European Commission

Energy efficiency in fisheries

Workshop of Energy efficiency in fisheries

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The importance of fuel costs in fisheries

- Fuel costs have always been seen as important for profitability; but, for a long time, they were considered as exogenous. A given.
- Matters started to change in 2005/2006: by taking action significant savings can be achieved and these are crucial for survival.
- The Commission very active since 2006: Conference on energy efficiency in fisheries organised by DG MARE in May 2006. As a result, a website was created to exchange ideas and best practices and to post news about studies, projects, conferences, etc: http://energyefficiency-fisheries.jrc.ec.europa.eu/.
- Since 2006, at least 3 fuel price peaks: end of 2006, July 2008 and 2012. Prices now exceed €0.75/l. At that level, fuel costs would be approaching 40% of total costs, with big differences across segments (highest for trawlers, lowest for passive gears).

Reaction by the sector

- Two ways to reduce the impact of fuel costs on profitability:
- Increase income: Prices seem to be quite good at the moment. Fleets seem to be doing well at the moment.
- Reduce consumption by:
  - Changes of fishing behaviour: e.g. reducing speed % reduces consumption more than proportionally (-7%: -16%).
  - Technical adaptations of vessels & gears: e.g.: adaptations of doors and trawl nets can reduce consumption during fishing by up to 40% at an affordable cost

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Reactions by sector (continued)

- Changing the engine is also an (expensive) possibility. Recent studies refer to 10% savings but add that changing engine is not the magical solution.
- The success of these actions is shown by the fact that fuel cost reported in the AER for the period 2008-2010 have been decreasing or increasing less than the increase in fuel prices.
- Behavioural and technical changes are needed, but the Commission considers that behavioural changes are intrinsically important on a day-to-day basis, because fuel prices will remain high(er) in the long term. They have to be fostered, not jeopardised by regulatory action.

Regulatory reactions:

- The Commission (DG MARE) very active and interested in the issue of fuel costs and fuel efficiency, starting with seminar and website (2006, see supra): Studies and public support in EFF of technical changes & pilot projects (and possibly in EMFF).
- Studies on energy efficiency in fisheries (mainly MARE and JRC)
- To name just 3 (available in website):
  - Options for improving fuel efficiency in the UK fishing fleet. Sea Fish, 2006
  - Energy saving in fisheries (ESIF). IMARES, 2009
  - Effects of engine replacement on the fuel consumption reduction in fisheries. CNR-ISMAR, 2012.
- To be continued in the new programming period 2014-2020. To be noted also that one of the focus of FP7 is on efficient energy use (and on efficient energy generation).

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Support under the EFF

- Article 25.2 covers energy efficiency. Article 25.3 covers engine replacement (Axis 1). Article 41 cover pilot projects (Axis 3). Axis 5 covers studies.
- Condition: Provided the ability of the vessel to catch fish is not increased.
- Problem: The Court of Auditors Report, special report 12/2011 on adaptation of capacity to resources concludes that investments on board, particularly investments in energy-efficient engines, can increase the ability to catch fish. E.g.: nozzle propulsion systems allow a reduction of 20% of power demand for the same thrust as compared with an open propeller, but increase "ability to catch fish".

Support under the EMFF

- The EU has the objective of saving 20% of energy until 2020. A resource-efficient Europe is one of the pillars of the Europa2020 strategy.
- Resource efficiency is an objective of the EMFF. Energy efficiency would receive public support in fisheries (inland fisheries, aquaculture and processing). Article 39: Investments on board increasing energy efficiency of fishing vessels (+ energy efficiency audits and schemes),
  - General limitation: provided that the fishing capacity of the vessel is not increased (Article 13) and
  - Specific limitation: engine replacement or modernisation is excluded. Increases ability to catch fish & is not the most effective, but certainly the most expensive.

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Thanks for your attention – gracias por su atención