

【欧州】【Common, 海事】

Common - Environmental issues: EU invests in alternative fuel and fuel infrastructure projects for road and maritime transport under the CEF programme to deliver on the European Green Deal

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【概要 : Summary】

The European Union's Connecting Europe Facility (CEF) was introduced 2014 as a key EU funding instrument also for projects in the transport sector. It focuses on cross-border projects and projects that remove bottlenecks or bridge missing links and supports innovation in the transport system to improve the infrastructure, reduce the environmental impact, enhance energy efficiency and increase safety. In order to support the EU Member States to deliver on the European Green Deal and to ease the negative impact of the COVID-19 pandemic crisis, the EU has decided to invest an amount of almost € 2.2 billion into 140 key transport projects in order to support the economic recovery in the post-pandemic era.

With funding of the CEF, these projects are expected to help building the missing transport links across the continent, support sustainable and environmental friendlier transport and create jobs. The 2019 CEF Transport Multiannual programme (MAP) and the CEF Transport Blending Facility are both tools to support selected projects in the transport sector in this currently critical moment of the COVID-19 pandemic. It is a difficult time for the economies in all EU Member States, as they are hit hard by the COVID-19 pandemic. The selected projects under both CEF programmes intend to step

up the environmental sustainability and efficiency of Europe's transport sector.

【記事 : Article】

1. Funding new transport sector projects under the EU's CEF Programme

The European Union's Connecting Europe Facility (CEF) is a key EU funding instrument, which was introduced in 2014. The CEF supports the development of high performing, sustainable, intelligent and efficiently interconnected trans-European networks in the fields of transport, energy and digital services. The CEF Transport programme implements the EU's transport infrastructure policy by supporting investments in building or upgrading transport infrastructures across Europe. The CEF programme focuses on cross-border projects and projects that remove bottlenecks or bridge missing links. This includes nine pan-European Corridors of the EU's transport Core Network, to be completed by 2030 -including the most important connections, and linking the most important nodes. Furthermore, it includes the Comprehensive Network, which is expected to being completed by 2050, covering all European regions. It also includes horizontal priorities such as traffic management systems. The CEF Transport also supports innovation in the transport system in

order to improve the use of infrastructure, reduce the environmental impact of transport, enhance energy efficiency and increase safety. The CEF Programme is managed centrally by the European Commission, which sets the political priorities and is responsible for the selection of projects. The Commission is assisted by the Innovation and Networks Executive Agency (INEA), which assists also in the evaluation and selection of the projects and is responsible for the overall technical and financial monitoring of project implementation. Beneficiaries in the Member States manage the projects, and the respective Member States remain responsible for monitoring the implementation of the projects.

Since 2014, the CEF has supported 794 projects in the transport sector, worth a total of €21.1 billion. Overall, the CEF programme's 2014-2020 budget makes €23.2 billions available for grants to co-fund Trans-European Transport Network (TEN-T) projects in the EU Member States.

Besides other initiatives and measures, the EU has decided to invest almost €2.2 billion into 140 key transport projects in order to support the economic recovery and to ease the negative impact of the COVID-19 pandemic crisis in all of its Member States, while delivering on the European Green Deal's targets. Under the CEF funding, these projects are expected to help building the missing transport links across the continent, support sustainable transport and create jobs.

In the latest calls under the CEF programme, namely the 2019 CEF Transport Multiannual programme (MAP) call of October 2019 and the 2019 CEF Transport Blending Facility Rolling call of November 2019, emphasis is on projects reinforcing railways, including cross-border links and connections to ports and airports. However, also other selected projects in transport sectors like inland waterway transport, the road sector and the maritime sector are supported with funds.

2. The selection process

On 16 July 2020, the European Commission announced the selection of 140 key transport projects with a budget of almost €2.2 billion. The projects were selected for funding via two competitive calls for proposals. The projects were selected for funding via two competitive calls including the regular CEF Transport call for proposals launched in October 2019 and the CEF Transport Blending Facility call in November 2019. The EU's financial contribution comes in the form of grants, with different co-financing rates depending on the project type. The 2019 CEF Transport Blending Facility call is an innovative approach to encouraging substantial participation by private sector investors and financial institutions in projects intended to step up the environmental sustainability and efficiency of the EU's transport sector. It is implemented via a cooperation framework between the European Commission, the European Investment Bank (EIB) and promotional banks from EU-Member States. The European Commission is currently negotiating agreements to define the involvement of other potential Implementing Partners. The projects are expected to help build missing transport links across the continent and they are expected to support sustainable transport in the EU in order to deliver on the EU's climate objectives set out in the European Green Deal. Besides railway related projects, inland waterway transport is boosted through more capacity and better multimodal connections to the road and rail networks. In the maritime sector, priority is given to short-sea-shipping projects based on alternative fuels and the installation of on-shore power supply for ports to cut emissions from docked ships. Furthermore, ten projects are selected under the Blending Facility Rolling Call. The EU support is to be combined with financing from banks (via a loan, debt, equity or any other repayable form of support). The submitted application files, consisting of the Eligibility Check List, Project Report and the copy of Grant Application form will be evaluated by the European Commission in order to decide on the award

of the grant after each cut-off date. Applicants will receive the evaluation results at the latest six months after the submission deadline, and grant agreements will be signed with the successful applicants within nine months after the submission deadline.

According to the EU Commissioner for Transport Adina Vălean, the €2.2 billion EU contribution to these two calls for crucial transport infrastructure are expected to help kick-starting the economy's recovery, and to generate €5 billion in investments.

3. The Regular CEF Transport call and the CEF Blending Facility call

The EU will support 130 project proposals selected for funding under the CEF Transport Multiannual programme (MAP) call and 10 projects under the CEF Blending Facility call.

Out of this, there will be 55 railway infrastructure projects located on the TEN-T core network with a total of €1.6bn. This includes the Rail Baltica project, which integrates the Baltic States in the European rail network, as well as the cross-border section of the railway line between Dresden (Germany) and Prague (Czechia). Nine projects will contribute to an interoperable railway system in the EU and the seamless operation of trains across the continent through the European Rail Traffic Management System (ERTMS).

The Call will also support the shift to greener fuels for transport. A number of projects involve converting vessels to run on Liquefied Natural Gas (LNG), as well as installing corresponding infrastructure in ports. Inland waterway transport should gain capacity and better multimodal connections to the road and rail networks. In the maritime sector, short-sea-shipping projects are prioritised, based on alternative fuels and the installation of on-shore power supply for ports. Also road transport will see the deployment of alternative fuels infrastructure, namely through the installation of 17,275 charging points on the

road network and the deployment of 355 new buses. Furthermore, 10 projects are selected under the Blending Facility. The EU support is to be combined with additional financing from banks via loans, or any other repayable form of support. The first ten projects under the CEF Transport Blending Facility is a specifically devised instrument to blend private funding with EU support.

4. Projects selected under the 2019 CEF Transport MAP call

The 2019 CEF Transport Multiannual programme (MAP) call is one of the regular CEF calls for proposals to finance transport infrastructure projects in Europe. The INEA publishes regular Annual and Multiannual calls for proposals for the financing of transport infrastructure projects in Europe. Multiannual calls normally support longer-term projects located in the TEN-T core network corridors, and horizontal priorities such as traffic management systems.

The objectives of the 2019 CEF Transport MAP call focus on building missing links, encouraging the deployment of the European Rail Transport Management System (ERTMS), developing safe and secure infrastructure, fostering Intelligent Transport Systems (ITS) for road, boosting the Motorways of the Sea (MoS) concept of collaboration between ports, and speeding up the creation of a Single European Sky. The 2019 CEF Transport MAP call includes project proposals addressing either works or studies. INEA received 262 proposals, requesting a total of more than €4.5 billion in co-funding by the call deadline of 26 February 2020. The applicants were mostly Member States and public or private undertakings. The 130 project proposals selected for funding under the CEF Transport Multiannual programme (MAP) call reach a total of €2.1 billion. Examples of projects that will be financed include:

- Improving the railway connection to the airports of Bucharest (€48.4million, CEF funding), Turin (€14.6 million, CEF funding), Milan Malpensa (€63.4 million, CEF funding) and Paris

Orly (€ 63.9 million, CEF funding) • Building infrastructure to provide electrical power to moored ships in Malta (€22 million, CEF funding), Building and revamping safe and secure parking areas for trucks throughout the EU (combined € 56.3 million, CEF funding, for 11 projects), among others. INEA will prepare and sign individual grant agreements with project beneficiaries at the latest by January 2021.

In order to support the shift toward greener fuels in transport almost €142 million will be allocated to 19 projects. A number of projects involve converting vessels so they may run on LNG, as well as the installation of the corresponding infrastructure in ports. Road transport will also see the deployment of alternative fuels infrastructure. The European Union is supporting Member States' shift to greener fuels for transport with new funding commitments.

Regarding alternative fuel and fuel infrastructure for road and maritime transport within the 2019 CEF Transport MAP call, there can be pointed out the following projects.

1. Construction and operation of a medium-scale multimodal LNG terminal in the seaport of Rostock, Germany. With this project, the EU supports the change towards the utilisation of LNG in maritime transport. This project is expected to substantially decarbonise transport in the region and reduce air pollution. (2019-DE-TM-0247-W Works Maritime DE DE 19, 393, 115.)

2. ALFION - Alternative Fuel Implementation in Port of Igoumenitsa

The ALFION project is formulating the plans needed for the development of on-shore power supply technology in the port of Igoumenitsa in Greece. This will allow ships to receive green electric energy at berth. Charging stations for vehicles will also be established, reducing the overall environmental footprint of transport activities in the port area. (2019-EL-TM-0227-S Studies Maritime EL EL 540, 000)

3. LNGHIVE2 POWER SUPPLY & LNG BUNKERING

The project mitigates the negative environmental effects of moored ships using their polluting diesel engines by creating the infrastructure to supply electricity and LNG in the port of Palma, Spain. This will allow for ships to receive green electric energy at berth, and significantly reduce emissions. (2019-ES-TM-0093-W Works Maritime ES ES 6, 380, 000)

4. EALING Works Valencia port: Preparation of the electrical grid of the Port of Valencia for Onshore Power Supply. The project is intended to mitigate the negative environmental effects of moored ships using their polluting diesel engines by creating the infrastructure to supply electricity in the port of Valencia, Spain. This will allow for ships to receive green electric energy at berth, and significantly reduce emissions. (2019-ES-TM-0182-W Works Maritime ES, ES 1, 754, 910)

5. LNGHIVE2 Barcelona - an efficient LNG bunker barge in the port of Barcelona. The LNGHIVE2 Barcelona project will build an energy-efficient, safe, and cost effective new 5,000 cubic metre capacity LNG bunker barge, which is capable of providing refuelling services to large LNG-powered vessels, including cruise ships and container vessels. (2019-ES-TM-0283-W Works Maritime ES ES 9, 157, 700)

6. LNGHIVE2 Algeciras - A Flex LNG bunkering facility in the port of Algeciras Bay project will build an energy-efficient, safe, and cost effective new 5,000 cubic metre capacity LNG bunker barge in order to replace heavy oil as fuel for the maritime industry with a greener alternative. (2019-ES-TM-0308-W Works Maritime ES, ES 11, 292, 800)

7. Sea Li-ion: Before switching to electrification, the maritime sector needs reassurances on shore-side power, charging speed and capacity. This project will prove the environmental and economic case for electrification, and pave the way for the construction of energy storage systems in Gothenburg and Kiel to charge battery-powered ships.

The system could be replicated elsewhere. (2019-EU-TM-0097-S Studies Maritime DE | SE DE | SE 1,505,000)

8. Coordinated supply of onshore power in Baltic seaports. When ships are in port, on-board diesel generators currently provide the electricity needed for lighting etc. Five Baltic ports, including Aarhus, Copenhagen, Rostock, Stockholm and Helsinki are working together in this project to replace these generators with onshore power supply. (2019-EU-TM-0125-W Works Maritime DE | DK | FI | SEDE | DK | FI | SE 15,307,920)

9. TWIN-PORT 4 The Gulf of Finland is one of the busiest maritime routes in Europe. This project will reduce the environmental impact of the increasing traffic between Helsinki and Tallinn while optimising infrastructure, such as quay walls and road connections, in order to increase efficiency. (2019-EU-TM-0192-W Works Maritime EE | FI EE | FI 10,083,000)

10. International Fast and Secure Trade Lane - Improving the Dublin-Cherbourg Motorways of the Seas-route: This project will provide ports, maritime and logistic actors active on the Dublin-Cherbourg shipping route with a toolkit to improve efficiency. The resulting policy recommendations could help facilitate commerce and trade between Ireland and France, and could be applied elsewhere if Brexit leads to a change in UK connections. (2019-EU-TM-0193-S Studies Maritime FR | IE FR | IE 386,500)

11. EALING - European flagship Action for cold ironING in ports: This project brings together ports from nine EU countries that wish to transition to alternative fuels. The launch of technical, financial, legal and environmental studies on the provision of shore side electricity through cold ironing will prepare the ports for the transition, while the project will also support their electrification and ensure port-to-vessel compatibility. (2019-EU-TM-0234-S Studies MaritimeBG | DE | EL | ES | IE | IT | PT | RO | SIBG | DE | EL | ES | IE | IT | PT | RO | SI 3,480,120)

12. Upgrade of the Baltic Sea Bridge Kapellskär-Naantali (Motorways of the Seas Finnlink): The Kapellskär-Naantali maritime link is a key section of the Scandinavian-Mediterranean transport corridor for both passengers and freight. This project will establish a high-voltage onshore power facility at the ports to supply ships mooring there with environmentally friendly energy. It will also develop auto-mooring systems and upgrade the terminals for greater efficiency and safety. (2019-EU-TM-0245-W Works Maritime FI | SE FI | SE 3,445,473).

13. Upgrade of the core Baltic maritime link Helsinki-Lübeck - phase 2 (MoS Hansalink 2):Improving sustainability and efficiency, this project will provide for shore-side electricity for vessels at berth in Lübeck, optimise existing terminals using digitalisation to cut congestion, and improve IT and data documentation to ensure data security and effective communication. This will also benefit the entire maritime link, from Lübeck to Helsinki. (2019-EU-TM-0270-W Works Maritime DE | FI DE | FI 3,444,472).

14. New RoRo at Port of Dunkirk: securing & improving environmental performance of traffic: The project will enable the Port of Dunkirk to receive larger vessels and better process RoRo traffic. The terminal will be equipped with an offshore power supply system: a LNG filling station is now in place, and a hydrogen production unit will come into service in 2022. Combined, these services will enable the RoRo infrastructure to move towards zero emissions. (2019-FR-TM-0124-W Works Maritime FR FR 7,300,000)

15. H2BordeauxThe project is preparing the way for the deployment of hydrogen as an alternative fuel at the port of Bordeaux, while supporting the energy transition for port operations. It will encourage a hydrogen-based ecosystem at the industrial port area, to reducing the carbon footprint of Bordeaux Metropole. (2019-FR-TM-0184-S Studies Maritime FRFR 375,000)

16. C Channeling the Green Deal for Venice. The port

of Venice in Italy is connected to the Adriatic Sea by a single 15 km canal. The project will improve transit for through-traffic by devising a better way to manage sediments in the canal and Venice lagoon. Navigation should be improved without affecting the delicate hydrodynamic balance of the lagoon. (2019-IT-TM-0096-S Studies Maritime ITIT 849, 500).

17. Port of Trieste: Railway Terminal and LNG Facility (studies): This project will improve and expand the Port of Trieste's container terminal and railway yard to increase container throughput. The new development will take into account the environmental impact of the works and offer mitigation measures. Furthermore, IT resources will be put in place to connect port and rail operations, and a LNG facility will be built. (2019-IT-TM-0101-S Studies Maritime ITIT 3, 194, 250).

18. Naples LNG Coastal Depot

The project will design a LNG coastal depot in the port of Naples in Italy. LNG is a greener alternative to heavy oil as fuel for the maritime industry. (2019-IT-TM-0112-S Studies Maritime ITIT 669, 533).

19. The High Voltage Shore Connection (HVSC) for the Grand Harbour Cruise vessels and RO-RO vessels require energy while berthed. This is currently provided using their auxiliary engines and marine gas oil. This consumes a significant amount of energy and also generates emissions (CO₂, NO₂, SO₂ & particulates) and noise. This project will provide on-shore power supply for the cruise liners that berth within the Grand Harbour, linking the vessels to the national energy grid. (2019-MT-TMC-0089-W Works Maritime MTMT 21, 905, 380).

20. Bio2Bunker: BLNG as the solution for decarbonising the maritime industry, with LNG being the key to reducing the environmental and climate impact of the shipping sector. This project develops and expands a (Bio)-LNG (BLNG) bunkering supply chain by introducing three BLNG bunker

barges in Zeebrugge, Rotterdam, and Lübeck. The project will provide additional LNG refuelling points at core maritime EU ports (2019-NL-TM-0196-W Works Maritime NLBE | DE | NL 11, 000, 000).

5. The 2019 CEF Transport Blending Facility

The CEF Transport Blending Facility is an innovative approach to promoting the substantial participation of private sector investors and financial institutions in projects contributing to the environmental sustainability and efficiency of the transport sector in Europe. It is implemented via a cooperation framework between the European Commission, the European Investment Bank (EIB) and promotional banks from EU Member States.

The objectives of the CEF Transport Blending Facility will deliver on the Commission's agenda for a clean and digital transport system, including the deployment of the European Railway Traffic Management System (ERTMS) and the deployment of alternative fuels. The 2019 CEF Transport Blending Facility's Timeline Date Call opened 15 November 2019 and lasted until 14 February 2020. The successive cut-off dates (subject to budget availability) are every quarter until March 2021, with intermediate cut-off dates in view of carrying out periodic evaluations of the received proposals. INEA received 11 proposals for a total of €86 million of requested co-funding by the first cut-off deadline of 14 February 2020.

10 project proposals were selected for a total funding of €70.4million. For the 10 selected projects under the Blending Facility, EU support is to be combined with additional financing from banks by a repayable form of support. The INEA agency will prepare and sign individual grant agreements with project beneficiaries at the latest by January 2021. The CEF Transport Blending Facility includes the following projects:

1. Grupo Ruiz Clean Bus Fleet

The project aims to expand clean bus fleets, related infrastructure and technology operating under public service contracts in different locations

around Spain. During 2020–2023, a total of 210 compressed-natural gas (CNG) and 17 electric busses will be deployed around Mallorca, Badajoz, Madrid, Murcia, Salamanca, and Toledo. Three CNG and two electric fuelling stations (with nine charging points) will be built to fuel the fleets in Mallorca. (2019-ES-TM-0075-W Works Roads ESES 1,464,924)

2. ISM - Iberdrola Smart Mobility

The project aims to deploy 592 charging stations with 2,339 charging points. Some 416 of them, together with 1,690 charging points, will be placed in the TEN-T Core Network, while 176 stations with 649 points will be integrated along the TEN-T Comprehensive Network. This will contribute to the clean energy transition, and energy supply from renewable energy sources. (2019-ES-TM-0076-W Works Roads ESES | PT 13,379,985)

3. Promoting Energy Transition and Sustainable Transport Freight in the Strategical Area of Gibraltar Strait (LNGHIVE2 FRS): LNGHIVE2 FRS will help deploy alternative fuels by constructing a hybrid-LNG-powered high-speed craft vessel. This will promote sustainable maritime transport by reducing CO2 emissions, improving air quality and mitigating noise compared to other high-speed crafts operating between the ports of Algeciras and Ceuta. (2019-ES-TM-0078-W Works Maritime ESES 2,885,825)

4. Development of a network of alternative fuel technology in the Atlantic and Mediterranean corridors across Spain: This project will implement and deploy a decentralised network of fast electric charging stations in the Atlantic and Mediterranean corridors across Spain within RCPP's National service station network. It will pave the way for further replication and significantly increase energy efficiency as well as contribute to a reduction of CO2 emissions from transport. It will also be a power source for the deployment of electric vehicles. (2019-ES-TM-0079-W Works Roads ESES 3,279,255).

5. LNGHIVE2 Vessels Demand 2: Completing green links: Together with the LNGHIVE2 Vessels Demand

project, this project will support the deployment of LNG in the Mediterranean and Atlantic Core Network Corridors. (2019-ES-TM-0082-W Works Maritime ESES 1,900,913).

6. ECO-Net: Spanish network of alternative fuels refuelling stations: This project will equip 23 conventional refuelling stations in Spain with alternative fuels. A total of 42 LCNG (liquid to compressed natural gas), 16 CNG (compressed natural gas) and 1 hydrogen refuelling point will be deployed. Some 19 stations are located on the European core network, and 4 on the comprehensive network. (2019-ES-TM-0083-W Works Roads ESES 1,360,231)

7. Total High Power Charging: The project will develop a trans-European network of 500 High Power Charging (HPC) stations in France, Germany, Belgium, the Netherlands and Luxembourg. Some 300 stations will be installed along the European core and comprehensive networks, and the remaining 200 in urban areas. Each of the 500 HPC stations will be situated on Total sites, which are publicly accessible. The selection of sites ensures high-density coverage of the five countries, with one charging station located at least every 150 km. (2019-FR-TM-0073-W Works Roads FRBE | DE | FR | LU | NL 16,995,000)

8. EV Charging Italy: This project concerns the installation of around 6,850 electric vehicles charging stations (14,000 charging points) and associated connections along Italy's distribution network. Approximately 75% of the charging points will be installed in urban areas, with the rest in non-urban areas and on motorways, enabling medium and long-range travel. (2019-IT-TM-0077-W Works Roads ITIT 8,225,160)

9. On Board ERTMS B3 equipment for Lombardy Fleet: This project will deploy the on-board European Rail Traffic Management System (ERTMS B3) on 143 vehicles operating on lines in northern Italy (Lombardy). It will increase the safety, capacity and interoperability of railway transport in the region. (2019-IT-TM-0080-W Works Railway ITIT

7,150,000).

10. Zero Emission Buses for public transport in Amsterdam: Amsterdam GVB, Vervoerregio Amsterdam (VRA) and the Municipality of Amsterdam wish to have an emission-free public transport system in the Amsterdam region. This project covers 128 buses, 128 depot chargers, 32 fast charges, 1 garage and investment in public spaces. (2019-NL-TM-0072-Works Roads NLNL 13,780,842)

6. Conclusion and the way forward

Given the EU Member States' approval of the selected projects under both calls, the Commission will adopt formal financing decisions and INEA will sign the grant agreements with the project beneficiaries, at the latest by January 2021. The EU's support for alternative fuel and fuel infrastructure for road and maritime transport projects under both CEF calls comes at a crucial moment for many of the selected projects as the economies of all EU Member States are hit by the COVID-19 pandemic related economic slowdown. Both calls support transport projects in order to support the economic recovery and to ease the negative impact of the COVID-19 pandemic crisis. However, at the same time, these projects can also deliver on the European Green Deal's targets as they support alternative fuels and infrastructures across the continent in order to achieve a more sustainable transport sector. The projects could help to reduce the transport sector's environmental impact while at the same time they could help enhancing energy efficiency and increasing safety in the EU's transport sector.

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