



## The Energy Management In Practice (EMIP)-2 project

Statusreport no 1 to the WG 5

**Dec 2 2011**

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# Outline



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- Resultgoals
- Project structure-WBS
- Prelim timeschedule-milestones
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- Communication strategy
- Current status-activity autumn 2011
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- Economy
- Consortium agreement
- Way ahead-desired actions from WG 5/project board

## The project's effectgoal- WHY do we do it?



*“To utilize, strengthen, enhance and sustain the developed EMIP platform through stronger inclusion of R&D institutions and industry actors enabling a robust knowledge and innovation platform related to energy efficiency on ships, with rational utilization of limited resources and a strong focus on verification of practical energy efficiency measures, contributing to increasing Norwegian shipping's competitive edge and environmental performance”.*

# Resultgoals- WHAT shall we deliver?



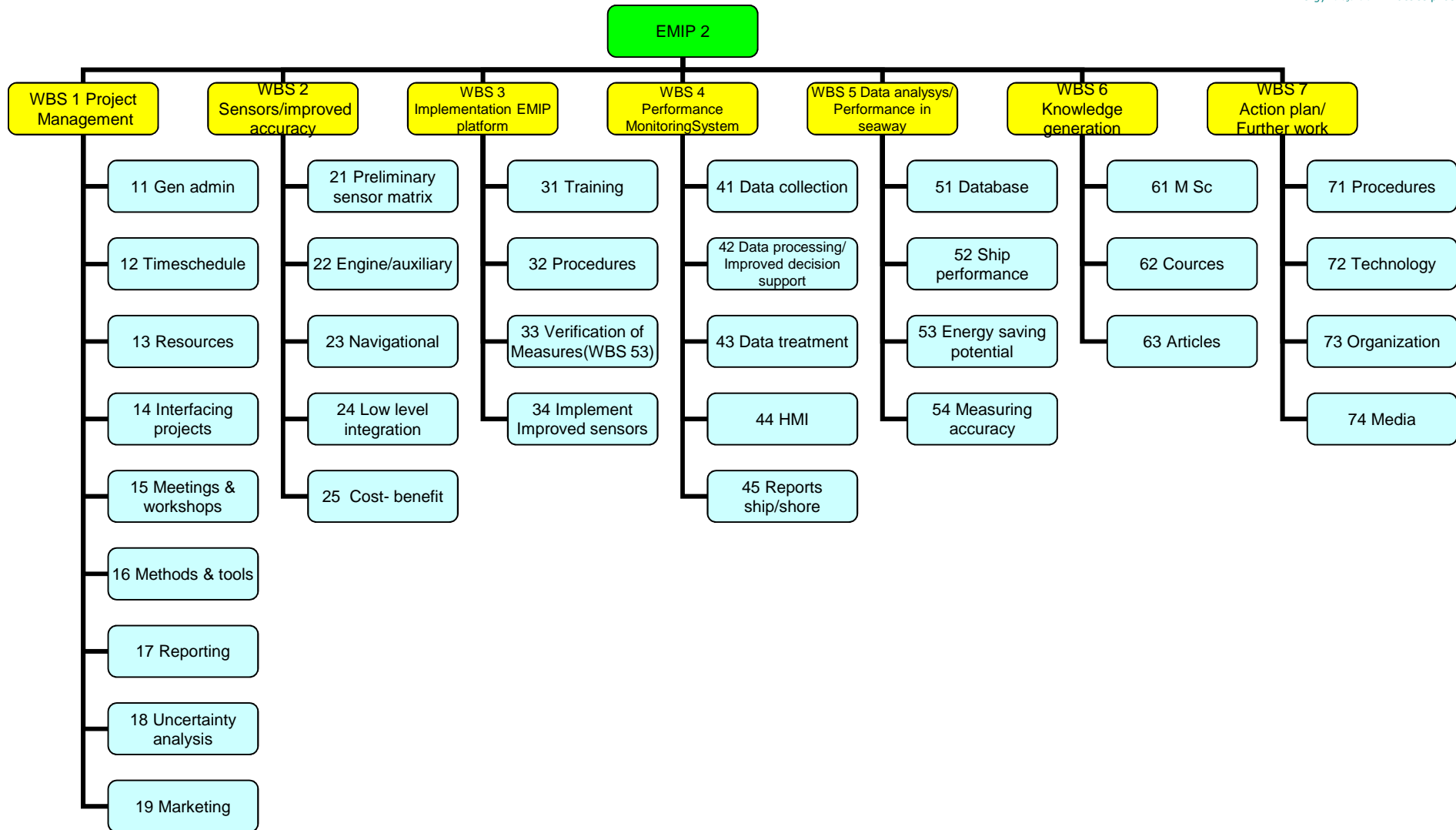
- Deliverables;
  - Identify, test, integrate and develop sensors yielding **improved measuring accuracy** related to energy efficiency on ships
  - **Implement results from the 200840/I40 EMIP I project, related to developed training programs for crews, procedures and verification of measures**
  - Enhance decision support functionality installed on nominated testships and build a **robust ship-shore reporting** system enabling improved capability for shore organization follow up
  - Establish a **database for scientific analysis** and systematic follow up of energy efficiency measures on ships and perform studies related to **improved energy efficiency of ships in seaway**
  - Further **develop knowledge** related to energy efficiency on ships by including **3 M Sc students** to the project, establish courses in the topic at **NTNU** and publish articles related to the project in scientific journals, popular science magazines and in the media in general
  - Conclude the project with an **action plan** with indication of next steps and areas for further research

## Resultgoals- WHAT shall we deliver?



- Budget goal; **10500 kNOK**
  - 4200 kNOK Norwegian Research Council(NRC) Support
  - 6300 kNOK WG 5/partner contribution
  
- Project termination date; **Sep 26 2013**

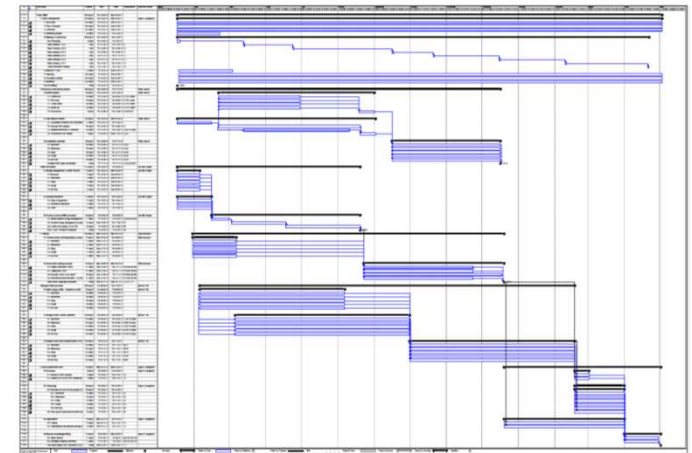
# Project structure- Work Breakdown Structure(WBS)



# Prelim timeschedule- milestones



- WBS 2 Sensors for improved measuring accuracy and decision support- concluded **Q3 2012**
- WBS 3 Implementation of EMIP platform- concluded **Q2 2013**
- WBS 4 Performance Monitoring system, concluded **Q1 2013**
- WBS 5 Data analysis/Performance in seaway, concluded **Q1 2013**
- WBS 6 Knowledge generation, concluded **Q2 2013**



# Organisation



- Project manager: Aage O Langeland- Grieg
- Ass project manager; Christoffer Bøhmer- Klaveness
- WBS 2; Sub project manager; Sam Holvik- Høegh
- WBS 3; Sub project manager; Christoffer Bøhmner- Klaveness
- WBS 4; Sub project manager; Petter Jønvik- Wilh Wilhelmsen
- WBS 5; Sub project manager; Brage Mo- MARINTEK
- WBS 6; Sub project manager; Tor Øyvind Ask-Solvang
  
- NTNU, MARINTEK, Marorka and Kongsberg are all project partners- in total 10 organisations.....
  
- A cooperation matrix are under development showing subject matter experts in the various companies

# Interface Maritime 21



- By execution of EMIP I and II, WG 5 supports the execution of the Maritime 21 strategy
  - “Effektiv og miljøvennlig energiutnyttelse”

IVAR



# Communication strategy



- Under development
- Encompass;
  - Development of website
  - Regular status report in relevant forums
    - Forum for Reducing Emissions from Ships, Nov 9 2011
  - Presentations at conferences/seminars
    - MARKIS conference Uddevalla Dec 1 2011

# Current status-activity autumn 2011



- **Kick off Sep 26-27**
  - Identified need for further work in detailing and harmonization of scope and work. Defined project culture
- **Statusmeeting no 1- Oct 26**
  - Still need for work with the plans
  - Work with consortium agreement, collaboration tool, website
- **Statusmeeting no 2- Nov 24**
  - Project plan 80% finalized- 200 work packages identified
  - Uncertainty analysis remain
  - Final harmonized plan by Dec 15
- Average resource utilization per partner 21 000 NOK per month (hours and travel)

# NRC report- Dec 1

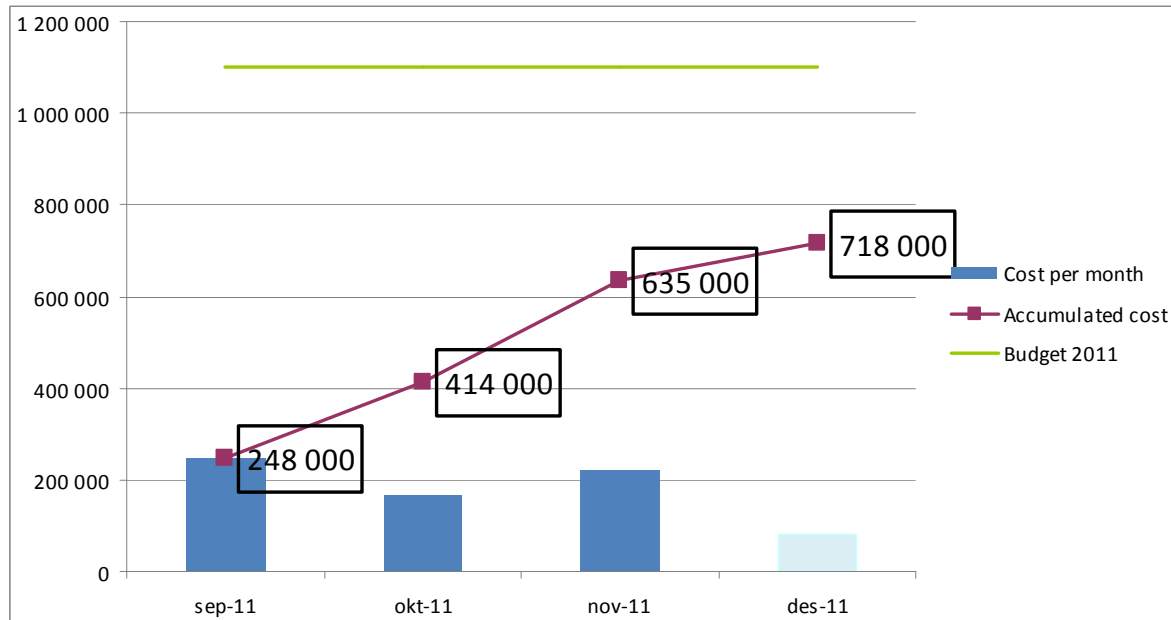


## FRAMDRIFTSRAPPORT

Prosjektnummer: 210685  
Prosjekttittel: Energy Management In Practice- phase 2  
Prosjektleder: Langeland, Aage Oscar  
Aktivitet / Program: MAROFF-2  
Prosjektansvarlig: Klaveness Maritime Logistics AS  
Rapporteringsperiode: 20110926 - 20111130

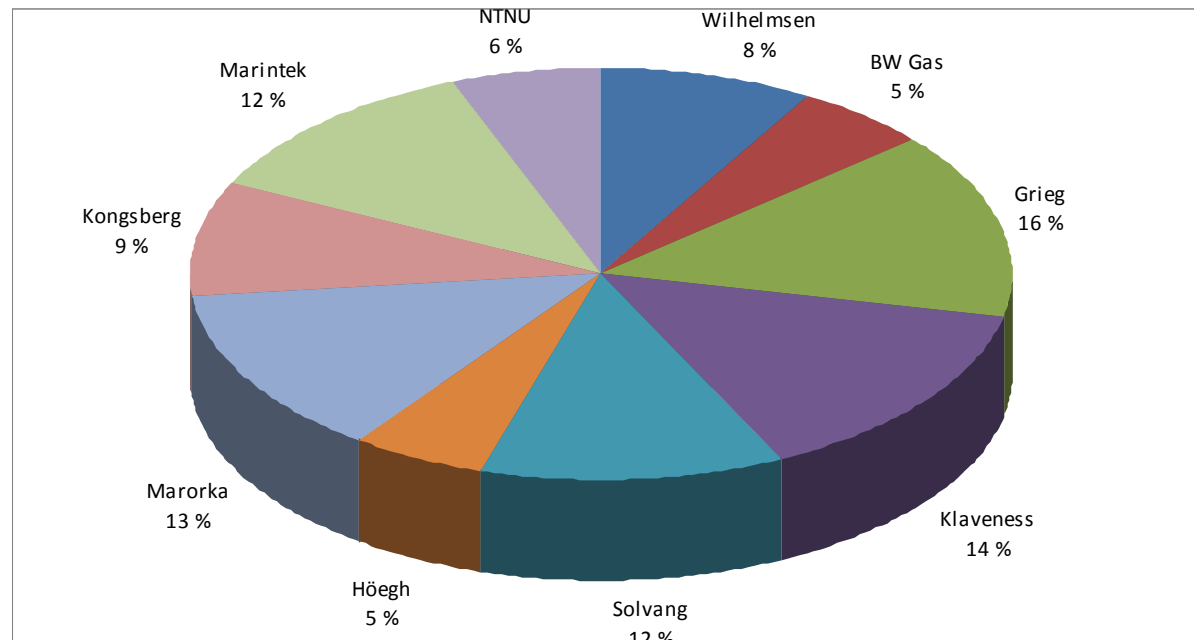
- Mål:** Er det rapporteringspliktige avvik i de avtalte mål? Nei  
**Framdrift:** Er det rapporteringspliktige avvik i faglig framdrift i forhold til avtalte milepæler, prosjektbeskrivelsen eller i forhold til stipendenes tilsetning/framdrift? Nei
- Økonomi:** Er det rapporteringspliktige avvik mellom budsjett og forbruk (jfr. kostnadsplanen) Ja
- Økonomi:** Er det rapporteringspliktige avvik i finansieringsplanen? Nei
- Partnere:** Er det rapporteringspliktige endringer for samarbeidspartnere? Nei
- Andre avvik:** Er det andre vesentlige avvik i forhold til det som er avtalt i kontrakten (særlig art. 8)? Ja  
**Stipend:** Opplysninger om alle stipend må være fullstendige og korrekte. Har du oppdatert månedsverk og andre opplysninger for hver stipendiat? Nei
- Resultater - aktiviteter:** Det skal gis en oversikt over resultater og aktiviteter i prosjektet. Er dette gjort? Nei
- Resultatindikatorer:** Alle resultatdata som er framkommet i prosjektet skal rapporteres. Er rapportering foretatt? Ja
- Publisering/informasjon:** Er opplysninger om publisering gitt? Nei
- Internasjonalt:** Omfanget av internasjonalt samarbeid skal angis. Har det vært slikt samarbeid i rapporteringsperioden? Nei  
**Særskilt rapportering:** Dersom det foreligger krav om særskilt rapportering i egen melding skal dette utføres. Er særskilt rapportering utført? Ja

# Economy- accrued expenses



Estimate 65% earned value by end 2011

Will apply NRC for transfer of 382 kNOK from 2011 to 2012



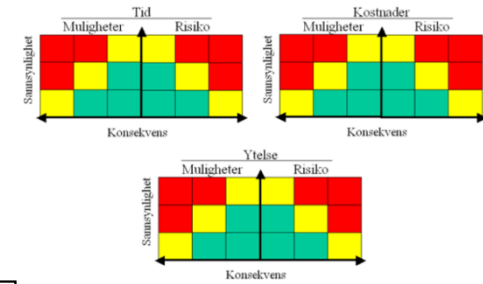
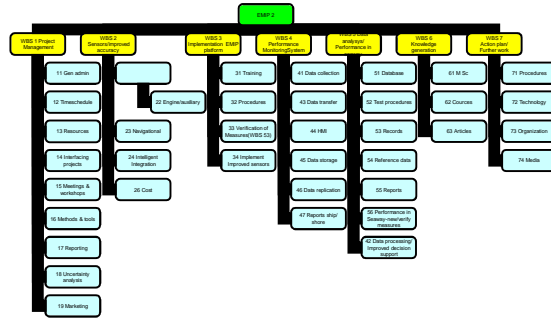
# Consortium agreement



- Quick signing process this week- submitted to NRC Dec 1
- Reuse of the EMIP I agreement-standard contract
- Company internal hearing process initiated ultimo Oct
  - Nov 28 goal for submission to NRC
- Need to sign in hardcopy and submit to NRC including all appendixes
- Have to discuss the composition of a project Board
  - Separate Board meetings including all 10 companies at regular frequency?
  - WG 5 companies +Kongsberg(want to be a part of a Board)

# Way ahead

1 Start



Dec 15 2011

2 Dicipline and teamwork

Jan 11 2012



3 Stop

