



TEKNOLOGISK
INSTITUT

it's all about innovation





TEKNOLOGISK
INSTITUT

DTI blue growth activities with SUBMARINER Network

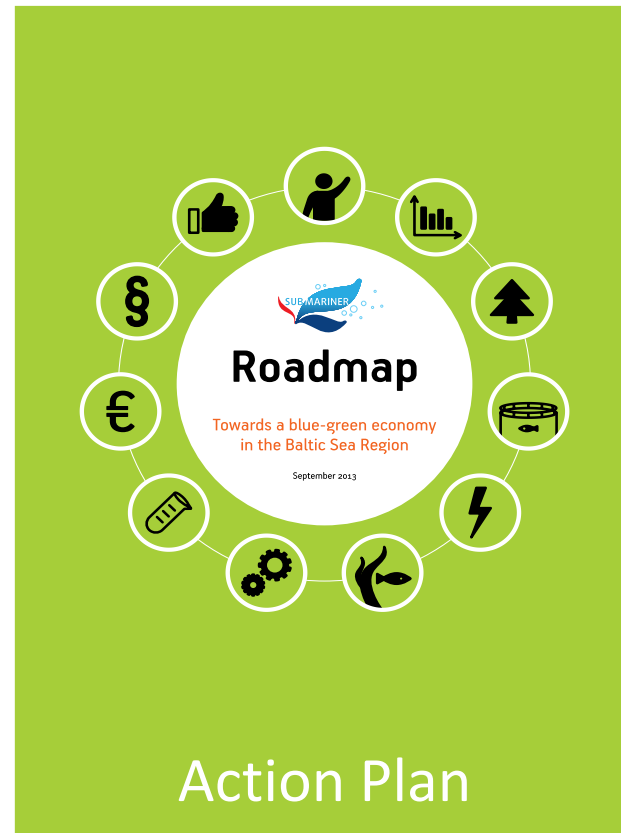
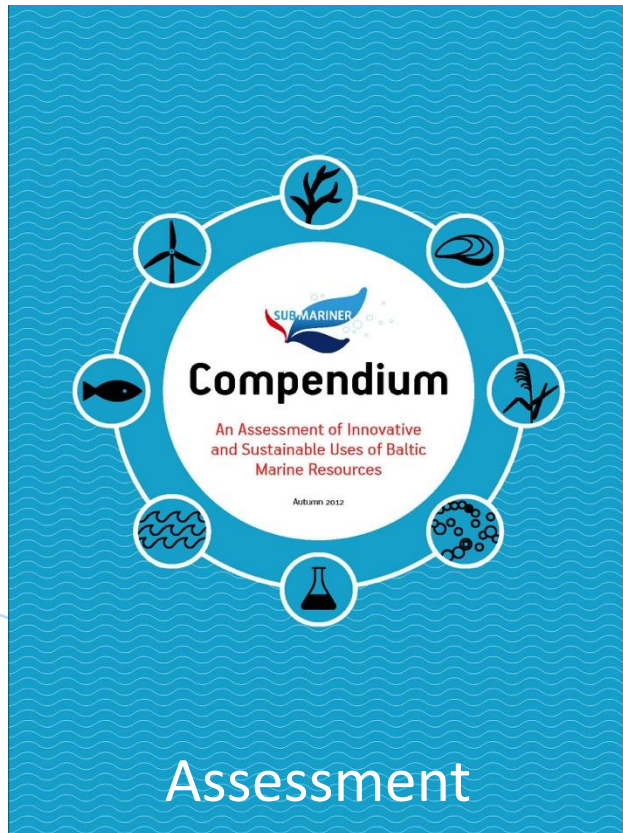
Hilary Karlson

The SUBMARINER Network

- EU Strategy for the Baltic Sea Region
 - **Priority Area Innovation**
 - **Umbrella flagship:**
numerous actions and initiatives
- **Flagship leaders:**
 - Ministry of Economic Affairs
Schleswig-Holstein (Germany)
 - Swedish Agency for Marine and
Water Management
 - Maritime Institute in Gdańsk (Poland)
- Organised as **European Economic
Interest Grouping (EEIG)**
 - **Permanent Secretariat** in Berlin
- Rationale: **Reaching the critical mass
for action** – which not available in one
country alone

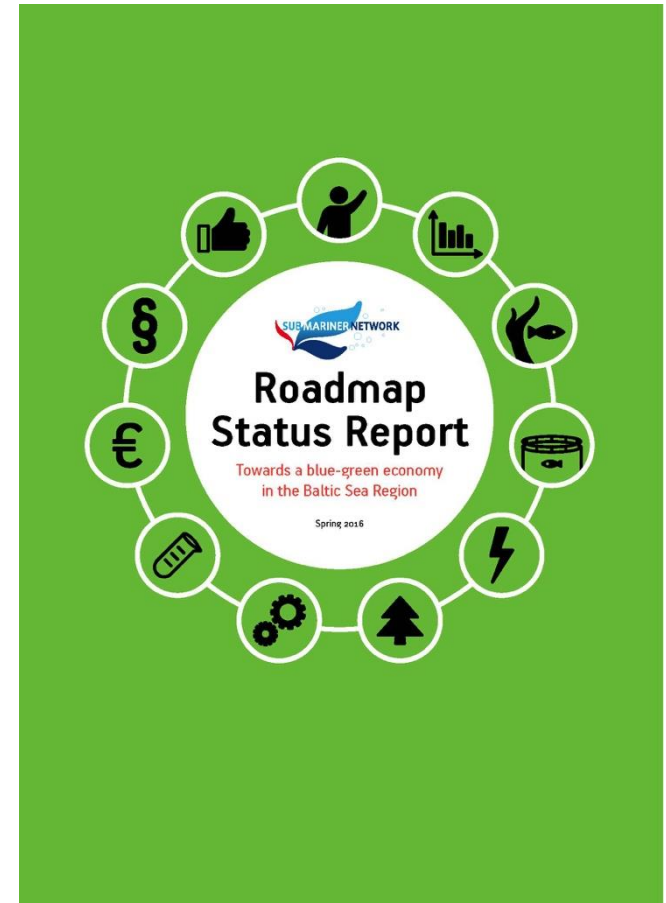


Key Reference Documents

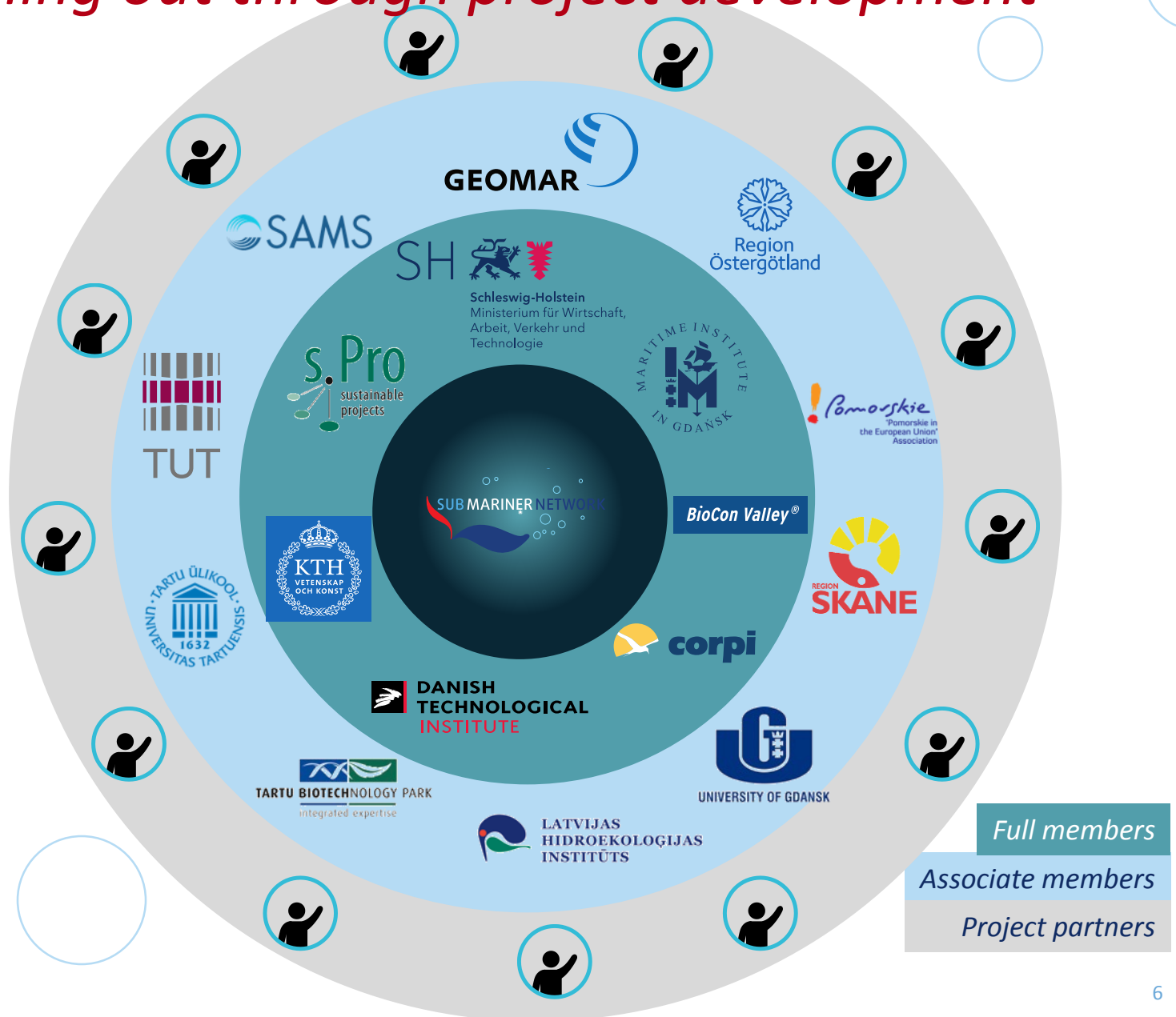


Roadmap Status Report 2016

- Macro-regional cooperation necessary to reach **critical mass of action**
- More efforts needed to integrate **private sector** at all levels:
 - **New ways of finance**
 - Market Surveys & **Marketing Campaigns**
 - Work with **distribution channels** (e.g. retailing industry)
 - Closer work with **technology** owners & developers
- Need of **financial incentives** to enable innovative products with societal & environmental benefits to come to market



Reaching out through project development



Making use of different funding opportunities



ALLIANCE
Baltic Blue Growth
Smart Blue Regions



MSP & MHM
Maritime monitoring
technology transfer



Smart Blue
Europe



InnoAquaTech
Save the Bay!



Save your Bay!



SuMBays



BONUS BALTICFARM



MUSES



EMFF Blue
Technology call



SUBMARINER topics

Macroalgae
harvesting and
cultivation



Mussel
Cultivation



Reed
Harvesting



Large-Scale
Microalgae
Cultivation



Blue Bio-
technology



Wave
Energy



Sustainable Fish
Aquaculture



Combinations
with Offshore
Wind Parks



strategic action fields

Actors

Data

Environmen-
tal Impacts

Pilot sites

Energy

Ecosystem
Services

Technolog
y

Blue Bio-
technology

Finance

Regulation

Image



Baltic Sea
actors and
activities



Data sets of
Baltic Sea
resources



on water
quality and
habitats



for
empirical
research



Regional
solutions
integrating
marine
resources



Valuation and
compensation
of ecosystem
services



Development
and transfer
of suitable
technology for
the Baltic Sea



BSR-wide
systematic
approach to
Blue Bio-
technology
Research



Unlock
financing for
innovative
uses of
marine
resources



Create
better legal
and
regulatory
conditions



Create
positive
image for
products
and services
from marine
resources

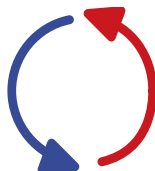
vision 2030



A smart Baltic
Sea Region –
making use of
blue-green
combined
solutions



Maintaining
the Baltic
Sea Region's
natural
capital



Marine
resources as
part of the BSR
sustainable
energy and
biomass
portfolio



Improve
human well-
being via
new marine
products



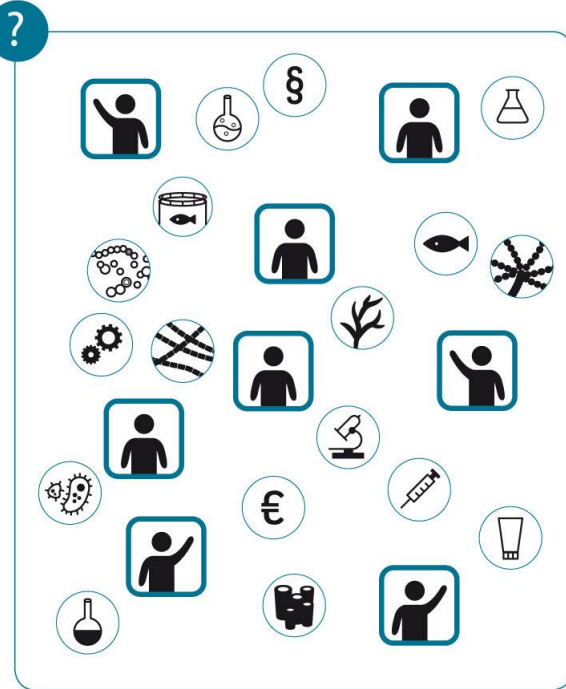
The Baltic Sea
Region – a
biobased
innovation
showcase

Baltic Blue Biotechnology Alliance

Accelerating the development of marine bio-based products through transnational collaboration of private & public partners

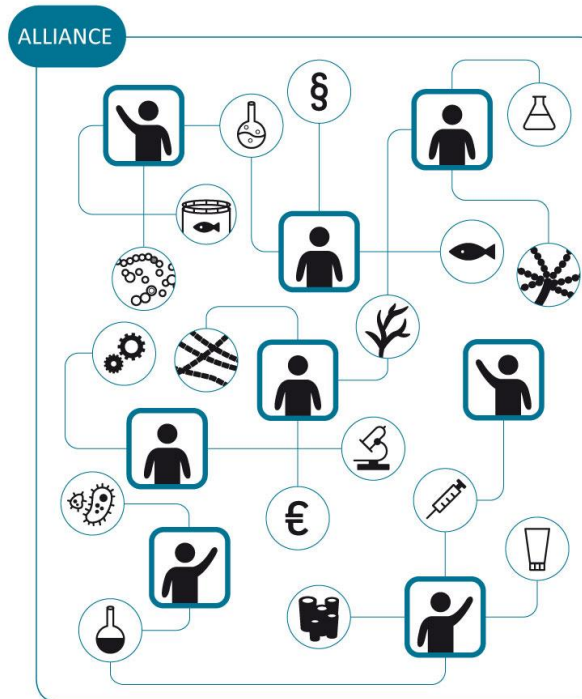
- Create success stories: focus on real cases
- Pro-active search for new actors:
 - Working through calls
 - Pitching events – international panel
 - Joint Marketing
- Info and service hub:
 - Where to find which resources, material, knowledge, test beds, laboratories, etc.
 - Overcome “soft” barriers: language, organisational, financial, legal issues

Baltic Blue Biotechnology Alliance – Our Approach



- High potential but actors not aligned with facilities, experts, resources

- Alliance “match-making” process: linking our users to services, facilities and experts they need



- Alliance users are now connected and can take their idea further along the value chain

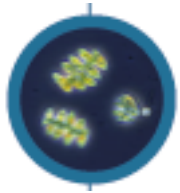
Baltic Blue Biotechnology Alliance – The Cases



...**CRM** aims for a new product based on active compounds of macroalgae extracts => extraction method



...**Baltic Probiotics** ...wants to test its innovative new probiotic aquaculture products to enhance fish health and water quality.



...**Biovento** has a collection of cultivated Baltic Sea microalgae => it looks for natural product chemistry and bioactivity testing



...**Kalundborg Utility** ...offers its state-of-the-art microalgae cultivation test facility to new users.



...**Geoterma** => needs an application for making use of its geothermal water => range from aquaculture to health.

Do YOU have a raw material, a product idea, a facility, or ...

For which you need partners to develop a blue biotech value chain?


FIRST CALL NOW OPEN!

Deadline : 16th September 2016


- **Decision support for new aquaculture installations** based on assessment of modern integrated RAS and integrated aquaculture systems and their components
- InnoAquaTech **SME service offer** consists of matchmaking events, study visits, summer school, professional trainings and innovation check

Four regional pilot activities:

- RAS system combined with geothermal energy in Klaipeda, LT
- Crustacean production in RAS system in Pomerania, PL
- Aquaponic production in Mecklenburg-Vorpommern, DE
- Integrated RAS and microalgae cultivation system in Zealand, DK



*Working together to improve the Baltic
Sea **environment** and **economies**:*



*Innovative approaches to the
sustainable use of marine resources*



The SUBMARINER Network:
a pan-Baltic maritime
**cluster initiative**



Hilary L. Karlson
DTI | September 2016

Want to know more?

www.submariner-network.eu

#BalticBlueBioAlliance

