



# European Actions for Sustainable Shipping and Cleaner Fuels

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COMMUNICATION FROM THE COMMISSION TO THE COUNCIL, THE EUROPEAN PARLIAMENT, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS

*Strategic goals and recommendations  
for the EU's maritime transport  
policy until 2018*

[21 January 2009](#)

**EU Maritime Transport Strategy  
2009-2018:**  
European Commission, EU Member States  
and EU maritime industry should work  
together towards the long term objective  
of 'zero-waste, zero-emission' maritime  
transport



ROADMAP TO A SINGLE EUROPEAN TRANSPORT AREA —  
TOWARDS A COMPETITIVE AND RESOURCE-EFFICIENT TRANSPORT SYSTEM

**EU 2011 White Paper –  
Roadmap to a Single European  
Transport Area:**  
The environmental record of  
shipping can and must be improved  
by both technology and better fuels  
and operations.



## New sulphur limits based on IMO Marpol annex VI

### Revised EU Sulphur Directive

- *Directive 1999/32/EC as amended by 2012/33/EC on the sulphur content of marine fuels: (N.B. NOx from ships is currently not covered by EU legislation)*
- *Main objective was bringing EU legislation in line with the 2008 Marpol Annex VI revision:*
  - 0.1% sulphur content in EU SECAs as of 2015
  - 0.5% outside SECAAs as of 2020 (N.B. no revision clause for the latter date foreseen as in IMO)
- *Impacts of the revised Sulphur Directive for the EU (European Commission Impact Assessment):*
  - ✓ reducing the annual 50.000 premature deaths caused by burning high sulfur marine fuels
  - ✓ € 15 to 34 billion of annual health benefits
  - ✓ € 2.6 to 11 billion of costs for shipping industry for switching fuels or exhaust filters to meet the new limits



## The Sustainable Waterborne Transport Toolbox (1)

*The "Toolbox" (SEC(2011) 1052) proposes a number of short-term accompanying measures (i.e. financing under Trans-European Transport Network (TEN-T) & Marco Polo II Programmes, European Investment Bank (EIB), national funding etc.), as well as a set of medium and longer-term measures:*

- ✓ ***Regulatory and non-regulatory EU measures***
- ✓ ***Coordination with Member States and industry***
- ✓ ***Clean ship technology, infrastructure and alternative fuels***
- ✓ ***Possible financing opportunities***
- ✓ ***R&D activities, innovation***
- ✓ ***International cooperation***



## The Sustainable Waterborne Transport Toolbox (2)

- *The Commission has published a Progress Report on the Implementation of the Measures of the Sustainable Waterborne Transport Toolbox in July 2013.*
- *The Commission intends to progress together with EU stakeholders and in coordination with international organisations (ISO, IMO,...) and partner countries:*
  - A comprehensive framework (guidelines, standards and rules for LNG for shipping)
  - Address possible issues regarding use of scrubbers
  - Research & Development agenda for 2030/2050 (ultimate aim: 'zero-waste, zero-emission maritime transport')

## Why LNG for shipping?

- **most promising alternative fuel in the short to medium term (technology available, a decade of experience)**
- **Meets or exceeds current and future shipping emission standards. LNG emits (compared to bunker oil): SOx (~0), NOx (minus 90%), PM (~0);**
- **GHG (minus 25% if no methane slip); not enough for White Paper target!**
- **Decouple operational costs from oil price development (and need for more expensive distillate fuels in the future)**
- **Around 10.000 ships are currently mainly used for European Short Sea Shipping of which around 5000 are spending more than 50% of their time in sulphur emission control areas (SECAs)**



## LNG action so far

1. Commission & EMSA LNG expert group meetings with ports, ship owners and gas industry (April, June and December 2012) to identify operational/technical gaps on LNG bunkering
2. Follow-up of relevant international and European developments / research studies & exchange information (ISO, IMO, IAPH, SIGTTO)
3. Procurement of a study on standards and rules for bunkering of gas fuelled ships: regulatory gap-analysis and proposal for a EU LNG bunkering standard (GL – final results in Feb. 2013)
4. EMSA will continue to support the Commission with proposing a comprehensive set of rules, standards and guidelines for LNG provision, bunkering and use in shipping;
5. Follow-up the implementation of the various TEN-T financed projects promoting LNG as bunker fuel (i.e. LNG in Baltic Ports, Fjalir, Costa)
6. Continue dialogue with stakeholders and Member States in the context of the proposed European Sustainable Shipping Forum (ESSF) and the sub-group on LNG as shipping fuel.



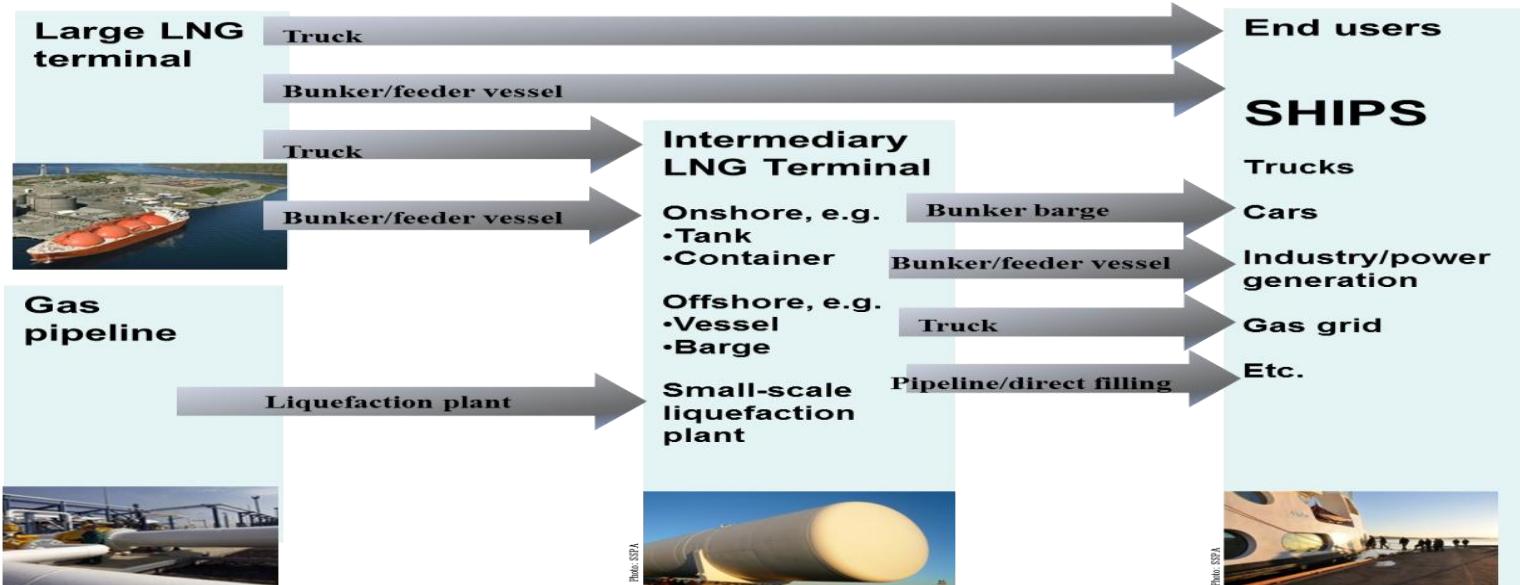
## Development of innovative and alternative fuels (1)

**Commission's Clean Power for Transport Package – focus on shipping in Directive proposal (COM(2013) 18 final) + Action plan on LNG**

**Member States shall ensure:**

- **Publicly accessible LNG refueling points for maritime and inland waterway transport are provided in all maritime ports of the TEN-T Core Network by end of 2020 (end of 2025 for inland core ports)**
- **LNG refueling points for waterborne vessels shall comply by end 2015 with the relevant EN (European Norm) standards, to be adopted by end of 2014.**
- **Shore side electricity supply for waterborne vessels is installed in ports provided that it is cost-effective and has environmental benefits.**
- **Shore-side electricity supply shall comply with the technical specifications by end 2015: relevant EN standard to be adopted by end of 2014, and, pending the publication of this standard, with the technical specifications of the IEC/ISO/IEEE 80005-1 standard.**

Photo: E.ON



## Definition (Directive proposal (COM(2013) 18 final)):

(8) "refuelling point for LNG" means a provision of LNG, either through a physically established pump connected to fixed or mobile installations (including vehicles and vessels) or through a movable LNG container.



## Development of innovative and alternative fuels (2)

- **Methanol, hybrid, hydrogen, biofuels (ultimately use of fuels from renewable sources)**
- **Other innovative approaches by industry are welcome**
- **Global compatibility is of utmost importance to the EU !**



## References (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, OJ L 327, 27.11.12.

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2012:327:0001:0013:EN:PDF>

- Commission Staff Working Paper 'Pollutant emission reduction from maritime transport and the Sustainable Waterborne Transport Toolbox' of 16 September 2011, SEC(2011)1052 final

[http://ec.europa.eu/environment/air/transport/pdf/ships/sec\\_2011\\_1052.pdf](http://ec.europa.eu/environment/air/transport/pdf/ships/sec_2011_1052.pdf)

- Report from the Commission to the European Parliament and to the Council. First progress report on the implementation of the Commission staff working paper 'Pollutant emission reduction from maritime transport and the Sustainable Waterborne Transport Toolbox', COM(2013)475 adopted on 28.06.2013

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2013:0475:FIN:EN:PDF>

Italian version: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2013:0475:FIN:IT:PDF>



## References (2)

- Clean Power for Transport Package, adopted by the Commission on 24 January 2013
  - Proposal for a Directive of the European Parliament and of the Council on the deployment of alternative fuels infrastructure  
<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2013:0018:FIN:EN:PDF>
  - Clean Power for Transport: A European alternative fuels strategy  
<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2013:0017:FIN:EN:PDF>
  - LNG Action Plan: Actions towards a comprehensive EU framework on LNG for shipping, SWD (2013)4 final  
<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=SWD:2013:0004:FIN:EN:PDF>



# Thank you for your attention !

**For further questions:**

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