

TITLE

Understanding the carbon footprints of Norwegian households

Subtitle: Consumption-based carbon accounting

OBJECTIVE

To review and summarise the international literature on consumption-based carbon accounting (CBCA) of households in different countries and socio-economic segments.

The aims are

- i) To better understand the assumptions made in models for consumption-based accounting as opposed to production-based accounting
- ii) Review the evidence in terms of the volume of the (consumption-based) footprint of Norwegian households (preferably various socio-economic segments) compared to other countries (e.g. selecting another European country, one among growing economies and one in the South).
- iii) Help to identify knowledge gaps as regards the Norwegian context of household energy/carbon consumption.
- iv) Discuss relevance of the findings for the Norwegian context

The results will be relevant to ongoing research activities at SUM, given that one of the Centre's main areas of research is sustainable consumption; as well as to other researchers. Research activities at SUM address both developed and developing countries in a wide range of projects. At the same time, it is expected that the assignment will provide a learning experience to the student (corresponding to Master level criteria for performance) guided by supervision from senior researchers.

BACKGROUND

To some extent, consumption-based carbon accounting (BacFew CBCA studies) has been employed. However, there is a growing body of international research in this area, which is comparatively new (10-12 years) and of increasing importance. Until recently most energy and emission studies have been production-based, and this has also been the case in national and international statistics and efforts referring to country national emissions (the Kyoto agreement, the Paris accords, and the Norwegian parliamentary "klimaforlik"). Given that these models are based on a production perspective, since a considerable share of household consumption of energy and carbon emissions derives from imports, they do not give a realistic picture of households' actual carbon consumption. The production-based models tacitly "export" the impacts from our consumption of imported goods to other countries, for example to China. In contrast, CBCA studies show that our carbon consumption, in countries like Norway, is actually far higher than the figures usually discussed. Hence, the consumption-based approach is becoming increasingly important.

SCOPE OF WORK

The student will work principally under supervision of Chris Butters to undertake review and critically assess the available research in this realm. The student will be offered a desk (shared student office)

at SUM and can benefit from contact with other researchers at SUM. The findings will be presented in a report.

The work is to take place principally in summer 2018 and the report is to be submitted by 15th August. The scope corresponds to six weeks' full time work, however more probably to be spread over a longer period according to the applicant's suited time-frame.

OUTCOME

The outcome is to be a report, with annexed background information, sources etc. We also encourage the candidate to publish a popular article (e.g. newspaper kronikk) based on the work. This latter is seen as important both for the student's own development, and because awareness of the "hidden" energy/carbon consumption is still rather low amongst consumers and households. Such dissemination from research to a broader public is an important objective at SUM.

APPLICATION

Preferred applicants are students enrolled in SUM's Master Programme, but the assignment is open to all candidates with at least one year of studies at the Masters level. Interested candidates must submit a statement of purpose/motivation and an overview of academic records and background.