked at from a financial perspective the situation is influenced by the aftermath of the financial crisis, new banking regulations aiming at securing a robust banking system, banks trying to bring down their shipping balances and a reduced risk appetite. From an equity point of view new players like capital funds have entered.

However the situation varies between the shipping companies and looked at from a policy point of view an “average” cannot be applied. Furthermore policy initiatives must not “punish” early movers.

From a member state point of view initiatives are limited by EU state aid guidelines for environmental protection and in general state aid initiatives in relation to the new sulphur regulations have been limited.

Looked at from an EU perspective possibilities for supporting the structural changes are available. However, these possibilities do not target the general shipping industry. Horizon2020 tries to pave the way toward a sustainable and competitive shipping industry focussing on the future and seen from a competitive European Maritime Cluster perspective. The Connecting Europe Facility (CEF) takes on board existing and novel technologies, especially through Motorways of the Sea and innovation. For ships it is possible to apply for funding of additional costs compared to an “ordinary” solution. But when it is demonstrated that the technology works the possibility for grants are very limited. CEF grants to infrastructure in ports, e.g. for LNG bunkering and hinterland connections are facilitating in relation to the competitiveness of shipping. However, through the new financial instruments CEF offers a novel financial possibility applicable for shipping companies with the potential to catch up with the structural changes in shipping. Basically this changes demand a new balance between capital costs (CAPEX) and operational costs (OPEX).

The two submissions from the Finance group to the ESSF meeting 26 June 2014 focussed on the new financial CEF instruments supporting a retrofit fund/bond initiative and better utilization of EU instruments.

With regard to the retrofit fund/bond initiative the starting point was shipping companies with a competitiveness potential and mature technologies. Mature technologies make the business case less risky.

Credit ratings shall not be assessed by a Member State or by an EU institution but by private financial entities on a case by case basis. A portfolio of different shipowners implies a reduced risk. However, as risks are high there is a need for supplementary capital and/or risk coverage provided through the new financial instruments. If possible, supplementary capital can be provided through other sources, i.e. development banks and state budgets.

A wide range of instruments targeting the needs of the shipping industry, especially environmental and energy-efficiency investments with the new financial instruments as vehicle can be worked out. Basically two strategies can be applied for developing these instruments, a top down with extensive work on different models or a market based bottom up strategy bringing in financing entities in the very beginning by EU calls

containing the framework for development of instruments towards the industry. The latest possibility has an obvious “time to market” advantage.

REQUESTS TO THE PLENARY

1) The risk sharing mechanism according to the CEF demands business cases in developing instruments as the retrofit fund/bond instrument. These can already be found/will be further developed; e.g.

- The Norwegian NOX Fund which has an extensive range of business case in relation to investments in NOX abatement; e.g. LNG
- Swedish projects on scrubbers and LNG according to the Zero Vision Tool and Motorways of the Sea projects
- Motorways of the Sea projects in general
- Business cases from the Commission consultancy work, LOT 3 on “Completion of an EU framework on LNG fuelled ships and its relevant fuel provision infrastructure”
- Others

ECSC has offered to facilitate coordination for the establishment of financial instruments targeting shipping industry needs. In this view, ECSC is committed itself to further work on this opportunity with support of DG MOVE and INEA. The role of ECSC will be essential in raising awareness and ensure support from all involved parties.

Business cases as mentioned above, involving the maritime industry (shipowners, ports, shipyards), financial institutions (EU, public and private) and Member States is thus the prerequisite for developing financial instruments targeting the shipping industry. The mentioned actors are represented in the Sub-Group on Finance.

The Commission, INEA and the EIB will initially be the central drivers in this work aiming at creating models/frameworks for the exploitation of the CEF financial instrument. Furthermore, assistance from other contributors is welcome.

Aspects of the work will be the EIB lending policy as the basis for the need for financial instruments, involvements of development banks, attraction of private capital, private entities as assessing risks, alternative amortisations of loans, e.g. through energy savings² and energy efficiency investment as gearing the SECA investments etc.

The results of this initial work shall be disseminated in the Sub-group on Financing and decisions on further steps shall be taken. The aim for the development is a concrete proposal for the next ESSF plenary meeting mid-2015.

2) A specific document integrating the works for a vade-mecum for a better utilization of of EU instruments shall be edited with the additional comments and answers of the

² A SECA investment must be seen as expenditure without direct income compared to an energy-efficiency investment. But the “smartest” SECA investment depending on the trade and the abatement investment choice will give the best “business case”. Furthermore a SECA investment can be seen as a “license to operate”.

European Commission, INEA and EIB on the basis of documents and questions enclosed in the annex.

3) For pragmatic reasons, it is furthermore recommended that the practice of having joint meetings with the Competitiveness Sub-Group – or other Sub-Groups if and when appropriate – is continued.

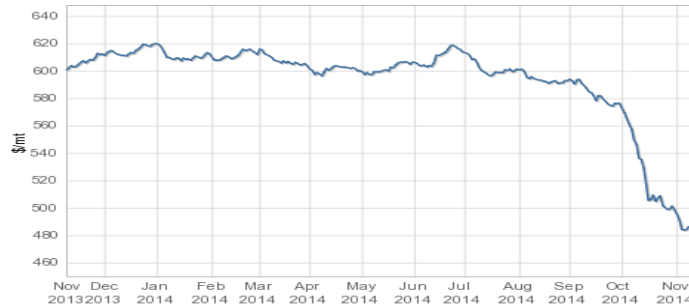
4) The ESSF Plenary is invited to approve this report of the Sub-Group and the recommendations contained herein

ANNEXES :

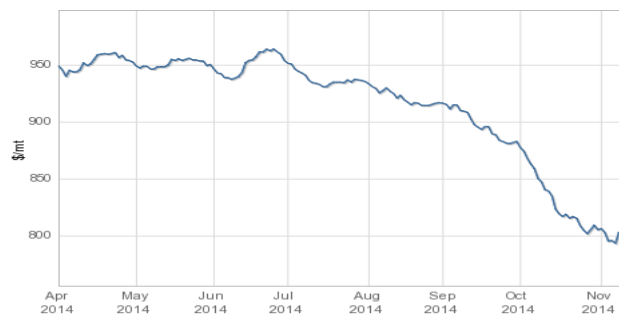
Annex 1: Outlook on OPEX and CAPEX arising from SECA implementation

1) OPEX :

Voyage costs will depend on fuel prices and the differential between HFO usually used (1%) and MGO (distillate under 0,1%) may vary sensitively. The following graphics illustrate recent variations (from 55 % to 62%).



HFO (sources: Bunkerworld)



MGO (0,1%) (sources Bunkerworld)

Switching from one fuel to the other needs adaptation operations on injectors and the circuits: it cost may be estimated around 130 to 200 000€ per vessel.

2) CAPEX:

Scrubbers: from 4M€ to 11M€ for open loops systems; and 20 to 30% more expensive for hybrid systems. The cost depends on the size of the scrubber, the number of scrubbers installed in one vessel and the costs linked to specific ships. For a Ro-Ro, for Ro-Pax or Cruiser, prices are different from tankers, bulk carriers or box-carriers.

LNG retrofits: Prices may vary from 12M€ to more than 30M€ according with the size of engines, the type of vessel.

What are sustainable Shipping investments?

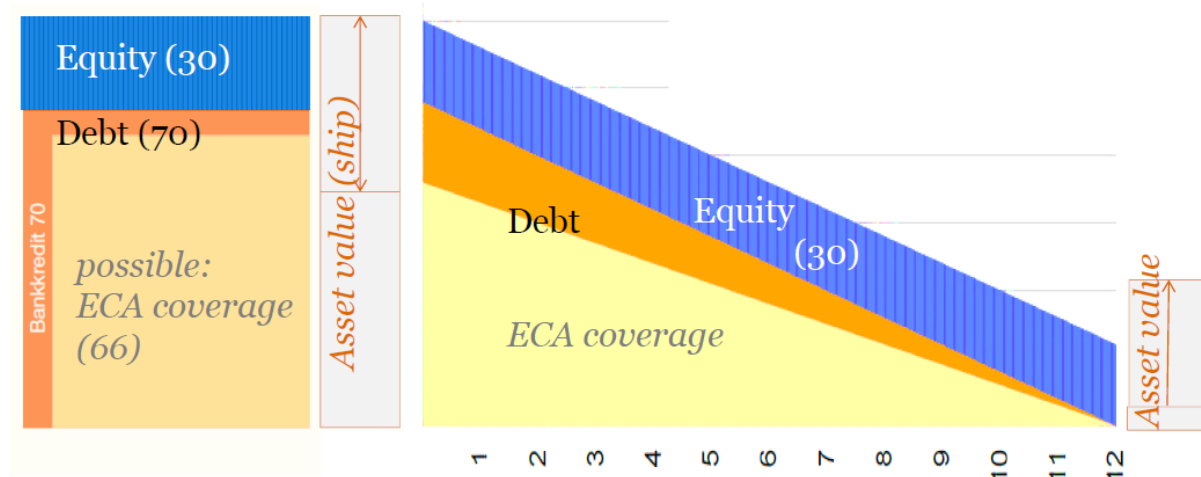
Who bears the costs?

Reduction of sulphur emission <ul style="list-style-type: none"> • LNG fuelling • Scrubber • (MGO-fuelling?) 	<ul style="list-style-type: none"> • 1st step: EU-SECA area Baltic Sea (2015) – 0.1% sulphur, Others (2020) – 0.5% sulphur → LNG Alignments with the IMO rules <ul style="list-style-type: none"> • imply investment costs on the ship owners (LNG fuelling, scrubber) <p style="text-align: center;">and / or</p> <ul style="list-style-type: none"> • Imply higher energy costs on the charterer/ shipping companies (e.g. scrubber require more energy, use of MGO more expensive)
Reduction of biological emission <ul style="list-style-type: none"> • Ballast water treatment 	
Other investments in fuel reduction / efficiency <ul style="list-style-type: none"> • Loading technologies • Technical equipment (e.g. propulsion technology) 	

Ship financing normally asset based Asset based financing of a freight going vessel

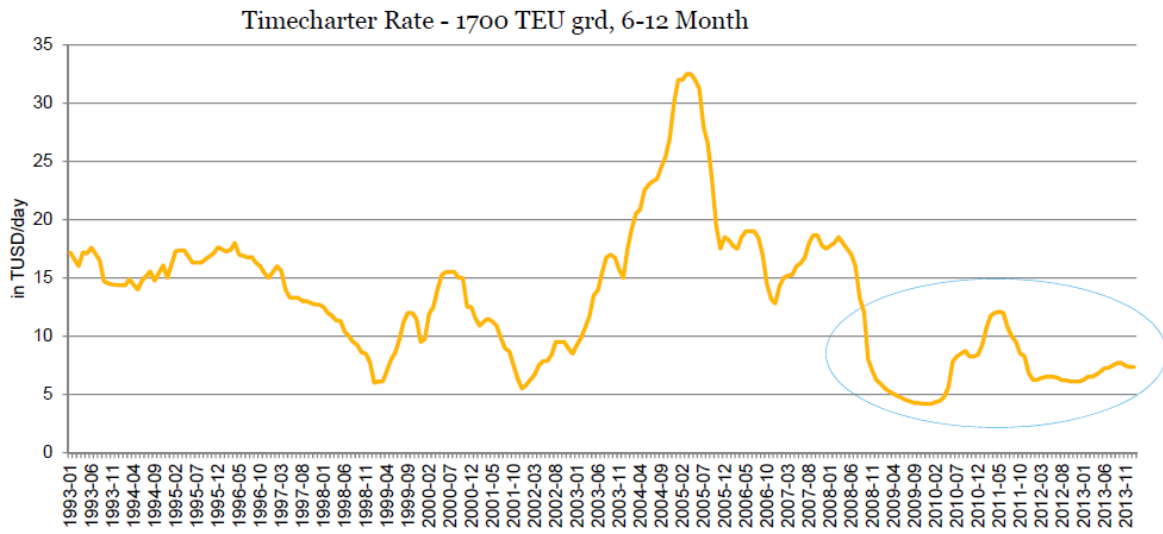
Financing structure

purchase 12 years of debt repayment (OECD consensus)



Shipping crisis – ongoing in it's 6th year

Lowest charter rate level in over 20 years, though OPEX remain high



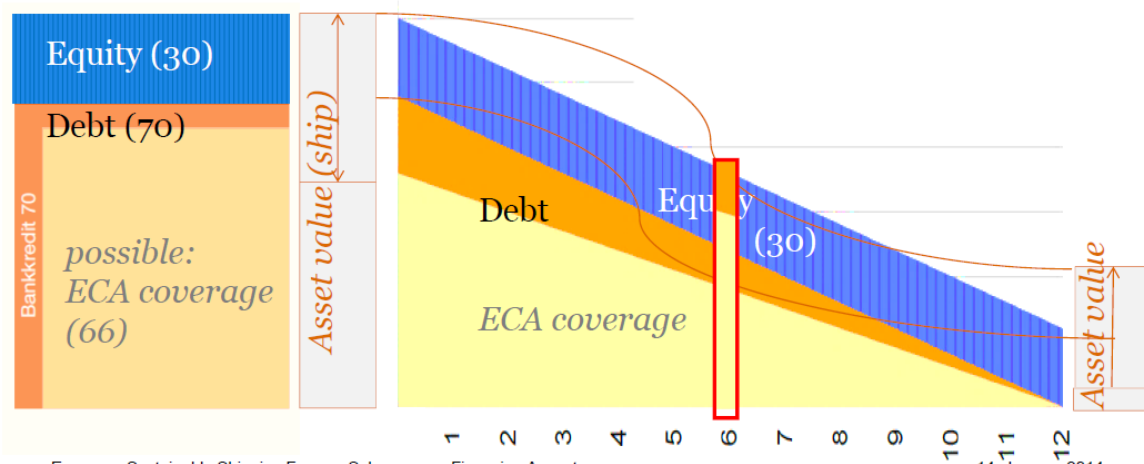
Source: Clarksons Research Services, 13 Januar 2014

Ship financing with distortions

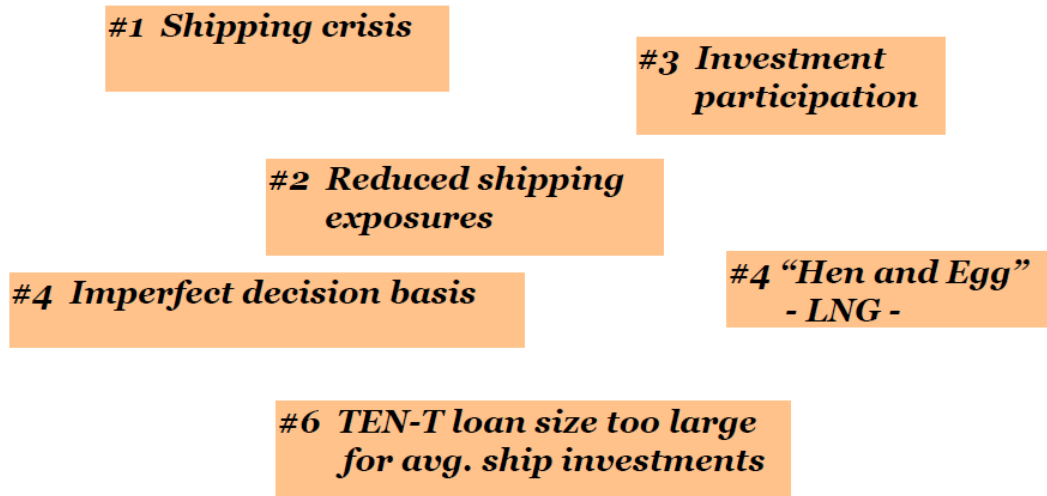
Almost no debt services on 5y old ships

Financing structure

purchase 12 years of debt repayment (OECD consensus)



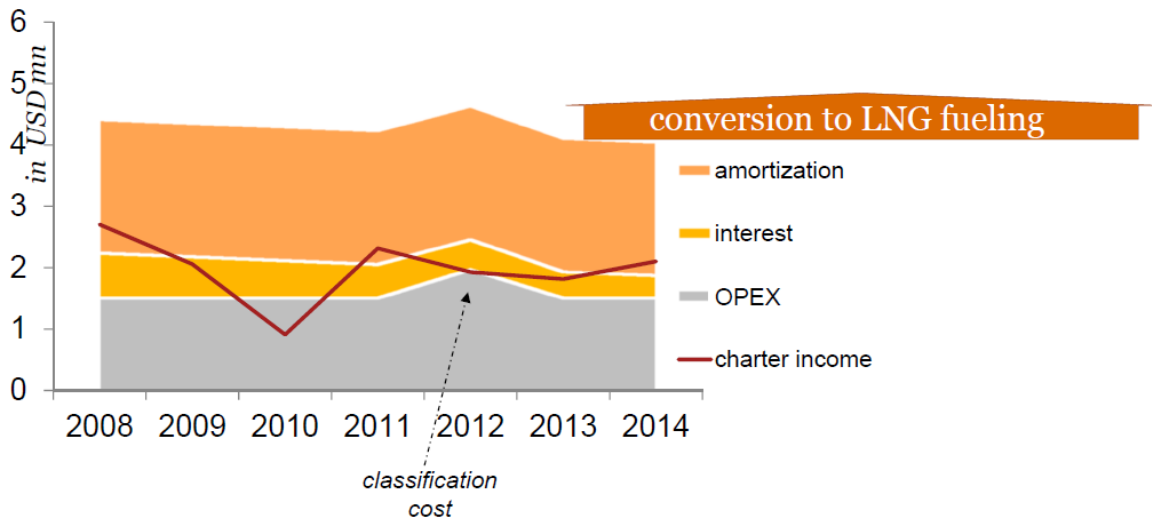
Barriers to financing



#1 Shipping crisis

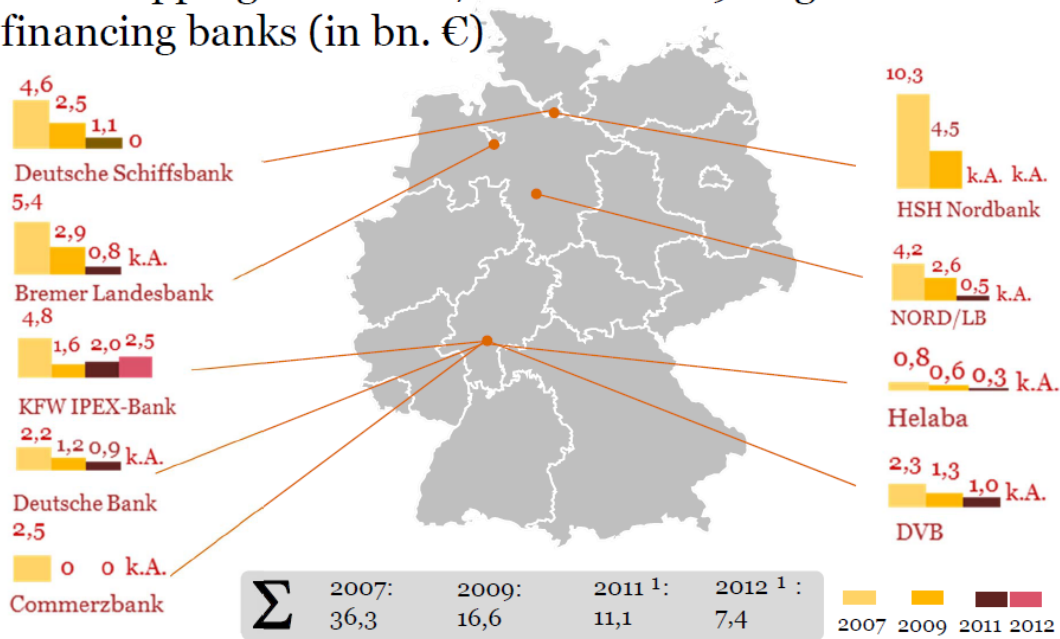
Burn out of private funds of small and medium sized players

Liquidity situation of a 1.700 TEU container vessel



#2 Reduced shipping exposures

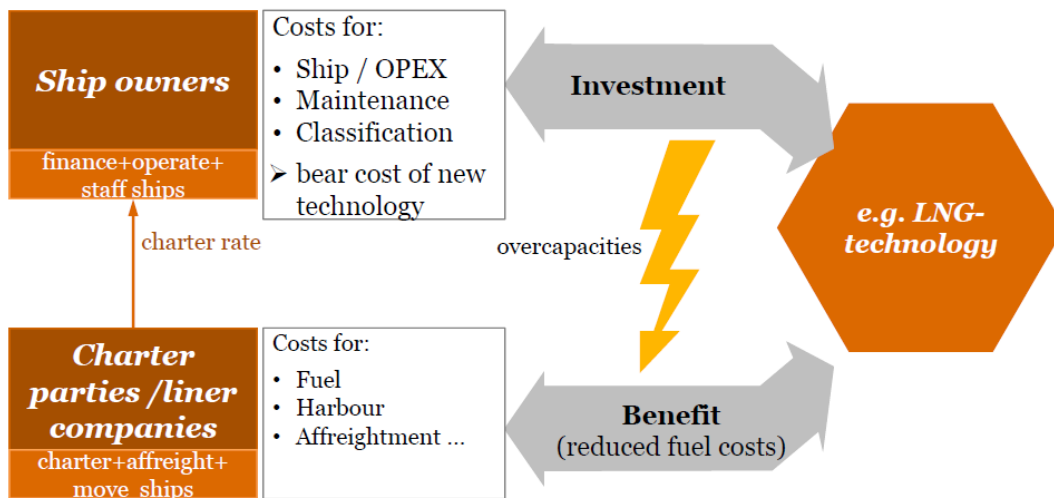
New shipping loans 2007-2012 of the 9 largest German ship financing banks (in bn. €)



Source: business and press reports

¹ Association of German Pfandbrief Banks 8,6 bn € + KfW IPEX 2,5 bn € (2011), 4.9 bn. € + KfW IPEX 2.5 bn € (2012)

Incentives split



Source: PwC

Ship owners	<ul style="list-style-type: none"> • Funds used in the crisis, no earnings • Often no/ too low creditworthiness
Charter party / “Liner” company	<ul style="list-style-type: none"> • Contribution to investment • Re-imbursment from freight clients (as possible regarding “street competition”, competition from EU neighbours)
Ship financing banks	<ul style="list-style-type: none"> • Willingness to finance with creditworthiness and reliable investment decision • Ability to finance depends
	<ul style="list-style-type: none"> • Large owners/ new entrants might buy new ships • Would lead to further overcapacities • Dramatically changes the existing owner structure
Gas providers	MGO users ...

Annex 3: toward a guidance document on EU funding for LNG (JB Erhardt)



CGEDD

Mission de coordination sur l’emploi du GNL

The use of Liquefied Natural Gas as a marine fuel by ships

Mobilizing EU Funding - Towards a vade-mecum

Summary

This working paper aims to present the various EU Funding Regulations, the State aids and the mechanisms of the European Investment Bank which could support the energy change of the shipping sector to respond to the environmental rules.

The use of LNG as a fuel by the shipping sector is fully compliant with the existing or foreseen environmental constraints, and is in line with the EU policy on the decarbonisation of the waterborne transport and the deployment of alternative fuels.

The implementation of the Sulphur Directive costs the sector 3 billion Euro. Ship-owners have to undertake huge investments to adapt or to renew their fleet by 1 January 2020. The price of a ferry using LNG as fuel can be approximately 20 to 25% more than a ferry with a conventional propulsion. The conversion of a ferry to LNG could cost between 20-25 million Euro.

Unfortunately, ship-owners can encounter some difficulties in accessing banking resources. Banks can be unwilling to grant loans to ship-owners due to their own financial and regulation constraints. Moreover several European banks withdraw from maritime loans.

It appears in the aggregate report on the comprehensive assessment published on 26 October 2014 by the European Central Bank (ECB) that shipping assets could present particular financial risks.

Therefore, the EU financial instruments turn out to be crucial to encourage shipowners to adapt their vessels. Moreover, these instruments can promote the deployment of LNG infrastructure in ports.

A final part of the working paper contributes to a vade-mecum on the implementation of these EU financial instruments.

This working paper is an updated version of a previous working paper on 2 April 2014, and can be revised subsequently.

Plan

Background

1. Economic and financial aspects

2. EU financial support

2.1. General framework

2.2. Connecting Europe Facility (CEF)

2.2.1. Financial envelope

2.2.2. Projects of common interest

2.2.3. Amount of Union financial assistance

2.2.4. List of general orientations

2.3. Trans-European Transport network (Ten-T)

2.3.1. The Comprehensive Network

2.3.2. The Core Network

2.3.3. Building the Transport Core Network

2.3.4. Transport work programmes 2014

2.3.4.1. Annual programme

2.3.4.2. Multi-Annual Work Programme

2.3.4.2.1. Ensuring sustainable and efficient transport

2.3.4.2.1. Motorways of the Sea (MoS)

2.4. European Structural and Investment Funds (ESI Funds)

2.4.1. European Regional Development Fund (ERDF)

2.4.2. European territorial cooperation

2.4.3. Cohesion Fund

2.5. HORIZON 2020

2.6. LIFE

3. State aid

4. European Investment Bank

5. Directive on the deployment of alternative fuels infrastructure

6. Proposal for a vade-mecum on EU Funds

Background

Following Directive n°2012/33/EU of 21 November 2012 on the sulphur content of marine fuels, a sulphur content of 0.1% shall be applied on 1 January 2015 in the Baltic Sea, the North Sea and the English Channel which are the unique Sulphur Emission Control Area (SECA) in the European Union. Outside SECA, all ships in the European Union shall use fuel with a sulphur content of 0.5% from 1 January 2020.

The implementation of these rules on the sulphur content of fuel used on board ships will lead to considerable additional costs for ship-owners, beginning with ferries operators in SECA. At the second meeting of the Sub-group on Financing Mechanisms of the European Sustainable Shipping Forum, it was mentioned that the implementation of the Sulphur Directive costs the sector 3 billion Euro. According to various studies, the increase in vessel operating costs and a lower competitiveness of shipping could lead modal shifts from short sea shipping to road transport in SECA.

As the schedule for the sulphur limits approaches, Liquefied Natural Gas (LNG) as a marine fuel is being considered as an alternative option to conventional marine bunker fuel oils because it produces emissions with a sulphur dioxide (SO_x) content of virtually 0%. The use of LNG will also reduce the emission of nitrogen oxides (NO_x) up to 80 %, of CO₂ by 20% and eliminate particulate matter (PM).

In accordance with the White Paper entitled "Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system"³, the use of LNG by vessels will reduce the negative impact on the environment and improve the competitiveness and the sustainability of the maritime transport. Therefore, LNG is able to match the objective of Clean Transport in the EU.

Nevertheless, LNG as a marine fuel requires considerable investments for a shipping company, and for the deployment of a LNG bunkering infrastructure at the scale of a port operator.

This Working Paper aims to present the economic and financial aspects to adapt the European Shipping to the environmental constraints (Part 1), the EU funding regulations (Part 2), the State aids (Part 3), the mechanisms of loans and guarantees of the European Investment Bank (Part 4), the funds defined by Directive 2014/94/EU on the deployment of alternative fuels (Part 5) and a ^{proposal for a vade-mecum on EU Funds} (Part 6) in order to facilitate the use of EU Funds for the operators.

1. Economic and financial aspects

All the studies realized in the framework of the Intelligent Energy Programme or the trans-European transport network (TEN-T) programme, such as MAGALOG (2007-2008), LNG as a fuel for shipping in the Netherlands (TNO - 1 Mars 2011) and the North European LNG infrastructure study coordinated by the Danish Maritime Authority (May 2012) demonstrate that LNG is a viable, reliable and available, both economically and technically, solution to comply with the new rules on sulphur content of bunker fuel, in particular for short sea shipping in the SECA of Northern Europe.

3 COM (2011) 144 final on 28.3.2014

These studies underline the financial constraints of the developments of LNG fueled ships and the associated infrastructure, and the need to create business incentives for LNG infrastructure investments. It is also recommended to establish a funding scheme for the development, the construction and the operation of LNG bunker vessels in the early stage of LNG as marine fuel introduction on the market.

To evaluate the infrastructure costs, the North European LNG Infrastructure project considered three models: large-scale, medium-scale and small-scale terminal installations.

Port Case I is defined as a large-scale facility that is incremental to an existing LNG import terminal. Medium-scale and small-scale, Port Case II and Port Case III respectively, would be “purpose built” installations with storage capacity of 20,000 m³ and 2 x 700 m³, respectively.

The three port cases are based on projected numbers from ports and reflect actual traffic and calls and hereby throughput. The cases therefore involve equipment to meet the local foreseen LNG bunkering demand, but also supplementary equipment that is required in order to meet demand in nearby ports and land-based demand.

The financial implications from an investment point of view and associated needed income to finance the investments are shown in the table below.

Table. Infrastructure costs for the three LNG port cases

LNG Port Case	Large-scale Port Case I	Medium-scale Port Case II	Small-scale Port Case III
Total initial investment cost [million €]	69	137	15
- thereof investment in bunker vessels [million €]	32	60	-
Total operational cost [million €/yr]	10	17	3
- thereof fixed operational costs of bunker vessels [million€/yr]	2	4	-
- thereof fuel costs for bunker vessels [million€/yr]	0.5	1	-

This financial implication applies to the ports, the LNG facilities and shipping in the scope of the North European LNG Infrastructure project, coordinated by the Danish Maritime Authority. It shall be considered, but the costs can differ in other areas.

The cost of a LNG tank-truck is estimated to be more than 350 000 €. The logistic chain to deliver LNG to two or three LNG ferries can be estimated at 10M€. An intermediary LNG storage installation is evaluated at 10M€. The price of a LNG feeder ranges between 32M€ and 60 M€, depending on the capacities. A dedicated berth for the LNG feeder can exceed 100M€.

Ship-owners have to undertake huge investments to adapt or to renew their fleet by 1 January 2020.

The price of a ferry using LNG as fuel can be approximately 20 to 25% more than a ferry with a conventional propulsion. A conversion of a ferry to LNG could cost between 12M€ to more than 30M€.

Unfortunately, ship-owners can encounter some difficulties in accessing banking resources. Banks can be unwilling to grant loans to ship-owners due to their own financial and regulation constraints. Moreover several European banks withdraw from maritime loans.

It appears in the aggregate report on the comprehensive assessment published on 26 October 2014 by the European Central Bank (ECB) that shipping assets could present particular financial risks. The asset quality review of the report contains additional detail on the review of shipping exposure. The ECB placed particular emphasis on the treatment of shipping exposure across the Single Supervisory Mechanism given the divergent practices observed across banks and National Competent Authorities. Following the credit file review, a total of 21.3% of the shipping debtors reviewed were reclassified to non-performing, and the total amount of provisions increased from €5.9 billion to €7.3 billion (+25%).

Therefore, the EU financial instruments turn out to be crucial to encourage shipowners to adapt their vessels. Moreover, these instruments can promote the deployment of LNG infrastructure in ports.

2. EU financial support

2.1. General framework

This Working Paper aims at identifying which of the EU financial instruments can participate in the funding of the investments needed to deliver LNG to ships or to implement LNG infrastructure in ports.

This Working Paper is not in the opinion that all the additional costs of investments or operating costs of the ships shall be covered by an EU funding. On the contrary, it considers that innovation shall be encouraged, and the need to establish a minimal infrastructure enabling a secure market should be supported by the EU programmes.

It has also taken into account that all the actions related to the development of the LNG installations and the construction of LNG vessels will spread out till at least 2020.

Consequently, the communications from the Commission allowing the implementation of the directive on sulphur content⁴ and the programmes associated with the Multiannual Financial Framework for 2014-2020⁵ have been considered.

4 COM (2011) 439 final on 15.7.2011 Proposal for a Directive amending Directive 1999/32, COM (2011) 441 final on 15.7.2011 Communication on the review of the implementation of Directive 1999/32, SEC (2011) 918 final on 15.7.2011 Impact Assessment accompanying the proposal, SEC (2011) 919 final on 15.7.2011 Summary of the impact assessment, SEC (2011) 1052 final 16.9.2011 pollutant emission reduction from maritime transport and the sustainable waterborne transport toolbox, Non-paper on Sulphur content of marine fuels (Working Document 2013/5 24.01.2013), SWD(2013) 4 final on 24.1.2013 Actions towards a comprehensive EU framework on LNG for shipping.

5 Regulation EU, Euratom N°1311/2013 on 2 December 2013 laying down the multiannual financial framework for the years 2014-2020

The first progress report from the Commission on the implementation of the sustainable waterborne transport toolbox⁶ asserts the will to provide support for the greener shipping sector and related port infrastructure development including marine LNG bunkering barges. This will remain a priority under the subsequent annual and multiannual TEN-T calls for proposals. There also needs to be a focus on other measures such as the validation and testing of innovative clean technologies, support for alternative fuels, including LNG, and the possibility of particular ship adjustments in order to meet environmental standards. It will also be important to address new measures combined with an upgrade to existing and planned Motorway of the Sea (MoS) connections. State aid rules will be observed with respect to TEN-T projects, where applicable.

The report takes action to ensure better use of the EU transport funding instruments and coordination with other EU instruments i.e. Structural funds, Horizon 2020, EIB loans, etc.

In this line of argument, the Working Paper analyses the various regulations which could be used by the maritime transport.

2.2. Connecting Europe Facility (CEF)

2.2.1. Financial envelope

The Connecting Europe Facility (CEF) is established by Regulation (EU) No 1316/2013 of 11 December 2013.

For the transport sector, according to article 5 (1), the financial envelope for the implementation of the CEF for the period 2014 to 2020 is set at € 26, 250 million, of which € 11, 305 million shall be transferred from the Cohesion Fund to be spent exclusively in Member States eligible for funding from the Cohesion Fund.

2.2.2. Projects of common interest

In the transport sector, the CEF shall support projects of common interest that pursue the objectives set out below:

- ensuring sustainable and efficient transport systems in the long run, with a view to preparing for expected future transport flows, as well as enabling all modes of transport to be decarbonised through transition to innovative low-carbon and energy-efficient transport technologies, while optimising safety. The achievement of this objective shall be measured by the number of inland and maritime ports of the TEN-T core network equipped with supply points for alternative fuels in the Union.

- optimising the integration and interconnection of transport modes and enhancing the interoperability of transport services, while ensuring the accessibility of transport infrastructures. The achievement of this objective shall be measured by the number of improved or new connections between ports through motorways of the sea.

In the transport sector, only actions contributing to projects of common interest shall be eligible for support through Union financial assistance in the form of procurement and financial instruments under this Regulation. Only the following shall be eligible to receive Union financial assistance in the form of grants under this Regulation:

- actions implementing the core network, including the deployment of new technologies and innovation, and projects and horizontal priorities;

⁶ COM(2013)475 final on 28.6.2013 First progress report on the implementation of the Commission Staff Working Paper “Pollutant emission reduction from maritime transport and ^{the sustainable waterborne transport toolbox}”.

- actions implementing the comprehensive network;
- actions supporting motorways of the sea.

2.2.3. Amount of Union financial assistance

In the transport sector, the amount of Union financial assistance shall not exceed:

- (a) with regard to grants for studies, 50 % of the eligible costs;
- (b) with regard to grants for works:
 - for inland waterways: 20 % of the eligible costs; the funding rate may be increased to a maximum of 40 % for actions addressing bottlenecks and to a maximum of 40 % for actions concerning cross-border sections;
 - for inland transport, connections to and the development of multimodal logistics platforms including connections to inland and maritime ports, as well as the development of ports: 20 % of the eligible costs;
 - for actions supporting new technologies and innovation for all modes of transport: 20 % of the eligible costs;
- (c) with regard to grants for telematic applications systems and services:
 - for actions to support the development of motorways of the sea: 30 % of the eligible costs.

The funding rates may be increased by up to 10 percentage points over the percentages listed above for actions with synergies between at least two of the sectors covered by the CEF.

The amount of financial assistance to be granted to the actions selected shall be modulated on the basis of a cost- benefit analysis of each project, the availability of Union budget resources and the need to maximise the leverage of Union funding.

Actions supported by means of financial instruments shall be selected on the basis of maturity and shall seek sectoral diversification as well as geographical balance across the Member States.

They shall:

- (a) represent European added value;
- (b) respond to the objectives of the Europe 2020 Strategy;
- (c) present a leverage effect with regard to Union support, i.e. aim at mobilising a global investment exceeding the size of the Union contribution according to the indicators defined in advance.

2.2.4. List of general orientations

When setting award criteria, at least the following general orientations shall be taken into account:

- (a) maturity of the action in the project development;
- (b) soundness of the implementation plan proposed;
- (c) stimulating effect of Union support on public and private investment, when applicable;
- (d) the need to overcome financial obstacles, such as the lack of market finance;
- (e) when applicable, the economic, social, climate and environmental impact, and accessibility;
- (f) the cross-border dimension, when applicable.

2.3. Trans-European Transport network (Ten-T)

Regulation (EU) No 1315/2013 of 11 December 2013 set up the guidelines for the development of the trans-European transport network.

The trans-European transport network shall demonstrate European added value by contributing to the sustainability through contribution to the objectives of low greenhouse gas emissions, low-carbon and clean transport, promotion of low-carbon transport with the aim of achieving by 2050 a significant reduction in CO₂ emissions.

Member States shall take all necessary measures to ensure that the projects are carried out in compliance with relevant Union and national laws, in particular with Union legal acts on the environment, climate protection, safety, security, competition, and state aid.

2.3.1. The Comprehensive Network

Member States shall make all possible efforts with the aim of completing the comprehensive network by 31 December 2050.

In order to complement the measures, particular consideration shall be given to measures that are necessary for ensuring fuel security through increased energy efficiency, and promoting the use of alternative and, in particular, low or zero carbon energy sources and propulsion systems.

The Regulation defines LNG as an 'alternative clean fuel', which contributes to its decarbonisation and enhances the environmental performance of the transport sector.

Motorways of the sea

Motorways of the sea are included in the maritime transport infrastructure. Motorways of the sea, representing the maritime dimension of the trans-European transport network, shall contribute towards the achievement of a European maritime transport space without barriers. They shall consist of short-sea routes, ports, associated maritime infrastructure and equipment, and facilities as well as simplified administrative formalities enabling short-sea shipping or sea-river services to operate between at least two ports, including hinterland connections. Motorways of the Sea shall include a maritime links between comprehensive and core ports and at least two EU Member States ports and a third-country port where such links are of strategic importance to the Union. Motorways of the Sea projects need at least two member States.

In the promotion of projects of common interest related to maritime infrastructure, priority shall be given to promoting the motorways of the sea including short-sea shipping, facilitating the development of hinterland connections and developing measures to improve the environmental performance of maritime transport.

New technologies and innovation

In order for the comprehensive network to keep up with innovative technological developments and deployments, the aim shall be in particular to:

- (a) support and promote the decarbonisation of transport through transition to innovative and sustainable transport technologies;
- (b) make possible the decarbonisation of all transport modes by stimulating energy efficiency, introduce alternative propulsion systems, and provide corresponding infrastructure.

2.3.2. The Core Network

Member States shall take the appropriate measures for the core network to be developed by 31 December 2030.

Availability of alternative clean fuels for inland waterway and maritime transport infrastructure shall be met by the infrastructure of the core network.

Nodes of the core network

The nodes of the core network include:

- (a) urban nodes, including their ports and airports;
- (b) maritime ports and inland waterways ports.

Core network corridors cover the most important long-distance flows in the core network and are intended, in particular, to improve cross-border links within the Union.

Core network corridors shall be multimodal and open to the inclusion of all transport modes covered in this Regulation. They cross at least two borders and, if possible, involve at least three transport modes, including, where appropriate, motorways of the sea.

2.3.3. Building the Transport Core Network

In the communication Building the Transport Core Network⁷, the European commission aims at:

- providing information on the potential budget and instruments available under the future framework;
- guiding potential applicants with regard to direct management of funds and providing information on the expectations of the Commission's from potential beneficiaries;
- explaining how the Commission intends to support the creation and the functioning of the Core Network Corridors.

Each Core Network Corridor will embrace all the transport modes (road, rail, inland waterways, maritime and air transport). Wherever appropriate, the Corridors will use Motorways of the Sea as the maritime dimension of the Core Network Corridors.

The communication clarifies that the Marco Polo Initiative will be continued as integral part of the CEF in line with the definition of the Sustainable Freight Transport Services in Article 32 of the TEN-T Regulation.

For the period 2014-2020, the indicative amounts scheduled for the Motorways of the Sea are €500-900 million, the indicative amounts for new technologies and innovation for all modes are €250-400 million and the indicative amounts for Sustainable Freight Transport Services are €150-200 million.

The CEF will be managed directly by the Commission, assisted by an Executive Agency. The annual and multiannual work programmes which define for calls for proposals the indicative budget, the timetable, the objectives and the foreseen results, the priorities, the maximum possible rate of co-financing as well as the eligibility, the selection and award criteria, will be adopted by the Commission after the approval of the CEF Committee under the examination procedure.

One of the key elements of the CEF is the objective to increase the use of innovative financial instruments (amongst which Project Bonds), in order to build an environment

⁷ COM(2013) 940 final on 7.1.2014 Building the Transport Core Network: Core Network Corridors and Connecting Europe Facility

conducive to private investment in infrastructure. The latter is with the view to offer an alternative to the traditional grant funding and plug financing gaps for strategic investments. The Commission is pursuing consultations with several partners, including financial institutions, and will present when appropriate, a policy document explaining the framework, the objectives and the conditions for the use of financial instruments in the field of transport, in line with the CEF Regulation.

The European Commission evaluates the pilot phase of the project bond initiative in an interim report on 19 December 2013⁸. It concludes that the initiative is fulfilling expectations and is a success in terms of providing financing to projects. Nevertheless, more work is needed to improve the project bond initiative.

An incoming Commission delegated regulation specifies that, in the framework of the multiannual work programmes, the funding priorities aim to ensure sustainable and efficient transport systems in the long run, by the deployment of new technologies and innovation in all transport modes, with a focus on decarbonisation, safety and innovative technologies.

2.3.4. Transport work programmes 2014

On 5 March 2014, the CEF Committee approved the annual and the multiannual work programmes for financial assistance in the field of transport sector for 2014, which has been endorsed by two Commission implementing decision of 26 March 2014⁹.

2.3.4.1. Annual programme

The total amount of financial assistance, to be allocated in 2014 on the basis of the annual call, to projects of common interest in the field of the trans-European transport network shall be of the amount of €930 million of which €65 million under the budget line for ensuring sustainable and efficient transport in the long run.

The calls have been launched on 11 September 2014. In this annual programme, two priorities are relevant for the deployment of alternative fuels by the maritime sector.

- **New technologies and innovation**

This priority includes the possibilities for all modes of transport to be decarbonised through transition to innovative low-carbon and energy-efficient transport technologies. TEN-T development must keep up with state of the art developments of new technologies and innovation. In this respect, TEN-T development for all transport modes and systems shall complement Research and Innovation action under "Horizon 2020" by pursuing a market-oriented approach and promoting the deployment of innovative technological and organisational solutions.

This deployment of new technologies and innovation has a specific objective to introduce alternative propulsion systems and to provide corresponding infrastructure. This objective applies to the comprehensive network (excluding the core network parts).

The indicative amounts for the deployment of new technologies and innovation other than those covered by the multiannual workprogramme are €20 million.

- **Freight transport services**

The general objective is to stimulate and deploy innovative, efficient and sustainable freight transport services that use the infrastructure of the comprehensive network and

8 COM(2013) on 19.12.2013 Interim report on the pilot phase of the Europe 2020 project bond initiative

9 Commission implementing decision C(2014) 1919 and 1921 of 26 March 2014

contribute to reducing carbon dioxide emissions and other environmental impacts of transport.

One of the specific objectives is to stimulate resource and carbon efficiency of freight transport services in individual modes.

The indicative amounts for the Freight Transport Services are €25 million.

Therefore, in the annual programme for 2014 the total indicative amounts applicable to the alternative fuels projects are €45 million.

2.3.4.2. Multi-Annual Work Programme

The total amount of financial assistance, to be allocated in 2014 on the basis of the annual call, to projects of common interest in the field of the trans-European transport network shall be of the amount of €11,000 million of which € 250 million under the budget line for ensuring sustainable and efficient transport in the long run, and € 750 million under the budget line for optimising the integration and interconnection of transport modes and enhancing interoperability, safety and security of transport.

The calls have been launched on 11 September 2014.

2.3.4.2.1. Ensuring sustainable and efficient transport

- **New technologies and innovation**

This priority includes the deployment of new technologies and innovation in all transport modes, with a focus on decarbonisation. TEN-T development for all transport modes and systems shall complement Research and Innovation action under "Horizon 2020" by pursuing a market-oriented approach and promoting the deployment of innovative technological and organisational solutions.

This deployment of new technologies and innovation has specific objectives to introduce alternative propulsion systems and to provide corresponding infrastructure, with regard to the support of the implementation of the alternative fuels strategy.

The indicative amounts for the deployment of new technologies and innovation are €160 million.

- **Freight traffic**

Freight traffic includes specific objectives, such as alternative fuel solutions.

2.3.4.2.2. Motorways of the Sea (MoS)

Actions addressed with this programme may concern studies, pilot actions or implementation measures as well as a combination of studies and implementation.

To support the overall objectives of motorways of the sea, the promotion of "wider benefits" of the MoS development, such as infrastructure development in ports, notably including alternative fuelling facilities shall be promoted.

A priority will be given to implementation projects, pilot projects and studies which contribute to addressing the environmental challenges faced by the Maritime sector, in particular in view of the forthcoming requirements with respect to the implementation of the requirements of Annex VI of the IMO MARPOL Convention and of Directive 2012/33/EU.

This will include in particular:

- Actions supporting the deployment of alternative fuels and emission abatement technologies.

- Actions supporting the development of reception facilities for oil and other waste, including residues from scrubbers.
- Studies and deployment of alternative fuel infrastructure, in particular but not limited to LNG, either through publicly accessible fixed or mobile (including trucks and barges) refuelling points and related infrastructure.
- Upgrades of vessels used on existing services and existing or new Motorways of the Sea links, but limited to the additional efforts for environmental upgrades.

The indicative amounts for the Motorways of the Sea (MoS) are €250 million.

Proposed Actions submitted to this call for proposals under Priority "Motorways of the Sea" must include applicants from and be supported by a minimum of two different Member States. Derogation from this eligibility criterion is possible for Motorways of the Sea proposals between a Cohesion Member State and Member State not eligible to the Cohesion Fund. In such case, two separate proposals shall be submitted under this call and call for proposals for Cohesion countries and both proposals must make clear reference to the twin proposal.

2.4. European Structural and Investment Funds (ESI Funds)

Regulation (EU) No 1303/2013 of 17 December 2013 lays down the common provisions and general provisions on the European Regional Development Fund (ERDF), the European Social Fund (ESF), the Cohesion Fund and the European Maritime and Fisheries Fund, which operate under a common framework (the 'European Structural and Investment' - 'ESI Funds').

Thematic objectives

The Regulation establishes 11 thematic objectives in order to contribute to the Union strategy for smart, sustainable and inclusive growth. Among these 11 thematic objectives are:

- thematic objective 4 to support the shift towards a low-carbon economy in all sectors;
- thematic objective 7 to promote sustainable transport and removing bottlenecks in key network infrastructures.

Common Strategic Framework

The Common Strategic Framework ('CSF') establishes strategic guiding principles to facilitate the programming process and the sectoral and territorial coordination of Union intervention under the ESI Funds and with other relevant Union policies and instruments.

The Common Strategic Framework set up coordination and synergies between ESI funds and other union policies and instruments such as:

- Horizon 2020 and other centrally managed Union programmes in the areas of research and innovation.
- Connecting Europe Facility (CEF).

To maximise European added value in the fields of transport, telecommunication and energy, Member States and the Commission shall ensure that ERDF and Cohesion Fund interventions are planned in close cooperation with the support provided from the CEF, so as to ensure complementarity, avoid duplication of efforts and ensure the optimal

linkage of different types of infrastructure at local, regional and national levels, and across the Union.

Prioritisation of investments which have an impact beyond a certain Member State, particularly those which are part of the core TEN-T network corridors, shall be coordinated with TEN-T planning and core network corridors implementation plans, so that investments by the ERDF and the Cohesion Fund in transport infrastructure are fully in line with the TEN-T Guidelines.

Once identified, investments shall be prioritised according to their contribution to mobility, sustainability, to reducing greenhouse gas emissions, and to the Single European Transport Area, in accordance with the vision set out in the 2011 Transport White Paper, highlighting that a significant reduction in greenhouse gases is required in the transport sector.

Preparation of the Partnership Agreement

Each Member State shall prepare a Partnership Agreement for the period from 1 January 2014 to 31 December 2020.

2.4.1. European Regional Development Fund (ERDF)

According to Regulation (EU) No 1301/2013 of 17 December 2013 on the European Regional Development Fund and on specific provisions concerning the Investment for growth and jobs goal, the ERDF shall support investment priorities within the thematic objectives set out in the Regulation (EU) No 1303/2013.

Among them are the priorities to promote sustainable transport and remove bottlenecks in key network infrastructures by:

- supporting a multimodal Single European Transport Area by investing in the TEN-T;
- developing and improving environmentally-friendly (including low-noise) and low-carbon transport systems, including inland waterways and maritime transport, and ports.

2.4.2. European territorial cooperation

Regulation (EU) no 1299/2013 of 17 December 2013 defines, for the European territorial cooperation goal, the priority objectives and organisation of the ERDF, the criteria for Member States and regions to be eligible for support from the ERDF, the financial resources available for support from the ERDF, and the criteria for their allocation.

Under the European territorial cooperation goal, the ERDF shall support the following components:

- (1) cross-border cooperation between adjacent regions to promote integrated regional development between neighbouring land and maritime border regions in two or more Member States;
- (2) transnational cooperation over larger transnational territories, involving national, regional and local partners and also covering maritime cross-border cooperation;
- (3) interregional cooperation to reinforce the effectiveness of cohesion policy.

For interregional cooperation, support from the ERDF shall cover the entire territory of the Union.

Resources for the European territorial cooperation goal shall amount to 2,75 % of the global resources available for budgetary commitment from the ERDF, ESF and the Cohesion Fund for the 2014-2020 programming period and shall be allocated as follows:

- (a) 74,05 % (i.e., a total of EUR 6 626 631 760) for cross- border cooperation;

(b) 20,36 % (i.e., a total of EUR 1 821 627 570) for transnational cooperation;

(c) 5,59 % (i.e., a total of EUR 500 000 000) for interregional cooperation.

At least 80 % of the ERDF allocation to each cross-border cooperation and transnational programme shall be concentrated on a maximum of four of the thematic objectives set out in the first paragraph of Article 9 of Regulation (EU) No 1303/2013.

All of the 11 thematic objectives set out in the first paragraph of Article 9 of Regulation (EU) No 1303 /2013 may be selected for interregional cooperation

2.4.3. Cohesion Fund

The Cohesion Fund, established by Regulation (EU) No 1300/2013 of 17 December 2013, is aimed at Member States whose Gross National Income (GNI) per inhabitant is less than 90 % of the EU average. It aims to reduce economic and social disparities and to promote sustainable development.

It is now subject to the same rules of programming, management and monitoring as the ERDF and ESF through the Common Provisions Regulation.

For the 2014-2020 period, the Cohesion Fund concerns Bulgaria, Croatia, Cyprus, the Czech Republic, Estonia, Greece, Hungary, Latvia, Lithuania, Malta, Poland, Portugal, Romania, Slovakia and Slovenia.

Under the Connecting Europe Facility (CEF), €11.305 billion will be available only for projects in Member States eligible for the Cohesion Fund.

Within the thematic objectives set out in the first paragraph of Article 9 of Regulation (EU) No 1303/2013, the Cohesion Fund shall support the investment priorities promoting sustainable transport and removing bottlenecks in key network infrastructures by:

- (i) supporting a multimodal Single European Transport Area by investing in the TEN-T;
- (ii) developing and improving environmentally-friendly (including low-noise) and low-carbon transport systems, including inland waterways and maritime transport, ports, multimodal links.

2.5. HORIZON 2020

Regulation (EU) No 1291/2013 of 11 December 2013 establishes Horizon 2020 - the Framework Programme for Research and Innovation (2014-2020).

General objective, priorities and specific objectives

The general objective of Horizon 2020 is to contribute to building a society and an economy based on knowledge and innovation across the Union by leveraging additional research, development and innovation funding and by contributing to attaining research and development targets.

The general objective shall be pursued through three mutually reinforcing priorities dedicated to:

- (a) Excellent science;
- (b) Industrial leadership;
- (c) Societal challenges.

Budget

The financial envelope for the implementation of Horizon 2020 is set at € 77, 028 million in current prices of which a maximum of €74, 316 million shall be allocated to activities under Title XIX TFEU.

The amount for activities under Title XIX TFEU shall be distributed among the priorities:

- (a) Excellent science, € 24, 441 million in current prices;
- (b) Industrial leadership, € 17, 015 million in current prices;
- (c) Societal challenges, € 29, 679 million in current prices.

Complementarity with other Union programmes

Horizon 2020 shall be implemented in a way which is complementary to other Union funding programmes and policies, including the European Structural and Investment Funds (ESI Funds), the Common Agricultural Policy, the Programme for the Competitiveness of Enterprises and small and medium- sized enterprises (COSME) (2014–2020), the Erasmus+ programme and the Life Programme.

Priority 'Societal challenges'

This priority responds directly to the policy priorities and societal challenges that are identified in the Europe 2020 strategy and that aim to stimulate the critical mass of research and innovation efforts needed to achieve the Union's policy goals.

Smart, green and integrated transport is a specific objective to achieve a European transport system that is resource-efficient, climate- and environmentally-friendly, safe and seamless for the benefit of all citizens, the economy and society.

Research and innovation must bring about focused and timely advances for all transport modes that will help achieve key Union policy objectives, while boosting economic competitiveness, supporting the transition to a climate-resilient, energy-efficient and low-carbon economy, and maintaining global market leadership both for the service industry as well as the manufacturing industry.

Coordination and synergies with the sustainable waterborne transport

On 13 September 2012, the European Commission introduced a communication on research and innovation for Europe's future mobility¹⁰. The Commission proposed a range of initiatives to implement the necessary actions. They will contribute to fulfilling the policy objectives and help meet the Transport challenge in Horizon 2020.

The strategic transport-technology plan will support the implementation of the funding programmes proposed by the Commission for the next multiannual financial framework, subject to the adoption by the legislative authority. This includes Horizon 2020, the Connecting Europe Facility, the ERDF and Cohesion Fund, and the Programme for the Competitiveness of Enterprises and SMEs.

After this communication, the first progress report from the Commission on the implementation of the sustainable waterborne transport toolbox¹¹ aims to contribute to the definition of the work programme for the calls for proposals under HORIZON 2020 to:

- (a) suggest appropriate topics and type of actions.

¹⁰ COM(2012) 501 final on 13.9.2012 Research and innovation for Europe's future mobility - Developing a European transport - technology strategy

¹¹ COM(2013) 475 final on 28.6.2013

(b) inform and guide the interested organizations to make best use of Horizon 2020 funding for the implementation of the Toolbox.

It also foresees to contribute to the Strategic Research and Innovation Agenda for the maritime transport sector under Horizon 2020. The objectives are to:

(a) monitor progress and update research and development requirements for the Toolbox.

(b) help aligning the EU research and innovation actions with policy implementation.

2.6. LIFE

Regulation (EU) No 1293/2013 of 11 December 2013 establishes a Programme for the Environment and Climate Action (LIFE).

Budget

The financial envelope for the implementation of the LIFE Programme for the period from 2014 to 2020 is set at €3, 456 million in current prices.

The budgetary breakdown for the sub-programmes shall be as follows:

(a) €2, 592 million of the overall financial envelope shall be allocated to the sub-programme for Environment;

(b) €864 million of the overall financial envelope shall be allocated to the sub-programme for Climate Action.

With a view to contributing to the reduction of greenhouse gas emissions, the priority area Climate Change Mitigation shall in particular have the specific objective to contribute to the development and demonstration of innovative climate change mitigation technologies, systems, methods and instruments that are suitable for being replicated, transferred or mainstreamed.

The sub-programme for Climate Action includes also a priority on Climate Governance and Information.

The Commission and the Member States shall ensure that support from the LIFE Programme is consistent with the policies and priorities of the Union and complementary to other financial instruments of the Union while also ensuring that simplification measures are implemented.

Action grants may finance pilot projects, demonstration projects, best practice projects, integrated projects, technical assistance projects, capacity-building projects, preparatory projects, information, awareness, and dissemination projects.

The LIFE multi-annual work programme for 2014-2017 has been adopted by a Commission Decision on 19 March 2014. The total budget for funding projects during the period covered amounts to €1.3billion under the sub-programme for Environment and €0.44 billion under the sub-programme for Climate Action.

Under the sub-programme for Climate Action, the LIFE multiannual work programme will contribute to the transformation of the Union into a low carbon society, a central part of the Europe 2020 climate and energy package. Emerging climate mitigation technology will be facilitated through extended piloting and integrative demonstration.

Traditional projects under the sub-programme for Climate Action could get 60% co-financing during this multi-annual work programme.

3. State aids

In its first progress report from the Commission on the implementation of the sustainable waterborne transport toolbox, the European Commission has stated on the conditions for the application of the Community Guidelines on State aid for environmental protection to support early adaptation to the new environmental standard. Accordingly, Member States wishing to provide support to operators affected by the low sulphur standard introduced by Directive 2012/33/EU may grant State aid for:

- The acquisition of new ships that comply with the new sulphur limits provided that acquisition takes place until one year before the new standard enters into force, i.e. until 31 December 2013. The maximum aid intensity is 10%, 15% and 20%, respectively for large, medium and small-sized companies;
- Retrofitting of existing vessels in order to comply with the new sulphur limits (e.g. installation of scrubbers) before the new standard enters into force, i.e. until 31 December 2014. The maximum aid intensity is 50%, 60%, and 70%, respectively for large, medium, and small-sized companies.

This progress report should be updated, taking into account the new regime on state aids which could be applied to LNG projects following the publication of various texts in June 2014, in application of the Treaty on the Functioning of the European Union.

The Treaty on the Functioning of the European Union lays down the principle that any aid granted by a Member State or through State resources in any form shall be incompatible with the internal market (art.107). But the Council, on a proposal from the Commission and after consulting the European Parliament, may make any appropriate regulations for the application of this principle and may determine the categories of aid which can be exempted (art.109). The Commission may adopt regulations relating to the categories of State aid that the Council has determined (art.108).

Council Regulation (EC) No 994/98 empowers the Commission to declare, in accordance with Article 109 of the Treaty, that the following categories may, under certain conditions, be exempted from the notification requirement: aid to small and medium-sized enterprises (SMEs), aid in favour of research and development, aid in favour of environmental protection, employment and training aid and aid that complies with the map approved by the Commission for each Member State for the grant of regional aid.

In this legal framework, the European Commission has adopted the Commission Regulation (EU) No 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty. Regional aid, aid for environmental protection and aid for research and development and innovation, which seem to be relevant for LNG projects, are covered by this Regulation.

The communication (2014/C 198/01), published on 27 June 2014, from the Commission specifies the framework for State aid for research and development and innovation.

The Guidelines on State aid for environmental protection and energy 2014-2020 are set up by the Communication (2014/C 200/01) from the Commission published on 28 June 2014.

The Guidelines on regional State aid for 2014-2020 are set up by the Communication (2013/C 209/01) from the Commission published on 23 July 2013.

A further reflection is needed to determine the appropriate use of state aids for LNG projects regarding the relevant guidelines, and to combine a state aid with an EU fund.

4. European Investment Bank

In line with the EU 2020 Strategy and the EU transport policy objectives and targets, the European Commission recalls that the European Investment Bank (EIB) will continue to provide financial support to the commercial shipping sector. Particular attention will be given to projects that better assist the sector to cope with the environmental challenges and encourage, in line with EU legislation, the development of clean technology, and increased fuel efficiency as well as more concentrated effort in the safe and environmentally efficient methods of phasing out older and less fuel efficient vessels.

The EIB Transport Lending Policy adopted on 13 December 2011 states that lending for inland waterway, port, logistics and maritime projects are also prioritized in support of sustainable transport solutions. Shipping projects are subject to particular scrutiny with respect to the procurement, supplier and operating arrangements.

It appears that the LNG projects are fully compliant with the policy defined by the EU transport policy and the EIB.

The developments of LNG infrastructure and LNG vessels are in the specific criteria established by EIB for the waterborne transport. The objective is to comply with the Annex VI of MARPOL convention covering air pollutant emissions from ships, and the sulphur content of fuels.

The EU projects are also in the scope of the considerations of the EIB regarding the European aspects of shipping: vessels will be operated under an EU flag to ensure compliance with the European safety, operating and environmental rules. All EU projects related to LNG will adhere to all EU and IMO safety and environmental rules and regulations with regard to the construction and operation of vessels.

The EU projects will be in full compliance with the Intellectual Property Rights, the trade agreements and the competitive practices, as quoted in the Transport Lending Policy of the EIB. A particular attention is given to perform the projects in European shipyards.

There is a need to examine with the EIB experts the possibilities for operators, either ship-owners or port operators to apply for an EIB loan in the framework of the EU programmes mentioned in this working paper.

In this domain, two types of EIB interventions should be examined: applying for a loan in the framework of the EIB products, including applying for an EU/EIB finance support through intermediary banks/financial institutions, and EIB intervention in the framework EU risk-sharing financial instruments, including the possibility to apply for a project bond.

In October 2012, the European PPP Expertise Centre (EPEC) adopted a publication “Financing PPPs with project bonds: issues for public procuring authorities”, available on the EIB’s site. The aim of this publication is to contribute to and stimulate discussions on public-private partnerships (PPPs) as well as to foster the diffusion of best practices in this area. It lists the key characteristics of bond financing: maturity/refinancing risk, pricing, credit quality, transaction size, preparatory costs, deliver-ability and pricing uncertainties, cost of carry, termination provisions, controlling creditor.

The EIB published on 21 December 2012 “An outline guide to Project Bonds Credit Enhancement and the Project Bond Initiative” which describes the Project Bond Credit Enhancement (PBCE) Facility and defines the roles of the Procuring Authority, the Bidder and EIB at each stage of the tendering of a project which may incorporate PBCE.

The European Commission published on 19 December 2013 an interim report on the pilot phase of the European 2020 project bond initiative, which concludes that a liquid

project bond market requires better prepared and more mature projects. Governments should thus commit to long term planning so as to ensure a more stable and transparent pipeline of infrastructure projects. In this respect, CEF foresees technical assistance at institutional and project level to help prepare future pipelines of project of common interest in order to support Member States and the private sector. There is also scope to expand the project bond initiative (PBI) to other policy areas where the financing of smaller local infrastructure projects could be pooled at national or regional level. It is important to know that project bonds tend to have quite high administrative costs. Therefore, project bonds are more suited for large projects (over €300 million investment as indicative), where administrative costs can be split over the high value of the projects.

An “Ad-hoc audit of the pilot phase of the Europe 2020 Project Bond Initiative - Final Report on 17 June 2014” by EY is also available on the EIB’s site.

The mechanisms of guarantees offered by the EIB should also be taken into consideration.

The communication on research and innovation for Europe's future mobility¹² foresees to invite the EIB to intensify the provision of preferential loans via the Risk Sharing Finance Facility (RSFF), expand its lending to the transport sector under its new lending policy and provide increased technical assistance to public and private stakeholders.

5. Directive on the deployment of alternative fuels infrastructure

The Council and the European Parliament have formally adopted a Directive on the deployment of alternative fuels infrastructure, based on the final compromise text reached at the 20 March 2014 informal trilogue. The Directive 2014/94/EU on 22 October on the deployment of alternative fuels infrastructure was published on 28 October 2014.

The recitals of Directive 2014/94/EU set up a link between the deployment of alternative fuels infrastructure and the EU financial programmes. Therefore, CEF, TEN-T, Horizon 2020 and European Regional Development Fund will contribute to finance the projects on the implementation of alternative fuels infrastructure.

It emerges from Directive 2014/94/EU that the development of new technologies and innovation, in particular regarding the decarbonisation of transport, is eligible for Union funding. It recalls that the CEF Regulation provides for additional funding to be granted for actions which exploit the synergies between at least two of the sectors covered by the Regulation (transport, energy and telecommunications). The CEF would therefore contribute to the deployment of alternative fuels infrastructure (Recital 16).

The revised guidelines of the Trans-European Network for Transport (TEN-T) require with regards to new technologies and innovation that the TEN-T shall enable the decarbonisation of all transport modes by stimulating energy efficiency as well as the introduction of alternative propulsion systems and the provision of corresponding infrastructure. The TEN-T guidelines also require that inland and sea ports, airports and roads of the Core Network provide for the availability of alternative clean fuels. In the Connecting Europe Facility (CEF), the TEN-T funding instrument makes eligible for grants the deployment on the Core Network of these new technologies and innovation, including infrastructure for alternative clean fuels. In addition, the deployment of infrastructure for alternative clean fuels on the broader comprehensive network will be

12 COM (2012) 501 final on 13.9.2012

able to receive financial assistance from the CEF in the form of procurement and financial instruments, such as project bonds (Recital 20).

Regarding the innovative projects, Directive 2014/94/EU states that the Horizon 2020 framework programme will also provide support for research and innovation with regard to alternative-fuel vehicles and the related infrastructure, in particular through the Societal Challenge "Smart, green and integrated transport". This specific source of financing should also contribute to the development of alternative fuels infrastructure and should be fully considered as an additional opportunity to ensure a sustainable mobility market throughout the Union. (Recital 17).

Directive 2014/94/EU invites the Commission and the Member States to support national and regional development measures in this area, in order to trigger investments in sustainable transport and support the deployment of a continued network of alternative fuels infrastructure in the European Union. They should encourage the exchange of best practices in alternative fuels infrastructure deployment and management between local and regional development initiatives and, to this aim, they should promote the use of the European Structural and Investment Funds, in particular the European Regional Development Fund and the Cohesion Fund (Recital 18).

Regarding the State Aids, Member States may consider it necessary to provide support to operators affected by this Directive in accordance with the applicable State aid rules. Any national support measures for alternative fuel infrastructure notified to the Commission should be assessed without delay (Recital 19).

The use of the EU Financial instruments to foster the deployment of LNG infrastructure shall consider the implementing dates for LNG infrastructure in an appropriate number of maritime ports (31 December 2025) and of inland waterways ports (31 December 2030).

6. Proposal for a vade-mecum on EU Funds

The use of LNG as a marine fuel is fully compliant with the EU policies on alternative fuels, decarbonisation of transport, clean transport, air quality, climate change, technology development and innovation which are recalled and applied by the EU funding regulations.

The European Commission has underlined that the Trans-European Transport Network will continue to finance projects addressing environmental issues and promoting the development of related green infrastructure and facilities. Implementation projects, pilot actions, and studies supporting the deployment of LNG technologies are among the priority actions of the TEN-T Motorways of the Seas work programme. For example, these may include the deployment of LNG stations. LNG bunkering vessels could also be funded as pilot projects.

This policy will be reinforced by Directive 2014/94/EU on the deployment of alternative fuels infrastructure.

The "Frequently Asked Questions -General" published in the framework of the CEF Transport -2014 Calls for proposals recall that the same costs cannot be supported more than once under the EU budget (section 14.1.1 on 'Other sources of financing' in each call text): *"Pursuant to Article 129 of the Financial Regulation, no Union financial aid shall be awarded to Actions receiving funds from other sources of EU financing. In no circumstances shall the same costs be financed twice by the Union budget."*

It is possible however that a Global Project receives funding from different EU sources for different activities to implement it. However, such activities have to be operationally

and financially managed and reported in a separate Action to exclude any ambiguity of double funding.

Nevertheless some key issues need a deep examination.

6.1. The use of TEN-T Fund

It is a necessity to have a common definition of port infrastructures, LNG infrastructure, bunkering infrastructure, barge, bunker-vessel, feeder, equipments to supply LNG to ships, other components, either on board the vessels or onshore, and the modifications of vessels which could receive an EU fund.

In this framework, **the concept of Motorways of the Sea** has been developed by the Commission Implementing Decision of 26 March 2014 establishing a Multi-Annual Work programme 2014 for financial assistance in the field of Connecting Europe Facility. This Implementing Decision details the specific objectives of the Motorways of the Sea. A priority will be given to implementation projects, pilot projects and studies which contribute to addressing the environmental challenges faced by the Maritime sector, in particular in view of the forthcoming requirements with respect to the implementation of the requirements of Annex VI of the IMO MARPOL Convention and of Directive 2012/33/EU on sulphur content.

To improve **the environmental performance of freight transport services** in the EU, the European Commission implemented the Marco Polo programme in the period 2003-2013. The main objective of this programme was to reduce the amount of freight transported by road.

In the questionnaire of a public consultation opened until 2 April 2014, the Commission states that the design of the funding scheme for freight transport services needs to take into account market needs and the results delivered by the Marco Polo programme. As the questionnaire included questions on energy efficiency, air pollution reduction and innovation, the foreseen funding scheme for freight transport services should take into account LNG projects.

The funding scheme for freight transport services is included in the revised TEN-T guidelines and using the instruments provided by the Connecting Europe Facility.

As specified by the transport work programme 2014 (see paragraph 2.3.4 above), the annual and multi-annual programmes 2014 contribute to the improvement of the efficiency and sustainability of freight transport in Europe. Innovation and new technologies, including alternative fuel solutions are amongst the specific objectives.

6.2. Coordination between EU Funds

In addition to the Connecting Europe Facility, the Ten-T Regulation also authorizes public and private stakeholders to use other specific European programmes, in particular those supporting regional development, 'European Territorial Cooperation', 'Research and Innovation' or 'Environment and Climate action'. Those stakeholders may thereby contribute to achievement of the objectives of this Regulation and, moreover, specifically strengthen the promotion of sustainable transport solutions, such as low-carbon and other innovative transport solutions and environmental improvements.

On this legal basis, the coordination and the synergies between the EU Funds should be clearly established. The rules regarding the eligibility, the selection and award criteria of each EU Fund should be set up.

The eligibility of projects interesting the ports of the comprehensive network defined by the TEN-T Regulation needs a comprehensive understanding, taking into account the

ERDF Regulation. It is necessary to precise in which case a project is eligible to a TEN-T grant and in which case a project is eligible to an ERDF grant.

In this case, it is necessary to take into account the Partnership Agreement concluded by each Member State with the Commission, in the framework of the ESI Funds.

Regarding the new technologies or the innovation, there is also a need to clearly define the projects to be eligible to TEN-T Fund and the projects to be eligible to HORIZON 2020. A coordination with the Leadership 2020 Initiative, which aims to support European shipyards, is to be set up.

It is understood that TEN-T promotes innovative measures facilitating the decarbonisation of all transport modes by stimulating energy efficiency, introducing alternative propulsion systems, and providing corresponding infrastructure. TEN-T does not fund the research and development phase of a project. TEN-T can fund prototype under the condition that this prototype is market-oriented, which means that the prototype can be deployed afterwards.

HORIZON 2020 can fund the research and development phase of a project and a prototype, which could difficultly be deployed in the market.

The possibility to use the LIFE Programme for the deployment of technologies or instruments which could contribute to the reduction of greenhouse gas emissions should be examined.

6.3. State Aids

Regarding the State Aids, the European Commission has focused on the State aid for environmental protection, with a constraint on the end date, 31 December 2014, for the retrofitting of existing vessels in order to comply with the new sulphur limits. But this coming limit for sulphur content concerns the SECA. For other maritime zones, the rule will change on 1 January 2020. Consequently, the recourse to the State aid for environmental protection could be examined for the projects outside the SECA. The possibilities to grant State aid to LNG projects beyond 31 December 2014 should also be reassessed taking into account that the use of LNG as a fuel improves the environment beyond the environmental rules on shipping.

Moreover, the possibility to get a grant in the domain of State aid for research and innovation should be studied. This issue should be reviewed in the line of the strategic transport-technology plan presented by the European Commission in the communication on research and innovation for Europe's future mobility.

The limits between State aid and EU funds for an overall project should be clearly defined, taking into account the guidelines on environmental and energy aid for 2014-2020, the guidelines on research and development and innovation framework (R&D&I Framework) and the General block exemption Regulation ("GBER") on State aids.

As it seems that EU Fund are not a State aid, it is understood that a same project can combine an EU Fund and a State aid provided that a principle of proportionality shall be applied. Obviously, it is also understood that the principle of proportionality means that the total amount of the State aid grant and the EU Fund grant shall not exceed 100% of the eligible costs for the EU Fund. Nevertheless, a more precise guidance is needed on this issue.

The "Frequently Asked Questions -General" published in the framework of the CEF Transport -2014 Calls for proposals indicates that applicants have to notify the Commission whether their national co-financing granted for the proposed Action is

considered as state aid under Article 107(1) of the Treaty. According information must be provided in Application Form Part C, chapter III.

In case state aid is involved, the applicant is required to explain if a notification pursuant to Article 108(3) to the Commission (DG Competition) has taken/will take place and set out possible grounds for compatibility with state aid rules.

6.4. EIB financial mechanisms

A real financial engineering should be set up with EIB in order to have a clear and comprehensive understanding on the use of EU Funds with the financial mechanisms (loans and guarantees) of the Bank. The objective is to clarify with the EIB the modalities for these operators to submit their projects to the EIB. It appears that EIB only works directly with beneficiaries of large amounts. The advices of the EIB in this domain will be highly appreciated.

For example, it was released on 8 July 2014 that EIB provided a EUR 124 million loan to a shipping company for the expansion of its fleet, to boost the development of sustainable sea transport. It is noted that the loan has been secured by a guarantee from the Kingdom of Norway, through the state support credit agency.

The interim report from the European Commission on the pilot phase of the project bond initiative indicates that this financial instrument is relevant for motorways, gas storage or grid connections. The required conditions to apply the project bond initiative to maritime projects should also be assessed.

Comprehensive guidelines on the use of EU funds and EIB financial mechanisms should be of high interest and utility for the operators (shipowners, ports, shipyards, LNG infrastructures operators) belonging to various sectors (shipping, industry, energy).

On 14 October 2014, the Economic and Financial Affairs Council welcomes the establishment of a Task Force, led by the EIB and the Commission, with a view to working on concrete measures to boost investment. The Council agrees with the need to focus on key sectors with EU-added value, such as energy and transport infrastructure, to boost the competitiveness and the growth potential of the Union. The need to make the action of the EIB more effective, including by fully exploiting its risk bearing capacity to support European investment in key sectors to boost competitiveness and growth potential is underlined by the Council.

Due to the financial risks presented by the shipping sector as indicated by the European Central Bank, it is expected that the shipping sector will be included in the works of the Task Force, led by the EIB and the Commission.

The shipping sector is committed in a deep energy change, which will last for at least 20 years to adapt the fleets and the ports to the incoming environmental constraints. Therefore, the financial instruments defined to sustain the European shipping should take into account the Green Paper on Long-term financing of the European economy, which promotes investments for a low carbon economy.

Annex 4: Table of investments and relevant EU fundings

Type of Investment	Project coordinator	Financing	Observations
Ship building	Shipowner Shipyard	TEN-T Fund	For new vessels, could studies, or action supporting the deployment of alternative fuel new technologies and innovation limited to the additional efforts for environmental purposes be eligible to TEN-T Fund as it is the case for conversion of vessel propulsion system to LNG fuel?
		State Aid for environmental protection and energy	Conditions defined by the Guidelines (Communication (C2014/C 200/01) from the Commission) published on 28 June 2014
		State Aid for Research & Development & Innovation	Framework defined by the Communication (C2014/C 198/01) from the Commission published on 27 June 2014
		Regional State Aid	Conditions defined by the Guidelines (Communication (2013/C 209/01) from the Commission) published on 23 July 2013
		EIB	EIB Transport Lending Policy adopted on 13 December 2011 Vessels will be operated under an EU flag to ensure compliance with the European safety, operating and environmental rules. All EU projects related to LNG will adhere to all EU and IMO safety and environmental rules and regulations with regard to the construction and operation of vessels. The EU projects will be in full compliance with the Intellectual Property Rights, the trade agreements and the competitive practices, as quoted in the Transport Lending Policy of the EIB. A particular attention is given to perform the projects in European shipyards.
			Studies and deployment of alternative fuel infrastructure, in particular (but not limited to) LNG are addressed in the MoS Priority as defined in the multi-annual Work

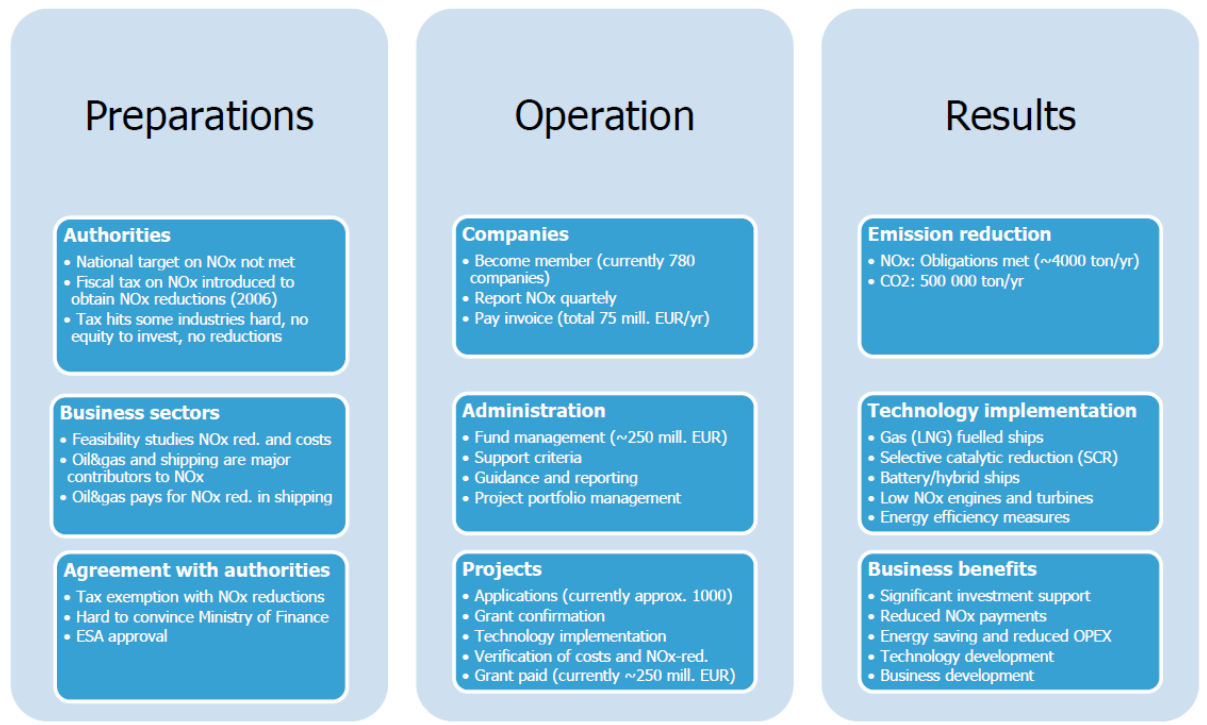
Ship modification	Shipowner	TEN-T Fund	<p>Programme 2014. Upgrades on vessels are limited to the additional efforts for environmental purposes and cannot cover the full costs of acquiring or constructing a vessel. This kind of investment could be considered as eligible under certain conditions:</p> <ul style="list-style-type: none"> <input type="checkbox"/> The ship will be part of an upgraded or a new MoS link established between two ports in two different countries on an intermodal corridor, or <input type="checkbox"/> The ship intends to pilot and validate some new technological solutions which have not been tested before on other ships in Europe. The piloting actions should be innovative. <p>The ship receiving a CEF Transport grant will be required to provide services between the EU ports for a period of at least five years after the project end date. Please note that CEF Transport does not support the conversion of a fleet of vessels non-related to the specific maritime links upgrade.</p>
		State Aid for environmental protection and energy	Conditions defined by the Guidelines (Communication (C2014/C 200/01) from the Commission published on 28 June 2014)
		State Aid for Research & Development & Innovation	Framework defined by the Communication (C2014/C 198/01) from the Commission published on 27 June 2014
		Regional State Aid	Conditions defined by the Guidelines (Communication (2013/C 209/01) from the Commission) published on 23 July 2013.
		EIB	EIB Transport Lending Policy adopted on 13 December 2011
Bunker vessel	Shipowner	TEN-T Fund	<p>As stipulated in the TEN-T Work Programme, costs related to the introduction of a LNG bunkering barge are eligible for co-funding under the MoS Priority. The co-funding rate cannot exceed 30% (85% for proposals submitted under the call addressing the Cohesion Fund allocation). A barge is considered as part of port infrastructure and should therefore offer services on non-discriminatory grounds. Moreover, the services should remain publicly accessible. A co-financed bunkering barge will be required to provide the</p>

			customary services in the EU ports for a period of at least five years after the project end date.
		State Aid for environmental protection and energy	Conditions defined by the Guidelines (Communication (C2014/C 200/01) from the Commission published on 28 June 2014)
		State Aid for Research & Development & Innovation	Framework defined by the Communication (C2014/C 198/01) from the Commission published on 27 June 2014
		Regional State Aid	Conditions defined by the Guidelines (Communication (2013/C 209/01) from the Commission) published on 23 July 2013.
		EIB	EIB Transport Lending Policy adopted on 13 December 2011
Port Infrastructure	Port Authority Region, District Port manager Port Facility Manager	CEF Regulation TEN-T Fund	<p>a) with regard to grants for studies, 50 % of the eligible costs;</p> <p>b) with regard to grants for works:</p> <ul style="list-style-type: none"> - for inland waterways: 20 % of the eligible costs; the funding rate may be increased to a maximum of 40 % for actions addressing bottlenecks and to a maximum of 40 % for actions concerning cross-border sections; - for inland transport, connections to and the development of multimodal logistics platforms including connections to inland and maritime ports, as well as the development of ports: 20 % of the eligible costs; - for actions supporting new technologies and innovation for all modes of transport: 20 % of the eligible costs; <p>(c) for actions to support the development of motorways of the sea: 30 % of the eligible costs.</p> <p>See the TEN-T annual and multi-annual calls specifications</p>
		ESI, ERDF and Cohesion Funds	<ul style="list-style-type: none"> - thematic objective 4 to support the shift towards a low-carbon economy in all sectors; - thematic objective 7 to promote sustainable transport and removing bottlenecks in key network infrastructures. <p>Priorities to promote sustainable transport and remove bottlenecks in key network infrastructures by:</p> <ul style="list-style-type: none"> - supporting a multimodal Single European Transport Area by investing in the TEN-T; - developing and improving environmentally-friendly (including low-noise) and low-carbon transport systems, including inland waterways and maritime transport, and ports.

		EIB	EIB Transport Lending Policy adopted on 13 December 2011 states that lending for port projects are also prioritized in support of sustainable transport solutions.
Shore-based LNG Infrastructures	LNG Infrastructures manager or owner	CEF Regulation TEN-T Fund	See above Port infrastructure and the TEN-T annual and multi-annual calls specifications
		ESI, ERDF and Cohesion Funds	See above port infrastructure
		EIB	To be defined
LNG trucks parks	Port authority Region, District Facility manager LNG infrastructure manager or owner	CEF Regulation TEN-T Fund	See above port infrastructure and LNG infrastructure
		ESI, ERDF and Cohesion Funds	See above port infrastructure and LNG infrastructure
Innovative climate change mitigation technologies	Region Industry	LIFE Programme	<p>The priority area Climate Change Mitigation shall in particular have the specific objective to contribute to the development and demonstration of innovative climate change mitigation technologies, systems, methods and instruments that are suitable for being replicated, transferred or mainstreamed.</p> <p>The sub-programme for Climate Action includes also a priority on Climate Governance and Information.</p> <p>Action grants may finance pilot projects, demonstration projects, best practice projects, integrated projects, technical assistance projects, capacity-building projects, preparatory projects, information, awareness, and dissemination projects.</p>
R&D	Shipowner Shipyard Industry	Horizon 2020	Priority 'Societal challenges': Smart, green and integrated transport is a specific objective to achieve a European transport system that is resource-efficient, climate- and environmentally-friendly, safe and seamless for the benefit of all citizens, the economy and society.
		Research and	COM(2012) 501 final on 13.9.2012

	innovation for Europe's future mobility	The strategic transport-technology plan will support the implementation of the funding programmes. This includes Horizon 2020, the Connecting Europe Facility, the ERDF and Cohesion Fund, and the Programme for the Competitiveness of Enterprises and SMEs.
--	---	---

Annexe 5: Norwegian Nox Fund by Mr Tommy Johnsen)



Support to LNG projects

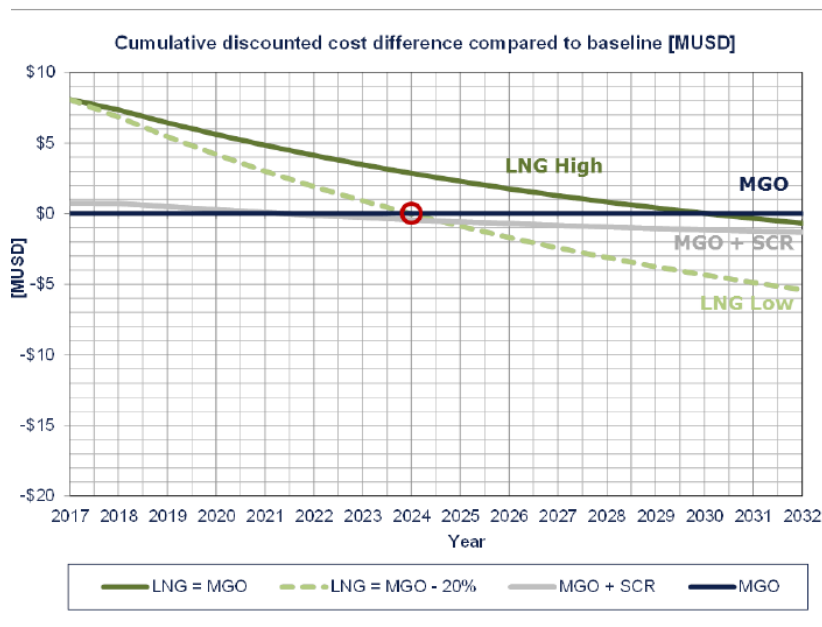
- Support cover *additional costs* of investing in LNG fuelled ship
- Up to 80% of investment cost and up to **300 NOK/kg** NOx reduced
- Support also possible for LNG distribution infrastructure

Type	# projects	Grant (mill. EUR)	NOx-reduction (ton/yr)
LNG small scale infrastructure	3	8	0
Offshore service ships	28	95	2800
Ferry and passenger	18	70	1800
Tankers and cargo ships	24	80	2000
TOTAL	73	251	6600

What does it take to shift to LNG

New PSV in Norway, no support

Example 2: PSV



ENGINE AND OPERATION

Time in ECA	100%
Installed power	8,000 kW
Baseline	Marine Gas Oil (MGO)

FUEL PRICE

MGO	1,000 USD/tonne + tax
LNG High	MGO parity
LNG Low	MGO parity - 20%

FINANCIAL

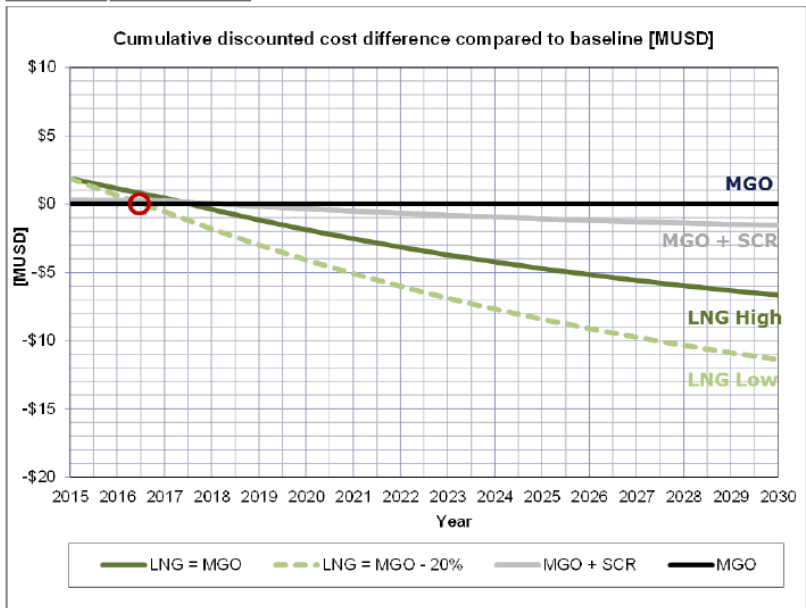
Discount rate	8%
Inv. decision	Newbuild
Tax regime	CO ₂ , SO _x and NO _x
CAPEX LNG	8,100,000 USD
CAPEX SCR	750,000 USD

Negative values means savings compared to fuel switch

What does it take to shift to LNG

New PSV in Norway, NOx Fund support

Example 1: PSV

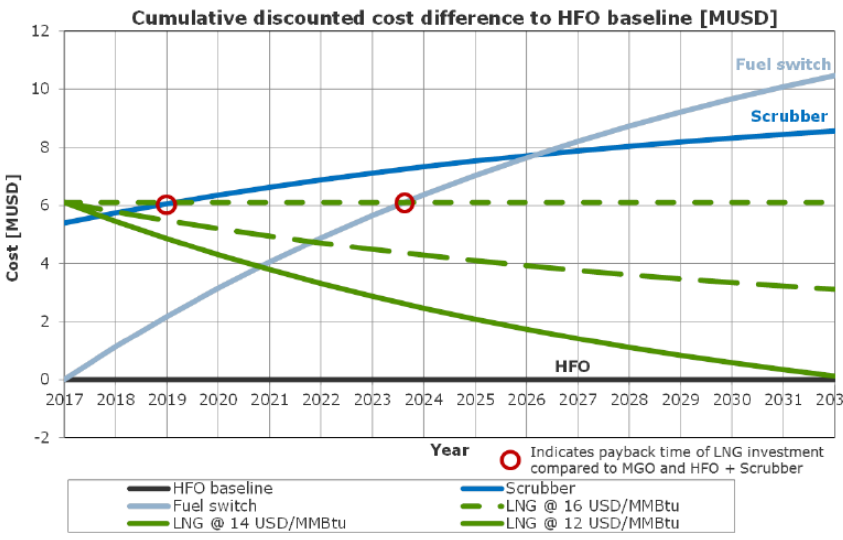


ENGINE AND OPERATION	
Time in ECA	100%
Installed power	8,000 kW
Baseline	Marine Gas Oil (MGO)
FUEL PRICE	
MGO	1,000 USD/tonne + tax
LNG High	MGO parity
LNG Low	MGO parity - 20%
FINANCIAL	
Discount rate	8%
Inv. decision	Newbuild
Tax regime	CO ₂ , SO _x and NO _x
CAPEX LNG	1,900,000 USD
CAPEX SCR	300,000 USD

Negative values means savings compared to fuel switch

What does it take to shift to LNG

Retrofit container example (1000 TEU), no support



Explanation

Each line represents the additional cumulative costs of the respective configuration compared to baseline (HFO).

LNG has a high investment cost, but depending on the fuel price the operational savings can be significant.

MGO price
930 USD/tonne
23 USD/MMBtu

HFO price
615 USD/tonne
16 USD/MMBtu

The LNG price spread shows which price levels are required for certain payback times. It serves as a good basis for decision making and negotiation with LNG fuel suppliers and system suppliers

Annex 6: Reflections on EIB credit policy

EUROPEAN INVESTMENT BANK AND PRIVATE FINANCING

(Jean PhilippeNEAU/ Adam KAPELLA)

I – BACKGROUND: PERFORMANCES OF EUROPEAN INVESTMENT BANK AND CHALLENGE OF THE NEW ENVIRONMENTAL STANDARDS (A KAPELLA)

In line with the EU 2020 Strategy and the EU transport policy objectives and targets, the European Commission recalls that the European Investment Bank (EIB) will continue to provide financial support to the commercial shipping sector. Particular attention will be given to projects that better assist the sector to cope with the environmental challenges and encourage, in line with EU legislation, the development of clean technology, and increased fuel efficiency as well as more concentrated effort in the safe and environmentally efficient methods of phasing out older and less fuel efficient vessels.

The EIB Transport Lending Policy adopted on 13 December 2011 states that lending for inland waterways, ports, logistics and maritime projects are also prioritized in support of sustainable transport solutions. Shipping projects are subject to particular scrutiny with respect to the procurement, supplier and operating arrangements.

Promotion of Motorways of the Sea projects (infrastructures and vessel components as LNG elements and scrubbers) is fully in line with the policy objectives defined by the EU transport policy and the EIB. The developments of LNG infrastructure and LNG vessels are among the specific criteria established by EIB for the waterborne transport. The objective is to comply with the Annex VI of MARPOL convention covering air pollutant emissions from ships, and the sulphur content of fuels.

EU objectives are also in the scope of the considerations of the EIB regarding the European aspects of shipping: vessels will be operated under an EU flag to ensure compliance with the European safety, operating and environmental rules. All EU projects related to LNG will adhere to all EU and IMO safety and environmental rules and regulations with regard to the construction and operation of vessels. The EU projects will be in full compliance with the Intellectual Property Rights, the trade agreements and the competitive practices, as quoted in the Transport Lending Policy of the EIB. A particular attention is given to assist the projects in European shipyards.

There is a need to examine with the EIB experts the possibilities for operators, either ship-owners or port operators to apply for an EIB loan in the framework of the EU programmes mentioned in this submission. In this domain, two types of EIB interventions should be examined: applying for a loan in the framework of the EIB products, EIB intervention in the framework of the Connecting Europe Facility (CEF),. The mechanisms of guarantees offered by the EIB may be the project bond instrument offered through the EIB is a risk-sharing financial instrument of the CEF.

The communication on research and innovation for Europe's future mobility foresees to invite the EIB to intensify the provision of preferential loans via the former Risk Sharing Finance Facility (RSFF), expand its lending to the transport sector under its new lending policy and provide increased technical assistance to public and private stakeholders.

The commitment of EIB depends on several conditions which were conceived to the financing of big projects (infrastructures): long-term loans, financial instruments offered

through risk-sharing with EU funds, such as the pilot phase of the project bond instrument in the TEN-T Programme. These risk-sharing financial instruments were designed for project finance models, normally associated with public-private partnership (PPP) procurements. The threshold of its project loans directly borrowed for individual projects is set at 25M€ for investment costs and can cover up to 50% of the total cost for both public and private sector borrowers. The bank has financed a number of ships, paying a special attention that the ships use best available technologies.

Under the intermediated loan scheme, project managers secure loans with commercial banks which shoulder part of the commercial risks while EIB provides support to the “intermediated loan”. Eligible companies are autonomous SMEs with less than 250 employees (max. loan of 25 million €) or Mid-cap businesses with less than 3000 employees (max. loan of 50 million €). Loan conditions can be flexible in terms of the size, duration, structure etc. Lending decisions remain with the intermediary institutions, which also retain part of the financial risk of the on-lending. The EIB does not have a contractual relationship with final beneficiaries. The intermediary must transfer a financial advantage reflecting the impact of EIB funding.

Those conditions apply to retrofitting shipyards imperfectly because the investments are in majority under the 25 M€ threshold and shipowners have to secure loans from commercial banks. Shipowners highlighted that the intermediated loan does not help them since the risk remains at the level of local banks, which implies that in fact nothing changes in comparison with normal private lending. Also here the problem is that the rest value of the vessel is too low in comparison with the required loans for retrofitting (for instance a feeder vessel was worth 18 million € in 2006, and is now worth only 4 million €). The intermediate, commercial, bank has to be convinced of the loan. Companies with a good credit rating can still profit. However, it was mentioned that for small companies, which own only one vessel this may not solve their problem. Moreover, for many banks the required loans are too small for the amount of administration/complication they require.

The access to credit is limited since 2008 and the crisis of private financing. Banks reduce their exposure to shipping market and withdraw dramatically, we should underline that private banking hardly intends to conceive special loans for challenging environmental compliance even if the retrofitting shipyards are expensive and similar to building shipyards. Shipowners cut investment and European shipyard activity slowed down since 2010 (*Opinion of the European Economic and Social Committee on the European ship maintenance, repair and conversion sector*).

The exploitation of ferries reveals specific questions and needs bespoke solutions : more expensive ships and higher costs for SECA compliance (adapted scrubbers for ferries reach 10M€), special LNG retrofits (15 /35M€). The exploitation life of the ship is longer than other ships (25 to 30 years) and the renewal of the fleets is slower than other sectors of the shipping. There is a lower mobility for ferries because exploitations are adapted and connected to ports infrastructures: it limits the second-hand market which however sets the price of the asset in case of foreclosure. Profits are weaker and contained within narrow margins and reduced cashflows. The modal competition (air, railways and roads) limits the capacity to modify the prices according to the new costs. In those conditions, an examination of the requirements and the process for granting loans should be explored.

II-PROPOSALS FOR ADAPTED CONDITIONS FOR LOANS FINANCING SHIPOWNERS & SHIPBUILDERS (JP. NEAU)

A real financial engineering should be set up with EIB in order to have a clear and comprehensive understanding on the use of EU Funds with the financial mechanisms (loans and guarantees) of the Bank. The objective is to clarify and improve with the EIB the modalities for these operators to submit their projects to the EIB.

A-At EU level the financial support may be more pragmatic and thus can be strengthened. For example, scrubber business may be analysed as though :

- Scrubber equipment suppliers are only a few: Norwegian (Green Tech Marine), Swedish (Alfa Laval, Finnish, Wartsila), etc....

- Market demand: Strong for ECA reasons (but not only), sustainable demand up to [2020-25].

- Project size: Below 25m€ for 95% of the considered transaction.

- Project content (as statistical): 40% scrubber equipment + 35% engineering studies + 25% installation on board.

- Project profile: [5-7] years return on equity

- Project industrial Leader: Shipbuilder - Drydock needed most of the time.

- Project timeline: Betw.[6months-1 year] to install the scrubber on board.

- Purchaser profile: Ship owner - buying a turnkey contract to Shipbuilder.

- Seller profile: Shipbuilder - signing the turnkey contract with the Purchaser.

- Financing profile: Corporate loan/Mortgage loan/Supplier credit (if shipbuilder is a borrowing entity)

- Borrowing entity: Owner or Shipbuilder of all B/S size (small/medium/large Cy)

- Employment impact: Created by Shipbuilder, both at shipbuilder Cy (engineering) and on board (installation) if needed.

Taking into account this features, if at EU level there is a strong support for the implementation of that kind of asset on board re. Scrubber, the appropriate funding solutions could be as follows:

1. Financing

(a) The new mechanism must be focused on providing guarantees and not banking liquidity. Because the banking market is now liquid however the risk takers are not always there due to the zero growth situation in the EUR which strongly impacts the net margin of the companies.

(b) Risk Sharing mechanism between Financiers [local and supranational]
EIB could guarantee up to 50% of the project cost the local bank against the payment default of the Cy, leading to the issuance of a first, irrevocable and on demand guarantee to be issued by EIB in favor of the intermediary bank.

In parallel, the local bank put in place a credit agreement, providing the funding of the total transaction, being counterguaranteed by EIB and tentatively by an Export credit Agency, located in the country of the scrubber equipment supplier. The intermediary bank bears an EIB counterparty risk which is acceptable being a AAA S&P LT risk

EIB should also be in a position to draw its credit policy with acceptable counterparty banking risks with a minimum S&P LT ratings [A].

(c) Maturity: EIB should offer a long term maturity in terms of guarantee, up to 12 years from the effectiveness of the commercial contract.

(d) Currency: EIB should offer its guarantee in USD or in Euro.

(e) Refund guarantees: The purchaser should ask to the shipbuilder some guarantees to protect its commitment under the financing. EIB could also provide these refund guarantees to help the closing of the commercial contract. As of today, commercial banks are not keen to take lots of risk on shipbuilders, even if the yards are key component of the whole transaction and drive the process in terms of jobs impacts

(f) Purchase guarantees: ESSF should discuss with EIB about purchase guarantees by which a shipyard protect its commitment against Ownerships' failure.

(g) Financial documentation: ESSF should create a working group to discuss with EIB about the tentative wording of this guarantee which will include both Yard's representative, Ownership representatives and commercial bankers. For the refund guarantees, a pre-agreed bond wording should be designed to be used in all transactions.

2. Origin of equipment and Supplier involvement

(a) The equipment to execute the commercial contract between the Buyer and the Purchaser should mainly come from Europe, at least for a minimum of 70% European content.

(b) The commercial contract should be executed within yards of the EU community.

3. Jobs impact

(a) The contract should imply by the yard the employment of young people from the EU community, aged below 30 years. The undertaking should come from the yard.

B -For all the other potential transactions excluding scrubber ones, but including assets tied with the shipping industry a viable solution at EU level should be found.

EU financial support has eligibility conditions that must be respected, the nature of the transactions need to be better identified. What we see is that comparable institutions in the world are much more supportive than we have in Europe despite the fact that we have some big players in the EU Community in the ship owner side or in the yards industry or equipments suppliers. The reality is that we could be much more efficient with adequate funding mechanism that could match what they have in Japan or in South Korea, in USA or in China or even in Brazil.

To be efficient, what could be of help with real added value and what could fill the gap in the current situation. If the general goal is to allow a quicker and easier implementation of the sulphur directive as such, then the general matter is to ease the financial closing of the project.

Based on the fact that in Europe to build accurate innovative ships and marine platforms, we have:

- relevant technical capabilities in some yards,
- accurate project management capabilities in some yards,
- adapted equipment suppliers with high quality - most likely in a better situation than in Asia (re. China lower)
- quality of equipments which could be a quite important issue when passenger vessels projects are considered for obvious safety reasons),

Then there is often a low closing project process due to non performance financial process with only few options available for business partners. Only some few commercial banks are there to consider the transactions, all the more if:

- there is a small considered transactions of less than 50 M€ equivalent.
- this is a shipping related deal due to ongoing stuck banking portfolio
- all the business partner are European based, then the US Bank and Asian Bank are not generally interested to support the transaction. The latter then prefer to support some relationships client partially or in connection with national/supranational banks from USA (UX EXIM BANK), from Asia (Korean exim bank, KDB, China bank, JBIC, BNDES, EXPORT CREDIT NORWAY,.....).

So to fill the gap and given the quality of the business partners to close any related shipping projects, EIB or another European Financial entity should strengthen its capacity to support any European business interest like their peers outside Europe. Where is the key point to intervene:

- Financing the industrial project leader or the shipowner (re. Borrowing entity), generating activity in the European industry with the financing of the supply chain, then the money goes not only to this borrower but to the sub contractor generally European Sme's. BNDES is doing so well in this respect.
- Create a financing department with dedicated human resources in charge of developing this activity is a must to have. Indeed, this can create some

additional workload, and our perception of EIB current capabilities is that the current team is quite small and already stuck with some important transactions in Europe for big players in a quite broad nature of activities (from ship finance to port infrastructure financing which is more project finance related and has nothing to do with the current attempts of the European players in terms of financing).

- Create a ready-to-use financial documentation for such transaction to save time and be on time as time is of essence in business to create business activities and generate some economic growth.
- Officialise a clear and no questioned credit policy paper of :
 - Eligible asset to finance :Passenger vessels, Offshore Supply Vessels, offshore platform,
 - Eligible borrowing entity : Shipbuilder and not only shipowners for obvious reason and leasing backed entity
 - Adequate credit maturity: today to be efficient a [15-25] years financing is a needed to let the shipowner and its shareholders sufficient time to amortize the asset to finance. This is a strategic point when considering the financing of ship finance.
 - Adequate credit rating: for the time being, the EIB credit rating is far too strict which can not allow the financing of the main commercial companies in Europe. EIB should be in a position to take some credit risk on European counterparty without the latter having some official rating and strong balance sheet. The principle of the risk-sharing financial instruments in the CEF supports the credit enhancement of investments.
 - Requiring an official financial covenant to be know by all :
 - EIB can finance up to 25% of the equity amount
 - Leverage ratio lower than [...]
 - Gearing ratio Debt/Equity : [...]
 - Credit decision should be also discussed in the EIB representative respective European countries within a limit of auhtorization of 30M€ per transaction and subject to the setting up of a financing structure respecting the general guidelines of the EIB HQ credit policy paper.
- Leasing product: EIB should be in a position to propose a leasing financing product alike its peers in Asia (Korean, Chinese and Japanese) where the EIB should act as lessor and thus attracting some good names acting as lessee. This requires some sectorial expertise but this is where now the business key components are. This is a key real point for shipowner and yards as of today and this financial scheme is an real attractive product in other competitive countries (we have to compare ourselves to the best countries in this field, ie, Korea - China - Japan - USA)
- A/B loan like the IFC in the USA, and EBRD - where EIB has an impact on the credit policy: EIB should also sponsor an A/B loan where EIB is offering to banks a umbrella risk cover on the Bloan when EIB is offering directly a A loan. This A/B loans profile having long maturity, offering €/ \$ financing, with potential fix/floating interest rate.
- In terms of flag, EIB is usually asking for some registration in Europe which is not so realistic because of the current organization of the shipping business on a wolrdwide basis (lots of flag from bahamas,..). We suggest to

allow flag from cooperative countries re. OECD rules and that all non banned and all cooperative countries are flag accepted.



Shipping Financing Tool (SFT) concept paper

Innovation for European Infrastructure

Connecting Europe Facility

Francois Gaudet
European Investment Bank

16 June 2015, Brussels

Background of the SFT concept



The shipping industry is currently facing a number of **challenges to finance investments** required to meet the new sulphur emission standards applicable in controlled areas (SECA). EIB was invited to reflect on how **financial instruments established under the Connecting Europe Facility (CEF)** could be used to help the industry face this challenge. While the details of the European Fund for Strategic Investments (EFSI) are not yet known, it is expected that financial instruments similar to those developed under CEF will be deployed under EFSI.

The structure put forward in this document is **not a financing proposal but rather a potential financing structure** that EIB would like to explore with relevant and committed stakeholders to address the market gap that prevents investments needed in this CEF sector.

The structure to be investigated still has a number of **open issues to be further investigated** and may not be seen as definitive nor conclusive. Any future proposal is also subject to (i) the CEF debt financial instrument steering committee approval, and (ii) EIB's management and board approval.

Shipping Financing Tool (SFT) concept



Shipping Financing Tool (SFT) concept

The main objective of the SFT is to design a sustainable financing structure that provides a solution for investments in vessels that allows operators to adapt to the current EU regulatory framework on emissions and that could be replicated/used to finance compliance with future regulations on ballast water across the European Union.

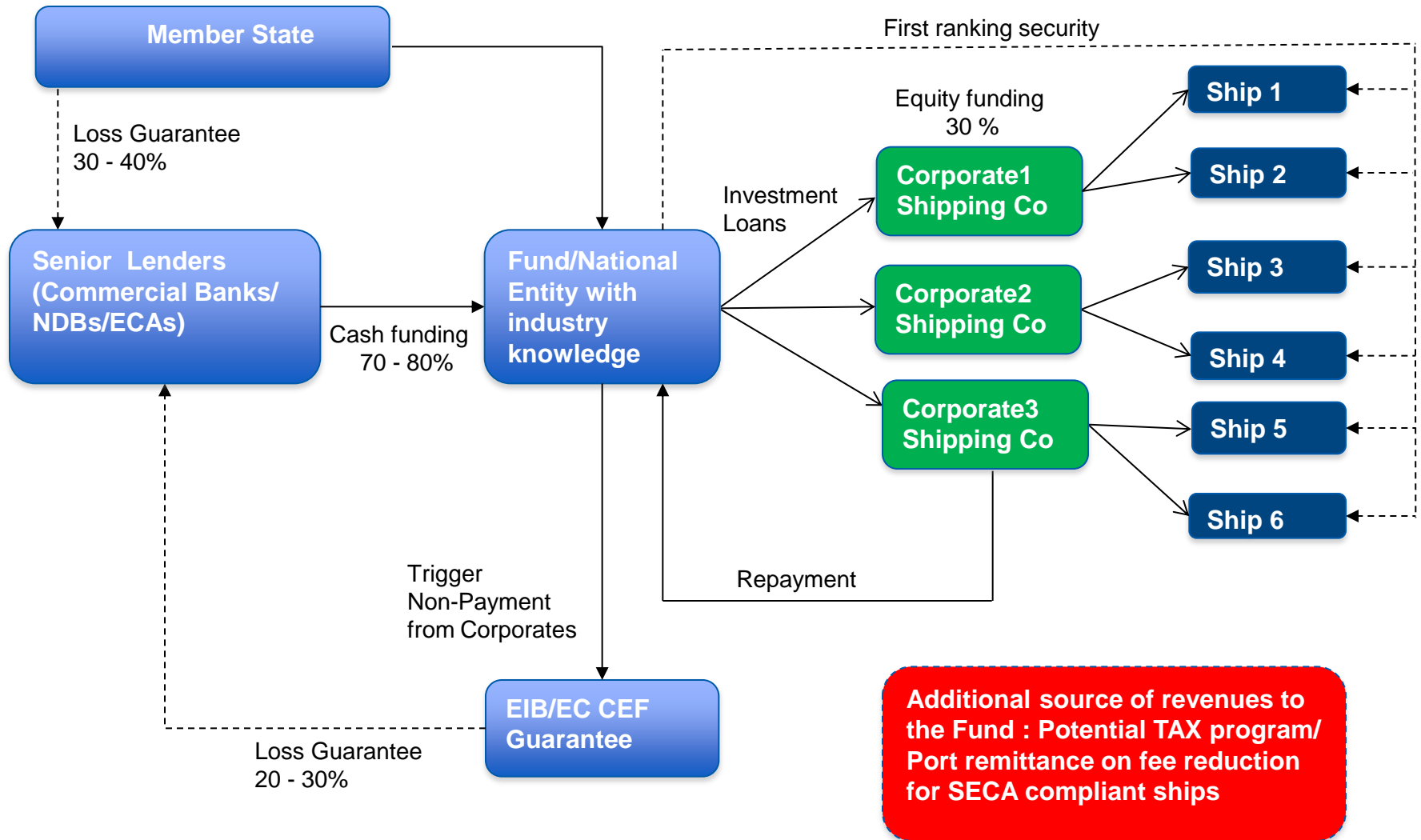
Main issues addressed by the SFT

The SFT intends to address the main market constraints to access financing and attract back commercial lenders to the sector by providing mitigants that reduces the credit risk of the loans to the shipping industry. After reviewing the main financing constraints of the sector, the challenge appears to be linked to the perceived risks associated with the sector.

Main Risk mitigants:

- Portfolio approach: Pooling loans to different operators secured over different assets into a portfolio reduces the risk exposure for lenders when compared to lending to a single obligor secured over a single asset. The high volume of lending within the portfolio allows for economies of scale and could facilitate the intervention of international financial institutions like the EIB, national development banks (NDBs), investors and export credit agencies (ECAs).
- First loss guarantee: A loss guarantee to be provided by the EIB using EU funds to cover (within an agreed limit) losses of commercial lenders on loans included in the portfolio. This EIB loss guarantee would be provided via a financial instrument under the Connecting Europe Facility (CEF) pursuant to the agreement between the EC and EIB. Given availability limits, the guarantee would need to be complemented with a loss guarantee to be provided from the Member State.
- Pilot: While the needs of the industry are large and immediate, the SFT set up challenges are important, complex and will require engagement with potential commercial lenders in individual member states. In this context, the development of a pilot scheme is pursued in order to validate the structure. The experience obtained in two or three member states would allow to identify best practices and draw some lessons learnt applicable to a larger scale pan European program. Currently investigating French, Dutch and Nordic pilots.

Potential SFT financial structure concept





Banks have liquidities but find current sector risk excessive:

- The sector fundamental (daily rates, over capacity) is the fundamental issue/barrier to financing
- Financial instrument will improve situation for some performing operators but will not solve the industry fundamentals

Resistance of banks to portfolio approach:

- Demand direct and personalized relationship with client and are very selective
- Structure unlikely to get them to broaden lending base (riskier borrowers) but will improve terms and possibly raise volumes (exposure limit issues)

Asset based financing limitations:

- Little flexibility to finance the environmental improvements (conversion, scrubbers, water ballast treatment systems) on existing (financed) fleet
- No recognition of incremental value in valuation of new built incorporating new environmental technology
- Banks moving away from asset based financing to corporate approach (favored by EIB) and operators need to start thinking in these terms also

Way forward ...



Issues to be further investigated: State aid issues, if any, will need to be investigated/cleared as the structure evolves and is further defined. Issues in terms of “eligibility/access” to the SFT (both from a policy and financial perspective) will need to be further developed and a detailed risk assessment matrix for SFT borrowers will need to be established. This document only highlights the key financial structuring issues and does not at this point consider the environmental/economic and policy issues EIB/EC may build into the structure to ensure related policy objectives are met through the lending activity generated by the structure.

Launching Pilots: A few member states have expressed their interest and work has commenced to identify live projects.

Member States participation: Member States have to confirm their willingness to join the scheme.



Thank You!

<http://www.eib.org>



EUROPEAN COMMISSION
DIRECTORATE-GENERAL FOR MOBILITY AND TRANSPORT

European Sustainable Shipping Forum

GREEN SHIPPING GUARANTEE PROGRAMME

Sub-Group on financing aspects

Rapporteur : Adam KAPELLA

Brussels, 4-7-2016



Green Shipping Guarantee (GSG) programme

The shipping industry is currently facing a number of challenges to finance investments required to meet the new sulfur emission standards applicable in controlled areas (SECA) and soon to be ballast water standards.

Commission invited EIB to reflect on how financial instruments established under the Connecting Europe Facility (CEF) and the European Fund for Strategic Investments (EFSI) could be used to help the industry face this challenge.

EIB agreed to engage with stakeholders in a targeted number of jurisdictions (France, The Netherlands, Sweden and Finland) to identify market gaps and financing barriers and to formulate proposals for a financial instrument designed to alleviate the identified gaps and barriers



Green Shipping Guarantee programme

Green Shipping Guarantee (GSG) programme objectives

Design a sustainable, scalable and commercial financial instrument that:

Provides a solution to accelerate investments in greener shipping that allows, in the pilot stage, operators to adapt to the current EU regulatory framework on emissions,

Could be replicated/used to finance compliance with future regulations on ballast water, and

Crowds-in commercial banks.

Main issues to be addressed by the Green Shipping Guarantee (GSG) programme

The GSG intends to address the main market gaps/constraints to access financing and attract back commercial lenders to the sector by providing mitigation that reduce the credit risk of the loans to the shipping industry for environmentally focused investments.

After reviewing the main financing constraints of the sector, the challenge appears to be linked to the perceived risks associated with the sector but also the reluctance of commercial lenders to finance (and value) environmentally focussed investments especially on existing fleet.

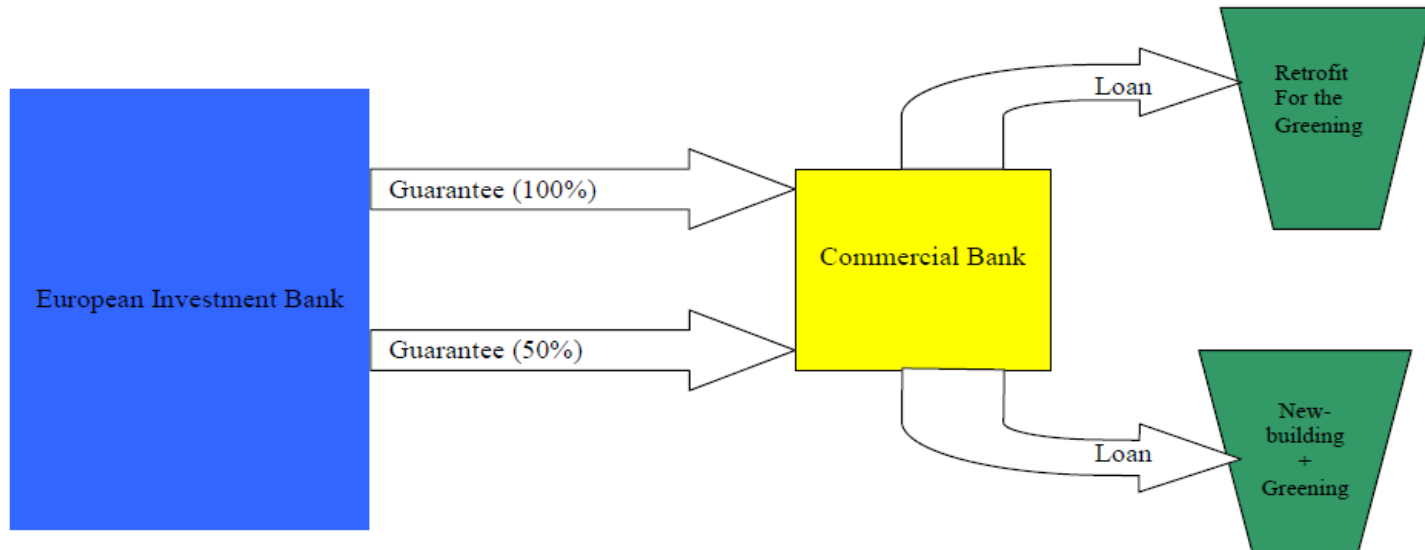
The GSG's focuses on de-risking the environmentally focused investments. The GSG is designed for general fleet renewal focused on greener shipping and being incremental to commercial lending (leveraging).

The issues that will NOT be addressed by the GSG

A number of operators are currently in a challenging financial situation. The GSG will not change the structural issues of the sector nor provide financing to operators that do not have a sustainable business perspective



Green Shipping Guarantee programme





Green Shipping Guarantee programme

National Interface

The shipping segment the GSG is trying to support is characterized by small and medium size enterprises with investment needs that are below EIB's traditional ticket size (EUR 50M and above).

This will require EIB to do things differently and partner with commercial banks that can play a front office role. EIB is in advanced discussion with commercial banks to conclude framework agreement.

Guarantee structure rather than direct lending

Given the above, a guarantee scheme with commercial banks is considered as the optimal structure to achieve the stated objectives and cover the market needs. The guarantee will be priced in accordance with EIB's credit policy.

Bankable operators

While the EIB may guarantee 100% of the incremental environmental investments on existing vessels, in all cases (existing and new vessels) the guaranteed amount will remain a fraction (between 20% and 50%) of the ship's overall financing.

This would require commercial banks to finance part of the operation. This co-financing will translate into significant leveraging of EU resources (estimated at 16x) and ensure the GSG does not support operators that would not be otherwise bankable therefore avoiding GSG having a market distortion effect.



Green Shipping Guarantee programme

EUR 750 million guarantee programme:

Pilot to be launched with financial institutions in France, The Netherlands and Nordic countries.
EUR 250 million supported by the CEF and EUR 500 million by the EFSI.
Expected to support around EUR 3 billion of investments.

Eligibility criteria:

Investments eligible under CEF horizontal priorities and EIB transport lending policy with significant European interest (flag, ownership, incorporation, routes).
Particular focus on green investments and sustainable shipping (alternative fuel such as LNG, hull treatment, ballast water treatment systems, ...).

Guaranteed rates:

Up to 50% of debt financing on new vessels.
Up to 100% of green components of retrofitting operations.

Senior and subordinated product:

Platform supports the issuance of guarantees for senior and subordinated obligations.



Green Shipping loan programme

Green Shipping Loan programme

EUR250 million loan programme

Pilot phase focused on Mediterranean and Atlantic based EU ship owners who contract new build vessels with eligible projects to be implemented in primarily European shipyards

Expected to support around EUR 500 million of investments.

Up to 50% of investment costs.

Eligibility criteria:

Investments eligible under EIB transport lending policy with significant European interest (flag, ownership, incorporation, routes).

Particular focus on green investments and sustainable shipping (alternative fuel such as LNG, hull treatment, ballast water treatment systems, ...).

Senior product:

Direct senior secured loans to European corporates.



ESSF SG on Financing Aspects

Results of the survey on market assessment

20 October 2015
Brussels

Szymon Oscislowski

Maritime transport & logistics
Directorate-General for Mobility and Transport
European Commission

Context of the survey

- **Objective:** to identify investment needs, obtain a quantitative understanding of their financing opportunities and constraints, and to confirm the need for tailored EU-level financial instruments;
- **Start:** 9 July 2015;
- **End:** 17 September 2015;
- Support from the **ESSF SG on Financing**;
- **Structure:** respondents' profile, investment needs, financial situation.

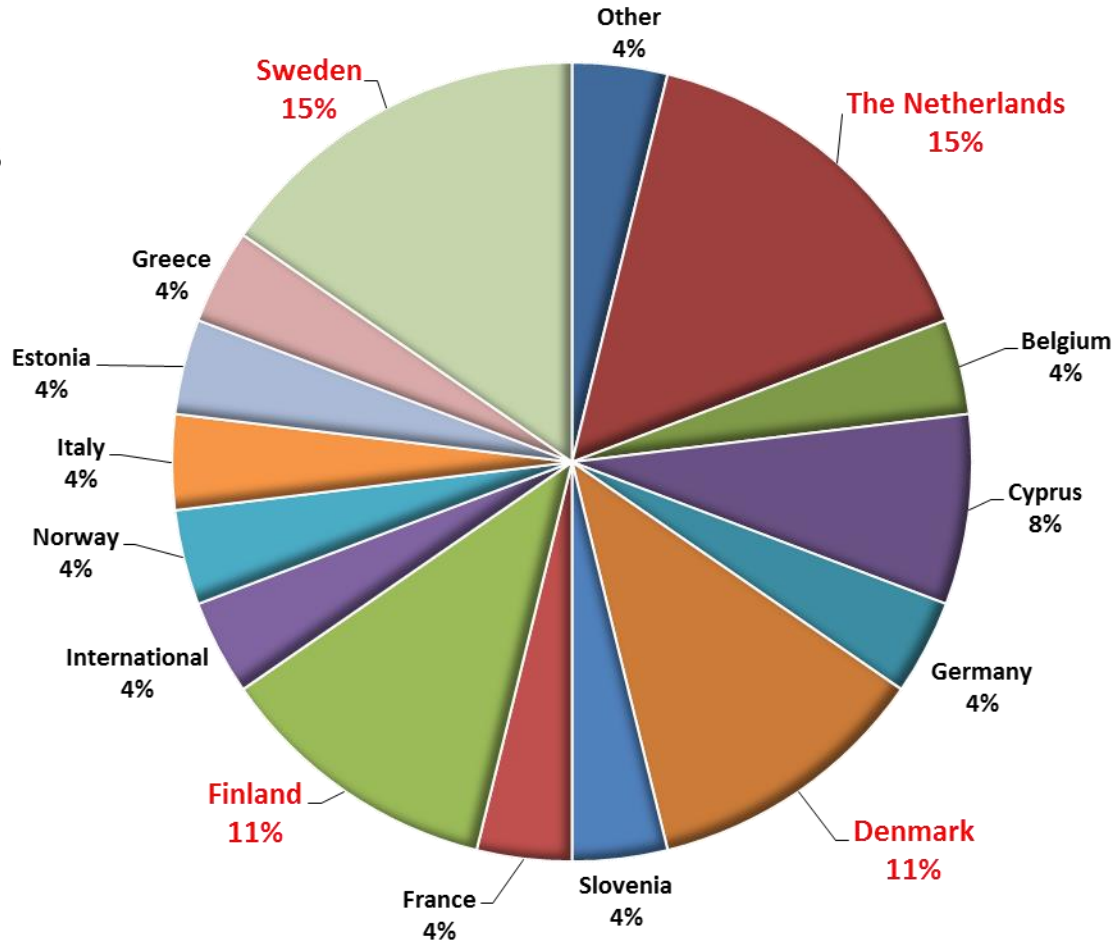
Profile of the respondents



European
Commission

Countries of origin

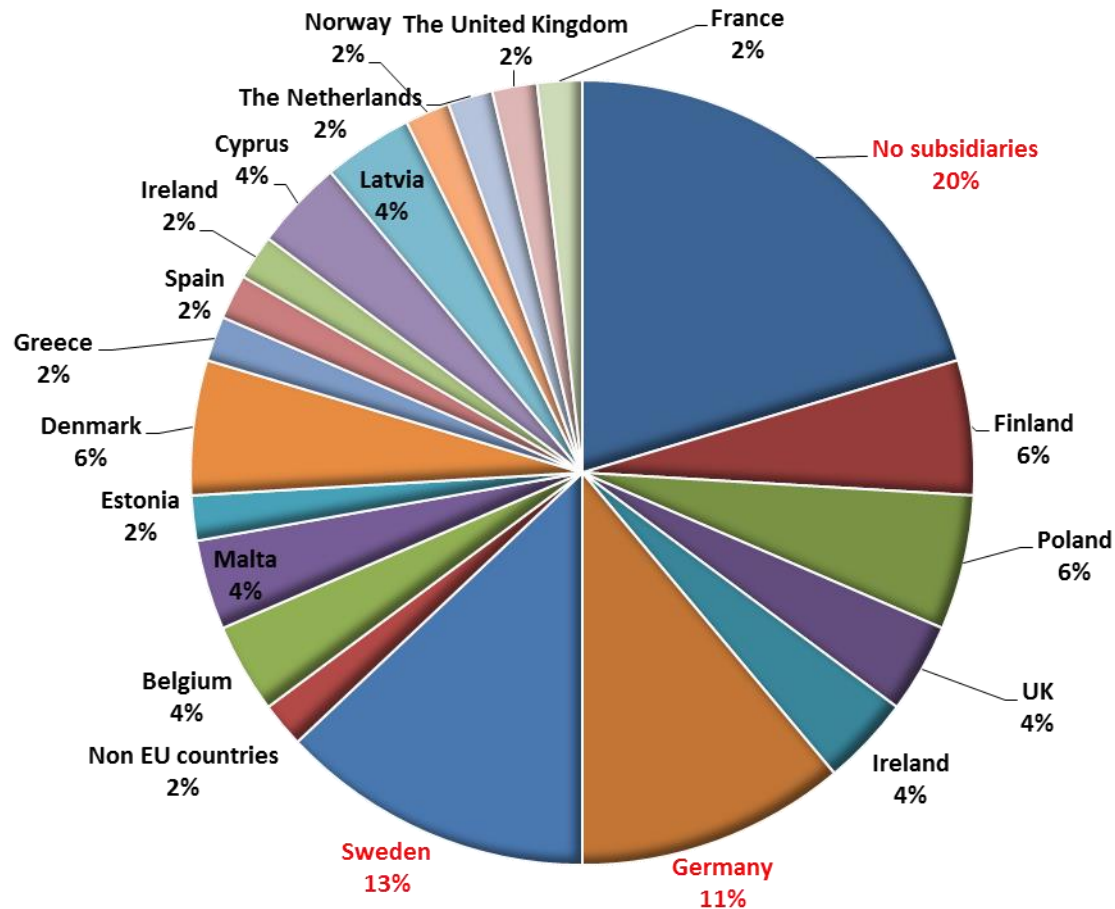
Total: 26 replies



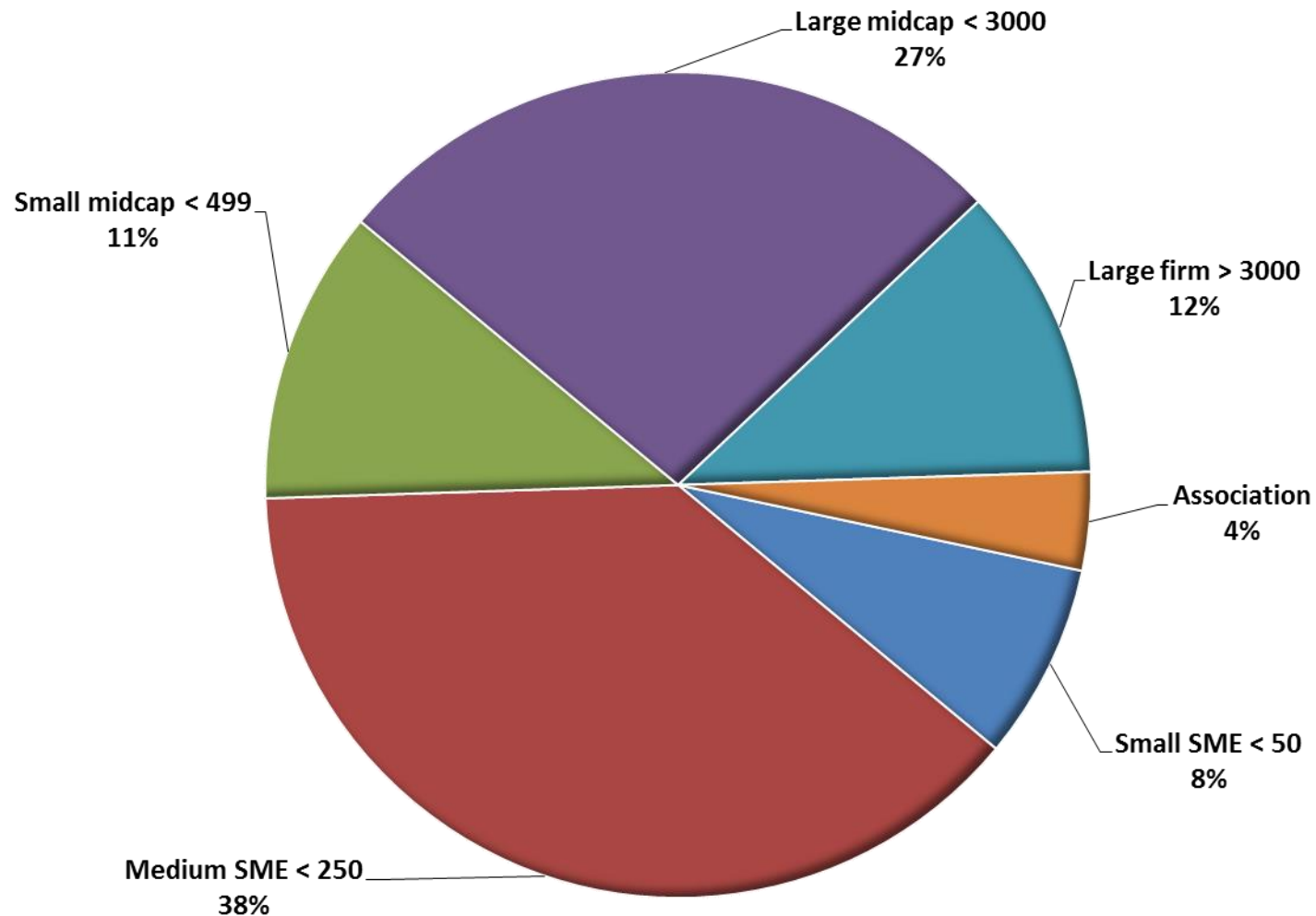


European
Commission

Countries of origin: subsidiaries



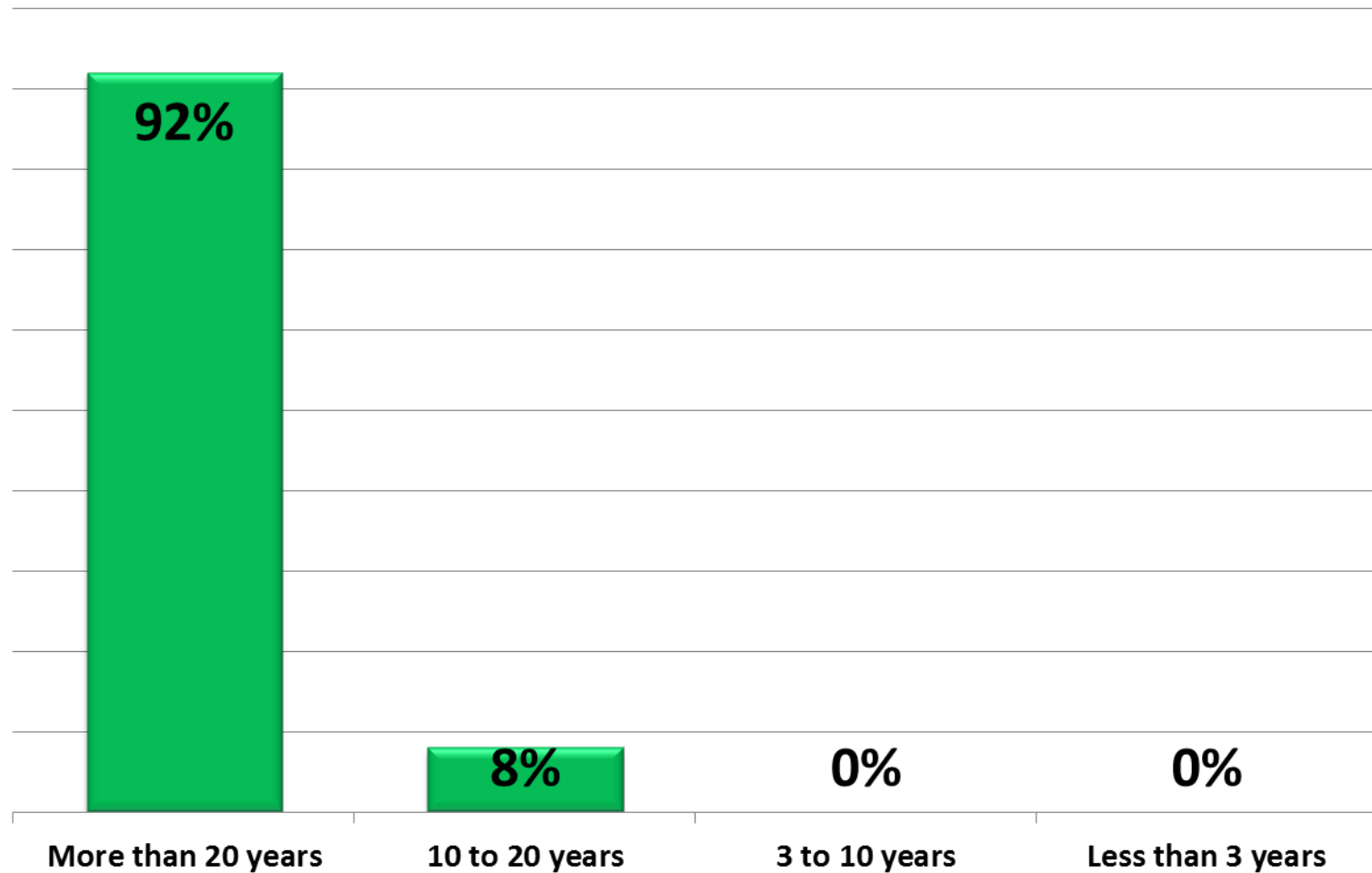
Market segment represented



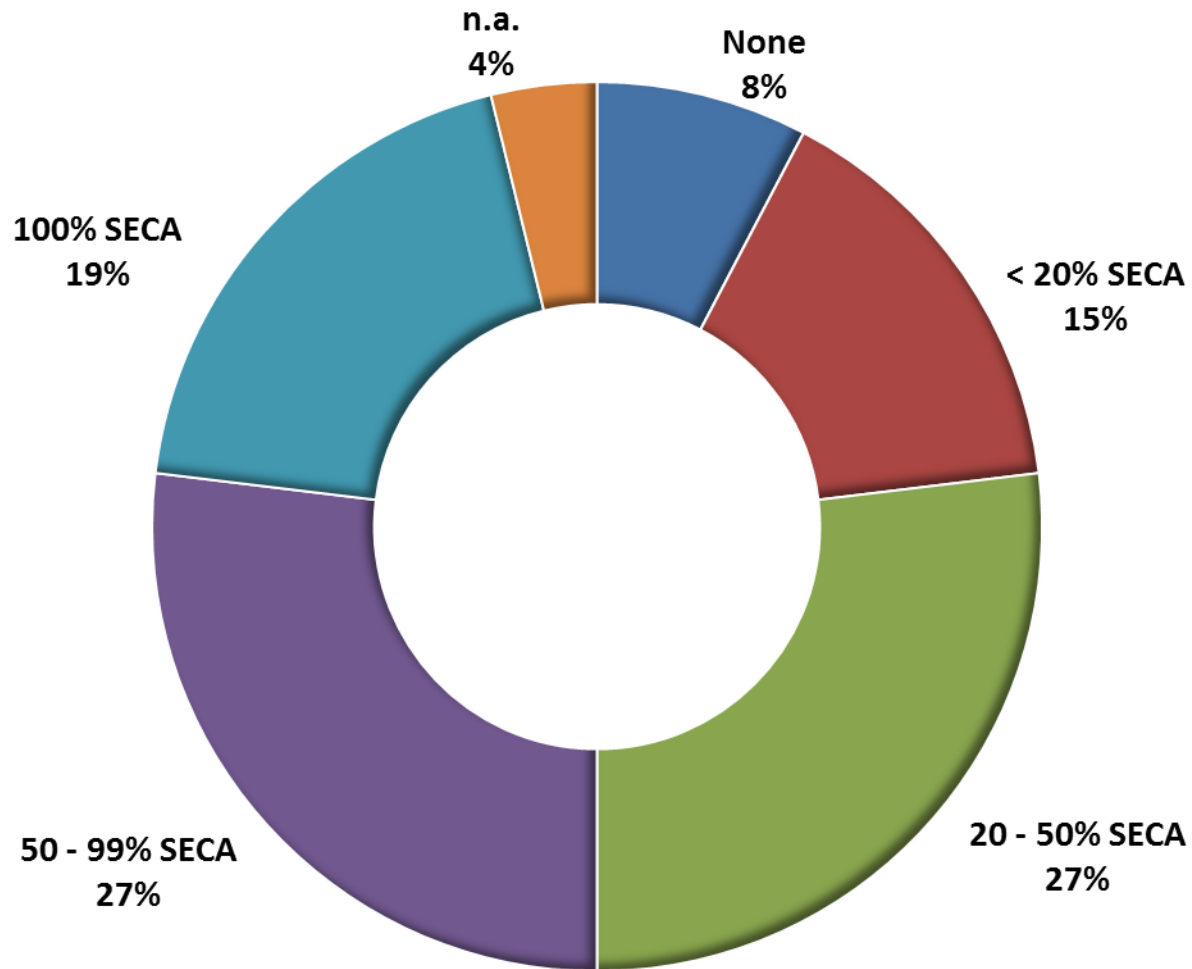


European
Commission

Period of activity

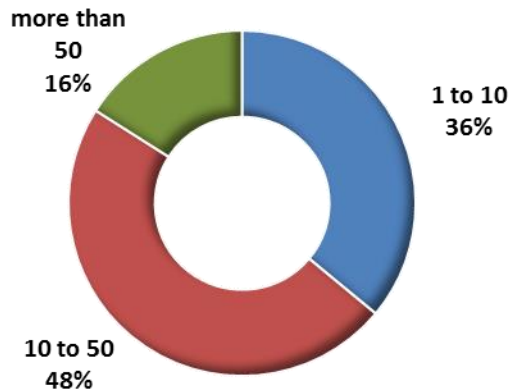


Proportion of operations in SECAs



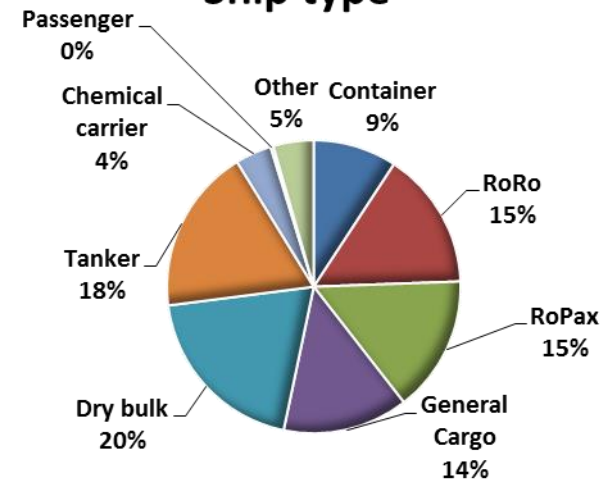
Operated ships

Number of ships operated

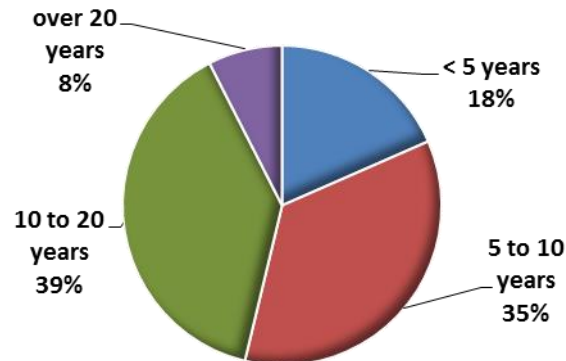


Total number of ships: 650

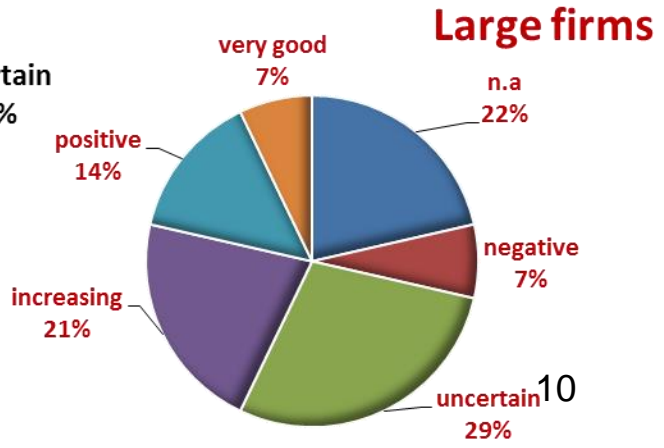
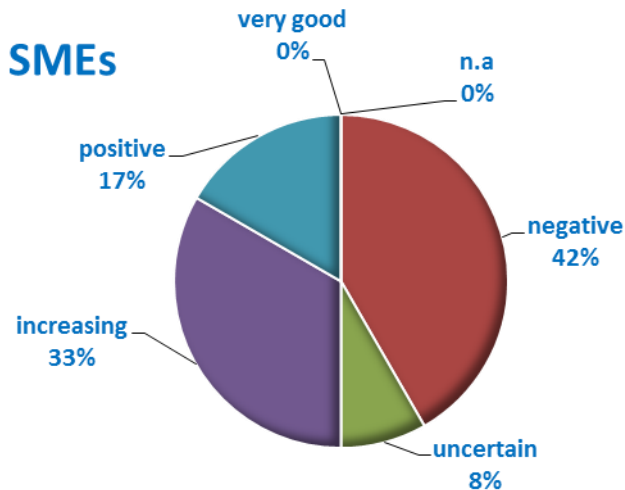
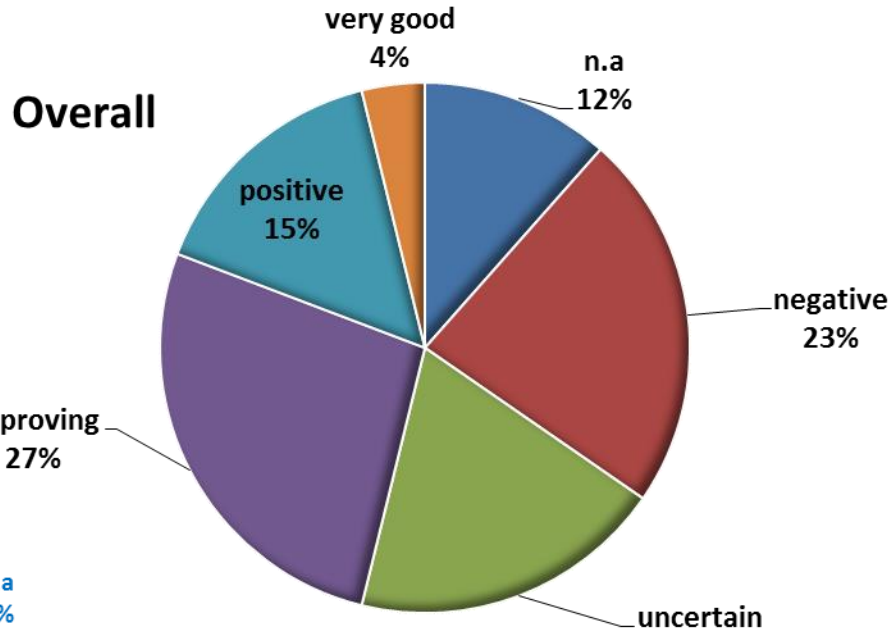
Ship type



Age categories of ships



Market prospects

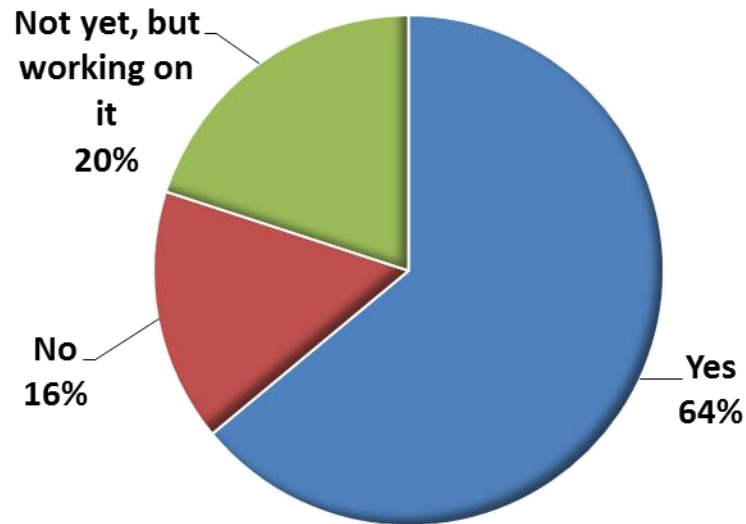




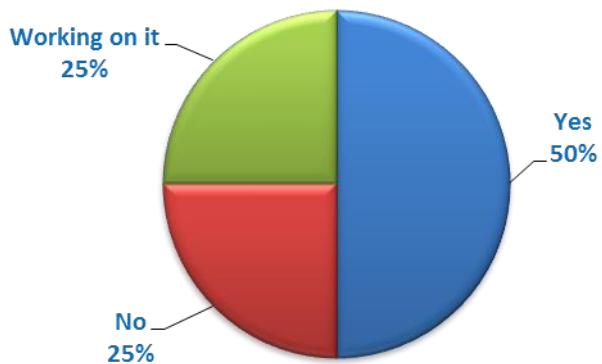
European
Commission

Investment needs

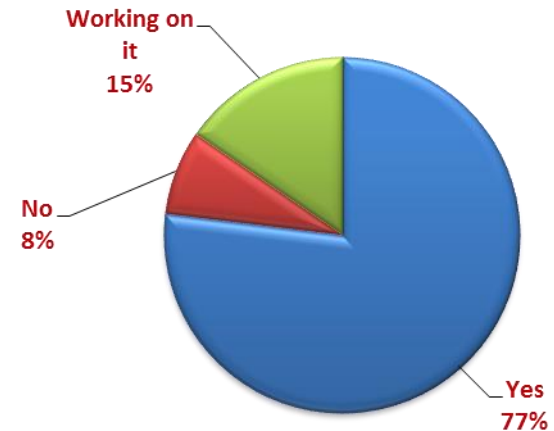
Investment plan



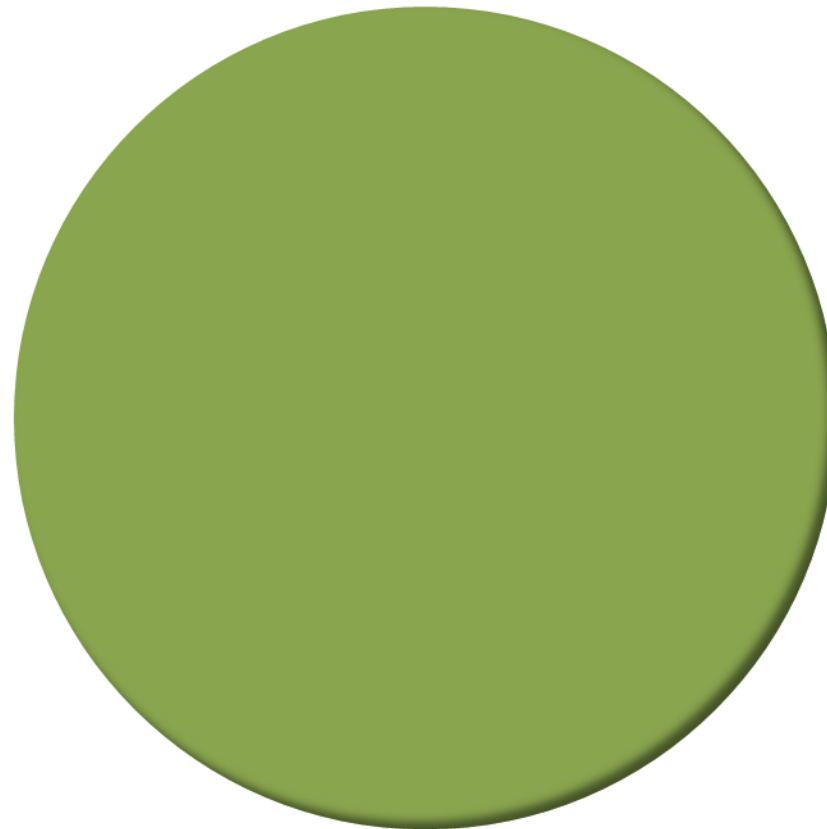
SMEs



Large firms



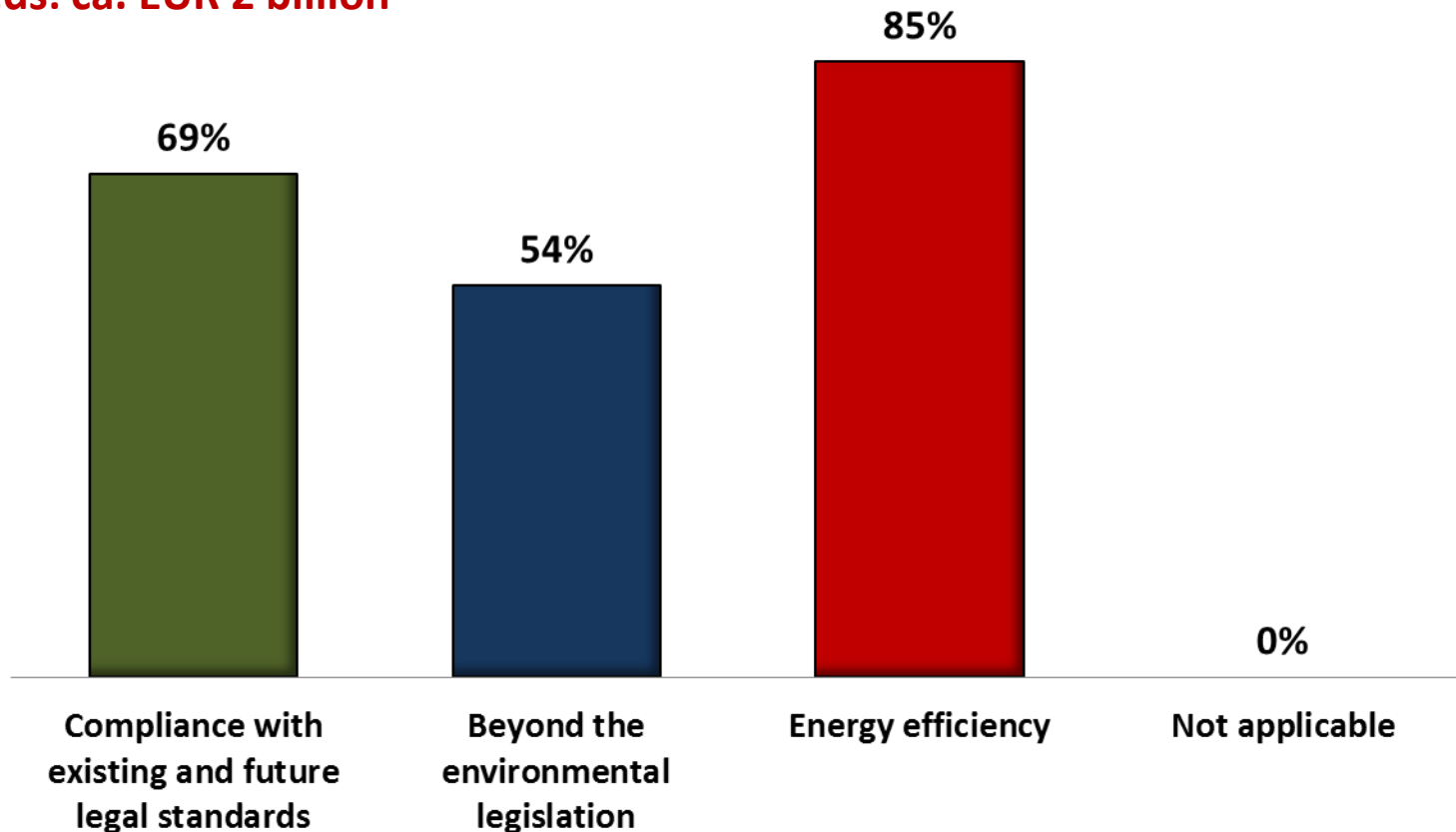
Interest in "green investments"



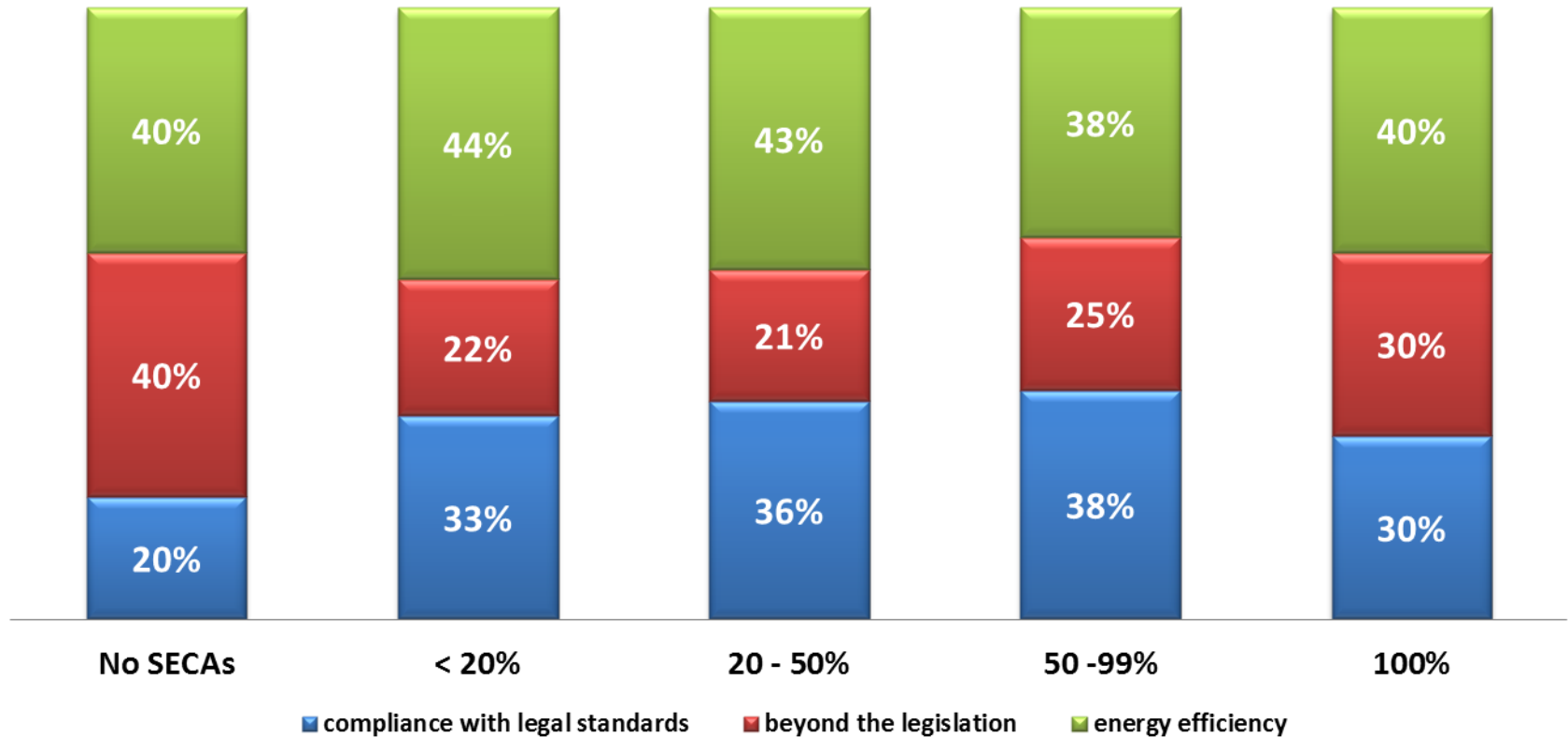
Yes
100%

Types of green investments considered over the next 5 years

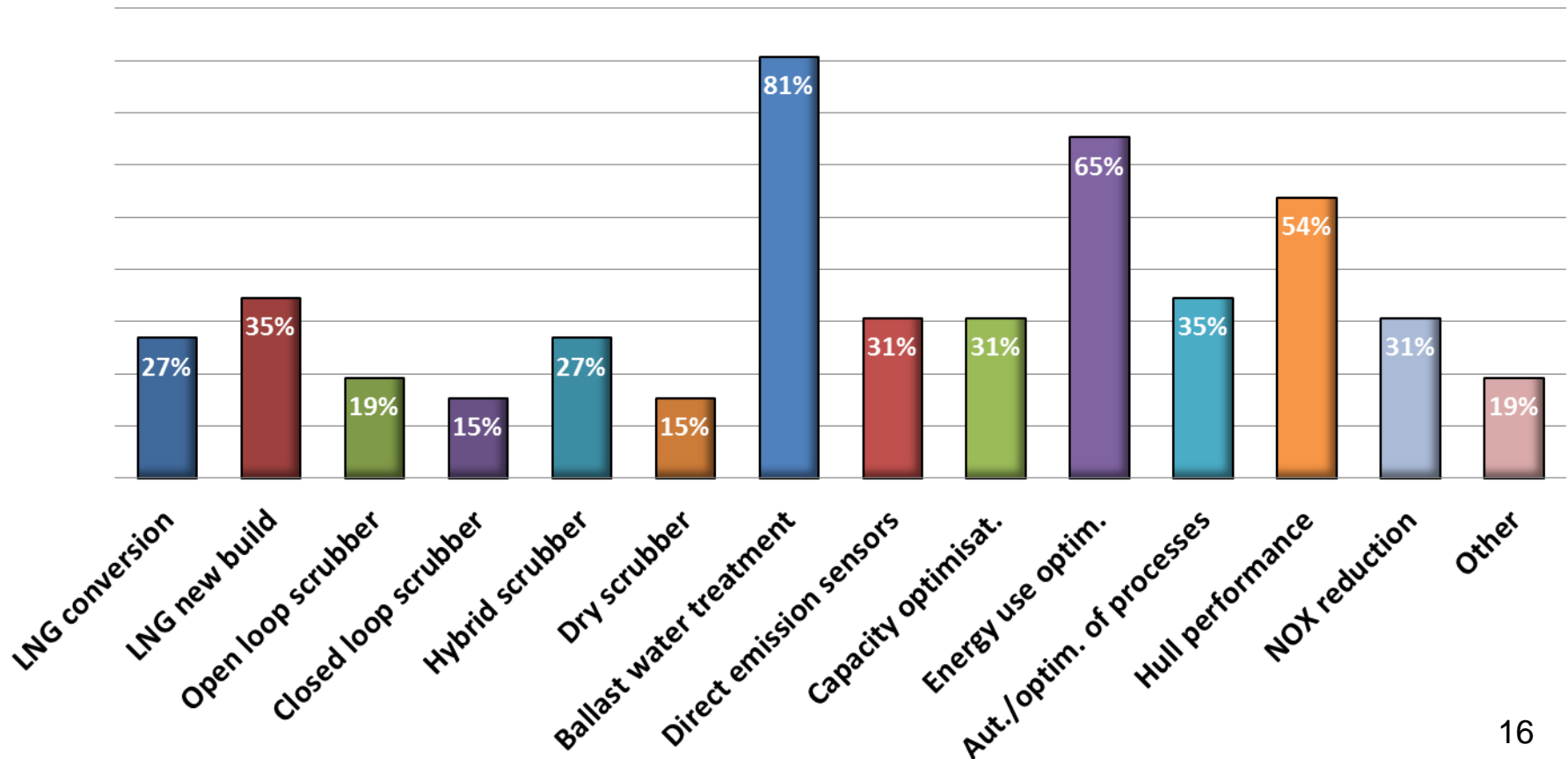
Total needs: ca. EUR 2 billion



Types of green investments considered according to operations in SECAs

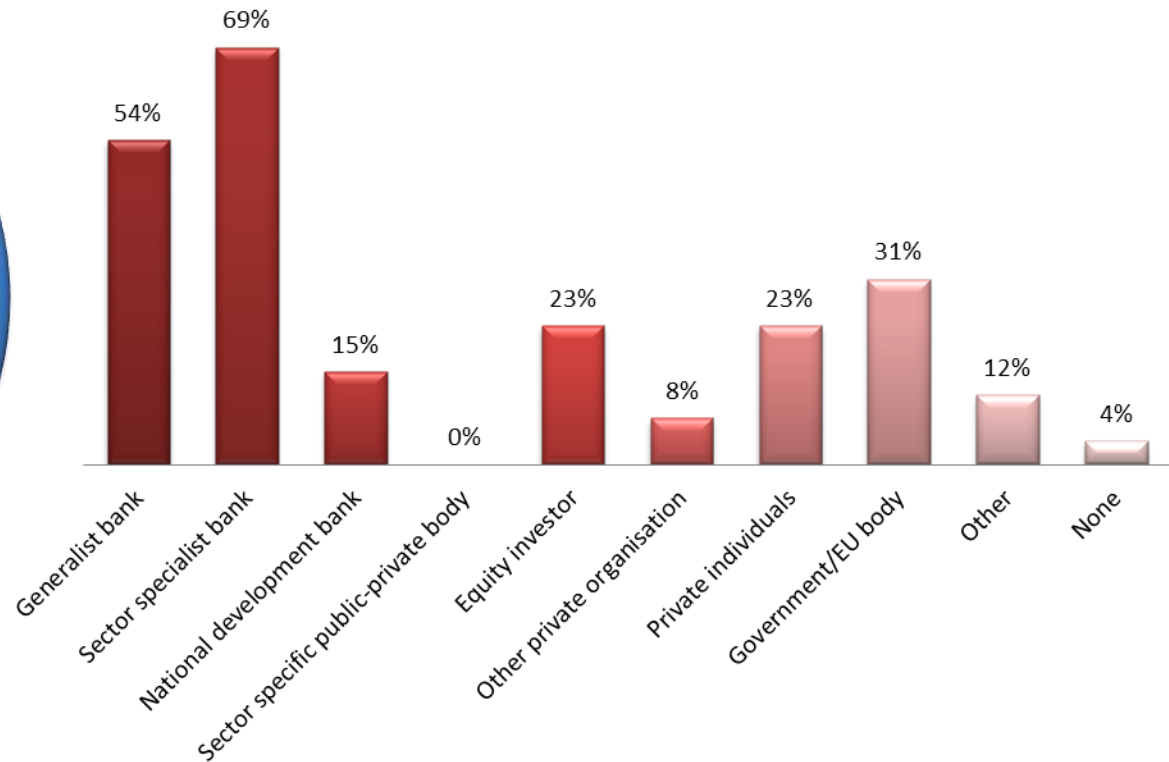
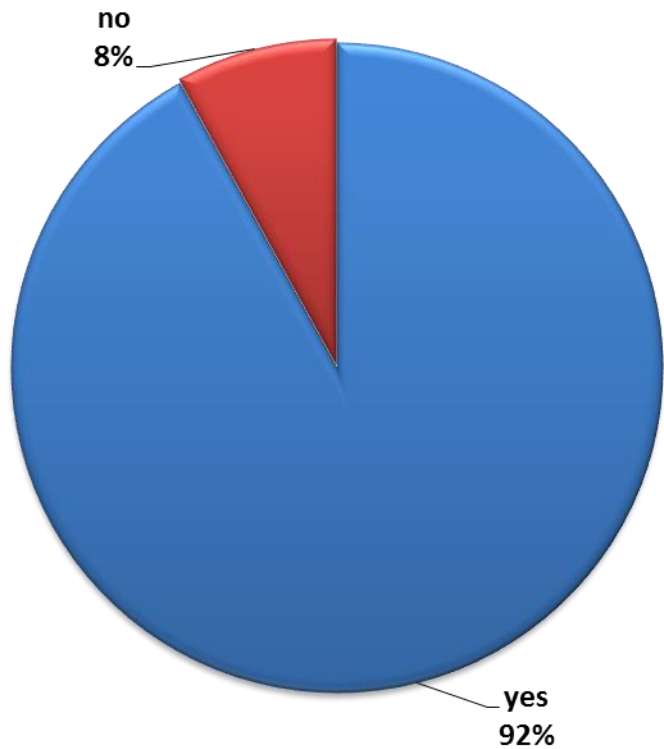


Types of green investments considered over the next 5 years

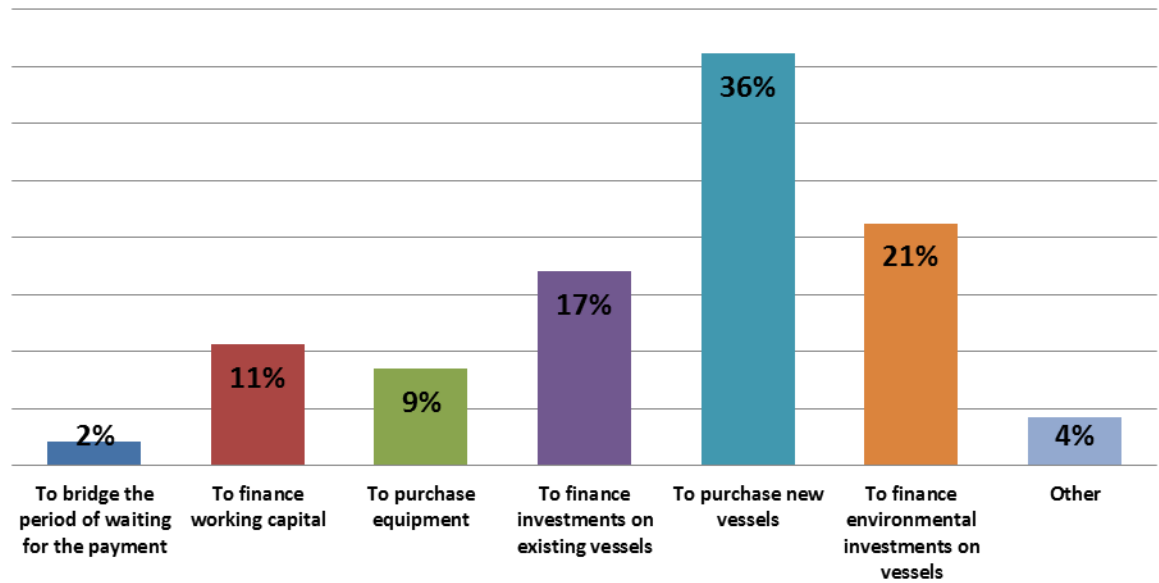
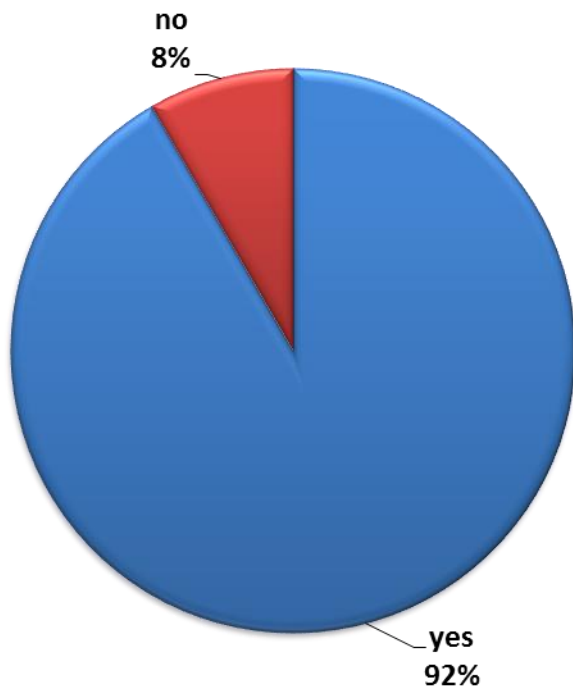


Financial situation

Interest in external financing over past 5 years

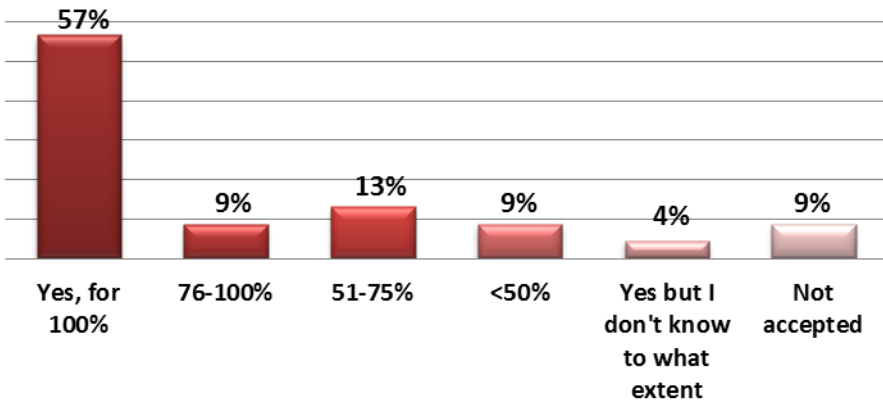


Loan application (1)

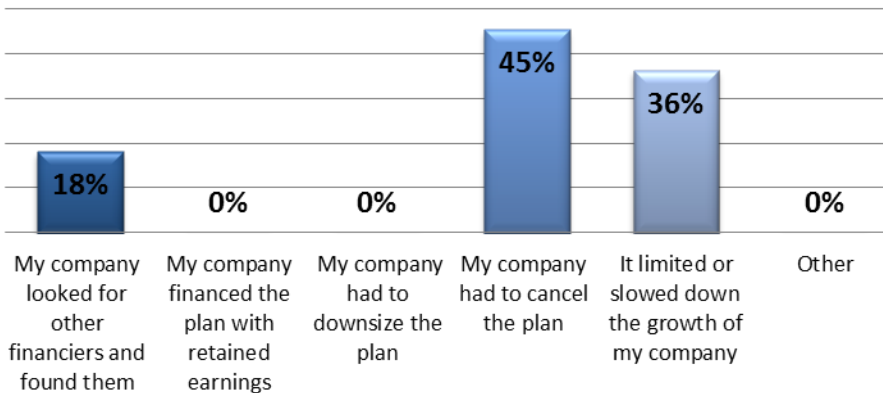


Loan application (2)

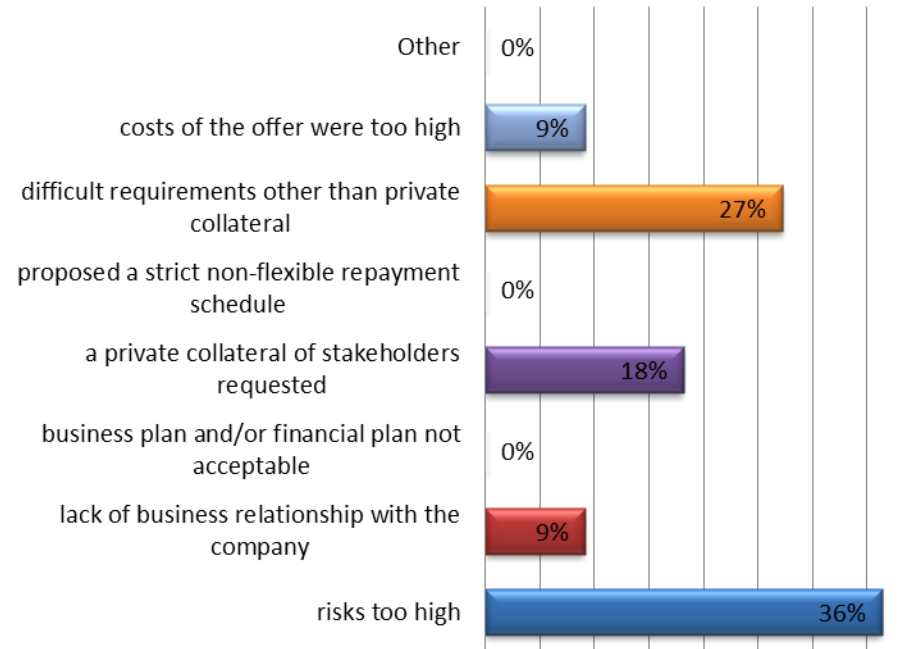
Accepted



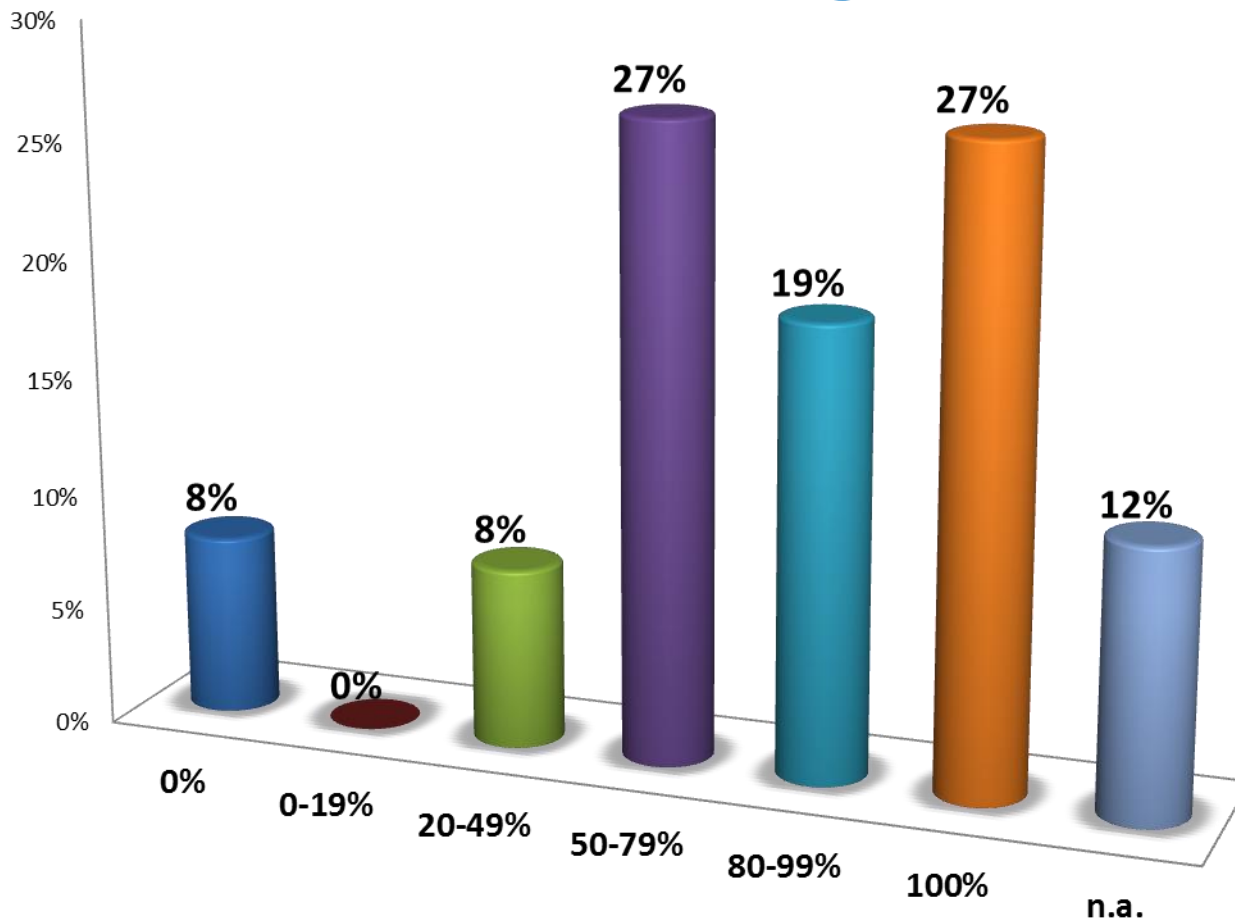
Consequences of refusal



Reasons for refusal

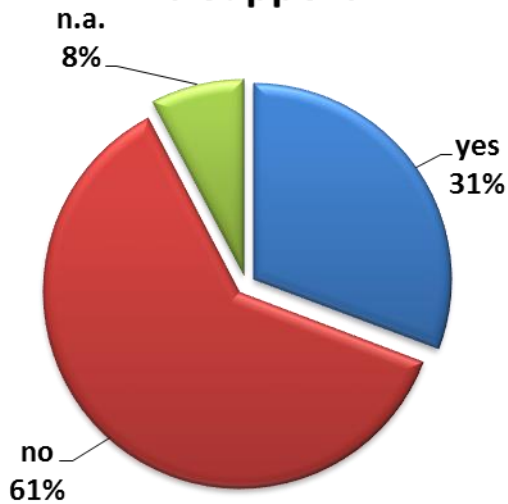


Proportion of fleet tied up as a security in outstanding loans

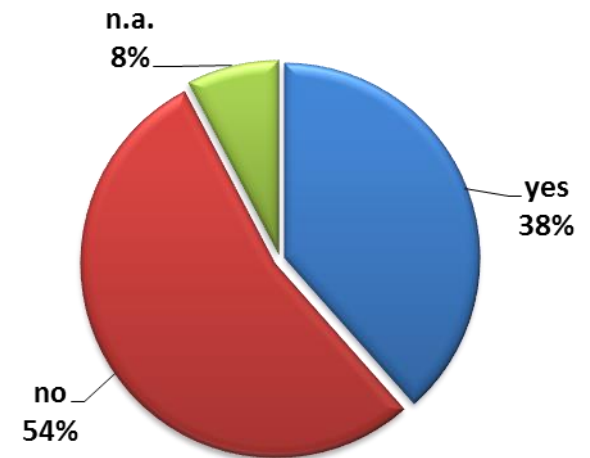


External financing from other sources

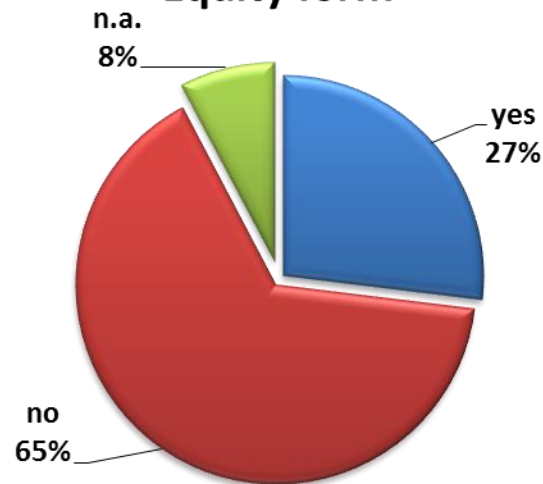
EU support



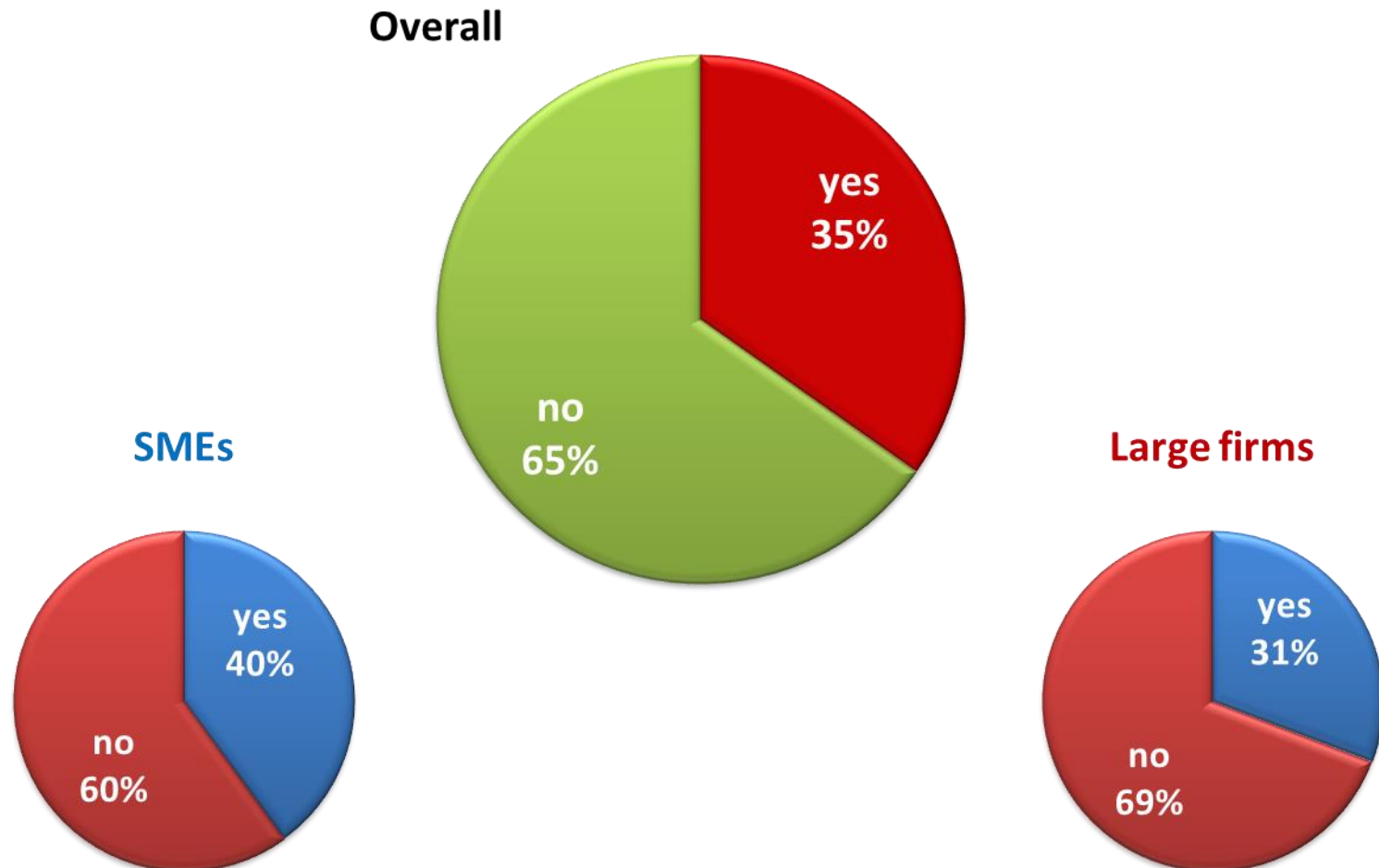
National schemes



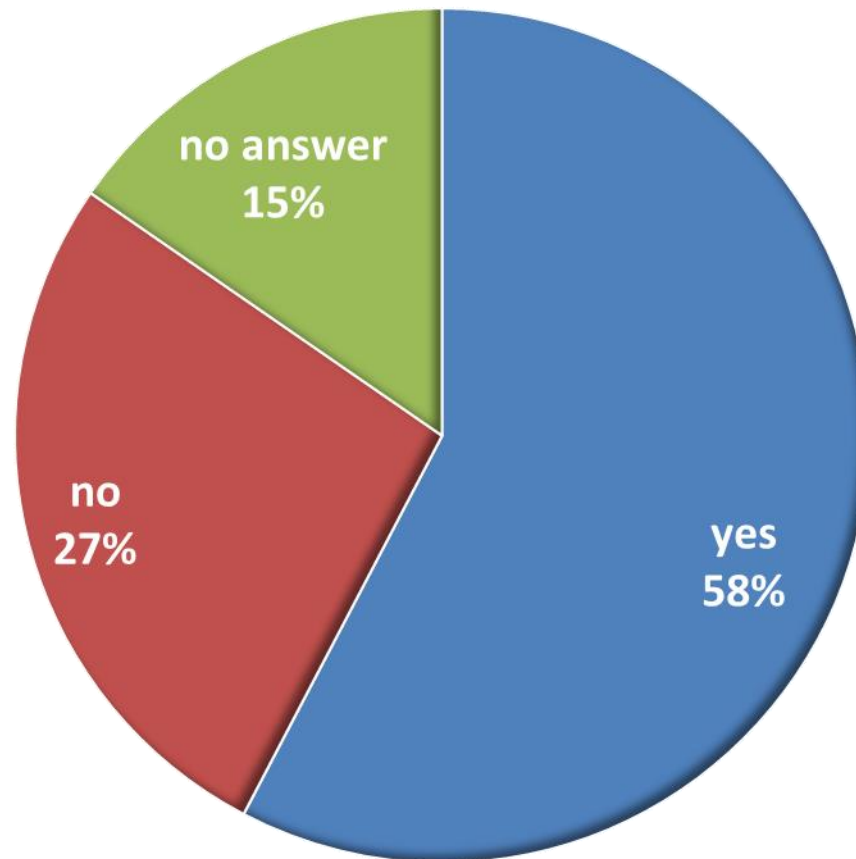
Equity form



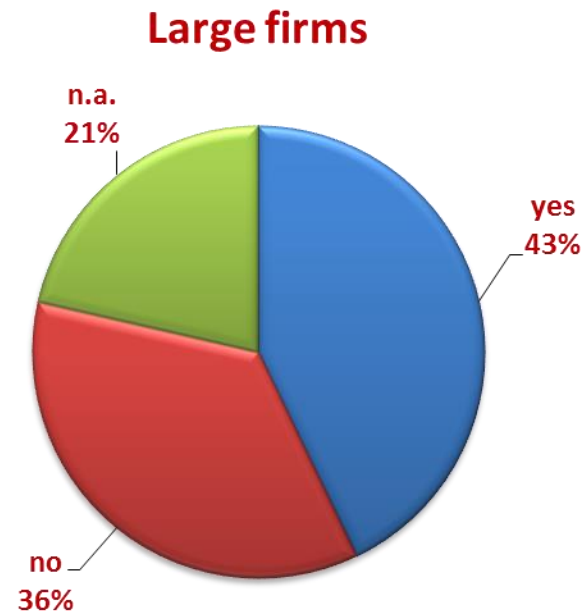
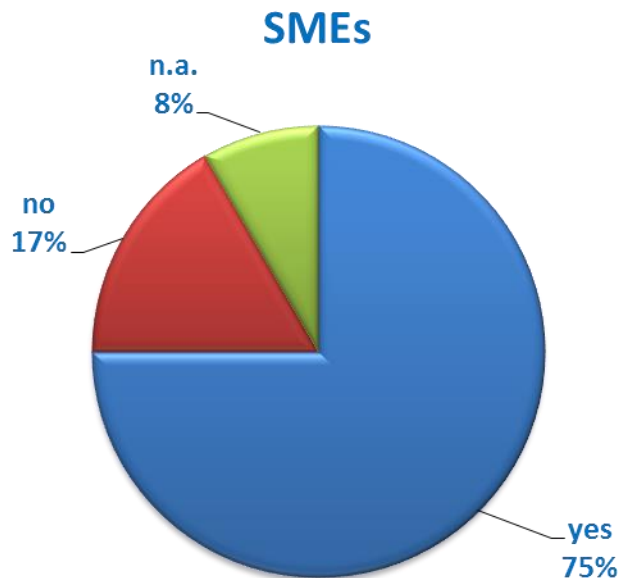
Problems with external financing



Problems in financing compliance investments

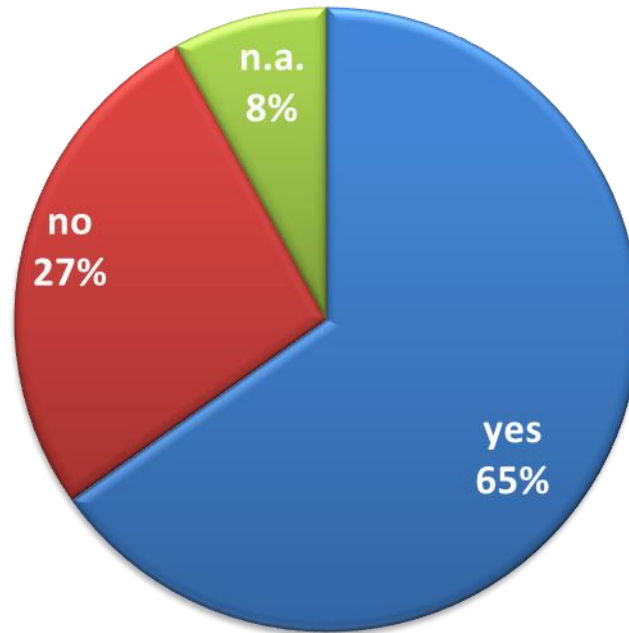


Problems in financing compliance investments (size of companies)

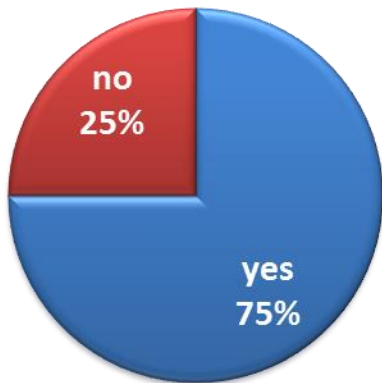


Market gap for ship financing

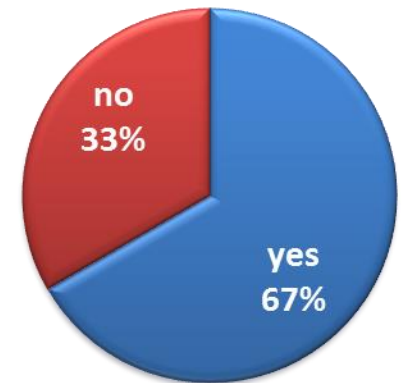
Overall



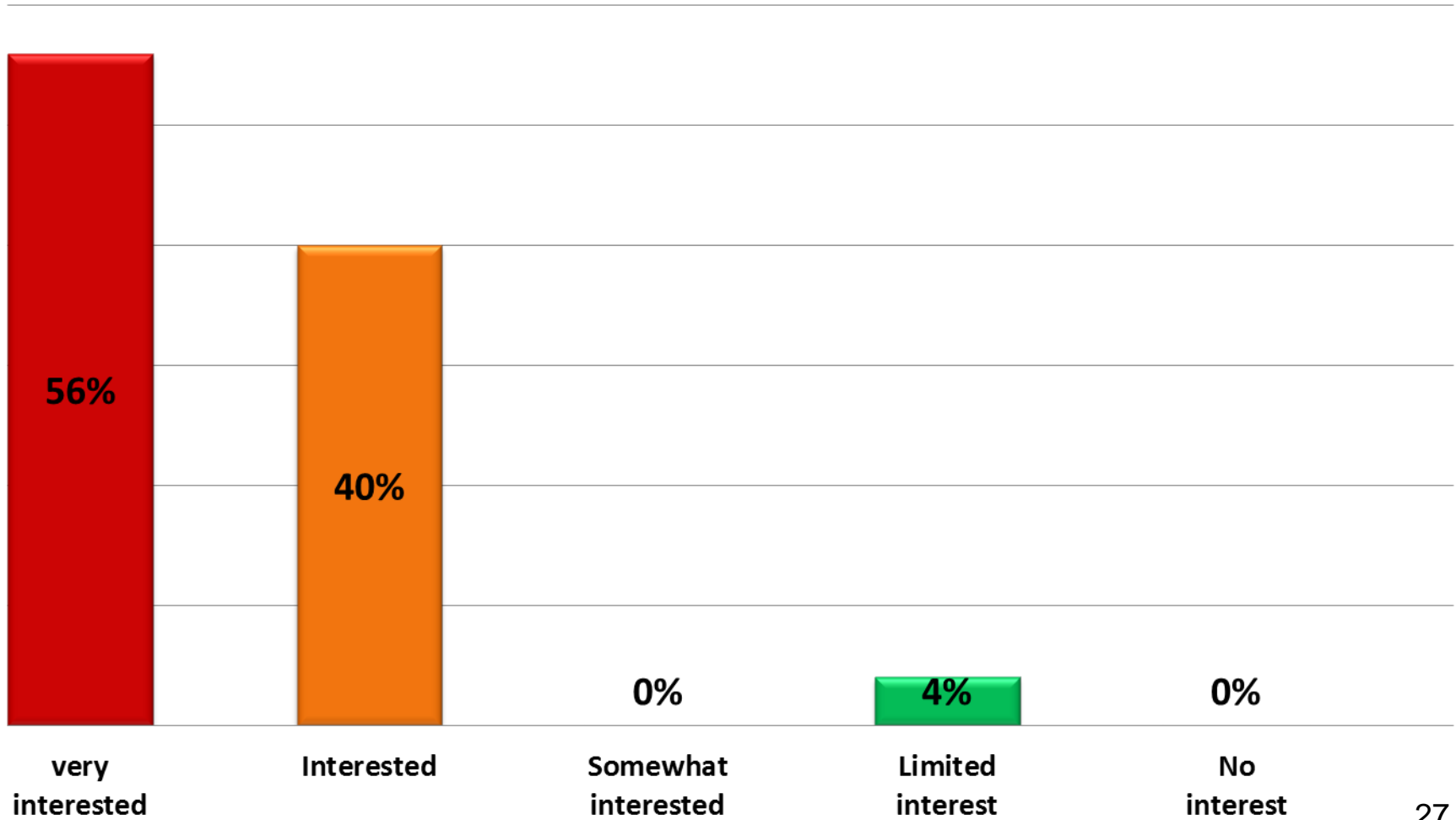
SMEs



Large companies



Interest in new EU financial tools



Thank you for your attention



**European Sustainable Shipping Forum
6th Plenary Meeting**

Brussels, 28 June 2016

Submission from ESSF sub-group on Financing

(Vade-mecum for a better utilisation of EU instruments)

1. Submission from (please choose):

ESSF sub-group on Financing



2. Sub-group recommendation(s) to the Plenary

The submission concerns the "*Vade-mecum for a better utilisation of EU instruments*" (Annex I), which was developed as a tool supporting the application for EU funds by the maritime sector.

The document provides a comprehensive list of relevant EU financing tools, according to their type, scope and target, and is intended to advise the users how to orient their projects in the context of different funding opportunities.

The sub-group recommends the document be distributed among the maritime community, after the necessary processing towards a version meeting high communication standards.

3. Required action(s) to be considered by the ESSF Plenary based on sub-group recommendation(s):

The sub-group invites the Plenary to endorse the "*Vade-mecum for a better utilisation of EU instruments*" as the official deliverable from the ESSF Sub-group on Financing.

4. Timing of required action(s) in view of upcoming deadlines and critical requirements:

Second semester 2016

5. Summary of the issue and possible alternative solution(s)

The vade-mecum lists and explains the available financial tools within the European Union in a practical way. The guide:

- orients project managers towards the relevant tools according to the profile of their project: size, maturity, and possible improvements needed in order to comply with the criteria set by European rules;
- presents the main points of the understanding of the tools on the basis of relevant European regulations for the period 2014-2020;
- addresses the possibility of blending these instruments (where allowed by specific rules) in order to optimize their effectiveness and efficiency;
- offers a "check-list" for each tool and advises applicants on the way forward in terms of managing their applications and projects;
- provides some relevant example success stories.

The document consists of four parts:

- i. a summary table of the EU funding corresponding to different kind of projects;
- ii. a presentation of the EU financial support (rules and practical advises for CEF Transports, H2020, ESI funds, Life, State aids, EIB mechanisms and EFSI)
- iii. general questions on the EU funds and their compatibility
- iv. records of the latest calls: sustainable shipping projects

6. Background information

The principle of the Vade-mecum was adopted by the ESSF Plenary in December 2014. Subsequently, it constituted one of the work-package assigned to the sub-group during 2015 and 2016.

All the editorial works were based on inter-active processes, namely exchanges with EU institutions (questions & answers), successive reviews of the text and relevant recommendations from members of the financing sub-group.

Annex I

Vade-mecum for a better utilisation of EU instruments

VADE-MECUM ON EUROPEAN FUNDING FOR SUSTAINABLE SHIPPING

The shipping sector is committed to undergo a deep change of energy provision. The process to adapt the fleets and the ports to the incoming environmental and climate challenges last for at least 20 years.

A comprehensive view on European funding tools for sustainable shipping is needed to support the adaptation of the transport by ships. This concerns ship-owners, ports, shipyards, energy infrastructure operators, gas suppliers, other industries and regions.

Objectives of the Vade-Mecum

This vade-mecum lists and explains the available financial tools within the European Union in a practical way. The guide:

- orients project managers towards the relevant tools according to the profile of their project: size, maturity, and possible improvements needed in order to comply with the criteria set by European rules ;
- presents the main points of the doctrinal understanding of the tools on the basis of European regulations for the next years (2014-2020). It also suggests a possible blending allowed by these rules in order to optimize their efficiency in the support of projects;
- offers a "check-list" for each tool and advises applicants on the way forward in order to ensure good management of their application as well as of the project itself. It also gives some example success stories that may inform both on the granted projects and best practices.

Steps to a successful application

Before any application the project needs to be assessed for its scope and timing as follows:

- The European dimension of the project which may require the applicant to find partnerships in other Member States;
- The applicant must have the technical capacity to implement the project and the members of the project must have the ability to undertake the work;
- The size of the project: smaller projects may be unsuitable for some schemes and may for example be supported through Horizon 2020's SME's scheme or at national level. There will also be criteria requiring added value on an European level.

- The applicant must have stable and sufficient sources of funding to maintain its activity throughout the period during which the proposed action is being carried out and to participate in its funding.
- Information concerning financial stability will need to be provided to protect EU funding and to ensure sufficient initial capital to undertake the project. Financial profitability may be required for EU loans or guarantees; it is not possible to fund projects by companies that suffer financial troubles.

Table of contents

I GENERAL OVERVIEW OF THE CURRENT CALLS

II –SUMMARY TABLE OF EU SUPPORT

III EU FINANCIAL SUPPORT

1. Connecting Europe Facility (CEF Transports)
2. European Structural and Investment Funds (ESI Funds) :
regional development, growth, jobs, maritime Europe and fisheries
3. Horizon 2020 : Research, development and innovation
4. Life : environment and climate action
5. State Aid
6. European Investment Bank mechanisms
7. European Fund for Strategic Investments (EFSI)

IV- GENERAL QUESTIONS AND COMPATIBILITY BETWEEN EU FUNDS

V- RECORD OF THE LATEST CALLS : SUSTAINABLE SHIPPING PROJECTS

1. GENERAL VIEW OF THE CURRENT CALLS

EU FUNDING	CALLS	LINKS
TEN-T Fund(CEF Transport)	CLOSED	https://ec.europa.eu/inea/en/connecting-europe-facility
Horizon 2020	OPEN	https://ec.europa.eu/inea/en/connecting-europe-facility
LIFE PROGRAMME	OPEN	http://ec.europa.eu/environment/life/funding/life2016/index.htm

II- SUMMARY TABLE OF EU FINANCIAL SUPPORT

Type of Investment	Project coordinator	Financing	Observations
Ship building	Shipowner Shipyard	TEN-T Fund	For new vessels, feasibility studies, or action supporting the deployment of alternative fuel. New technologies and innovation are limited to additional efforts for environmental purposes and eligible to the TEN-T Fund, for example conversions of vessel propulsion systems to LNG fuel or Hybrid Scrubbers; training is also eligible in partnership with other activities in the projects.
		Horizon 2020	HORIZON 2020 can fund the research and development phase of a project and a prototype, which would be otherwise difficult to introduce into the market. Horizon 2020 is funding research & innovation ranging from low Technology Readiness Level (TRL) research activities, to development work on validated concepts, technologies and applications, to higher TRL innovation activities with demonstration/pilot/trial activities in preparation to be deployed.
		European Fund for Strategic Investments EFSI	The EFSI supports through the supply of risk-bearing capacity to the EIB, the following: a) Investments, increased access to financing for entities up to 3 000 employees, with a particular focus on SMEs and small mid-cap companies. The EU guarantee shall be granted for EIB financing and investment operations approved by the Investment Committee. The operations concerned shall be consistent with Union policies and support any of the following general objectives: a) research, development and innovation; b) development of transport infrastructures, and equipment and innovative technologies for transport;
		State Aid for environmental protection and energy	Conditions defined by the Guidelines (Communication (C2014/C 200/01) from the Commission) published on 28 June 2014
		State Aid for Research & Development & Innovation	Framework defined by the Communication (C2014/C 198/01) from the Commission published on 27 June 2014
		Regional State Aid	Conditions defined by the Guidelines (Communication (2013/C 209/01) from the Commission) published on 23 July 2013

		EIB	<p><u>EIB Transport Lending Policy adopted on 13 December 2011</u> Vessels shall operate under an EU flag to ensure compliance with the European safety, operating and environmental rules. All EU projects related to LNG shall adhere to all EU and IMO safety and environmental rules and regulations with regard to the construction and operation of vessels. The EU projects shall be in full compliance with the Intellectual Property Rights, trade agreements and competitive practices, as quoted in the Transport Lending Policy of the EIB. A particular attention is made to perform the projects on European shipyards.</p>
			<p><u>Green Shipping Guarantee programme</u> [cross reference to GSG section below.]</p>
Ship modification	Shipowner	TEN-T Fund	<p>Studies and deployment of alternative fuel infrastructure, in particular (but not limited to) LNG are addressed in the MoS Priority. Upgrades on vessels are limited to the additional efforts for environmental purposes and cannot cover the full costs of acquiring or constructing a vessel. This kind of investment could be considered as eligible under certain conditions:</p> <ul style="list-style-type: none"> <input type="checkbox"/> The ship will be part of an upgraded or a new MoS link established between two ports in two different countries on an intermodal corridor, or <input type="checkbox"/> The ship intends to pilot and validate some new technological solutions which have not been tested before on other ships in Europe. The piloting actions should be innovative. <p>The ship receiving a CEF Transport grant will be required to provide services between the EU ports for a period of at least five years after the project end date. Please note that CEF Transport does not support the conversion of a fleet of vessels non-related to the specific maritime links upgrade. Training is also eligible in partnership with other activities in EU projects.</p>
		European Fund for Strategic Investments	See above description in ship building
		State Aid for environmental protection and energy	Conditions defined by the Guidelines (Communication (C2014/C 200/01) from the Commission published on 28 June 2014)
		State Aid for	Framework defined by the Communication (C2014/C 198/01) from the Commission published on 27 June

		Research & Development & Innovation	2014
		Regional State Aid	Conditions defined by the Guidelines (Communication (2013/C 209/01) from the Commission) published on 23 July 2013.
		EIB	EIB Transport Lending Policy adopted on 13 December 2011 <u>Green Shipping Guarantee programme</u>
Bunker vessel	Shipowner	TEN-T Fund	As stipulated in the TEN-T Work Programme, costs related to the introduction of a LNG bunkering barge are eligible for co-funding under the MoS Priority. The co-funding rate cannot exceed 30% (85% for proposals submitted under the call addressing the Cohesion Fund allocation). A barge is considered as part of port infrastructure and should therefore offer services on non-discriminatory grounds. Moreover, the services should remain publicly accessible. A co-financed bunkering barge will be required to provide the customary services in the EU ports for a period of at least five years after the project end date.
		European Fund for Strategic Investments	See above description in ship building
		State Aid for environmental protection and energy	Conditions defined by the Guidelines (Communication (C2014/C 200/01) from the Commission) published on 28 June 2014
		State Aid for Research & Development & Innovation	Framework defined by the Communication (C2014/C 198/01) from the Commission published on 27 June 2014
		Regional State Aid	Conditions defined by the Guidelines (Communication (2013/C 209/01) from the Commission) published on 23 July 2013.
		EIB	EIB Transport Lending Policy adopted on 13 December 2011 <u>Green Shipping Guarantee programme</u>
Port Infrastruc	Port Authority	CEF Regulation TEN-T Fund	a) with regard to grants for studies, 50 % of the eligible costs; b) <i>with regard to grants for works:</i>

ture	Region, District Port manager Port Facility Manager		<p>- for inland waterways: 20 % of the eligible costs; the funding rate may be increased to a maximum of 40 % for actions addressing bottlenecks and to a maximum of 40 % for actions concerning cross-border sections;</p> <p>- for inland transport, connections to and the development of multimodal logistics platforms including connections to inland and maritime ports, as well as the development of ports: 20 % of the eligible costs;</p> <p>- for actions supporting new technologies and innovation for all modes of transport: 20 % of the eligible costs;</p> <p>(c) for actions to support the development of motorways of the sea: 30 % of the eligible costs.</p> <p>See the TEN-T annual and multi-annual calls specifications</p>
		ESI, ERDF and Cohesion Funds	<p>- thematic objective 4 to support the shift towards a low-carbon economy in all sectors;</p> <p>- thematic objective 7 to promote sustainable transport and removing bottlenecks in key network infrastructures.</p> <p>Priorities to promote sustainable transport and remove bottlenecks in key network infrastructures by:</p> <p>- supporting a multimodal Single European Transport Area by investing in the TEN-T;</p> <p>- developing and improving environmentally-friendly (including low-noise) and low-carbon transport systems, including inland waterways and maritime transport, and ports.</p>
		European Fund for Strategic Investments	See above description in ship building
		EIB	EIB Transport Lending Policy adopted on 13 December 2011 states that lending for port projects are also prioritized in support of sustainable transport solutions.
Shore-based LNG Infrastructures	LNG Infrastructures manager or owner	CEF Regulation TEN-T Fund	See above Port infrastructure and the TEN-T annual and multi-annual calls specifications
		ESI, ERDF and Cohesion Funds	See above port infrastructure

		European Fund for Strategic Investments	See above description in ship building
		Combining ESI Funds and European Fund for Strategic Investments	The structural funds can finance projects via grants and financial instruments and are implemented in a decentralised way by Managing authorities in the Member States. The EFSI provides risk financing instruments via the European Investment Bank. ESI Funds and the EFSI can mobilise additional investments by complementing each other and optimising the additionality of the investments. These funds have been designed in a different way but are complementary in terms of rationale, design, and legislative framework.
		EIB	To be defined
LNG trucks parks	Port authority Region, District Facility manager LNG infrastructure manager or owner	CEF Regulation TEN-T Fund	See above port infrastructure and LNG infrastructure
		ESI, ERDF and Cohesion Funds	See above port infrastructure and LNG infrastructure
		Combining ESI Funds and European Fund for Strategic Investments	See above port infrastructure and LNG infrastructure
Innovative climate change mitigation technologies	Region Industry	LIFE Programme	The priority area Climate Change Mitigation shall in particular have the specific objective to contribute to the development and demonstration of innovative climate change mitigation technologies, systems, methods and instruments that are suitable for being replicated, transferred or mainstreamed. The sub-programme for Climate Action includes also a priority on Climate Governance and Information. Action grants may finance pilot projects, demonstration projects, best practice projects, integrated projects, technical assistance projects, capacity-building projects, preparatory projects, information, awareness, and dissemination projects.
R&D	All types of organisation	Horizon 2020	Priority 'Societal challenges': Smart, green and integrated transport is a specific objective to achieve a European transport system that is resource-efficient, climate- and environmentally-friendly, safe and seamless for the benefit of all citizens, the economy and society.

			Also SME instrument to develop ground-breaking innovative ideas for products, services or processes that are ready to face global market competition and Blue Growth supporting the sustainable development of seas and oceans.
		EIB	each project supports a more efficient and sustainable transport system, reduces oil dependence and enhances the competitiveness of industry in EU.
		BONUS	<p>Decision No 862/2010/EU of 22 September 2010 on the participation of the Union in a Joint Baltic Sea Research and Development Programme (BONUS).</p> <p>BONUS is fully aligned with the objectives of the European Strategy for Marine and Maritime Research. It is an integral part of the EU Strategy for the Baltic Sea which seeks to provide both a co-ordinated, and inclusive framework in response to the key challenges facing the Baltic Sea Region, together with concrete solutions for these challenges. By implementing a policy-driven, fully-integrated joint research programme, based on extensive and on-going stakeholder consultations, BONUS will provide concrete scientific outputs facilitating the implementation of ecosystem-based management of environmental issues in the Baltic Sea. BONUS thereby supports sustainable development in the region while strengthening research collaboration and facilitating the use of common resources and infrastructure in the region.</p> <p>Participating States: Denmark, Germany, Estonia, Latvia, Lithuania, Poland, Finland, Sweden</p>

II- EU FINANCIAL SUPPORT

1) Connecting Europe Facility (CEF) : transports

▪ CEF Grants

Connecting Europe Facility ("CEF") may provide EU financial assistance in the form of grants to projects of common interest within the trans-European transport network (Ten-T).

Project of common interest

Projects of common interest contribute to the development of the Ten-T through the creation of new transport infrastructures, through the rehabilitation and upgrading of the existing transport infrastructures and through measures promoting the resource-efficient use of the network. A project of common interest may encompass its entire cycle, including feasibility studies and permission procedures, implementation and evaluation.

The trans-European transport network (TEN-T)

The TEN-T is a European network comprising multimodal transport infrastructure (railways, inland waterways, roads, maritime and air transport) and telematics applications (ITS), as well as measures promoting the efficient management and use of such infrastructure and permitting the establishment and operation of sustainable and efficient transport services. The network is shown on the maps contained in Annex I of Regulation (EU) n°1315/2013 of the European Parliament and of the Council of 11 December 2013 on Union guidelines for the development of the trans-European transport network and repealing Decision N° 661/2010/EU.

The Ten-T comprises a dual-layer structure consisting of :

- the comprehensive network ;
- the core network, established on the basis of the comprehensive network.

·

The comprehensive network

The comprehensive network consists of all existing and planned transport infrastructures of the Ten-T as well as measures promoting the efficient and socially and environmentally sustainable use of such infrastructures. Member States shall make all possible efforts with the aim of completing the comprehensive network by 31 December 2050. Particular consideration shall be given to measures that are necessary for ensuring fuel security through increased energy efficiency, and promoting the use of alternative and, in particular, low or zero carbon energy sources and propulsion systems.

The core network

The Core Network consists of those parts of the comprehensive network which are of the highest strategic importance for achieving the objectives for the development of the trans-European transport network. Member States shall take the appropriate measures for the core network to be developed by 31 December 2030.

The core network is interconnected in nodes. The nodes of the core network include:

- urban nodes, including their ports and airports ;
- maritime ports and inland waterways ports.

Core network corridors are an instrument to facilitate the coordinated implementation of the core network. Core network corridors cover the most important long-distance flows in the core network and are intended, in particular, to improve cross-border links within the Union. Core network corridors are multimodal and open to the inclusion of all transport modes covered in this Regulation. They cross at least two borders and, if possible, involve at least three transport modes, including, where appropriate, motorways of the sea¹. Wherever appropriate, the corridors use motorways of the sea.

Availability of alternative fuels for inland waterway and maritime transport infrastructure shall be met by the infrastructure of the core network.

The Connecting Europe Facility (CEF)

The CEF is the financial instrument to support common projects within the TEN-T. It supports projects of common interest that pursue the objectives set out below:

- to ensure sustainable and efficient transport systems in the long run, with a view to

¹

Motorways of the sea shall consist of short-sea routes, ports, associated maritime infrastructure and equipment, and facilities as well as simplified administrative formalities enabling short-sea shipping or sea-river services to operate between at least two ports, including hinterland connections. Motorways of the Sea shall include a maritime links between comprehensive and core ports and at least two EU Member States ports and a third- country port where such links are of strategic importance to the Union. Motorways of the Sea projects need at least two member States.

preparing for expected future transport flows, as well as by enabling all modes of transport to be decarbonised through transitions to innovative low-carbon and energy- efficient transport technologies, while optimising safety. The achievement of this objective shall be measured by the number of inland and maritime ports of the TEN-T core network equipped with supply points for alternative fuels in the Union.

- to optimise the integration and interconnection of transport modes, and enhance the interoperability of transport services, while ensuring the accessibility of transport infrastructures. The achievement of this objective shall be measured by the number of improved or new connections between ports through motorways of the sea.

Only actions implementing the core network, the comprehensive network and supporting motorways of the sea can be eligible to EU financial assistance in the form of CEF grants.

For the transport sector, the financial envelope for the implementation of the CEF for the period 2014 to 2020 is set at € 26,250 million, of which € 11,305 million shall be transferred from the Cohesion Fund to be spent exclusively in Member States eligible for funding from the Cohesion Fund.

For the period 2014-2020, the indicative amounts scheduled for the motorways of the sea are €500-900 million, the indicative amounts for new technologies and innovation for all modes are €250-400 million and the indicative amounts for Sustainable Freight Transport Services are €150-200 million.

The CEF grants are managed directly by the Commission, assisted by an Executive Agency.

Annual and multiannual work programmes define calls for proposals.

Eligibility criteria:

- eligible applicants : legal persons of private or public law or bodies or entities which do not have legal personality under the applicable national law, provided that their representatives have the capacity to assume legal obligations on their behalf. Applications must be presented by one or more Member States, and / or with the agreement of the Member States concerned
- eligible projects: only projects which can be identified as projects of common interest identified in the TEN-T Regulation (EU) No 1315/2013 and are economically viable on the basis of a socio-economic cost-benefit analysis; which demonstrate European added value ; and which comply with the EU law ; no EU financial assistance shall be awarded for actions receiving funds from other sources of EU financing; independence of works / studies.

Selection and operational criteria:

The applicant must have the financial capacity to complete the Action for which the grant is sought and will provide their financial statements certified by an external auditor for the last financial year for which the accounts have been closed with the application.

The applicant must have the operational and technical capacity to complete the project for

which the grant is sought and must provide appropriate documents attesting to that capacity.

Information submitted by applicants who benefited from TEN-T support as from 2004 may be taken into account in the evaluation of these applicants' operational capacity.

Award criteria (not exhaustive):

- removal of bottlenecks, enhancing rail interoperability, bridging missing links and improving cross-border sections ;
- the maturity of the action in the project development ;
- soundness of the implementation plan proposed ;
- stimulating effect of the Union support on public and private investment, when applicable ;
- the need to overcome financial obstacles, such as the lack of market finance ;
- when applicable, the economic, social, climate and environmental impact, and accessibility;
- the cross-border dimension, when applicable.

Maximum possible rate of co-funding for grants:

- with regard to grants for studies, 50% of the eligible costs;
- with regard to grants for works:
 - for inland waterways: 20% of the eligible costs; the funding rate may be increased to a maximum of 40% for actions addressing bottlenecks and to a maximum of 40% for actions concerning cross- border sections;
 - for actions supporting new technologies and innovation for all modes of transport: 20% of the eligible costs;
- with regard to grants for telematic applications systems and services:
 - for actions to support the development of motorways of the sea: 30% of the eligible costs.

The funding rates may be increased by up to 10 percentage points over the percentages listed above for actions with synergies between at least two of the sectors covered by the CEF.

Steps of application:

- compliance with formal requirements;
- eligibility and selection criteria;
- compliance with EU legislation ;
- external evaluation : relevance, maturity, impact, quality;
- final selection process (Selection Committee: DG MOVE-DG ENV-INEA);
- approval by Member States; Information of European Parliament;
- Commission Framework Decision;
- grant agreement, signed bilaterally by INEA and beneficiary.

-

- **. Financial Instruments (GSG programme)**

The Commission and EIB are developing a Pan-European Green Shipping Guarantee (GSG) Programme (Programme) designed to promote commercial investment in technologies which both improve energy efficiency and reduce harmful emissions in the European shipping sector (the focus of the Programme will be the reduction of SO_x, NO_x, particulates and CO₂ as well as ballast water handling). The Programme is structured as an EIB/EC (CEF/EFSI) guarantee instrument developed in cooperation with and channelled through Partner Financial Institution(s) or PFI(s) with specialized expertise and dedicated teams in ship finance.

The Programme focuses on green shipping investments, comprising newly built vessels and retrofitting of existing vessels. In particular, the GSG consist of senior and subordinated guarantees in favour of PFIs covering up to: (i) 50% of the principal amount of debt financings relating to new vessels, or (ii) 100% of the principal amount of incremental debt financings relating to the green investment components of a vessel being retrofitted. The guarantee may be requested in relation to senior debt and, under more restrictive conditions, subordinated debt (not exceeding 20% of the investment costs).

The focus of the Programme will be the reduction of SO_x, NO_x, particulates and CO₂ as well as ballast water handling

Investments eligible under the Programme will be investments eligible under EIB's Transport Lending Policy "Waterborne Transport" points 79-99. Any GSG shall relate to investments conforming to the requirements stipulated therein and it is expected that sulphur scrubbers, dual fuel engine technology, propulsion technology, hull treatment, ballast water treatment systems and fuel cell (battery) technologies investments will qualify provided they can meet the demonstrability test referred to below. It is not the intention or the goal of the Programme to prescribe any individual abatement, engine or other technology which is designed to improve a vessel's overall fuel efficiency or prevent pollution at sea. In order to be eligible to GSG support, any of these technologies shall demonstrate a significant reduction in harmful airborne emissions or waterborne discharges (ballast water management technology) and as a strict minimum conform to EU and regulations of the International Maritime Organisation.

In addition to the above, investment projects shall be found to be of significant European interest based on standard EIB criteria for same (??) based, inter alia, on incorporation and/or ownership of the borrower, proposed routes/utilisation of the vessels.

2. European Structural and Investment Funds (ESIF Funds) : regional development, growth, jobs, maritime Europe and fisheries

Regulation (EU) No 1303/2013 of 17 December 2013 lays down the common provisions and general provisions on the European Regional Development Fund (ERDF), the European Social Fund (ESF), the Cohesion Fund and the European Maritime and Fisheries Fund, which operate under a common framework (the 'European Structural and Investment Funds' - 'ESIF').

Thematic objectives

The Regulation establishes 11 thematic objectives in order to contribute to the Union strategy for smart, sustainable and inclusive growth. Among these 11 thematic objectives are:

- thematic objective 4 to support the shift towards a low-carbon economy in all sectors;
- thematic objective 7 to promote sustainable transport and removing bottlenecks in key network infrastructures.

Common Strategic Framework

The Common Strategic Framework ('CSF') establishes strategic guiding principles to facilitate the programming process and the sectoral and territorial coordination of Union intervention under the ESI Funds and with other relevant Union policies and instruments.

The Common Strategic Framework set up coordination and synergies between ESI funds and other union policies and instruments such as:

- Horizon 2020 and other centrally managed Union programmes in the areas of research and innovation.
- Connecting Europe Facility (CEF).

To maximise European added value in the field of transport, Member States and the Commission shall ensure that ERDF and Cohesion Fund interventions are planned in close cooperation with the support provided from the CEF, so as to ensure complementarity, avoid duplication of efforts and ensure the optimal linkage of different types of infrastructure at local, regional and national levels, and across the Union.

Prioritisation of investments which have an impact beyond a certain Member State, particularly those which are part of the core TEN-T network corridors, shall be coordinated with TEN-T planning and core network corridors implementation plans, so that investments by the ERDF and the Cohesion Fund in transport infrastructure are fully in line with the TEN-T Guidelines.

Once identified, investments shall be prioritised according to their contribution to mobility, sustainability, to reducing greenhouse gas emissions, and to the Single European Transport Area, in accordance with the vision set out in the 2011 Transport White Paper, highlighting that a significant reduction in greenhouse gases is required in the transport sector.

European Regional Development Fund (ERDF)

According to Regulation (EU) No 1301/2013 of 17 December 2013 on the European Regional Development Fund and on specific provisions concerning the Investment for growth and jobs goal, the ERDF shall support investment priorities within the thematic objectives set out in the Regulation (EU) No 1303/2013.

Among them are the priorities to promote sustainable transport and remove bottlenecks in key network infrastructures by:

- supporting a multimodal Single European Transport Area by investing in the TEN-T;
- developing and improving environmentally-friendly (including low-noise) and low-carbon transport systems, including inland waterways and maritime transport, and ports.

European territorial cooperation

Regulation (EU) no 1299/2013 of 17 December 2013 defines, for the European territorial cooperation goal, the priority objectives and organisation of the ERDF, the criteria for Member States and regions to be eligible for support from the ERDF, the financial resources available for support from the ERDF, and the criteria for their allocation.

Under the European territorial cooperation goal, the ERDF shall support the following components:

- cross-border cooperation between adjacent regions to promote integrated regional development between neighbouring land and maritime border regions in two or more Member States;
- transnational cooperation over larger transnational territories, involving national, regional and local partners and also covering maritime cross-border cooperation;
- interregional cooperation to reinforce the effectiveness of cohesion policy.

For interregional cooperation, support from the ERDF shall cover the entire territory of the Union.

Resources for the European territorial cooperation goal shall amount to 2,75 % of the global resources available for budgetary commitment from the ERDF, ESF and the Cohesion Fund for the 2014-2020 programming period and are allocated as follows:

- 74,05 % (i.e., a total of EUR 6 626 631 760) for cross- border cooperation;
- 20,36 % (i.e., a total of EUR 1 821 627 570) for transnational cooperation;
- 5,59 % (i.e., a total of EUR 500 000 000) for interregional cooperation.

At least 80 % of the ERDF allocation to each cross-border cooperation and transnational programme shall be concentrated on a maximum of four of the thematic objectives set out in the first paragraph of Article 9 of Regulation (EU) No 1303/2013.

All of the 11 thematic objectives set out in the first paragraph of Article 9 of Regulation (EU) No 1303 /2013 may be selected for interregional cooperation.

Cohesion Fund

The Cohesion Fund, established by Regulation (EU) No 1300/2013 of 17 December 2013, is aimed at Member States whose Gross National Income (GNI) per inhabitant is less than 90 % of the EU average. It aims to reduce economic and social disparities and to promote sustainable development.

It is now subject to the same rules of programming, management and monitoring as the ERDF and ESF through the Common Provisions Regulation.

For the 2014-2020 period, the Cohesion Fund concerns Bulgaria, Croatia, Cyprus, the Czech Republic, Estonia, Greece, Hungary, Latvia, Lithuania, Malta, Poland, Portugal, Romania, Slovakia and Slovenia.

Under the Connecting Europe Facility (CEF), €11.305 billion are available only for projects in Member States eligible for the Cohesion Fund.

Within the thematic objectives set out in the first paragraph of Article 9 of Regulation (EU) No 1303/2013, the Cohesion Fund shall support the investment priorities promoting sustainable transport and removing bottlenecks in key network infrastructures by:

- supporting a multimodal Single European Transport Area by investing in the TEN-T;
- developing and improving environmentally-friendly (including low-noise) and low-carbon transport systems, including inland waterways and maritime transport, ports, multimodal links.

The selection of eligible projects to ESIF follows a scheme descending from general principles (the European Regulation sets thematic objectives and investment priorities) to the national level (a Partnership agreement setting national priorities falling under the European Regulation) to the local level (a management authority that runs the funding and sets its operational programme under the Partnership agreement and regional partnership).

Every project manager (Enterprise, association, local government, etc.) who aims to benefit from ERDF must address its application within the Member State where he is located, to the relevant regional authority which handles the funding. Complementary to eligibility rules prescribed in the Regulation (principles like e. g. the impossibility to fund a project which is already achieved before the date of deposit of the application, or non-eligible projects e.g. airport infrastructures), each regional authority sets the framework of its intervention designing the possible uses of European funding and may constrain the field of eligibility over Regulation limits.

State Aids rules apply to ESIF and may limit the amount and the conditions of the public funding (according to incentive effect of the aid, the rates and amounts of the aid, as well as the type of investment).

3. Horizon 2020 : Research, development and innovation

Horizon 2020 is an €80 billion program (2014-2020) implementing the Innovation Union, as a Europe 2020 flagship initiative with the aim of securing Europe's global competitiveness. Horizon 2020 contributes to build a society and an economy based on knowledge and innovation across the Union by leveraging additional research, development and innovation funding and by contributing to research and development targets.

Horizon 2020 is structured around three pillars;

- Excellent science, € 24, 441 million ;
- Industrial leadership, € 17, 015 million ;
- Societal challenges, € 29, 679 million.

Horizon 2020 - Framework Programme for Research and Innovation (2014-2020) is established by Regulation (EU) No 1291/2013 of 11 December 2013.

Complementarity with other Union programmes

Horizon 2020 shall be implemented in a way which is complementary to other Union funding programmes and policies, including the European Structural and Investment Funds (ESI Funds), the Common Agricultural Policy, the Programme for the Competitiveness of Enterprises and small and medium-sized enterprises (COSME) (2014-2020), the Erasmus+ programme and the Life Programme.

Pillar Societal challenges

The societal challenges pillar responds directly to the policy priorities and societal challenges that are identified in the Europe 2020 strategy and that aim to stimulate the critical mass of research and innovation efforts needed to achieve the Union's policy goals.

Transport research and innovation is founded within the challenge "*Smart, green and integrated transport*" and is focused on the objective of achieving a European transport system that is resource-efficient, climate- and environmentally-friendly, safe and seamless for the benefit of all citizens, the economy and society.

Research and innovation targets timely advance for all transport modes that will help achieve key Union policy objectives, while boosting economic competitiveness, supporting the transition to a climate-resilient, energy-efficient and low-carbon economy, and maintaining global market leadership both for the service industry as well as the manufacturing industry.

Priorities topics for Research, and Innovation, including within the waterborne transport sector are selected following wide stakeholders consultation, including with the public, member states, stakeholder organisations such as the Waterborne Technology Platform and "Vessels for the Future".

Forthcoming topics and their expected impacts are published within a biannual work programme. In addition to the challenge "*Smart, green and integrated transport*", support towards waterborne transport related to research and innovation can be provided within the Horizon 2020 SME instrument and linked challenges with actions relating to Industrial Technologies, Blue Growth, Energy and Marie Skłodowska-Curie research training actions.

All information concerning opportunities and how to apply are provided within the Horizon 2020 participant portal. Information on the range of projects already supported can be found on the Transport Research and Innovation Portal (TRIP)

Useful link:

[Horizon 2020 participant portal:](#)

<http://ec.europa.eu/research/participants/portal/desktop/en/home.html>

[Transport Research and Innovation Portal \(TRIP\) : http://www.transport-research.info/](http://www.transport-research.info/)

How does Horizon 2020 works?

Horizon 2020 funding is based on competitive calls that are open to everyone, also to (some) organisations or individuals outside the EU. Projects are selected on the basis of a list ranked by score following a system of independent peer review.

Participants from countries associated to the EU research framework programme² have the same rights as EU participants; for other countries, the situation varies. It is up to individual researchers, research organisations, companies or other organisations to decide whether to get

² Albania, Bosnia and Herzegovina, Faroe Islands, the former Yugoslav Republic of Macedonia, Iceland, Israel, Moldova, Montenegro, Norway, Serbia, Tunisia, Turkey and Ukraine and Switzerland (partial association).

involved.

Horizon 2020 is available in several types of action. The type of action varies according to the size of the project, the reimbursement rate and a possible specific eligibility criteria. The different types of action are:

- Research and innovation actions (RIA): research projects tackling clearly defined challenges, which can lead to the development of new knowledge or a new technology. Participants: consortia including at least three partners from three different EU or H2020 associated states ;
- Innovation actions (IA): more focused on closer-to-the-market activities (prototyping, testing, demonstrating, piloting, scaling-up, etc., if they aim at producing new or improved products or services. Participants: consortia including at least three partners from three different EU or H2020 associated states.
- Coordination and support actions (CSA): coordination and networking of research and innovation projects, programmes and policies. Funding for research and innovation per se is covered elsewhere. Participants: single entities or consortia of partners from different countries, industry and academia ;
- Marie Skłodowska-Curie actions: international research fellowships in the public or private sector, research training, staff exchanges. Participants: early stage researchers or experienced researchers (of any nationality), technical staff, national/regional research mobility programmes ;
- SME Instrument: dedicated to highly innovative SMEs with the ambition to develop their growth potential and offering lump sums for feasibility studies, grants for an innovation project's main phase (demonstration, prototyping, testing, application development...); lastly, indirectly support of the commercialisation phase through facilitated access to debt and equity financial instruments. Participants: only SMEs, either a single SME or a consortium of SMEs established in an EU or associated country ;
- Fast track to innovation (pilot action): continuously open, innovator-driven calls targeting innovation projects addressing any technology or societal challenge field. Participants: industry, including SMEs, with a minimum of 3 and maximum of 5 partners.

There is one single funding rate for all beneficiaries and all activities in the research grants. EU funding covers up to 100 % of all eligible costs for all research and innovation actions. For innovation actions, funding generally covers 70 % of eligible costs, but may increase to 100 % for non-profit organisations. Indirect eligible costs (e.g. administration, communication and infrastructure costs, office supplies) are reimbursed with a 25 % flat rate of the direct eligible costs (those costs directly linked to the action implementation).

How to apply?

Work programmes announce the specific research and innovation areas that will be funded and all information is accessible through the Participant Portal (<http://ec.europa.eu/research/participants/portal/desktop/en/home.html>). The Participant Portal provides easy-to-follow guidance and all the tools needed to apply for funding and manage projects throughout their lifecycle. It covers every type of research and innovation action. Proposals must be submitted before the deadline of the relevant call. The Participant Portal provides clear instructions. All proposals must be submitted online only, no more paper.

Objectives of " Smart, green and integrated transport"

Europe has set a policy target of achieving a 60 % reduction of CO₂ by 2050 compared to 1990 levels. CO₂ emissions from maritime bunker fuels should be reduced by 40 % by 2050 compared to 2005 levels. It is essential to reduce this environmental impact through targeted technological improvement taking into account the specific technology integration cycles of the maritime sector. Research and innovation will substantially contribute to the development and take-up of the necessary solutions, which will drastically reduce emissions that are harmful to the environment, lower the dependence of transport on fossil fuels, and hence reduce transport impact on biodiversity and climate change, and preserve natural resources.

Research and innovation are to increase the use of waterborne transport within low carbon intermodal supply chains. Making vessels cleaner and quieter to improve environmental performance and reduce perceived noise and vibration. as well as better exploiting waterborne transport within .

The activities in this domain are focused on the end products, but are also addressed to lean and ecological design and manufacturing processes, considering the entire life cycle process and with recyclability integrated in the design phase. Activities cover also the upgrading of existing products and services by integration of new technologies such as:

- (a) Developing and accelerating the take-up of cleaner and quieter propulsion technologies important for reducing or eliminating impacts on climate and health of European citizens, e.g. CO₂, noise and pollution. Necessity of new and innovative solutions, based on electric engines and batteries, hydrogen and fuel cells, gas-powered engines, advanced architectures and technologies in engines or hybrid propulsion. Improvement, through technological breakthroughs, of the environmental performance of traditional and new propulsion systems;
- (b) Exploring options for the use of low emission alternative energies in order to reduce the consumption of fossil fuels: using of sustainable fuels and electricity from renewable energy sources, reducing fuel consumption through energy harvesting or diversified energy supply and other innovative solutions. Pursue of new holistic approaches encompassing vehicles, energy storage, energy supply, fuelling and charging infrastructure, including vehicle-to-grid interfaces and innovative solutions for the use of alternative fuels;
- (c) Contribution to lower fuel consumption by improving the overall performance of vessels by reducing their weight and lowering their aerodynamic/ hydrodynamic resistance by using lighter materials, leaner structures and innovative design.

Examples of topics and calls already launched

- (a) 2014: 3 calls, total budget: €56.0 million.
 - > MG.4.1-2014. Towards the energy efficient and very-low emission vessel (IA).
 - > MG.4.2-2014. Safer and more efficient waterborne operations through new technologies and smarter traffic management (IA).
 - > MG.4.4-2014. Advancing innovation in the Inland Waterways Transport (IWT) sector (RIA).
- (b) 2015: 1 call, total budget: €18.0 million.
 - > MG.4.3-2015. System modelling and life-cycle cost and performance optimisation for waterborne assets (RIA).

- (c) 2016: 2 calls, total budget: €38.0 million.
 - > MG-2.2-2016: Development, production and use of high performance and lightweight materials for vessels and equipment (IA).
 - > MG-2.3-2016: New and improved transport concepts in waterborne transport (RIA).
- (d) 2016: 2 calls, total budget: €40.0 million.
 - > MG-2.1-2017: Innovations for energy efficiency and emission control in waterborne transport (IA).
 - > MG-2.4-2017: Complex and value-added specialised vessels (IA).

Other calls can concern shipping and waterborne. There are, for example, calls in pillar II Industrial Leadership concerning materials or ICT that may interest the maritime sector. Information is accessible and fully searchable through the Participant Portal and its search topics system.

- **4) LIFE : environment and climate action**

LIFE is the EU's financial instrument supporting environment, nature conservation and climate action projects throughout the EU.

The LIFE Programme is structured in 2 sub-programmes: the sub-programme for the environment and the sub-programme for climate action. Each sub-programme covers 3 priority domains:

- for the sub-programme for the environment (75% of the overall budget for 2014-2020)
 - LIFE Environment and Resource efficiency;
 - LIFE Nature and Biodiversity;
 - LIFE Environmental Governance and Information.
- for the sub-programme for climate action (25% of the overall budget for 2014-2020)
 - LIFE Climate Change Mitigation;
 - LIFE Climate Change Adaptation; o
 - LIFE Climate Governance and Information.

The LIFE Programme is established by Regulation (EU) No 1293/2013 of 11 December 2013. The Regulation is implemented by the multiannual work programme for 2014-2017 and the publication each year of guidelines for the applicants which specify the EU policy priorities that the proposals should address.

For the 2nd phase of the LIFE programme (2018-2020), the EU policies priorities could be added to forthcoming multiannual work programme, and no longer be revised each year.

The financial envelope for the implementation of the LIFE Programme for the period from 2014 to 2020 is set at €3, 456 million in current prices.

The budgetary breakdown for the sub-programmes shall be as follows:

- €2, 592 million of the overall financial envelope shall be allocated to the sub programme for Environment;
- €864 million of the overall financial envelope shall be allocated to the sub-programme for Climate Action.

With a view to contributing to the reduction of greenhouse gas emissions, the priority area Climate Change Mitigation in particular has the specific objective to contribute to the development and demonstration of innovative climate change mitigation technologies, systems, methods and instruments that are suitable for being replicated, transferred or mainstreamed.

The sub-programme for Climate Action includes also a priority on Climate Governance and Information.

The Commission and the Member States shall ensure that support from the LIFE Programme is consistent with the policies and priorities of the Union and complementary to other financial instruments of the Union while also ensuring that simplification measures are implemented.

Action grants may finance pilot projects, demonstration projects, best practice projects, integrated projects, technical assistance projects, capacity-building projects, preparatory projects, information, awareness, and dissemination projects.

The LIFE multi-annual work programme for 2014-2017 has been adopted by a Commission Decision on 19 March 2014. The total budget for funding projects during the period covered amounts to €1.3billion under the sub-programme for Environment and €0.44 billion under the sub-programme for Climate Action.

Under the sub-programme for Climate Action, the LIFE multiannual work programme will contribute to the transformation of the Union into a low carbon society, a central part of the Europe 2020 climate and energy package. Emerging climate mitigation technology will be facilitated through extended piloting and integrative demonstration.

Traditional projects under the sub-programme for Climate Action could get 60% co-financing during this multi-annual work programme.

<http://ec.europa.eu/environment/life/about/#mawp>

Maximum possible rate of co-funding for grants

The maximum EU co-financing rate for LIFE action grant projects is 60% of the total eligible project costs (75% for projects targeting priority habitats & species).

Useful link (national contacts): <http://ec.europa.eu/environment/life/contact/nationalcontact/>

Eligibility

- **applicants:** a proposal to the LIFE programme can be submitted by any legal person registered in the European Union; public bodies, private commercial organisations or private non-commercial organisation (incl. NGOs).

- **projects:** only projects with a strong EU added-value and contributing to the enforcement of

EU legislation, cost-effective approach and projects technically and financially coherent³.

- **costs:** Any costs incurred before the project's starting date will not be considered eligible and cannot be included in the project budget.

*Generic selection criteria*The project must:

- contribute to one or several of the general objectives set out in the LIFE Regulation;
- fall within the scope of at least one of the priority areas of the concerned LIFE sub-programmes;
- take place in the territory of the EU;
- correspond to one of the project types defined above.

The applicant(s) must have the professional competencies and qualification required to complete the project.

Specific selection criteria for the LIFE Climate Action components : the proposal can be rejected if it doesn't comply with all the relevant criteria that apply to its particular component.

Award Phase:

All proposals that have passed the Opening and Technical selection phase are admitted to an in-depth evaluation of their quality in the Award Phase using a specific criteria and scoring system:

1. Technical coherence and quality;
2. Financial coherence and quality;
3. EU added value: extent and quality of the contribution to the specific objectives of the priority areas of the LIFE sub-programme for Environment;
4. Contribution to the project topics;
5. EU added value: multipurpose, synergies, and integration

³ The LIFE regulation differentiates between several types of projects, depending on their size and objectives:

- Traditional projects may be innovative projects, best-practices projects, pilot projects or information, awareness and dissemination projects;
- Integrated projects implementing on a large territorial scale (regional, multi-regional, national or transnational scale) climate action plans, strategies or roadmaps required by specific Union climate legislation, developed pursuant to other Union acts or developed by Member States' authorities;
- Preparatory projects to help applicants prepare integrated projects;
- Capacity building project to support the activities required to build the capacity of Member States;

6. EU added value: replicability and transferability;
7. EU added value: transnational, green procurement, uptake.

A project proposal has to reach at least the minimum pass score for each award criterion, and the sum of scores for criteria for which a minimum score has been fixed has to be equivalent to 55 points (out of a maximum of 100) or more.

Admissibility and exclusion phase

Proposals that have not been rejected after the first two phases are checked for the compliance with general eligibility criteria: availability of relevant signed forms, whether the coordinating beneficiary is registered in the EU....

Financial selection phase

Proposals that have not been rejected after the previous phases are checked for compliance with financial selection criteria.

Revision phase

At the end of the Award Phase, the Contracting authority establishes a ranking list composed of approved projects. The proposals listed on the preliminary long list of projects accounting for 100% of the available budget enter into the revision phase.

The aim of the revision phase is to clarify, for the proposals listed on the award list, all open questions regarding feasibility, cost-effectiveness and eligibility of individual actions, compliance with the LIFE Regulation and Common Provisions of the LIFE Model Grant Agreement.

The final step for successful application: the grant agreement will be signed bilaterally by the Contracting Authority and beneficiary.

- 5) State Aid

Reminder

Aids granted by States (Treaty on the Functioning of the European Union)

Article 107

1. Save as otherwise provided in the Treaties, any aid granted by a Member State or through State resources in any form whatsoever which distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods shall, in so far as it affects trade between Member States, be incompatible with the internal market.

2. The following shall be compatible with the internal market:

(a) aid having a social character, granted to individual consumers, provided that such aid is granted without discrimination related to the origin of the products concerned;

(b) aid to make good the damage caused by natural disasters or exceptional occurrences;

(c) aid granted to the economy of certain areas of the Federal Republic of Germany affected by the division of Germany, in so far as such aid is required in order to compensate for the economic disadvantages caused by that division. Five years after the entry into force of the Treaty of Lisbon, the Council, acting on a proposal from the Commission, may adopt a decision repealing this point.

3. The following may be considered to be compatible with the internal market:

(a) aid to promote the economic development of areas where the standard of living is abnormally low or where there is serious underemployment, and of the regions referred to in Article 349, in view of their structural, economic and social situation;

(b) aid to promote the execution of an important project of common European interest or to remedy a serious disturbance in the economy of a Member State;

(c) aid to facilitate the development of certain economic activities or of certain economic areas, where such aid does not adversely affect trading conditions to an extent contrary to the common interest;

(d) aid to promote culture and heritage conservation where such aid does not affect trading conditions and competition in the Union to an extent that is contrary to the common interest;

(e) such other categories of aid as may be specified by decision of the Council on a proposal from the Commission.

In its first progress report from the Commission on the implementation of the Sustainable Waterborne Transport Toolbox, the European Commission has stated the conditions for the

application of the Community Guidelines on State aid for environmental protection to support early adaptation to the new environmental standard. Accordingly, Member States wishing to provide support to operators affected by the low sulphur standard introduced by Directive 2012/33/EU may grant State aid for:

- The acquisition of new ships that comply with the new sulphur limits provided that acquisition takes place until one year before the new standard entered into force, i.e. until 31 December 2013. The maximum aid intensity is 10%, 15% and 20%, respectively for large, medium and small-sized companies;
- Retrofitting of existing vessels in order to comply with the new sulphur limits (e.g. installation of scrubbers) before the new standard entered into force, i.e. until 31 December 2014. The maximum aid intensity is 50%, 60%, and 70%, respectively for large, medium, and small-sized companies.

This progress report should be updated, taking into account the new regime on state aids which could be applied to LNG projects following the publication of various texts in June 2014, in application of the Treaty on the Functioning of the European Union.

The Treaty on the Functioning of the European Union lays down the principle that any aid granted by a Member State or through State resources in any form shall be incompatible with the internal market (art.107). But the Council, on a proposal from the Commission and after consulting the European Parliament, may make any appropriate regulations for the application of this principle and may determine the categories of aid which can be exempted (art.109). The Commission may adopt regulations relating to the categories of State aid that the Council has determined (art.108).

Council Regulation (EC) No 994/98 empowers the Commission to declare, in accordance with Article 109 of the Treaty, that the following categories may, under certain conditions, be exempted from the notification requirement: aid to small and medium-sized enterprises (SMEs), aid in favour of research and development, aid in favour of environmental protection, employment and training aid and aid that complies with the map approved by the Commission for each Member State for the grant of regional aid.

In this legal framework, the European Commission has adopted the Commission Regulation (EU) No 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty. Regional aid, aid for environmental protection and aid for research and development and innovation, which seem to be relevant for LNG projects, are covered by this Regulation.

The framework for State aid for research and development and innovation is laid out in the Commission Communication (2014/C 198/01), published on 27 June 2014.

The Guidelines on State aid for environmental protection and energy 2014-2020 (EEAG) are set up by the Commission Communication (2014/C 200/01), published on 28 June 2014.

The Guidelines on regional State aid for 2014-2020 are set up by the Commission Communication (2013/C 209/01), published on 23 July 2013.

Framework on state aid to shipbuilding 2011/C 364/06 by which the EC may authorise aid to shipyards or, in the case of export credits, aid to ship owners, which is granted for building, repair or conversion of ships, as well as innovation aid granted for the construction of floating and moving offshore structures.

- **6) European Investment Bank mechanisms**

The European Investment Bank (EIB) provides financial support to the commercial shipping sector. Particular attention is given to projects that better assist the sector to cope with the environmental challenges and encourage, in line with EU legislation, the development of clean technology, and increased fuel efficiency as well as more concentrated effort in the safe and environmentally efficient methods of phasing out older and less fuel efficient vessels.

EIB Transport Lending Policy

The EIB Transport Lending Policy adopted on 13 December 2011 states that lending for inland waterway, port, logistics and maritime projects are also prioritized in support of sustainable transport solutions. Shipping projects are subject to particular scrutiny with respect to the procurement, supplier and operating arrangements.

The developments of LNG infrastructure and LNG vessels are in the specific criteria established by EIB for the waterborne transport. The objective is to comply with the Annex VI of MARPOL convention covering air pollutant emissions from ships, and the sulphur content of fuels.

EU projects are also in the scope of the considerations of the EIB regarding the European aspects of shipping: vessels will be operated under an EU flag to ensure compliance with the European safety, operating and environmental rules. All EU projects related to LNG will adhere to all EU and IMO safety and environmental rules and regulations with regard to the construction and operation of vessels.

The EU projects will be in full compliance with the Intellectual Property Rights, the trade agreements and the competitive practices, as quoted in the Transport Lending Policy of the EIB. A particular attention is given to perform the projects in European shipyards.

There is a need to examine with the EIB experts the possibilities for operators, either ship-owners or port operators to apply for an EIB loan in the framework of the EU programmes..

In this domain, two types of EIB interventions should be examined: applying for a loan in the framework of the EIB products, including applying for an EU/EIB finance support through intermediary banks/financial institutions, and EIB intervention in the framework of EU risk-sharing financial instruments, including the possibility to apply for a project bond.

Project Bonds Credit Enhancement and the Project Bond Initiative

The Project Bond Initiative is a joint initiative by the European Commission and the EIB, whose objective is to stimulate capital market financing for large-scale infrastructure projects in the sectors of transport (TEN-T), energy (TEN-E) and information and communication technology (ICT). The Project Bond initiative is designed to enable eligible infrastructure projects promoters, usually public private partnerships (PPP), to attract additional private finance from institutional investors such as insurance companies and pension funds.

For example, a transport project could be planned by a group of companies (sponsors) and tendered by public authorities. The sponsors create a project company to raise the financing, construct and operate the project for a period agreed with the public authorities. The sponsors provide own funds to the project company in the form of equity and shareholder loans. The

remaining financing is raised by the project company in the form of debt, traditionally in the form of a bank loan. Instead of using traditional bank lending, the project company could raise the senior debt through project bond issues. Capital market investors would buy the bonds if an investment grade credit rating, preferably at least A-, could be achieved. The Project Bonds Credit enhancement, which is the financial instrument of the Project Bond Initiative, is described in the following document : "[An outline guide to Project Bonds Credit Enhancement and the Project Bond Initiative](#)" (2012).

This EU financial instrument is most suitable for large projects, with a capex of over €100 million, where administrative costs can be split over the high value of the projects.

EIB Climate strategy

The European Investment Bank adopted its Climate Strategy on 22nd September 2015, following a comprehensive review, including a formal public consultation that was launched in January 2015.

The document *EIB Climate Strategy - Mobilising finance for the transition to a low-carbon and climate-resilient economy* presents a forward looking statement describing the Bank's future direction and developments of its climate action.

The Climate Strategy is structured around three strategic action areas that serve as guiding orientations for the Bank's future climate action: i) reinforcing the impact of EIB climate financing, ii) increasing resilience to climate change, and iii) further integrating climate change considerations across all of the Bank's standards, methods and processes. Within each of these strategic action areas, various operational initiatives are introduced, such as innovative financial instruments, outreach and cooperation with stakeholders, the development of standards and methodologies and the provision of advisory services.

The Bank will continue to dedicate a minimum of 25% of its financing to specific climate action projects.

Effective climate action, however, is about more than just finance volumes: it requires to steer the EIB activities and financing towards those initiatives and projects which have the highest impact. This action area therefore focuses on how the EIB can further increase the impact of its activities.

The EIB sees the impact of its climate finance along three main dimensions:

- Investing in projects which bring significant mitigation or adaptation gains;
- Catalysing and mobilising additional climate finance from a range of sources;
- Reducing financial and non-financial barriers to the investments needed for the transition to a low-carbon resilient economy.

Not all sectors have the same impacts on climate. One way EIB ensures that its lending portfolio is compatible with EU policies and emissions reduction pathways is through the application of climate sensitive sector screening criteria in major sectors. The most relevant sectors, due to their share in EIB financing and the underlying project typology, are energy and transport, which are both covered by publicly consulted and published EIB sector policies that apply both within and outside the EU.

The Bank has included the transport sector in the list of eligible sectors under climate action. All transport projects (apart from road and air) that result in the reduction of GHG emissions in aggregate through modal shift and/or more efficient operation in a single mode. Examples of eligible projects would be (i) for fixed assets, urban mass transit, inter-urban rail, inland waterway as well as intermodal and short sea shipping facilities, and (ii) for movable assets, replacement and refurbishment including the retrofitting of elements to achieve better energy efficiency.

Application

Lending is by far the EIB principal activity, accounting for around 90% of its total financial commitment. EIB lends to clients of all sizes to support sustainable growth and jobs. Its support is often central to attracting other investors.

Below is a list of its main lending activities:

- project loans, for large developments in excess of EUR 25m;
- Intermediated loans, made via local banks;
- Venture capital, helping fund managers invest in high-tech and growth SMEs;
- Microfinance, has benefited from their long term commitment
- Equity & fund investment, to catalyse further activity

A full list of products and services offered by the EIB can be found in the Products section of the EIB web site.

The EIB finances projects in most sectors. To be eligible projects must contribute to EU economic policy objectives.

No special formalities are involved for the submission of applications to the EIB for individual, loans. Project promoters are required simply to provide the Bank's Operations Directorate with a detailed description of their capital investment together with the prospective financing arrangements.

Initial contacts to discuss a proposed project can be in any form, by telephone, fax, e-mail or letter. The project promoter should provide sufficient information to allow the EIB to assess whether the project adheres to EIB lending objectives and has a well-developed business plan.

For projects where the total cost is under EUR 25 million, the EIB provides intermediated loans (credit lines) to local, regional and national banks.

The lending decision for EIB loans via credit lines remains with the financial intermediary. Promoters interested in EIB financing for projects under EUR 25 million should contact the banks and other intermediaries involved directly with a detailed description of their capital investment together with the prospective financing arrangements.

- 7) European Fund for Strategic Investments (EFSI) : strategic investments

The purpose of the EFSI is to support, in the European Union, through the supply of risk-bearing capacity to the EIB, the following:

- investments;
- increased access to financing for entities having up to 3 000 employees, with a particular focus on SMEs and small mid-cap companies.

The EFSI has been established by Regulation (EU) 2015/1017 of 25 June 2015 on the European Fund for Strategic Investments, the European Investment Advisory Hub and the European Investment Project Portal and amending Regulations (EU) No 1291/2013 and (EU) No 1316/2013 — the European Fund for Strategic Investments.

This Regulation also establishes the EFSI, an EU guarantee and an EU guarantee fund. In

addition, this Regulation establishes a European Investment Advisory Hub (EIAH) and a European Investment Project Portal (EIPP). It provides for the Commission to conclude an agreement with the European Investment Bank (EIB) on the EFSI and an agreement with the EIB on the implementation of the EIAH.

For the purposes of this Regulation, "additionality" means the support by the EFSI of operations which address market failures or sub-optimal investment situations and which could not have been carried out in the period during which the EU guarantee can be used, or not to the same extent, by the EIB, the EIF or under existing Union financial instruments without EFSI support. Projects supported by the EFSI shall typically have a higher risk profile than projects supported by EIB normal operations and the EFSI portfolio shall have overall a higher risk profile than the portfolio of investments supported by the EIB under its normal investment policies before the entry into force of this Regulation.

Eligibility criteria for the use of the EU guarantee

The EFSI Agreement shall provide that the EFSI is to support projects which:

- are economically viable according to a cost-benefit analysis following Union standards, taking into account possible support from, and co-financing by, private and public partners to a project;
- are consistent with Union policies, including the objective of smart, sustainable and inclusive growth, quality job creation, and economic, social and territorial cohesion;
- provide additionality; maximise where possible the mobilisation of private sector capital; and
- are technically viable.

EU guarantee

The Union shall provide an irrevocable and unconditional guarantee to the EIB for financing and investment operations covered by this Regulation and by the EFSI Agreement (EU guarantee) where those operations:

(a) are carried out within the Union; or

(b) involve entities located or established in one or more Member States and extend to one or more third countries falling within the scope of the European Neighbourhood Policy, including the Strategic Partnership, the enlargement policy, the European Economic Area or the European Free Trade Association, or to an overseas country or territory as set out in Annex II to the TFEU, whether or not there is a partner in those third countries or overseas countries or territories.

Requirements for the use of the EU guarantee

The EU guarantee shall be granted for EIB financing and investment operations approved by the Investment Committee. The operations concerned shall be consistent with Union policies and support any of the following general objectives:

- research, development and innovation;
- development of the energy sector in accordance with the Energy Union priorities, including security of energy supply, and the 2020, 2030 and 2050 climate and energy frameworks;
- development of transport infrastructures, and equipment and innovative technologies for transport;
- financial support through the EIF and the EIB to entities having up to 3 000 employees, with a particular focus on SMEs and small mid-cap companies.

The initial investment period during which the EU guarantee may be granted for supporting financing and investment operations covered by this Regulation shall last until:

- 5 July 2019, for EIB operations for which a contract between the EIB and the beneficiary or financial intermediary has been signed by 30 June 2020;
- 5 July 2019, for EIF operations for which a contract between the EIF and the financial intermediary has been signed by 30 June 2020.

Eligible instruments

The following instruments shall be eligible for coverage by the EU guarantee:

- EIB loans, guarantees, counter-guarantees, capital market instruments, any other form of funding or credit enhancement instrument, equity or quasi-equity participations, including in favour of national promotional banks or institutions, investment platforms or funds;
- EIB funding or guarantees to the EIF enabling it to undertake loans, guarantees, counter-guarantees, any other form of credit enhancement instrument, capital market instruments and equity or quasi-equity participations, including in favour of national promotional banks or institutions, investment platforms or funds;
- EIB guarantees to national promotional banks or institutions, investment platforms or funds under a counter-guarantee of the EU guarantee.

European Investment Advisory Hub

The European Investment Advisory Hub (EIAH) shall have as its objective to build upon existing EIB and Commission advisory services in order to provide advisory support for the identification, preparation and development of investment projects and to act as a single technical advisory hub for project financing within the Union. Such support shall include providing targeted support on the use of technical assistance for project structuring, on the use of innovative financial instruments and on the use of public-private partnerships and advice,

as appropriate, on relevant issues relating to Union law, taking into account the specificities and needs of Member States with less-developed financial markets.

The Advisory Hub consists of three complementary components:

- A single point of entry to a wide range of advisory and technical assistance programmes and initiatives for public and private beneficiaries, provided by high-level experts
- A cooperation platform to leverage, exchange and disseminate expertise among the EIAH partner institutions and beyond
- An instrument to assess and address new needs by reinforcing or extending existing advisory services or creating new ones as demand arises.

European Investment Project Portal

The European investment project portal (EIPP) gathers current and future investment projects in the Union. It shall constitute a publicly accessible and user-friendly project database, providing relevant information for each project.

The inclusion of projects in the EIPP shall be without prejudice to the decisions on the final projects selected for support under this Regulation, under any other instrument of the Union, or for public funding.

The purposes of the EIPP are to:

- Provide clear information on investment opportunities in Europe through a standardised online database.
- Give clarity and confidence to investors - particularly long term investors - to help them find projects.
- Identify possible projects where advisory support could add value.

a) **IV. GENERAL QUESTIONS AND COMPATIBILITY
BETWEEN EU FUNDS**

Under which conditions does the MoS horizontal priority of the TEN-T/CEF integrate the objectives of Marco-Polo system?

The Motorways of the Sea (MoS) represent a maritime dimension of the TEN-T policy, and are specifically referred to in Article 21 of the TEN-T Guidelines⁴: [MoS] "shall contribute towards the achievement of a European maritime transport space without barriers. They shall consist of short-sea routes, ports, associated maritime infrastructure and equipment, and facilities as well as simplified administrative formalities enabling short-sea shipping or sea-river services to operate between at least two ports, including hinterland connections."

Article 21 sets out general criteria for projects of common interest for Motorways of the Sea in the trans-European transport network, which shall in principle be characterised by:

- a) a maritime link and its hinterland connections within the core network between two or more core network ports; or
- b) a maritime link and its hinterland connections between a core network port and ports of the comprehensive network, with a special focus on the hinterland connections of the core and comprehensive network ports; and/or also
- c) activities that have wider benefits.

In accordance with the Regulation on Connecting Europe Facility⁵ actions addressed by the Motorways of the Sea may concern studies, studies with pilot activities as well as a combination of studies and works. These include in principle the infrastructure development in ports, upgrade of sea-based transport services integrated in logistics chain and the promotion of "wider benefits" of the MoS development.

The concept of TEN-T MoS sea-based transport services show some similarities to the former Marco Polo programme, especially in terms of environmental aspects and comprehensive perception of those services as a part of a logistics chain. However, in general TEN-T MoS vary substantially from Marco Polo, which ran as a separate programme covering all modes of transport (except air), contributing to its own policy objectives (modal shift, traffic avoidance), and being based on a different funding design⁶. Therefore, Article 21 of the TEN-T Guidelines does not provide any specific reference to Marco Polo.

As far as the TEN-T support for the sustainable freight transport services is concerned, it is referred to in Article 32 of the TEN-T Guidelines, and addresses the services that "*use the*

⁴ Regulation (EU) no 1315/2013 of the European Parliament and of the Council of 11 December 2013 on Union guidelines for the development of the trans-European transport network and repealing Decision No 661/2010/EU

⁵ Regulation (EU) No 1316/2013 of the European Parliament and of the Council of 11 December 2013 establishing the Connecting Europe Facility, amending Regulation (EU) No 913/2010 and repealing Regulations (EC) No 680/2007 and (EC) No 67/2010

⁶ Regulation (EC) no 1382/2003 of the European Parliament and of the Council of 22 July 2003 on the granting of Community financial assistance to improve the environmental performance of the freight transport system (Marco Polo Programme), and Regulation (EC) no 1692/2006 of the European Parliament and of the Council of 24 October 2006 establishing the second 'Marco Polo' programme for the granting of Community financial assistance to improve the environmental performance of the freight transport system (Marco Polo II) and repealing Regulation (EC) No 1382/2003

infrastructure of the comprehensive network and contribute to reducing carbon dioxide emissions and other negative environmental impacts of transport. ”

Since the Sustainable Freight Transport Services form an internal part of the TEN-T/CEF framework, they cannot be considered as a direct continuation of the Marco Polo programme. Article 32 proposes a broad range of measures focused on improving efficiency and sustainability of freight transport services, and in this sense it also represents a very distinct approach from the classic Marco Polo modal shift orientation.

Freight Transport Services constituted one of the funding priorities in the 2014 Annual Call for Proposals, providing support for actions aiming at modal shift, increased multimodality, supply chains improvements, collaborative approaches in logistics, traffic avoidance and small-scale technical and organisational improvements of the fleets. This approach was conceived to target smaller industry projects, in order to demonstrate that smart funding at a limited scale may bring a considerable change in terms of efficiency of logistics operations, thus setting best practices for further replication by the market. In this respect, this approach could be seen as complementary to classic TEN-T funding usually focused on core network corridors and bigger scale infrastructure, and in particular to the specific TEN-T MoS priority addressing the maritime dimension of transport.

In addition, Article 32 of the TEN-T guidelines may ideally serve as a reference for the implementation of the CEF innovative financial instruments, including the Green Shipping Financing Tool, being currently developed to support the European shipping sector.

"Ecobonus style" instrument and a smart application of the polluter/payer principle to the benefit of maritime transport industry

The Freight Transport Services priority under the 2014 CEF call for proposals included an action type supporting modal shift operations. This action allowed also for "Ecobonus" type of projects: "Investments in infrastructure, superstructures and equipment (including on-board equipment) enhancing the efficiency of freight transport operations services and optimising the use of the transport infrastructure by shifting cargo to more sustainable modes. General, sustainable schemes aiming at partly reimbursing the cost of modal shift incurred by trucks (eco-bonus) are also admissible under this type of actions". However, no proposal from the maritime sector was submitted for this type of funding.

Instead, a project proposal for a study "Med-Atlantic Ecobonus" was submitted and selected in the same CEF calls under the Motorways of the Sea priority. "Med-Atlantic Ecobonus" focuses on exploring the modalities of a regional Ecobonus type of incentive. Results of this project will be taken in due account in the policy making.

As regards new arrangements to improve the competitiveness of the short sea shipping sector, they are currently being evaluated in the context of a study on Short Sea Shipping aimed at:

- providing an analysis of the trends in EU shipping and Short Sea Shipping at a

regional, national and local level

- analysing the main factors affecting the development and evolution of Short Sea Shipping in the EU and proposing appropriate policy actions
- addressing obstacles that today are still hampering the exploitation of the full potential of Short Sea Shipping.

In addition, the Commission is also carrying out a study to investigate the role that differentiated port charging could have in improving the environmental performance of maritime shipping. The specific objectives of the study are to:

- update information and data of EU and worldwide existing practices' inventories;
- examine the benefits and costs, including the economic aspect and environmental potential, of certain schemes, and identify good practices;
- develop guidelines and practical options for the voluntary application of environmental charging principles in European ports.

CEF and ERDF

Framework conditions for the support under the CEF, ERDF and Cohesion Fund are stipulated in their legal bases⁷. Given the specificity of each project, the eligibility criteria are normally assessed on a case by case basis.

As for the ERDF and Cohesion Fund (as well as the other European Structural and Investment Funds), the eligibility conditions of transport infrastructure projects are developed by the competent national or regional authorities based on the priorities of the respective Partnership Agreements and operational programmes established by the EU Member States or regions in agreement with the European Commission.

As far as the grants from the Connecting Europe Facility are concerned, they target projects on the Core Network and in particular on its corridors. The budget available for projects on the comprehensive network is very limited and focused mainly on cross-border projects. For ports, comprehensive ports projects can be included in Motorways of the Sea actions including at least a port of the Core Network. Since the CEF is constrained, support to ports will target in particular the development of interconnections with rail and inland waterway infrastructure, or the deployment of alternative fuels infrastructure.

Generally, it is not possible to finance the same costs from different EU grant programmes. Unlike for grants, all port projects on the Core and comprehensive network are eligible for support

⁷ Regulation (EU) No 1316/2013 of the European Parliament and of the Council of 11 December 2013 establishing the Connecting Europe Facility, amending Regulation (EU) No 913/2010 and repealing Regulations (EC) No 680/2007 and (EC) No 67/2010, Regulation (EU) No 1301/2013 of the European Parliament and of the Council of 17 December 2013 on the European Regional Development Fund and on specific provisions concerning the Investment for growth and jobs goal and repealing Regulation (EC) No 1080/2006 and Council Regulation (EU) No 1300/2013 of 17 December 2013 on the Cohesion Fund and repealing Council Regulation (EC) No 1084/2006

under the CEF financial instruments.

TEN-T and H 2020

Regarding the new technologies or the innovation, projects to be eligible to CEF Fund and the projects eligible to be supported within HORIZON 2020.

TEN-T promotes the deployment of innovative measures to facilitate the decarbonisation of all transport modes by stimulating energy efficiency, introducing alternative propulsion systems, and providing corresponding infrastructure. TEN-T does not fund the research and development phase of a project.

TEN-T can fund prototypes under the condition that this prototype is market-oriented, which means that the prototype can be deployed afterwards.

HORIZON 2020 can fund the research, development and Innovation phase of a project and a prototype, which could difficultly be deployed in the market.

Horizon 2020 is funding research & innovation from low Technology Readiness Level (TRL) research activities, through development work to validate concepts, technologies and applications, to higher TRL innovation actions with demonstration/pilot/trial activities in preparation of deployment.

CEF on the other hand is targeting deployment activities and can also support market-sided innovation during the first stages of take-up / pre-commercialisation, as defined in Article 33 of the TEN-T Guidelines on new technologies and innovation.

There are synergies between H2020 which is supporting more upstream activities and TEN-T which can potentially support deployment. The H2020 and TEN-T programmes coordinate to ensure complementarity.

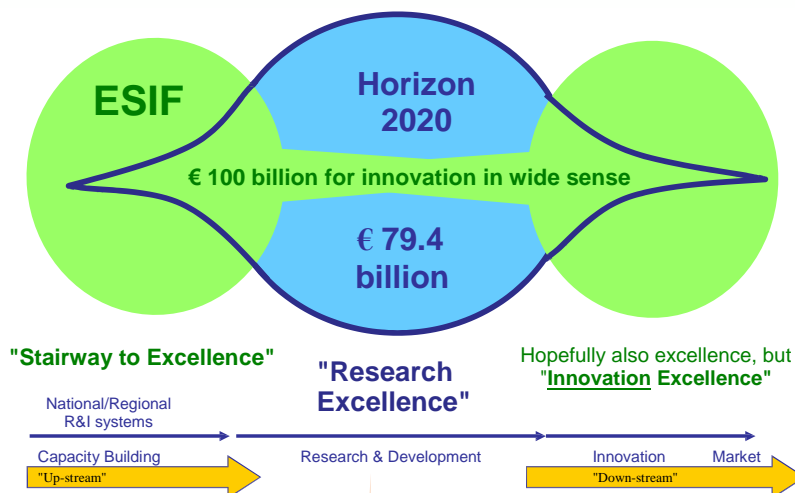
ESIF SYNERGIES WITH H2020

A basic premise of the Europe 2020 strategy for smart, sustainable and inclusive growth is that all EU policies should work together to achieve their objectives. As regards research and innovation, the European Structural and Investment Funds (ESIF) are providing complementary support to Horizon 2020 to finance the upgrade of scientific infrastructure - from laboratory equipment to supercomputers, to high-speed data networks - and to boost research and innovation capacities where needed.

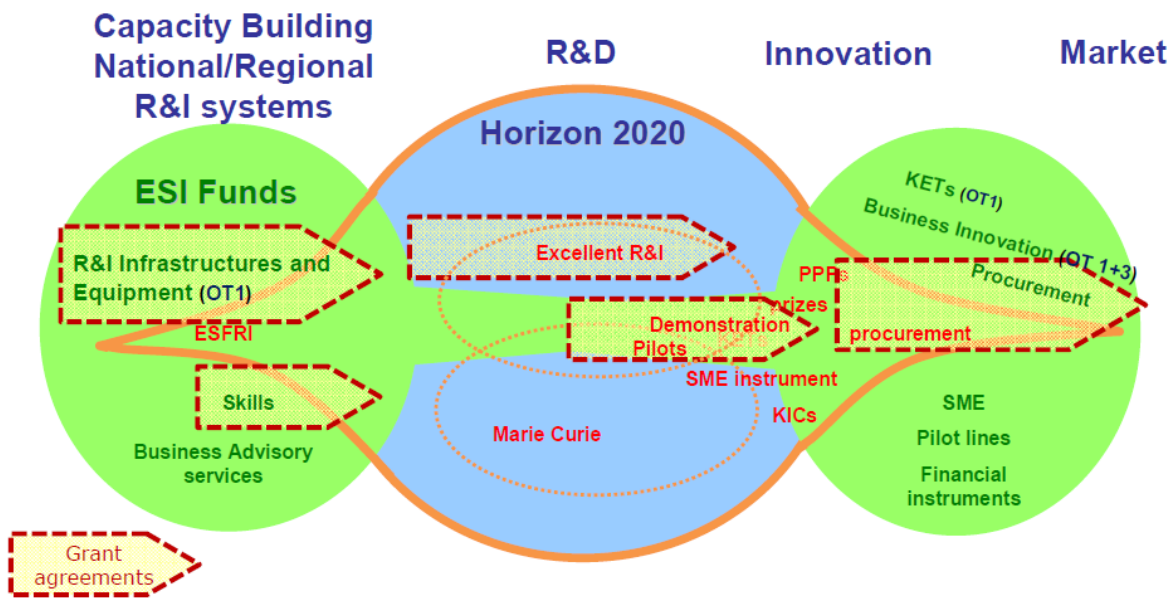
Main messages on synergies:

1. Think strategic & impact- oriented, not only project-oriented.
2. Act in collaboration: ESIF and Horizon 2020 etc. actors should listen, learn and talk across borders & take steps towards one another.
3. Identify / generate opportunities: synergies will only work if they are fostered along the entire programming cycle, starting from smart specialisation development (entrepreneurial discovery process), to programme design and suitable implementation mechanisms.
4. What the aim of synergies is not :
 - No substituting of national or regional or private co-funding to projects or programmes by money from the other instruments.
 - No diversion of funding away from the purpose of the respective instrument / operational programme (e.g. smart specialisation strategy for ERDF, research excellence for Horizon 2020).
 - No simple "run for the money": Maximising the acquisition of additional funding from Horizon2020 for a MS / region is no good objective, as this has no durable impact.

Combining “normal” H2020 projects & ESIF through sequential or parallel projects



Overall concept of complementarity : Emphasis of programmes



State aids and EU funding

Article 8 (2) of the General Blok Exemption Regulations (GBER)⁸ reflects the general line on cumulation throughout different State aid instruments. This provision states: "Where Union funding centrally managed by the institutions, agencies, joint undertakings or other bodies of the Union that is not directly or indirectly under the control of the Member State is combined with State aid, only the latter shall be considered for determining whether notification thresholds and maximum aid intensities or maximum aid amounts are respected, provided that the total amount of public funding granted in relation to the same eligible costs does not exceed the most favourable funding rate laid down in the applicable rules of Union law".

On the basis of this provision, centrally managed EU funds (de facto those where the project selection is done at EU level) are not taken into account for the calculation of the traditional ceilings: aid intensity, maximum aid amount. Funds under shared management (such as ESIF Structural funds) would be taken into account for the calculation of those ceilings. These rules apply for the eligible costs which are allowed under the State aid rules (as defined in the relevant provision). However 8(2) of the GBER further requires that the applicable funding rates under other EU rules (ESIF, TEN-T, CEF, etc.) need to be fulfilled as well. These rates tend to be more favourable than State aid intensities and generally foresee a wider eligible cost basis. Both sets of rules have thus to be respected cumulatively.

State aids and LNG

Aid for maritime ships for switching their installation to the use of LNG can be found compatible depending on achieved environmental objectives and the applicable standards. In general such aid can be approved under section 3.2 of the EEAG as aid for going beyond Union standards or increasing the level of environmental protection in the absence of Union standards or as aid for early adaptation to future Union standards.

As regards aid to early adaptation of future Union standards it is worth to mention that point 53 of the EEAG sets specific provisions for the incentive effect: "The Commission considers that aid granted to adapt to future Union standards has in principle an incentive effect, including when the standard has already been adopted but is not yet in force. However, in the latter case, aid has an incentive effect if it incentivises the realisation of the investment long before the standard enters into force. Aid granted for the adaptation to Union standards already adopted but not yet in force will be considered to have incentive effect if the investment is implemented and finalised at least one year before the Union standards enter into force."

State Aids and notifications

The State aids notification process may affect the procedure for the EU co-financed grants which are based on their own calendar of implementation.

In order to avoid delays, it is important to address State aid concerns "upstream", i.e. as early as possible in the project preparation. Many scenarios will be covered by the GBER and will thus require little formal DG COMP involvement. Beyond this, DG COMP tries to accommodate timing issues by offering advice during the "pre-notification" phase. However,

⁸ Commission Regulation (EU) N°651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty.

it is the responsibility of Member States and project promoters to take up this offer and initiate discussions. From the EU instrument side, administrations involved should raise awareness to stakeholders of the importance of upstream consideration of State aid aspects. Relevant Commission services are closely cooperating in order to raise awareness and knowledge among programme managers and other stakeholders about state aid rules. This was precisely the purpose behind recently published infrastructure analytical grids which clarify the substantive conditions applying to different types of infrastructure (http://ec.europa.eu/competition/state_aid/studies_reports/state_aid_grids_2015_en.pdf).

DG COMP is also closely cooperating with DG REGIO and Jaspers in order to accelerate the treatment of projects which have benefitted from the advice of Jaspers.

EIB and CEF

CEF and EFSI are complementary and both contribute to one of the main priorities of the European Commission: Boosting Jobs, Growth and Investment ¹⁴.

The CEF provides for two main types of support instruments: grants and financial instruments. Grants are normally distributed via annual and multiannual calls for proposals. The budget allocated to grants for 2014 -2020 amounts to €22.5bn, with 11.3bn reserved for the Cohesion Member States. Financial instruments make available €1.5bn for a wide array of specific tools, such as project bonds, LGTT, debt or equity instruments, and dedicated investment funds for specific policies (e.g. pilot actions for Green Shipping Financing Tool). These instruments act as a catalyst for further private and public funding by giving infrastructure projects credibility and lowering their risk profiles, thereby attracting investors. In the transport policy area, CEF supports only projects eligible under the TEN-T Guidelines. Grants are mostly distributed on the TEN-T corridors, whereas financial instruments may be used on the whole network, both core and comprehensive.

Specific conditions for the CEF support are stipulated in Regulation (EU) No 1316/2013¹⁵. More information can be accessed *via*:

http://ec.europa.eu/transport/themes/infrastructure/ten-t-guidelines/project-funding/cef_en.htm

The EFSI aims to overcome the current investment gap in the European Union by mobilising private financing for strategic investments which the market cannot finance alone. It will boost strategic investments in infrastructure and innovation as well as risk finance for small businesses. The EU will provide €21 billion in initial funding - a €16 billion guarantee, to be authorised via an EU Regulation¹⁶ - and the EIB own resources (€5 billion). It is

¹⁴ http://ec.europa.eu/priorities/jobs-growth-investment/index_en.htm

¹⁵ Regulation (EU) No 1316/2013 of the European Parliament and of the Council of 11 December 2013 establishing the Connecting Europe Facility, amending Regulation (EU) No 913/2010 and repealing Regulations (EC) No 680/2007 and (EC) No 67/2010

¹⁶ Regulation (EU) 2015/1017 of the European Parliament and of the Council of 25 June 2015 on the European Fund for Strategic Investments, the European Investment Advisory Hub and the European Investment Project Portal and amending

expected the Investment Plan will mobilise at least €315 billion in additional investment in Europe over the next three years. Provided that specific criteria are met, anyone - not just Member States - can submit their request for financing to the EIB for Infrastructure and Innovation investments, and to the European Investment Fund (the investment part of the EIB Group) for SMEs equity or guarantee instruments. Project promoters can contact the EIB and EIF directly - they do not need to pass via a local authority or government. In the field of transport EFSI can target TEN-T projects, but unlikely CEF it may also go beyond the TEN-T framework. Detailed information on EFSI and the specific conditions for funding can be found [on the dedicated websites: http://ec.europa.eu/priorities/jobs-growth-investment/plan/efsi/index_en.htm](http://ec.europa.eu/priorities/jobs-growth-investment/plan/efsi/index_en.htm) and <http://www.eib.org/about/invest-eu/index.htm?lang=en>

A complementary approach has been agreed by the Commission and the EIB for the use of CEF financial instruments and EFSI: the CEF Debt Instrument shall concentrate on innovative, demonstrator and pilot products and initiatives. This approach is being applied, for instance, to the Green Shipping Guarantee scheme under development, which is foreseen to be tested in the Netherlands, France, Finland and Sweden at pilot level, before upscaling with EFSI.

Finally, EIB support through EFSI and CEF grants can also be combined together (blending). The logic is that for project with potential revenue streams (from users or tax-payers), the use of EFSI will allow attracting investors, extending maturity and overall reducing the debt costs. If a funding gap remains, and if the project is in line with the EU priorities as defined by the TEN-T and CEF regulations, there is a possibility to access CEF grants. Such an approach necessitates strong coordination with the European Commission and the EIB. The early involvement of the EIB may also help define the scope and the structuring of the project, finally reducing the costs.

Example of a possible blending process: Following the upstream planning phase where Member States can engage with the Commission and the EIB on project pipeline identification, the project sponsor/promoter would need to engage with the EIB to define the project financing structure, and in particular to apply for the support of the CEF-Debt instrument (CEF-DI) and/or EFSI, and the financing plan so to identify any funding gap, that would require subsidy in the form of grant support. Provided that a funding gap is identified a request for grants is submitted through the regular process of CEF calls for proposals.

Complementarity between CEF and EFSI

To date, Member States Bulgaria, France, Germany, Italy, Luxembourg, Poland, Slovakia, Spain and the United Kingdom have committed to providing co-financing to EFSI supported projects and investment platforms, up to a total financing volume of EUR 42.5 billion (COM (2015) 361 Final).

Financial close occurs when all the project and financing agreements have been signed and all the required conditions contained in them have been met. It enables funds (e.g. loans, equity, grants) to start flowing so that project implementation can actually start.

Exploiting the opportunities opened by their respective project eligibility criteria.

CEF grants support projects that implement the TEN-T priorities identified in the TEN-T and CEF Regulations. CEF financial instruments are open to the whole TEN-T network for all modes. EFSI creates additional opportunities, including for projects and modes not identified as priorities for CEF and most importantly also outside and beyond TEN-T. In this context, EFSI can be used to upscale financing products deployed under the CEF, including the existing project bond credit enhancement mechanism and the loan guarantee for TEN-T transport (LGTT).

Combination of financial instruments and grants ("blending").

Some transport projects could make only a limited use of financial instruments. For example, financing of some projects addressing missing links and bottlenecks on the TEN-T through financial instruments alone may not be sufficient, as only part of the investment costs can be covered by the revenues generated from the projects, even over the long term. To optimise the use of the budget, EU grants could cover the share of the investment that cannot be repaid (funding gap), while the rest may be covered by financial instruments. A blended use of grants and EFSI resources will increase the number of transport projects supported, in particular in more challenging modes, such as rail and inland navigation. To this effect, a better coordination between CEF future calls for grants and financial instruments under EFSI and CEF should be ensured, as described in the scheme below, in particular with an enhanced effort among the Member States, the Commission and the EIB to identify projects suitable for financial instruments upstream during the project cycle and ahead of any request for grants support.

Complementarity between ESI Funds and EFSI ?

The ESI Funds are the most important source for EU co-financing of transport projects, with an estimated envelope of EUR 70 billion for the 2014-2020 period. The **EFSI** legal basis allows Member States to use **ESI Funds** resources (including financial instruments) to contribute to the financing of projects eligible for EFSI. They can feed into Investment Platforms or directly support projects (in line with the ESI Funds programme rules and applicable eligibility criteria). Reciprocally, EFSI could participate in ESI Funds supported financial instruments in view of upscaling them. So far, the proposed allocations to financial instruments in the transport sector are very limited; ways should be explored to increase their share in the ESI Fund programmes.

ESI Funds can join EFSI supported projects in cases where this is a more effective use of both funding sources. Such combination of funding for the same investment shall not lead to duplication or overlap but will have to bring clear, demonstrable added value in the use of resources (such as EFSI and ESI Funds supporting different parts of the capital structure of a project or covering different risk tranches of portfolios of projects). This may be the case in certain countries or sectors, where the associated risks would make it unlikely that EFSI support would be given without the presence of ESI Funds programme contributions. Where appropriate, opportunities should be sought to combine ESI Funds resources and EIB financing under EFSI for Major Projects notably under PPP structures - but without giving

rise to additional delays in starting projects on the ground. Furthermore EFSI support may be provided for parts of projects which are not eligible under an ESI Funds programmes but which are part of a bigger investment.

V. RECORDS OF LATEST CALLS: SUSTAINABLE SHIPPING PROJECTS

CEF/TEN-T

We would propose specific links be provided to the Agency's project fiche section on the INEA website. Here are some suggestions:

- a) For TEN-T legacy (if this is being included in the Vademecum):
 - Greening Transport: <https://ec.europa.eu/inea/en/ten-t/ten-t-projects/projects-by-transport-mode/greening-transport>
 - Water mode: <https://ec.europa.eu/inea/en/ten-t/ten-t-projects/projects-by-transport-mode/water>
- b) For CEF
 - Water mode: <https://ec.europa.eu/inea/en/connecting-europe-facility/cef-transport/projects-by-transport-mode/water>
 - Motorways of the Sea: <https://ec.europa.eu/inea/en/connecting-europe-facility/cef-transport/motorways-sea>

H2020

<http://ec.europa.eu/programmes/horizon2020/en/h2020-sections-projects> <https://open-data.europa.eu/en/data/>

<https://ec.europa.eu/inea/en/horizon-2020/funded-projects>

DG REGIO

http://ec.europa.eu/regional_policy/en/projects/

(Detailed databases are operated by respective managing authorities in the Member States)

LIFE

EMASSHIP (LIFE03 ENV/IT/000393)

The objective of the EMAS-SHIP project was to develop innovative methods for the environmental management of shipping companies and to support the implementation of the EMAS regulation in shipping companies. The project aimed to identify best practices and help the development of a model and technical manual with specific tools for implementing EMAS.

Project reference LIFE03

ENV/IT/000393 Duration 01-NOV-

2003 to 31-JUL -2006 Total budget

1,324,173.00 €

EU contribution 657,087.00 €

LNG Tanker (LIFE03 ENV/NL/000474)

This project had three main objectives: 1. Demonstrate the technical feasibility of a ship engine running solely on Liquid Natural Gas (LNG). 2. Demonstrate the possibility of propelling an LNG tanker with its own boil-off, instead of blowing this off. 3. Demonstrate an economical and flexible means of distributing LNG for widespread use on land and water.

Project reference LIFE03 ENV/NL/000474

Duration 01-DEC-2002 to 01-JAN -2005

Total budget 4,922,900.00 €

EU contribution 874,245.00 €

ZEM/SHIPS (LIFE06 ENV/D/000465)

The Zero emissions ships project aimed to develop and realise the first hydrogen-powered passenger ship (capacity > 100 persons), power-assisted by a 300-600 kW electric motor that gets its electricity from a fuel cell. Its main advantages over conventional ships would be zero local emissions, low noise, high energy efficiency and no risk of water pollution.

Project reference LIFE06 ENV/D/000465

Duration 01-NOV-2006 to 30-APR -2010

Total budget 5,158,348.00 €

EU contribution 2,384,424.00 €,

Project location Associated Czech (CZ), Hamburg, Bayern (?)