



Estimating fossil fuel subsidies with SEEA data

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Presentation outline

- Background
- Methodology based on SEEA framework
- What we include in our calculation of fossil fuel subsidies – work in progress
- Swedish preliminary results with revenue foregone method
- Swedish preliminary results on effective carbon rates (ECR)



Background

Between 2021-2023 Statistics Sweden is working on method development for potentially environmentally damaging subsidies (PEDS).

The aim is to publish estimations late 2022 and to report to UNEP on 12.c.1 when data has been validated.

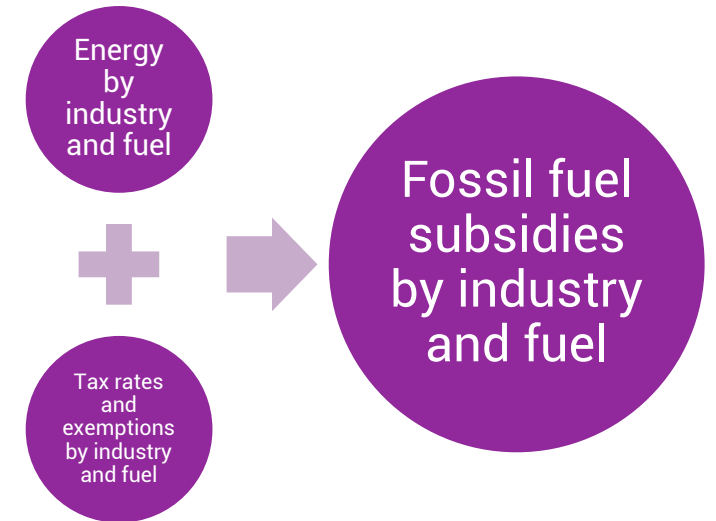
In our calculations, we cover:

- Budget transfers, i.e. direct transfers that can be found in national budgets
- Indirect transfers in the form of tax abatements

Methodology based on SEEA framework

Using the SEEA framework to calculate indirect transfers has several benefits:

- Data on energy use and tax payment is allocated by industry and fuel.
- Combining this with tax abatements makes it possible to calculate indirect subsidies using revenue foregone method.
- By adding information on emission trading scheme (ETS) we can calculate effective carbon rates (ECR).



Some of the tax exemption rules covered in the indirect fossil fuel transfer estimates

Energy tax abatements for fuel used in international waterway transportation

Manufacture privilege for producers of energy products

Energy tax abatements for fuel used in commercial aviation

No energy tax on peat used for heating

Reduced energy tax on fuels used for heating within industry

Reduced energy tax on electricity within manufacturing industry and data centres

Reduced carbon dioxide tax on fuels used for heating within industry outside EU-ETS and reduced carbon dioxide tax on district heating used within industry

No carbon dioxide tax on fuels used for electricity production outside EU-ETS

Reduced carbon dioxide tax on fuels used in combined heat and power plants outside EU-ETS

No carbon dioxide tax on peat as a fuel outside EU-ETS

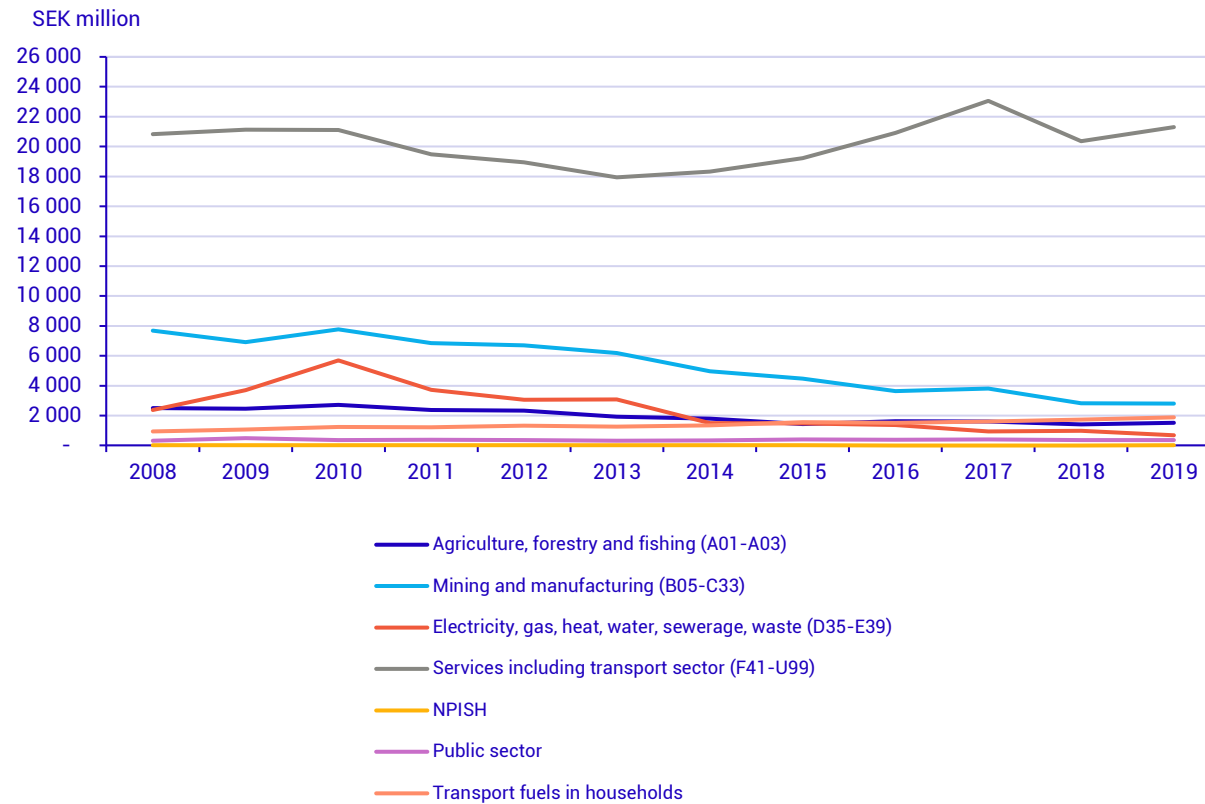
Reduced energy tax on diesel within mining industry

Direct budgetary transfers

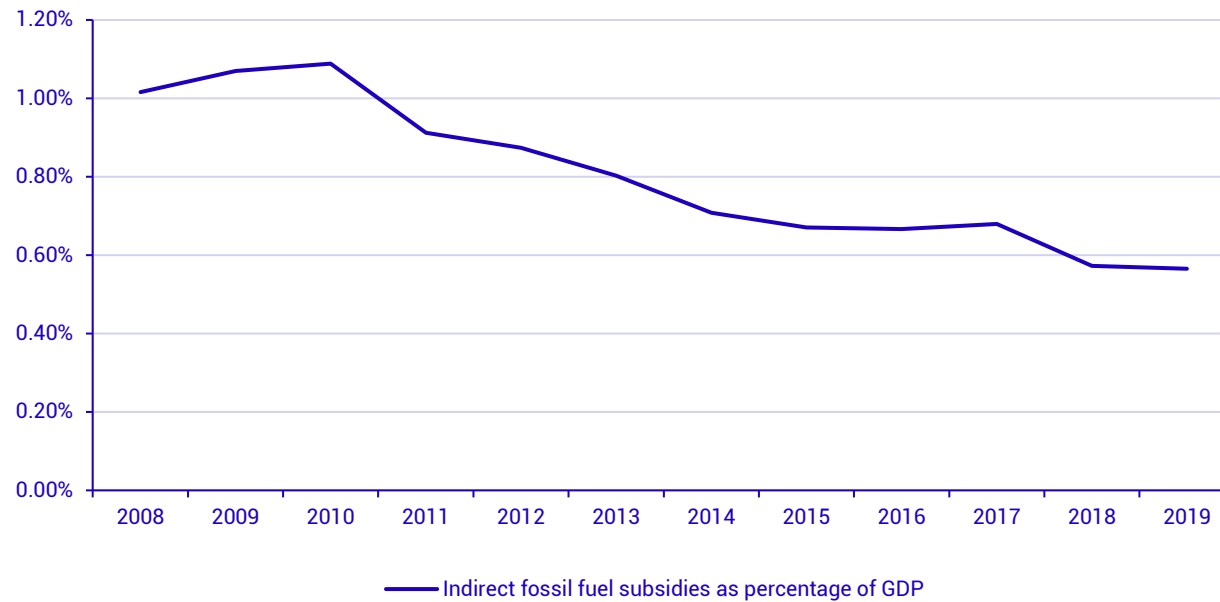
Transport support for companies in north of Sweden
Support to non-governmental airports
Support for shipping industry
Benefit taxation of private use of company owned cars
Deduction for journeys to and from work
Support motor roads in forest

Revenue foregone calculation for indirect transfers - preliminary results

Indirect fossil fuel transfers, by industry 2008-2019

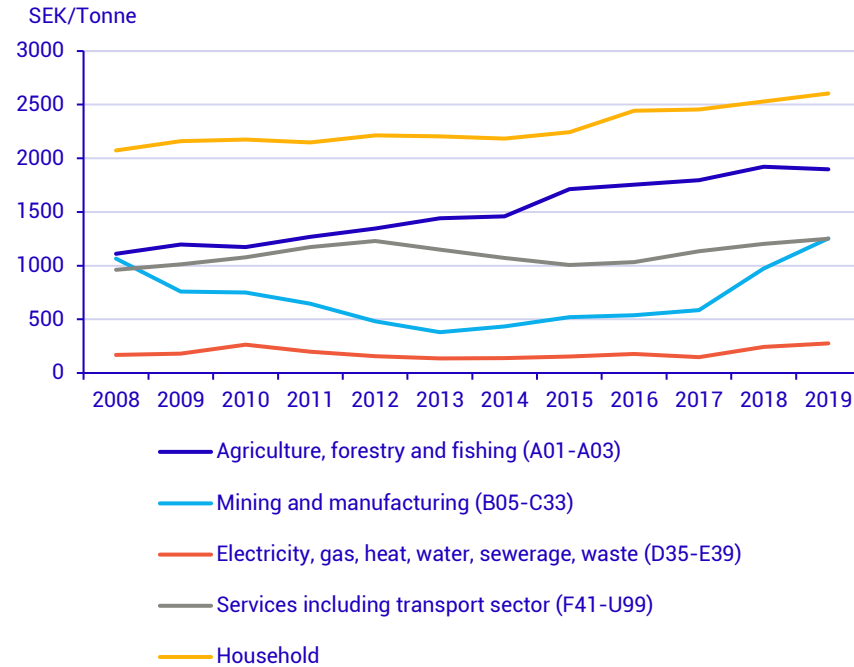


Value of indirect fossil fuel subsidies as percentage of GDP



ECR calculation – preliminary results

Average ECR per aggregated sector (2008-2019)



Average ECR per component, for the manufacturing sector NACE C (2008-2019)

