



The Transformation Towards Zero-Emission Waterborne Transport

Waterborne Transport Workshop
Brussels, 7 February 2022
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European Commission – DG CLIMA

The scale of the climate challenge

"This generation has altered the composition of the atmosphere on a global scale through ... a steady increase in carbon dioxide from the burning of fossil fuels"

Lyndon Johnson, 1965

"Notre maison brûle et nous regardons ailleurs ... il est temps, je crois, d'ouvrir les yeux. "

Jacques Chirac, 2002

"Our house is on fire. I am here to say, our house is on fire."

Greta Thunberg, 2019

IPCC 6th Assessment report on physical science, 2021

1992 UN Convention on Climate Change (UNFCCC)

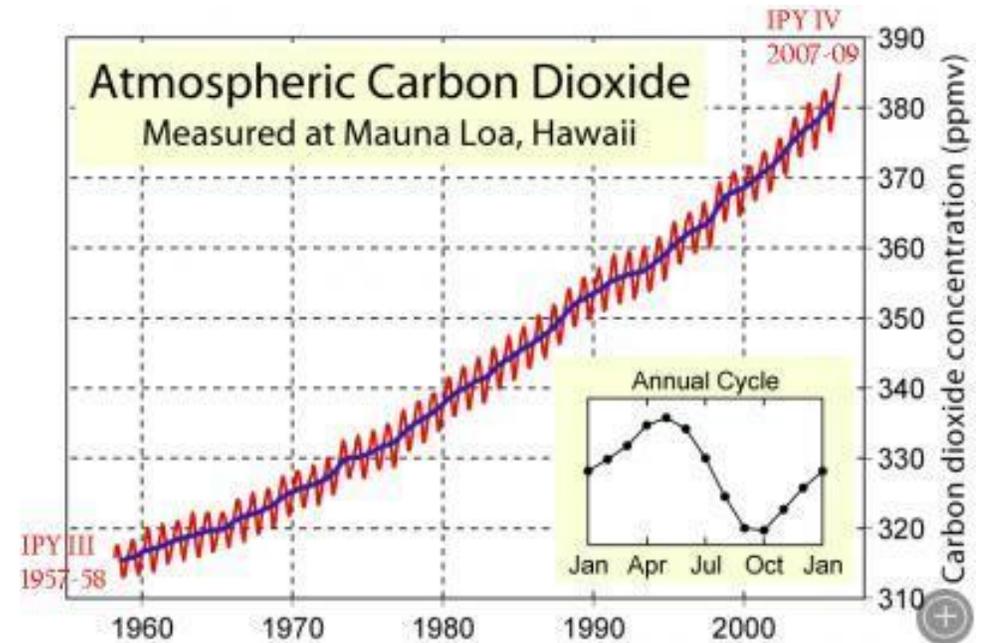
All act, with developed countries agreeing to reduce emissions to 1990 levels by 2000

1997 Kyoto Protocol

Developed country commitments to reduce by <5% below 1990 levels by 2008-12 (with -8% met by EU)

2012 Doha amendment to the Kyoto Protocol

Entered into force on 31 December 2020, quantified country reduction commitments for EU and others for 2013-20



Atmospheric concentrations of CO₂ at Mauna Loa were 414ppm in November 2021 (compared to 390ppm in November 10 years ago)

Harnessing market forces to reduce emissions

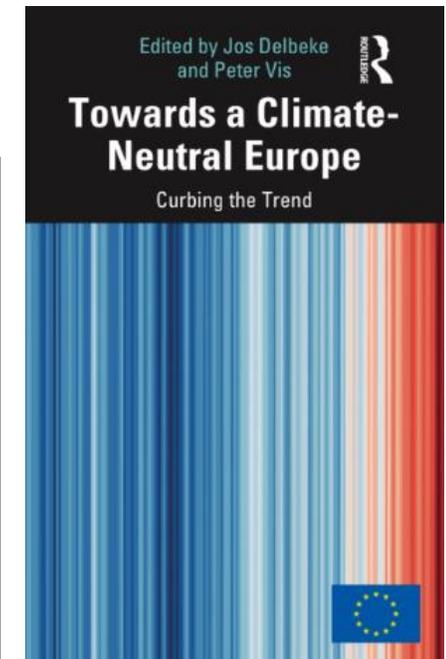
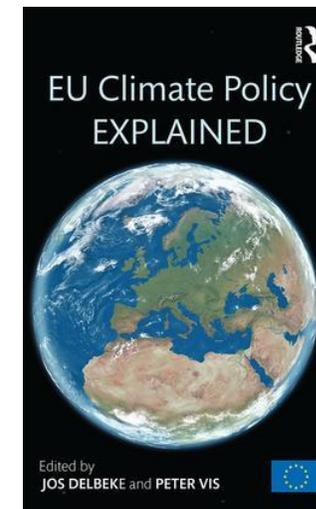
“The key is to change incentives for the marketplace... If it’s free to pollute then you’re never going to have companies making all the myriad decisions that are required in order for the entire system to move in a better direction... What you have to do is have a market mechanism to make it work more efficiently”

(former US President, Barack Obama)

“Carbon emissions must have a price. Every person and every sector will have to contribute.”

(EU Commission President, Ursula Von der Leyen)

Extensive experience gained in other sectors: books on 20 years of the EU's experience available for free at <https://ec.europa.eu/clima/publications> (in English, French, Spanish, Chinese and Korean)



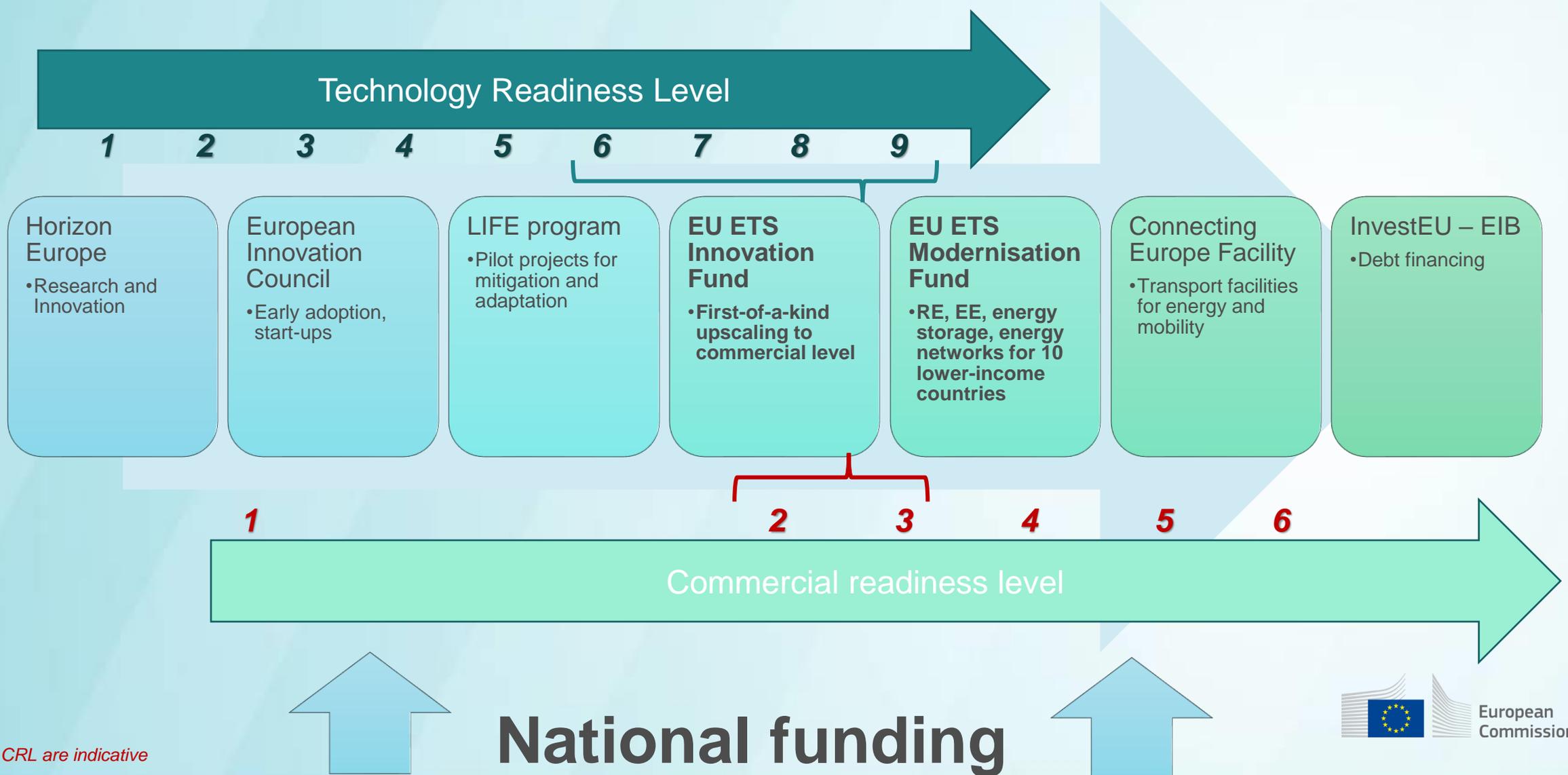
EU emissions trading system operating since 2005

- **Environmental outcome:** caps emissions from >10,000 installations across EU and from all airlines' flights within Europe. 30+ countries, around half Europe's greenhouse gas emissions
- **Market-based approach:** Companies can emit and buy, or reduce emissions and benefit
- Shift to **auctioning** for electricity generation, >€80bn funds for low carbon innovation
- **Power and industry sector** emissions have been reduced by more than one-third (and by 9% in 2019 alone, pre-Coronavirus)



- More than **75% revenues already reported by Member States as being used to tackle climate change** (in Climate Progress Reports)
- EU ETS-funded **Innovation Fund** supporting economy-wide commercial deployment of breakthrough technologies
- **Maritime greenhouse gas emissions** included in the proposal for the EU Green deal revision of the EU ETS, July 2021
- Legislative process underway between the European Parliament and the 27 EU Member States

EU Funding Programmes and the ETS Innovation Fund



TRL & CRL are indicative

EU ETS Innovation Fund

Current main route to support waterborne projects

Production and use of
Renewable energy

*including manufacturing plants for
components*

Carbon Capture Use and
Storage

Scaling up clean tech

Energy-intensive
industries

including substitute products

Energy storage

*including manufacturing plants for
components*

Key features

Financed 100% by the
EU Emissions Trading System

Volume: >EUR 25 billion* up to
2030 (depending on carbon
price)

Grants: Large projects:
Support of up to 60% of
additional capital and
operating costs (up to 10
years)
Small projects: up to 60% of
CAPEX

Grants: Up to 40% of grant
disbursed at financial close

Grants: Up to 60% of grant
disbursed during construction
and 10-years operating period
against GHG emission
avoidance

Small scale projects – shorter
3-years period

Grants: Annual calls for large-
scale and small-scale projects

Single applicant or consortium
Projects must be implemented
in the EU, NO and IC

Project development
assistance

InvestEU: Green Transition
Investment Facility: top-up of
blending operations

Results of first calls

Call for large-scale projects

Grants of EUR 1.145 billion for 7 projects (*)

Project development assistance for 15 projects(**)

Call for smaller-scale projects

Grants of EUR 113 million for 31 projects (***)

Project development assistance for 10 projects

Including:

* Kairos-at-C-Port of Antwerp

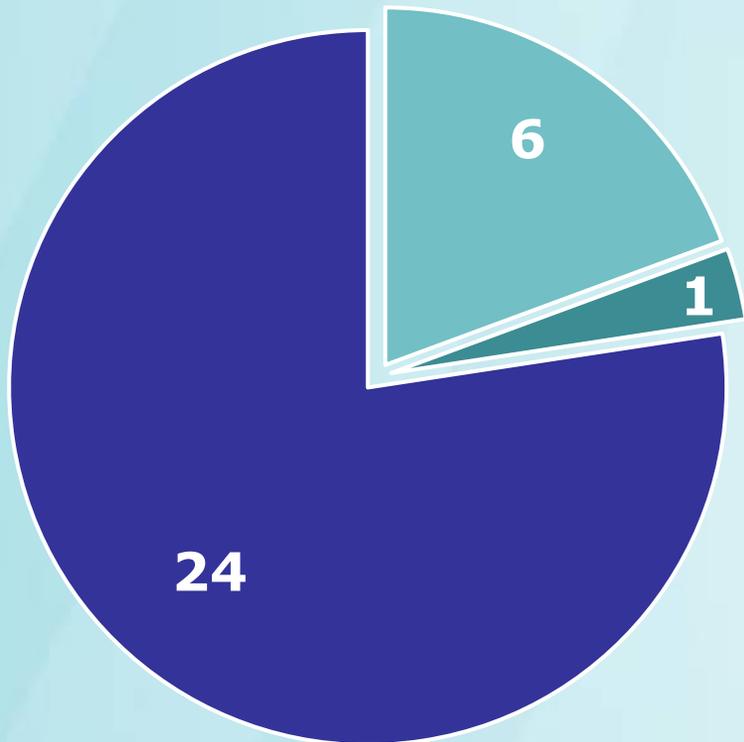
** Hydrogen EUROPAX & WAVE

*** FirstBio2Shipping

Synergies with other EU funds

23% of the awarded SSC and 14% of invited LSC projects have received previous EU funding

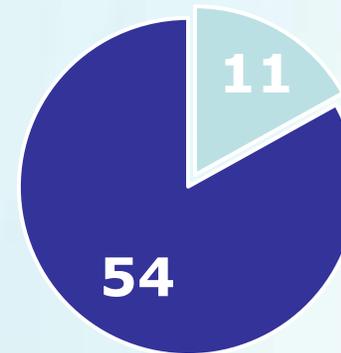
Awarded SSC projects



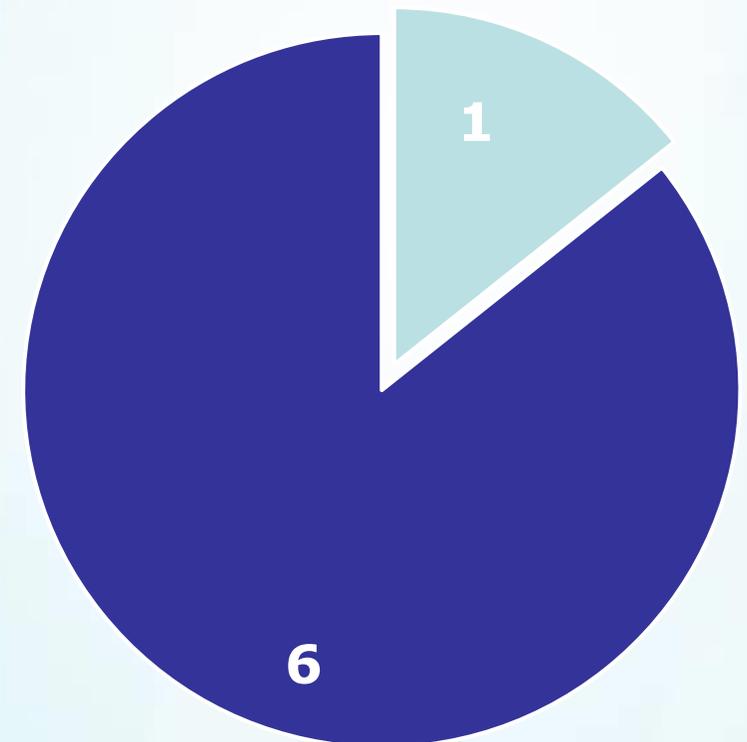
□ H2020/FP7 ■ NER 300 ■ No previous support

2nd stage LSC projects

Admissible



Invited to GAP



□ H2020/FP7 ■ No previous support

Next steps

13 January 2022

Seminar on lessons learnt from first call for large-scale projects

3 March 2022

Submission deadline for 2nd call for large-scale projects (€1.5 billion from EU ETS)

March 2022

Launch of second call for small-scale projects
Expected submission deadline late August 2022

4Q 2022

3rd call for Large-scale projects

Where to find more information?



All (past) call documents available on the Funding and Tenders Portal including:

- ✓ Guidance and calculation tools on GHG emissions and relevant costs
- ✓ Frequently asked questions

<https://europa.eu/!QB67by>



Further info, planning of new calls, recorded webinars and videos available on the IF Website:

<https://europa.eu/!rx34Dt>



Innovation Fund - YouTube

<https://bit.ly/2WxK8w7>

