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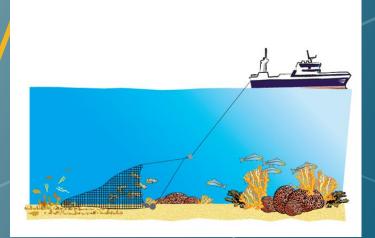
THE ARCTIC UNIVERSITY OF NORWAY

### STUBBORN FUEL TAX CONCESSIONS - THE CASE OF FISHERIES IN NORWAY

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#### **Outline of presentation**

- Introduction
  - Norwegian fisheries subsidies development
  - The fuel tax reimbursement scheme
- What is a subsidy?
  - Why is it harmful in fisheries?
- Background
  - Environmental taxes and excemptions
- Research questions:
  - The fleet's benefits from the subsidies (profitability)
    Sensitivity analysis
  - Subsidy removal effects
- Summing up some findings and recommendations

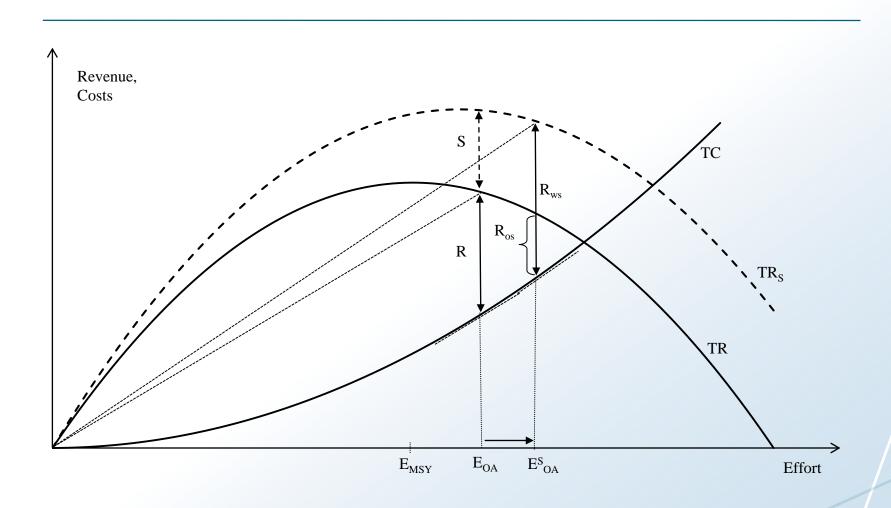
### What's a (fishery) subsidy?

- WTO: "...(i) financial contributions (ii) by a government or public body (iii) that confer a benefit", all three conditions must be met
- Governmental financial transfers to the fishery sector are not necessarily subsidies, nor necessarily harmful – OECD reports
- Sumaila et al. (2010): Good, bad or ambiguous (ugly) subsidies
- Why harmful in fisheries?
  - Incentives for increased output, endangering fish stocks and reducing potential long term profits
  - Trade distortion through provision of advantages for one exporting country (if underdeveloped stocks)
- Fuel subsidies and environmental tax exemptions

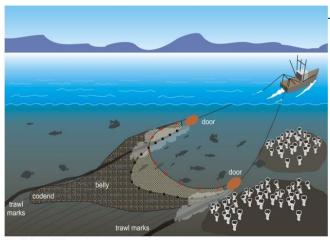
### Effects of subsidies in open access fisheries:

increased effort - reduced stock

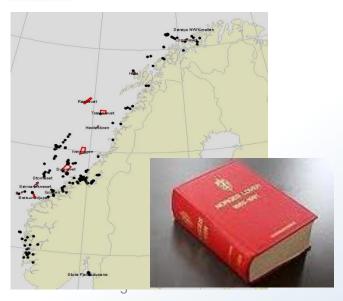
Source: Duy et al., 2014



# Energy intensive Bottom trawling may have damaged 30-50 % of Cold Water Corals in Norway (Armstrong, 2014)



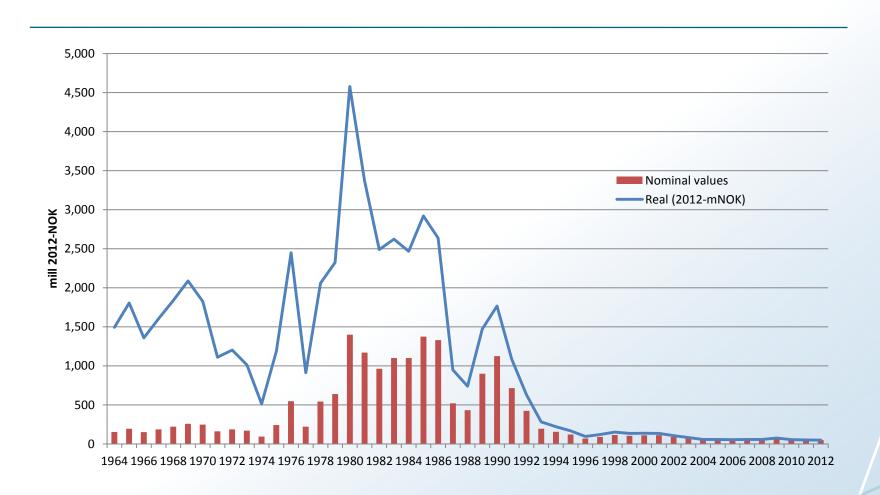






- 2445 km<sup>2</sup> protected
- Not allowed to damage on purpose

### Government financial transfers to the Norwegian fishing industy, 1964-2012. Sources MFCA and SN



#### The fuel tax reimbursement scheme in Norway

- 1970: Environmental/pollution justified Norwegian mineral oil tax
  - Basic tax, CO<sub>2</sub> tax and sulphur tax
  - Manufacturing industry consumption mainly exempted
- 1988: Coastal water fisheries reimbursed for most of the tax (not sulphur) while distant water fishing vessels are exempted all
  - This, due to a difficult economic situation in the fishing fleet, international competition and fear of bunkering abroad
- 2007: Parliament agreement on climate policy
  - Mineral oil tax reimbursement scheme under pressure
- 2012: Still in effect refunding NOK 1.6 per litre
  - But also other industries are exempted/subsidised
- 2013->2014: Increasing rate to pay for fishing vessels

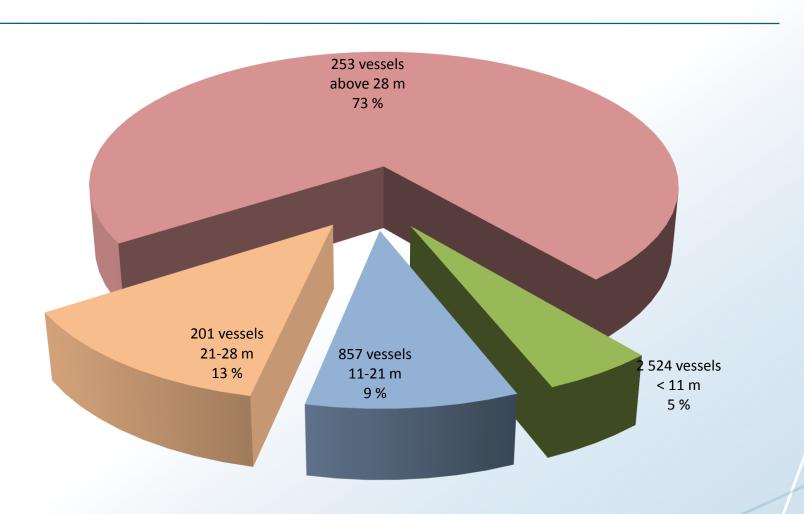
### The mineral gas oil list price and the per litre fuel tax refund, 1988 to July 2013.

Sources: Statoil Fuel and Retail ASA and the Guarantee Fund for Fishermen.



# Distribution of fuel tax reimbursement by vessel size, 2011

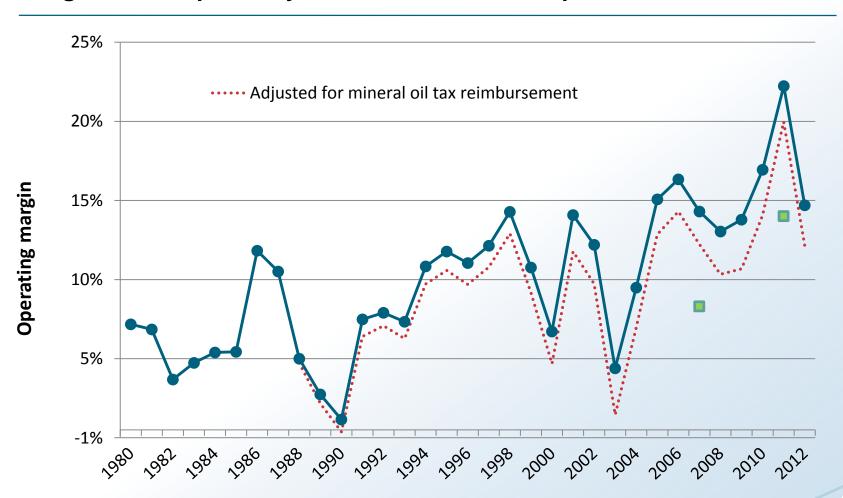
**Source: The Guarantee Fund for Fishermen** 



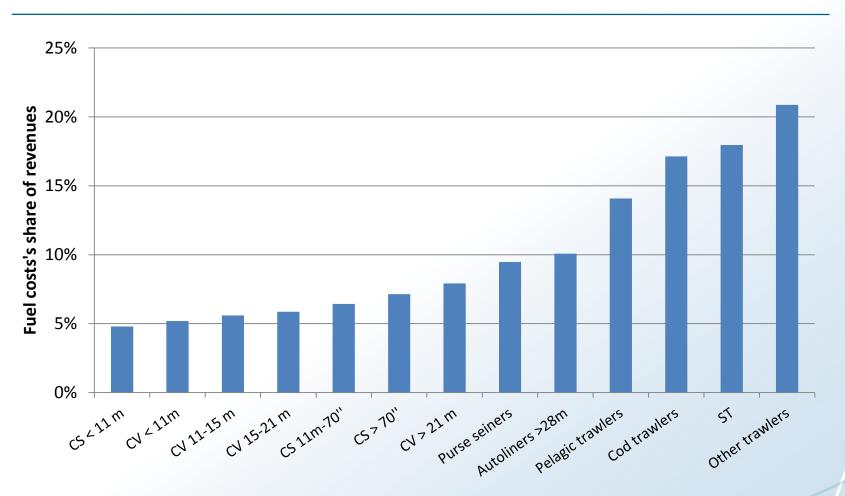
# Estimated exempted mineral oil and environmental taxes in the Norwegian fishing fleet, nominal value 2007 and 2011. Million NOK

Tax	CO <sub>2</sub>	SO <sub>2</sub>	NO <sub>X</sub>	Total
2007	394.7	11.4	366.6	772.7
2011	627.1	13.1	358.8	999.0

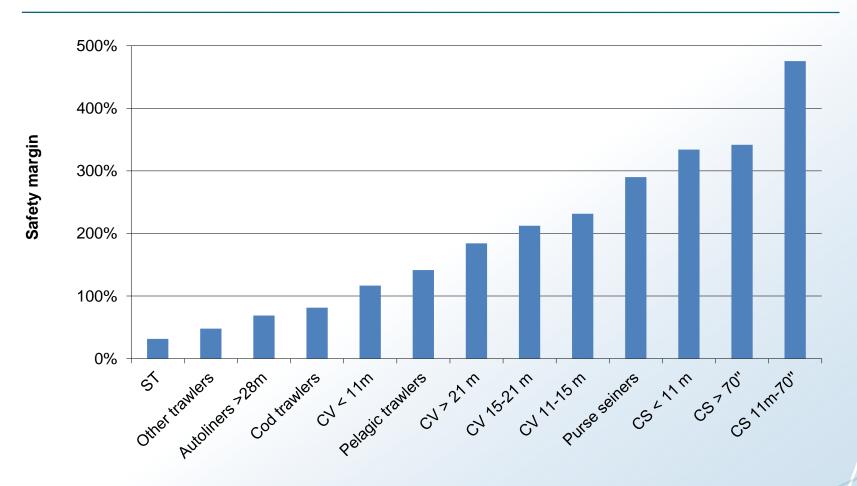
The Average operating margin (EBIT's share of turnover) in the Norwegian fishing fleet and adjusted for the CO<sub>2</sub> tax reimbursements, 1980–2012. For 2007 and 2011 the green squares indicate the profit margins the respective years if all fuel tax exemptions were abolished.



Fuel cost in percent of revenue for some vessel groups, 2011. CS=coastal seiners, CV=coastal vessels, ST=shrimp trawlers.



Fuel price increase "safety margin" for vessel groups with respect to fuel price (the increase allowed for "break-even" result), mean for 2008-2011. (Abbrevations: ST=shrimp trawl, CS=coastal seine, CV=coastal vessels)



### **Summing up (1)**

- Globally, the marginal damage from CO<sub>2</sub> emissions is independent of the location of the emission source
- The optimal emission tax on CO<sub>2</sub> should be equal across countries and sectors
- However, CO<sub>2</sub> taxes vary between countries, as well as within national sectors and across fuel types
- The same applies to SO<sub>2</sub>, NO<sub>x</sub> and other environmental taxes (though local damages may vary and require differentiated taxes)

### Summing up (2)

- In the EU quota market for CO<sub>2</sub> emissions, the price per ton has varied - down to € 6.6 per ton in 2012 at an UK auction
- The taxes in Norway in 2012 correspond to a rate of about USD 100 per ton CO<sub>2</sub> emissions, about twelve times the EU quota price
- In an almost Parliament-wide compromise as a measure to promote more climate friendly conduct - a proposal: phasing out the fishing industry's fuel tax exemptions
- First done for 2013 when the coastal fishing vessels pay the reduced rate of about one fifth of the full CO<sub>2</sub> rate, whereas distant water fishing is fully exempted from the CO<sub>2</sub> tax
- The Government white paper on the 2014 budget doubled this rate

### Summing up (3)

- A survey of the fuel tax regimes in neighbouring Nordic coastal states shows that their fleets are hardly charged any taxes on fuel (Waldo et al., 2014)
- Undoubtedly, this scheme is an industry support that should be abolished
- The worst emitters in fisheries get the highest relief from it

### **Conclusions**

- Emissions take place locally but affect globally
  - The fishing fleet emits about 3 % of Norwegian CO<sub>2</sub>
- Fuel tax concessions = 1 bn NOK (about USD 170 mill) = 6.3% of landed value (2011)
- Fleet profitability is no longer a reimbursement argument
- The worst emitters get the highest relief, in particular trawl
- If abolished:
  - Larger vessels will bunker "un-taxed" abroad/in open sea, since some other countries have fuel subsidies/tax free
  - Shift in supply of fish towards landings abroad
  - Smaller energy effective vessels will loose have considerably less opportunities to avoiding the fuel taxes
  - Little effect on GHG emissions
- An international agreement on environmental taxes would be preferred

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Thank you for listening!

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