Subsidies or Incentives?

Norway's support for upstream oil and gas

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GSI Global Subsidies Initiative

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Better living for all—sustainably

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International Institute for Sustainable Development / Institut international du développement durable

- Independent Policy Research Institute, est. 1990

to promote sustainable development

GSI Global Subsidies Initiative

- Established (by IISD) in 2005

to investigate and promote reform of subsidies … that have negative economic, social or environmental impacts

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Is expenditure on subsidies the best use of public money?

Fossil Fuels

$400-700 bn/year – largely oil consumers

But >$100 bn to producers, including in OECD

Fisheries

$15-35 bn/year – 25% of industry revenue

$50 bn/year lost from depleted stocks

Biofuels

>$20 bn/year

Mostly developed countries, but growing worldwide

ECONOMIC: Hugely inefficient - savings can easily compensate vulnerable

ENVIRONMENTAL: Resource depletion, pollution, land use, accidents

SOCIAL: Reduce competitiveness of poor producers; increase volatility

Irrigation

Scale unknown

GSI estimates $1 bn in Spain, >$0.5 bn in 4 Indian States

Nuclear

Scale unknown

Industry depends on subsidies

Agriculture

$384 bn in 2009

Over-production in developed countries very trade-distorting

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Why focus on fossil fuel subsidies?

Energy is fundamental	• To the economy • To the environment
Know little about them	• Subsidies and their impacts • Particularly to producers
Need a better debate	• Requires better information • Transparent, non-specialised format

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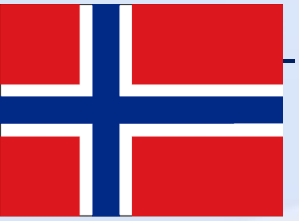
Why focus on upstream oil & gas? Why Norway?

- Consumer subsidies ~$400 billion in 2010 (IEA)
  - Reform challenge largely political
- Producer subsidies - we know very little
  - OECD (2011) made initial estimates for its members
- Norway is 3rd of GSI's *"Fossil fuels – At what cost?"*



  - Oil producer; high transparency; "Friend of Fossil Fuel Subsidy Reform"; leader in many SD initiatives and debates; well-respected world-wide
- **Norway not singled out as a poor performer**

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Methodologies for subsidy quantification, classification and evaluation should be improved – *Erik Solheim*

Subsidies aren't by definition bad (or good)

2009: ***"rationalize and phase out over the medium term inefficient fossil fuel subsidies that encourage wasteful consumption"***

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There is a robust, internationally-agreed definition of 'subsidy'

WTO (ASCM) definition of subsidy:

1. *Direct or indirect transfers of funds or liabilities (e.g. grants, government loans)*
2. *Government revenue foregone (e.g. tax breaks, reduced royalties)*
3. *Government provided goods & services (e.g. infrastructure – pipelines, storage facilities)*
4. *Income or market price support (e.g. regulated prices)*

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Tools and techniques exist to estimate subsidies

- Use existing data, estimates where possible
- *GSI Subsidy Manual & Policy Brief*: a collection of methodologies for estimating subsidy types

Box 2: How to use the GSI manual - Measuring Accelerated Capital Cost Allowances

The **table** provides a quick reference for finding the relevant subsidy category, tips on data availability and at least one reference for finding available estimation methodologies. In the example, accelerated depreciation allowances fall under the second category, "government revenue foregone," and identifies Chapter 6 of the GSI manual as the primary source for finding information, highlighting a range of estimation methodologies available.

The **manual** provides background information, methodologies for estimating subsidies, including mathematical equations and examples. In this case, Chapter 6.2 of the manual starts with background information on acceleration depreciation schemes, including a description of the different approaches that can be used to measure them. It then provides mathematical equations developed by the OECD for calculating the value of the subsidy. For instance, the following equation can be used to calculate a straight line depreciation scheme:

$$\frac{GGBE}{NCG}\Big] = \sum_{y=0}^{n-1} EA \times (sr - ar)\left(\frac{1}{1+rg}\right)^{n} \times t$$

Or, for a scheme with a declining balance, the following equation can be applied:

$$\frac{GGBE}{NCG}\Big] = EA \times t \times rg\left(\frac{(1+rg)(sr-ar)}{(sr+rg)(ar+rg)}\right)$$

Where:

Highly taxed sectors may also be subsidized

- Government fiscal policy aims that investments across the economy are equally attractive
  - Taxes 'normal' profit equally for all sectors
  - Taking account of relative risk
- High tax take in extractive industries explained largely by ***'(economic) rent'***
  - Difference of product value and extraction cost
  - Should accrue to the government

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FISCAL Producer subsidy estimates (GSI studies)

Country	Scope	Subsidies Identified	Value of Subsidies	Data year
	Upstream oil & gas	3 + 7 potential	$1.8 billion	2008
	Upstream oil activities, 3 Provinces	63	$2.8 billion	2008
	Upstream oil & gas, Federal subsidies	>20	>$10 billion	2010

Little work on subsidy impacts in public domain

	Federal/National	Alberta
GDP	0.0%	–0.16%
GDP Oil Producers	–4.8%	–6.0%
Government Budget	0.9%	4.8%
Net Oil Exports (trade surplus)	–13.6%	–9.9%
Employment	0.0%	0.4%

Sawyer, D., & Stiebert, S. (2010, November). **Fossil Fuels – At What Cost? Government support for upstream oil activities in three Canadian provinces: Alberta, Saskatchewan, and Newfoundland and Labrador**. Retrieved from http://www.globalsubsidies.org/files/assets/ffs_awc_3canprovinces.pdf

Do we have the right energy sector policies to make our economies sustainable?

- A **crucial debate** for all economies
- GSI increasingly convinced of need for **good quality information and analysis** as Step 1
  - Study recommends areas where transparency could be improved in Norway's oil & gas sector
- Future work should **focus on impacts** of specific policies and measures
  - All aims: economic, security/depletion, climate, etc.

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