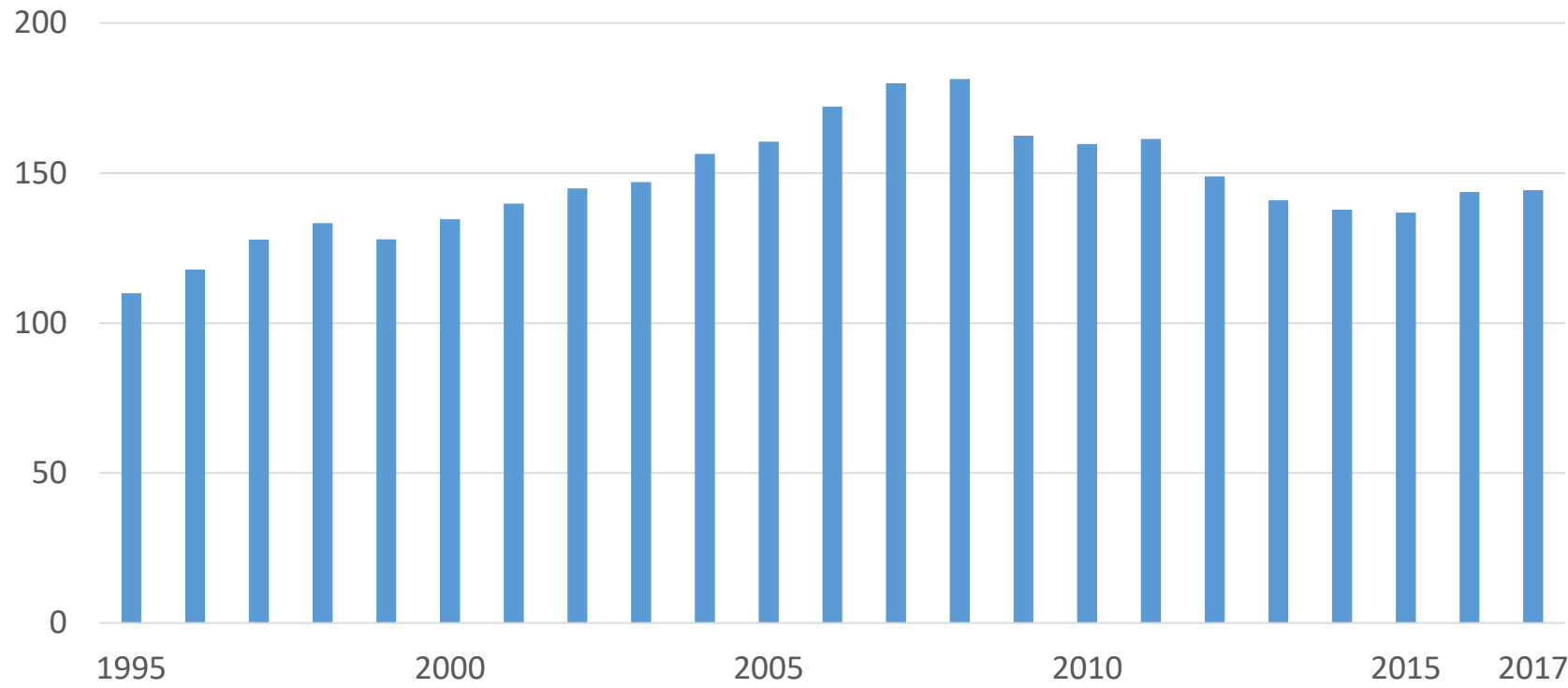


Shipping and climate



GCET20 – Limassol 190927
Magnus Nilsson

Emissions from international bunker oil filled in EU ports, kt CO₂/yr



Source: EU reporting to UNFCCC

**Intn'l shipping:
3-4 % of emissions,
worldwide and
within EU**

Not only carbon dioxide

| Greenhouse gas | Share of GHG effect from shipping during 20 years, % | Share of GHG effect from shipping during 100 years, % |
|-----------------------|---|--|
| Carbon dioxide | 76 | 91 |
| Black carbon | 21 | 7 |
| Methane | 2 | 1 |
| NOx | 1 | 1 |

Source: Olmer, N., Comer, B., Biswajoy, R., Mao, X. & Rutherford, D. (2017): [Greenhouse Gas Emissions From Global Shipping, 2013–2015](#). International Council on Clean Transportation.

IMO efforts

1. EEDI (Energy Efficiency Design Index)

2015-2019 - 10 per cent less CO2 per nautical mile vs. 2000-2010

2021-2024 - 15 per cent lägre

2025- - 30 per cent lägre

Will cover ca 85 per cent of GHG emissions from international shipping

2. SEEMP (Ship Energy Efficiency Management Plan)

A handbook – "ISO certification"

3. Initial strategy – adopted 2018

Long-term target: Emission reduction at least 50 % 2008-2050.

2019: Mandatory MRV of CO2 emissions from ships above 5000 GT. Figures not public.

2023: First emission reduction measures in place.

EU efforts

2018: Mandatory MRV. Figures public. (EU Regulation 2015/757)

2025: Mandatory supply of shore-side electricity and LNG in major harbours.
(EU directive 2014/94 "Infrastructure directive")

Renewable energy directive: Renewables within shipping factor 1,2.

EU efforts

2018: Mandatory MRV. Figures public. (EU Regulation 2015/757)

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Renewable energy directive: Renewables within shipping factor 1,2.



"I will propose to extend the Emissions Trading System to cover the maritime sector."

Ursula van de Leyen 190716

Amendment

(2a) The following Chapter is inserted:

'CHAPTER IIa

Inclusion of shipping in the absence of progress at international level

Article 3ga

Introduction

As from 2021, in the absence of a comparable system operating under the IMO, CO2 emissions emitted in Union ports and during voyages to and from Union ports of call, shall be accounted for through the system set out in this Chapter, to be operational from 2023.

Article 3gb

Scope

By 1 January 2023, the provisions of this Chapter shall apply to the allocation and issue of allowances in respect of CO2 emissions from ships within, arriving at or departing from ports under the jurisdiction of a Member State in accordance with the provisions laid down in Regulation (EU) 2015/757, . Articles 12 and 16 shall apply to maritime activities in the same manner as to other activities.

Proposal for amendment to the ETS directive adopted by ENVI 170113

1. Extra "shipping allowances" are emitted.
2. A Maritime Climate Fund is set up.
3. Ship owners may either acquire regular allowances in relation to their verified emissions and surrender them to the Commission, or pay an amount corresponding to their emissions to the fund, which then acquire the number of "shipping allowances" needed to cover the collective emissions. Price fixed Feb 28th every year.
4. An amount equal to 20 % of the value of the allowances sold to the Fund is used to support investments in innovative technologies to reduce CO2 emissions into maritime sector.

Recital directive 2018/410 of the European Parliament and the Council of 14 March 2018

- (4) In line with the commitment of the co-legislators expressed in Directive 2009/29/EC of the European Parliament and of the Council ⁽¹⁾ and Decision No 406/2009/EC of the European Parliament and of the Council ⁽²⁾, all sectors of the economy should contribute to the reduction of greenhouse gas emissions. Under the Paris Agreement, the Union and its Member States have undertaken an economy-wide reduction target. Efforts to limit international maritime emissions through the International Maritime Organisation (IMO) are under way and should be encouraged. The IMO has set up a process to adopt in 2018 an initial emission reduction strategy to reduce greenhouse gas emissions from international shipping. The adoption of an ambitious emission reduction objective as part of this initial strategy has become a matter of urgency and is important for ensuring that international shipping contributes its fair share to the efforts needed to achieve the objective of well below 2 °C agreed under the Paris Agreement. The Commission should keep this under regular review, and should report at least once a year to the European Parliament and to the Council on the progress achieved in the IMO towards an ambitious emission reduction objective, and on accompanying measures to ensure that the sector duly contributes to the efforts needed to achieve the objectives agreed under the Paris Agreement. Action from the IMO or the Union should start from 2023, including preparatory work on adoption and implementation and due consideration being given by all stakeholders.

Slow steam – instant emission reductions

2013-2015

Large oil tankers (>200 000 dwt) increased their speed by 4 per cent.

> CO₂ emissions per nautic mile rose by 1 per cent.

Large container ships (>14 500 TEU) increased their speed by more than 11 per cent.

> CO₂ emissions per nautic mile rose by 18 per cent.

Source: Olmer, N., Comer, B., Biswajoy, R., Mao, X. & Rutherford, D. (2017): [Greenhouse Gas Emissions From Global Shipping, 2013–2015](#). International Council on Clean Transportation.

Conclusions/proposals

IMO will not deliver unless EU forces it. 2023 is close.

EU: Include shipping in EU ETS. Push for lower speed limits.

Nationally/locally: Support emission mitigation through emission related fairway dues and port charges. All facts needed are available from the EU MRV.

Thank you for your attention!



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