



German Committee  
Future Earth

## Roundtable discussion

Climate shipping pollution:  
piecemeal regulation for different  
objectives? Health, climate, environmental,  
and socioeconomic implications and  
challenges for green shipping propulsion

**Hamburg, 12. / 13. March 2019**  
KlimaCampus Hamburg  
Grindelberg 5  
20144 Hamburg, Germany

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**futurearth**  
research for global sustainability

**WCRP**  
World Climate Research Programme

## Preliminary Agenda

Version, 11.2.2019

### 12<sup>th</sup> of March 2019

- 12.00      *Snack and Get together*
- 12.30      **Welcome and introduction** by Wilfried Rickels, Christiane Joerk, Daniela Jacob
- 12.45–13.30    **Impact of ship emissions** on air quality, by Volker Matthias  
Comment by industry representative (7 min)  
Discussion (15 min)
- 13.30–14.15    **Climate effects of shipping** by Johannes Quaas  
Comment by industry representative (7 min)  
Discussion (15 min)
- 14.15–15.00    **Impacts of shipping on the aquatic environment** by Anna Rutgersson  
Comment by industry representative (7 min)  
Discussion (15 min)
- 15.00–15.30    *Coffee Break*

15.30–17.30 **World Café**

Goal: Come up with open scientific questions considering the input and needs of the stakeholders

**Topic 1: Emission reduction regulations, technologies and their consequences**

Subtopic: Effects of Scrubbers and LNG. How mature are these technologies? What are the problems?

**Topic 2: Air quality and health**

Questions: What is the impact of current regulations? How useful are further regulations? Which would be most urgent for health protection?

**Topic 3: Climate effects and perspectives for carbon neutral shipping**

Questions: How useful is a global sulphur reduction w.r.t. climate effects? How can shipping become carbon neutral on the long run?

**Topic 4: Shipping effects on aquatic and terrestrial ecosystems**

Can we quantify shipping effects on water quality and land ecosystems?

**Topic 5: Socio-economic drivers for green shipping**

Questions: How do ship owners react to stricter regulations? Which implications on the ship trade do stricter regulations have?

- 17.30 **Plenum** – presentation of tables' results and discussion of further proceedings
- 18.00 End of Day 1
- 19.00 *Dinner*

## 13<sup>th</sup> of March 2019

- 09.00–10.15 **Podium discussion:** Socioeconomic and environmental implications of NO<sub>x</sub> and SO<sub>x</sub> regulations in context of SDGs (health and ocean) and GHG Emission Reduction goals, moderated by Christa Marandino
- 10.15–12.00 **Working groups** to outline interdisciplinary research proposals addressing the questions from Day 1 / drafting of a position paper
- 12.00 **Short presentations** on working group results  
Discussion of outcome and further proceedings in plenum
- 12.30 *Goodbye and Snack*