



European Sustainable Shipping Forum ESSF

**Research & Innovation
"Prospects under Horizon 2020"**

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Horizon 2020 in support of SWTT

The "Toolbox" considers "Research and Innovation" as one of the implementing measures

“Moving towards low pollution and low carbon waterborne transport requires substantial research efforts. Furthermore, it is very important to optimise research and innovation activities and to ensure the timely deployment of their results”

Horizon 2020 for waterborne transport

- **A modern, safe, secure and resource efficient waterborne transport system that interfaces with the overall transport system**
- **Sustainable development: optimal use of energy sources, minimization of environmental impacts (pollution, noise, space demand etc.)**
- **Competitiveness and leadership (global): creation and deployment of R&I solutions; exploring new frontiers**

Waterborne topics

see pre-published WP 2014-2015:

http://ec.europa.eu/research/transport/news/items/smart_green_transport_2014-2015_en.htm

- Towards the energy efficient and very-low emission vessel *2014 – 2 stages*
- Safer and more efficient waterborne operations through new technologies and smarter traffic management *2014 – 2 stages*
- System modelling and life-cycle cost and performance optimisation for waterborne assets *2015 – 2 stages*
- Advancing innovation in the Inland Waterways Transport (IWT) sector *2014 – 2 stages*

H2020 - Basics

- 11/12/13 - Publication
- 18/12/14 - Information day
- 18/03/14 - *1st stage evaluation*
- 28/08/14 - *2nd stage evaluation*
- *December 2014 - ESRs*

Horizon 2020 official presentation on-line:

[http://prezi.com/dycpimkrkgml/
horizon-2020-official-version-2013/](http://prezi.com/dycpimkrkgml/horizon-2020-official-version-2013/)

H2020 - Basics

- 70 bn Euro
- 2014-2020
- Simpler programme
- Challenge based
- Coupling research and innovation
- 6,3 bn Euros for societal challenge "Smart, Green and Integrated Transport"

H2020 - Basics

STANDARD AWARD CRITERIA

EXCELLENCE

IMPACT

QUALITY &
EFFICIENCY
OF THE ACTION

✓ **Innovation actions** >>> higher weighting for IMPACT

Towards the energy efficient and very-low emission vessel

Aiming to make new and existing vessels (including leisure and IWT) more efficient and less polluting through solutions addressing:

- engines,
 - pollution abatement systems,
 - propulsion,
 - energy management including efficient operations
- ✓ Retrofit and fuel conversion solutions are key aspects.
1. Efficiency gains and emission reductions that go beyond existing regimes at lowest costs.
 2. Fuel efficiency gains of $>15\%$ for retrofitting and $>30\%$ for new concepts.
 3. 25% decrease in GHG emissions and 80% in air pollution compared to BAT.

Context for the ESSF - R&I sub-group

- ❑ The ESSF community should participate strongly in the projects and shape research to user's benefits**
- ❑ WATERBORNE TP : elaborates research agenda and animates the research community in the field of waterborne transport.**



Thank you

www.transport-research.info

http://ec.europa.eu/research/horizon2020/index_en.cfm

http://ec.europa.eu/transport/themes/index_en.htm