From value to price – creating markets for innovative uses of marine resources

Gdansk, Sept 6 2013
Using markets to supply ecosystem services
How to make it happen
Cole, Hasselström, Engkvist, Söderqvist

"Given the number of ecosystem service markets in operation today, and the urgent need for cost efficient approaches for preserving ES, now is the time to identify what works and what does not when designing and encouraging ES markets."

FORES Study 2012:3

http://www.fores.se/environment/markets-for-ecosystem-services-a-new-report/
What does a typical "innovative" marine product generate?

Ecosystem service value

Market value

"Total Value"

Market Price
A very brief formalization of a market

€

Q*

D

S

Quantity

(market outcome)
A very brief formalization of a market

€

Positive externality

Q* (market outcome)

Q_{opt} (what society would want)

Quantity
Failing to give the value created to society through environmental improvement a price leads to an undersupply of the product, compared to what would be economically motivated.
...so:

- Who should pay the price premium for ecosystem services in innovative marine products?

- Why would they want to pay?

- What can the industry and policy do to facilitate this?

- And how do various types of production affect the answers to above questions.
Three alternative “payers”

Consumers    Government    Other firms
Consumers as payers

Why would they want to pay?
• Preferences among some to pay premium prices for 'environmental friendliness'

What should industry do?
• Inform the public about the benefits
• Consider eco-labelling..
• Assess the product chain – how can we be sure that end-consumers know what’s going on in the very beginning of the chain?

What should governments do?
• Inform the public (broadly)
• Finance and launch local pilot programs and research on consumer behavior
Government as payer?

Why would they want to pay?
• Helps fulfilling environmental objectives

How should they pay?
• Subsidies
• Examples are agri-environmental schemes (e.g. subsidizing certain production methodologies)

What should industry do?
• Convince government

What should governments do?
• Assess the environmental potential in different types of production
• Launch pilot programs (PES) and assess what works and what does not.
• Be aware of transaction costs
• see the PES as one out of many alternative policies
Other firms as payers?

Why would they want to pay?
- Helps them make profits
- Or – they need a certain amount of ’compensation credits’

How should they pay?
- As a general price premium for ’green’ products
- As a payment for the production of an ecosystem service (’credit’)

What should industry do?
- Assess whether it is possible to join existing ES market
- Establish collaboration with subsequent parts of the production chain

What should governments do?
- Assess the environmental potential in different types of production
- Launch pilot programs, compensation schemes and assess what works and what does not.
- Be aware of transaction costs
- see compensation as one out of many alternative policies
Some conclusions and recommendations

• Potential for transforming ES value creation into a price.
• This linkage is absolutely crucial
• Producers should ask themselves: how well does my product compete with other production on a regular market? And: how big are the positive environmental impacts?
• Governments should assess what types of production should be supported and how? Two different aspects:
  (1) pure market aspect, i.e. promoting regional competitiveness and
  (2) potential environmental gains.
• Concerning environmental gains, a lot (!!!) needs to be done.
  • Assessing impacts from various types of products and production
  • Assessing options to create incentives to the market
  • Informing, informing, informing
  • Trial and error
A project proposal

- Launch a project on pricing ES generation connected to SUBMARINER uses
- Choose a few cases
- For each case, find the key questions that need to be answered connected to pricing, e.g. ...  
  - How well do the products perform on their own and how large is the potential ES generation
  - Who is the most reasonable payer/financer for ES generation
  - What does it take for these payments to happen in reality
- Start answering these questions and defining new ones