



Michel Bodgo / WWF-Capon



A voluntary MRV system for GHGs in shipping is being developed through the FRAM project in Norway

- FRAM project initiated by WWF, Torvald Klaveness, Wilh.Wilhelmsen ASA,
 Solvang ASA, BW Gas, Grieg Star, DNV and the Norwegian Ship-owner
 Association
- Two overall focus areas: (1) develop a MRV system to enable (2) effective energy efficiency work on company and industry wide levels
- All ship-owners/operators in Norway will be invited to participate in FRAM without any costs. Scalability beyond Norway possible
- Received government funding (through the Transnova fund)



Approach: Harmonize MRV processes and establish data-warehouse solution

FRAM project participants

- Report according to guidelines
- Determine and publish energy efficiency goals



Fuel consumption (per ship)



Emission factors



Verification



Reporting



- Anonymous public disclosure of overall trends
- Ability for individual benchmarking

Data-warehouse solution



How FRAM is planning reporting requirements

- Goal: To ensure that GHG emission data is reported in a consistent manner
- Individual ship reporting is aggregated on company fleet level. Reporting will be made according to three key indicators:
 - CO₂ eq./ton-miles (transport efficiency)
 - CO₂ eq./nautical miles (vessel efficiency)
 - Absolut emissions, e.g. in tons CO₂ eq.
- Indicators will be associated with explanatory information, such as appurtenant parameters (e.g. speed) and qualitative information (e.g. fleet expansion).



How FRAM is planning verification requirements

- Goal: To ensure that all FRAM participants provides reliable data which is perceived as trustworthy among the participants and towards other stakeholders
- Approach: develop guidelines based on ISO 14064:
 - First year: verification on the basis of self-assessment
 - Second year on onwards: aim for certification
- May consider a maturity system, e.g. with level A signifying a high level of accuracy and C signifying the lowest level of accuracy.



Thank you

www.panda.org

