

# Calculating consumption impacts at the local level: a new approach in Umeå, Sweden



## P2CS project March 2019

In this P2CS project, SEI helped a Swedish municipality to make maximum use of data from a survey of residents to raise awareness about carbon footprints and to identify future policy options to support low-carbon lifestyles.

The SEI Initiative on Producer to Consumer Sustainability (P2CS) is an SEI-wide research initiative that connects the sustainable production and sustainable consumption agendas. P2CS explores the links and interactions within production-to-consumption systems – encompassing global flows of commodities and the impacts, dependencies and wider dynamics associated with production and consumption – in order to find new opportunities to enhance their sustainability.

The initiative enters its third implementation phase in 2019.

Swedish municipalities have a key role in the transition towards sustainable consumption. In the Swedish governance model, municipalities are responsible for a wide range of civic functions, such as day care, education, social services and elderly care. The municipalities are also in a good position to promote sustainable consumption habits among residents and local companies, not least through their influence over transport arrangements and the built environment.

## Supporting sustainable lifestyles

As part of an initiative titled the Low-Carbon Area (*Den koldioxidsnåla platsen*), Umeå municipality surveyed local residents in the spring of 2018 to understand more about their consumption habits. The purpose of the study was to help the municipality to identify those areas of household consumption with the greatest impact on the climate and thus how the municipality can support more sustainable lifestyles.

SEI worked with Umeå municipality to turn these survey results into estimates of the climate footprint of the residents of Umeå that would be easy to communicate and could be compared with national statistics. The project developed a tool based on the survey but complemented with a number of other consumption categories used in national statistics, to allow direct comparison of Umeå residents' consumption-based emissions with national averages. The tool also allows Umeå to redo the calculations based on the results of future surveys.

SEI also analysed the survey results and presented a number of recommendations for how the municipality could continue its work to facilitate sustainable household consumption patterns.

**Figure 1. The average per capita carbon emissions of Umeå residents due to different modes of travel**

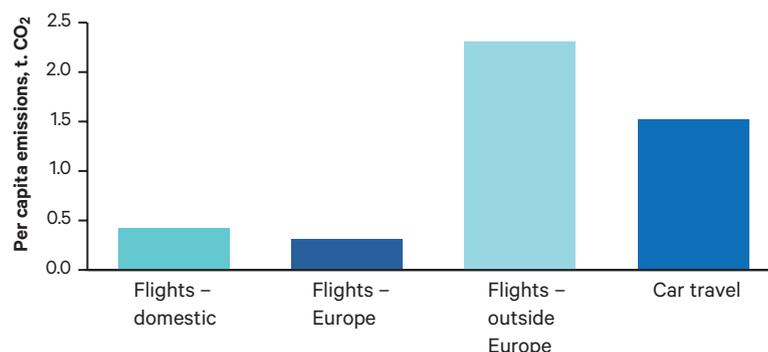


Photo (above):  
Umeå, Sweden

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## Researchers involved

Katarina Axelsson  
Fedra Vanhuyse  
Elena Dawkins

## Project lead

Katarina Axelsson

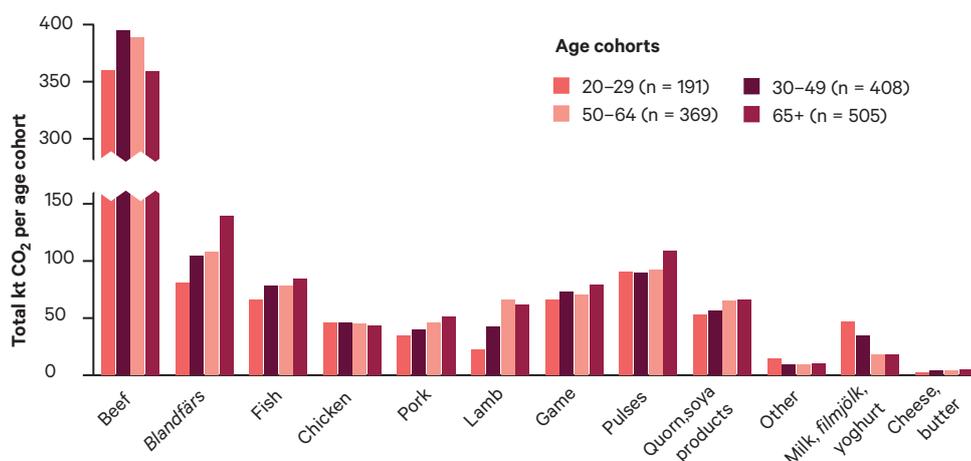
**Dates:** September – December 2018

**Duration:** 4 Months

## Contact

Katarina Axelsson  
katarina.axelsson@sei.org

**Figure 2. How the dietary choices of Umeå residents – and the resulting carbon footprint – change in different age groups**



*Blandfärs = mixed beef and pork mince; filmjök = fermented milk product*

## Findings

The survey data meant it was possible to analyse the influence on consumption patterns and emissions of a large number of determinants, such as gender, age, education and housing type. For example, residents in their 20s ate less meat and dairy and were more often vegetarian than older cohorts, suggesting that a transition to more climate-smart diets is perhaps underway.

However, this same age group had a substantially higher footprint than the others when it comes to furniture – probably because at this age people often move out of the family home and need to furnish their new homes.

The results also confirmed an overall positive correlation between incomes and climate footprints. Notably, higher-income groups took more flights and consumed more red meat and clothing.

The work generated great interest from actors across society including media, indicating that there is broad awareness that consumption patterns need to change if we are to achieve a transformation to a sustainable society.

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Stockholm Environment Institute  
Linnégatan 87D, Box 24218  
104 51 Stockholm, Sweden  
Tel: +46 8 30 80 44

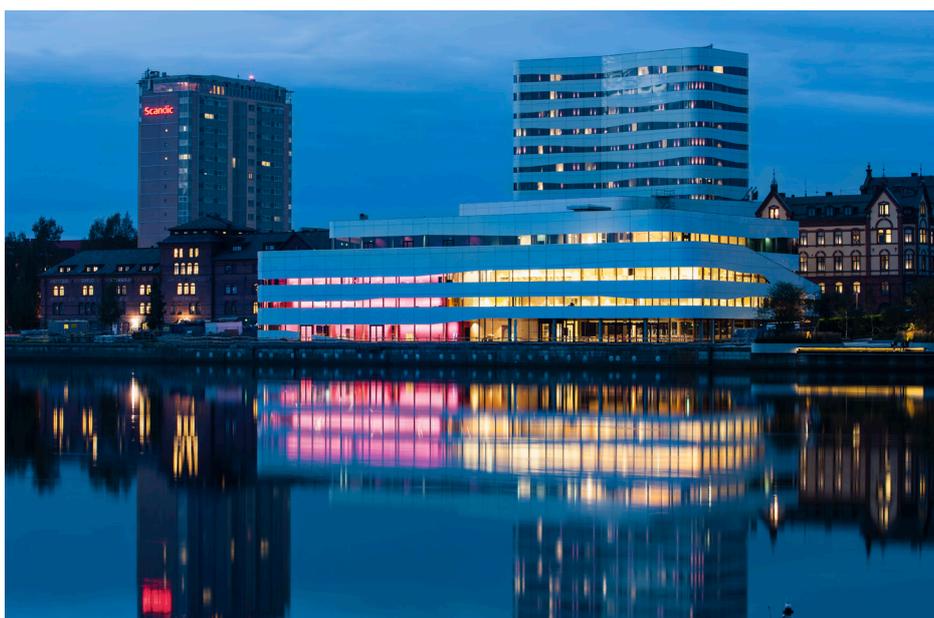
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