



Have the Swedish public reduced their climate impact?

Foreword

The Swedish Environmental Protection Agency has been asking the public since 2002 what they are prepared to do to reduce their climate impact. The proportion who answer the questions on various possible measures with “yes, definitely” has increased sharply. But has public behaviour also changed in practice?

Westander Klimat och Energi has been commissioned by the Swedish Environmental Protection Agency to summarise in broad terms whether the public in recent times (2007-2008) have changed their behaviour in a way that signifies reduced climate impact.

The study has been conducted in a relatively short time and should be regarded as a first attempt to present certain indicators of whether public behaviour has changed. The indicators described could be looked at in more depth, and there are other possible indicators that could be included in an in-depth study. In addition, the climate benefit (reduced emissions in tonnes) with changes in behaviour could be calculated.

A hypothesis that has been adopted in this work is that the extensive reporting on climate change in the media, starting in November 2006, has raised public awareness and encouraged changes in behaviour with less climate impact.

But even it is clear that a change has taken place, it is difficult to decide why. It may just as easily be due to high oil and electricity prices as government policy instruments that make it financially advantageous to act in a way that has less impact on climate. Several different factors influence behaviour, and we have not attempted to assess how important the different factors are.

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1 Introduction

The study begins with the combined picture of the surveys conducted by ABS Research on behalf of the Swedish Environmental Protection Agency. It relates firstly to what the public are prepared to do to reduce their impact on climate and secondly what people say they have actually done.

There then follows a short section concerned with the climate issue penetrating into all areas of life and the fact that the supply and marketing of goods and services with less impact on climate have increased.

Finally an account is given of how public behaviour has actually developed. We use the same classification as the Swedish Environmental Protection does in the new study “The Climate Impact of Consumption”, that it is say “travel”, “housing”, “eating” and “shopping”. We report on:

- The combined climate impact of the area (according to the Swedish Environmental Protection Agency’s study)
- What the public say they are prepared to do to reduce their climate impact
- What the public say they have done to reduce their climate impact
- How public behaviour has actually developed in recent years

As far as possible, the report is based on official statistics from Statistics Sweden or the competent authority. Where no such official statistics are available, the descriptions are based on data from industry organisations or individual players.

2 Summary and conclusions

Despite reporting on the climate issue in the media having decreased somewhat during the first half of 2008 in comparison with 2007, the preparedness of the public to reduce their climate impact has increased in 11 out of 13 areas.

A large majority also say that in the past two years they have actually done something in their everyday lives to reduce their impact on the climate.

A few years ago it was difficult – both expensive and complicated – as a member of the public to find goods and services with a low climate impact. Now the climate issue is penetrating into all areas of life. In area after area we are reminded of climate change and are given suggestions as to how we might reduce our climate impact.

It is evident from this study that our behaviour in many different areas has changed so that we have less climate impact. There are several different explanations for this: extensive reporting

in the media, energy prices, other instruments and complementary factors. Our perception is that attention in the media – and throughout society – has played an important role.

2007 was the absolute “record year” for climate reporting in the Swedish media, but reporting has continued to have a strong impact in all three quarters of 2008 to date, far greater than before the really extensive media breakthrough began during the first quarter of 2006.

It may also be noted that use of the term “climate impact” in the media increased sharply in 2007 and even more so during the first three quarters of 2008, reflecting an ever increasing focus in the media on people’s own responsibility and ability to exert influence.

The great focus on the climate issue has contributed to the development of behaviour with less impact on climate among the public. But this trend would not have been so rapid without high energy prices, other government policy instruments and other contributory factors. No attempt is made in this study to assess the extent to which the various factors have influenced the trend.

Travel

74 per cent can “definitely” imagine choosing a “more environmentally friendly car next time”.

- The public are choosing new cars with ever lower climate impact. This trend contributed to a decrease in carbon dioxide emissions from road traffic of around 70 000 tonnes, or around 0.7 per cent, during the first half of 2008 in comparison with the corresponding period of 2007. This happened despite an increase in emissions from freight transport. This is an important break in trend as the combined emissions of road traffic have increased steadily.
- In the first half of 2008 emissions from the new petrol and diesel cars of private individuals were 4.6 per cent down on 2007 and 12.6 per cent down on 2005.
- The proportion of “particularly fuel-thirsty” cars sold to private individuals fell by 43 per cent in the first half of 2008 in comparison with 2005, the proportion of “particularly fuel-efficient” cars rose by 207 per cent and the proportion of ethanol-powered cars increased by more than 500 per cent. The proportion of ethanol-powered cars bought by private individuals doubled in the first half of 2008 in comparison with 2007 to 16.7 per cent.
- The change in car buying is clearly apparent in fuel statistics, where the proportion of petrol has sharply declined and the proportion of diesel and ethanol has risen.

57 per cent can “definitely” imagine “driving less” and 59 per cent can “definitely” imagine car-sharing more on the way to work and school or for leisure”.

- After several years of steady increase in traffic mileage, vehicle mileage decreased by just under 1 per cent in the first three quarters of 2008 compared with the equivalent period of 2007. This happened despite a continued increase in truck mileage.

- There is a strong increase in interest in car pooling, and today there are car pools in around 50 locations. Citycarclub.se reports that its membership is increasing by 20-40 per cent a year and that it now has 2 500 users, while Sunfleet has 5 000 users, up 70 per cent in the first eight months of 2008.
- It has also recently been noted that more and more people are opting to hire a car. According to the national federation of car-hire companies Biluthyrarnas riksförbund turnover in this sector rose by 18 per cent between 2006 and 2007.

77 per cent can "definitely" imagine "driving in a more energy-efficient way, known as ecodriving", while 63 per cent can "definitely" imagine "driving more slowly, for example at 90 instead of 110 km/hour".

- There are no combined statistics on how many people have received training in economical driving, also known as ecodriving. But there appears to be strong interest. In addition, since 2007 it has been mandatory for all applicants for driving licences to learn how to drive economically.
- In August 2008 it was reported that the Swedish Road Administration for the first time had seen a break in trend with regard to speeds in traffic. Automatic surveillance cameras, high penalty fines and reduced tolerance in police checks are assumed to be the principal reasons, but for some motorists it may be assumed that reduced fuel consumption and reduced carbon dioxide emissions have also played a role.

54 per cent of respondents can "definitely" imagine "travelling more by public transport" and 76 per cent can "definitely" imagine "taking a train instead of flying, if possible". 29 per cent respond that in the past two years they have "definitely" done something in their "choice of daily transport" to reduce their impact on climate.

- Domestic train travel increased by 7.5 per cent in 2007 in comparison with 2006 and by 14 per cent in comparison with 2005.
- In the first half of 2008 domestic travel by train increased by 6 per cent compared with the first half of 2007 and by 19 per cent compared with the first half of 2005.
- Between 2005 and 2007 the number of journeys by both underground and tram increased by around 10 per cent and bus travel increased by 5.1 per cent, after having been unchanged or having even fallen for a few years.
- With regard to long-distance coaches, the number of tickets booked with Swebus Express was 22 per cent higher in June 2008 than in the corresponding period of the previous year.
- There are no combined statistics on the trend in cycling in recent years, but cycling in Stockholm is reported to have increased by 60 per cent – or by 150 000 cyclists per day – compared with ten years ago. In the first eight weeks of 2008 around 25 per cent more cycles had been sold than in the corresponding period of the previous year. 2007 was nevertheless a record year.

76 per cent of respondents can "definitely" imagine "taking a train instead of flying, if possible", while 11 per cent reply that in the past two years they have "definitely" done something with regard to their "choice of holiday travel" to reduce their impact on the climate.

- The number of domestic passengers at Swedish Civil Aviation Authority airports fell by one per cent in September 2008 compared with the same period last year. The number of passengers in the first half of 2008 was higher than in the corresponding period of 2007 but lower than in the corresponding period of 2006. A large proportion of journeys are work-related.
- International aviation is continuing to grow. Passenger numbers increased by around 10 per cent in the first half of 2008 in comparison with the same period of 2006. It is likely, however, that the increase would have been even greater were it not for the climate debate.
- Sales of Interrail cards rose by more than 60 per cent in 2008, from around 8 000 to around 13 000, which according to Swedish State Railways (SJ) was principally due to increased environmental awareness prompted by the climate debate. Train charters have also increased, and several travel agencies offer train charters to many places.

Housing

68 per cent of respondents can "definitely" imagine "changing to more environmentally friendly heating in the home".

- Use of domestic heating oil fell by 27 per cent between 2005 and 2007, and by 46 per cent between January 2006 and January 2008. The downturn has been under way over a long period of time, and is likely to be principally due to the high price of oil.
- Use of pellets for heating rose by 39 per cent between 2004 and 2007, and according to the industry's own forecasts sales of pellets are expected to increase by 17 per cent in 2008 in comparison with 2007.
- According to the district heating industry association Svensk Fjärrvärme, district heating is continuing to grow in Sweden, and half of Swedish district heating enterprises increased their deliveries of district heating between 2006 and 2007.
- Sales of heat pumps fell by 9 per cent in the first half of 2008, but in spite of this fall the heat pump industry is strengthening its position in Sweden, according to the Swedish Heat Pump Association.
- Sales of glazed solar collectors in smaller systems have increased by an average of 20 per year, and nearly 30 000 square metres of solar collectors were installed in Sweden in 2006. The industry expects sales to continue to increase to an equivalent extent over the next few years. Installations of solar cells have also increased in recent years, as a consequence of investment grants.

- Interest in shares in wind power has increased sharply in recent years, and the energy company o2, which sells shares in wind power stations to private customers, reports a sharp increase in 2008.

86 per cent can "definitely" imagine "buying energy-efficient household appliances" the next time they replace appliances and 75 per cent can "definitely" imagine "reducing electricity consumption in the home". 38 per cent reply that in the past two years they have "definitely" done something with regard to their "energy consumption in the home" to reduce their impact on climate.

- It is difficult to draw conclusions on whether household use of electricity has changed in recent years. Firstly it is difficult to differentiate between electricity for heating and electricity for other purposes, and secondly there are no updated statistics. It may be noted, however, reporting in the media on household use of electricity has increased in recent times.

Eating

67 per cent can "definitely" imagine "choosing a more environmentally friendly product even if it is slightly more expensive".

- Organically grown food is not necessarily the same thing as "climate-smart" food. It is likely, however, that increased awareness of climate change has also led to increased interest in organically grown food.
- In 2007 organic sales accounted for 2.6 per cent of total sales of foods and non-alcoholic beverages, an increase of around 18 per cent or 0.4 percentage points. Organic sales of dairy products increased by as much as 20.5 per cent between 2006 and 2007.
- In July 2008 it was reported that "sales of organic food are breaking all previous records. The rise for the market leader Coop is no less than 49 per cent to date this year."

40 per cent can "definitely" imagine "eating less meat" and 13 per cent reply that in the past two years they have "definitely" done something with regard to their "meat consumption" to reduce their impact on climate.

- Consumption of meat has increased steadily in Sweden over a long period, but it is now reported consumption of *beef* – the meat with the greatest climate impact – fell by half a per cent in 2007 in comparison with the previous year.
- The decrease has continued in 2008, and consumption of beef is reported to have fallen by six per cent in the first three months of the year in comparison with 2007. The rise in price is thought to be the principal reason, but the climate debate may also have had an effect.

The Swedish Environmental Protection Agency has not asked any question about the purchase of bottled water, a product which for many people has become symbolic of the climate issue.

- Swedish consumption of bottled water totalled 27 litres per person in 2006, which represents a more than doubling in ten years.
- Sales of bottled water fell 11 per cent in the autumn of 2007 compared with the same period of the previous year, according to figures reported in the media. The decrease for the whole year is just over 4 per cent.
- According to an opinion survey 78 per cent of Swedes had been aware of the debate on bottled water and the environment, and the Consumers' Association in Stockholm considers the climate debate to have influenced sales statistics.

Shopping

The Swedish Environmental Protection Agency has not asked the public about shopping but has asked about recycling and re-use. Asked whether they have done anything in their everyday lives to reduce their impact on the climate in various areas in the past two years, 21 per cent reply "yes, definitely" with regard to "re-using things, for example buying second-hand goods" and 57 per cent reply "yes, definitely" with regard to "separating waste more".

- Interest in organic clothing appears to have increased, which in turn may be due to increased interest in climate change, and a certain "anti-shopping trend" can also be observed.
- It appears to have become considerably more popular to sell and buy second-hand goods. "We now have more than 900 000 items up for sale every day, and that figure is rising all the time," the buy-and-sell site Tradera reports, for example.
- Recycling for instance of paper, plastic, glass, aluminium and steel represents a clear climate benefit, but there are no official statistics on recycling since 2006. Recycling (both material recycling and energy utilisation) of plastic which is covered by producer responsibility increased from 73 per cent in 2005 to 81 per cent in 2006, the recycling of metals increased from 58 to 66 per cent and the recycling of paper was unchanged at 72 per cent, while recycling of glass fell from 95 to 91 per cent.
- With regard to electrical and electronic products 15.8 kilos per person was collected, an increase of 2 kilos per person on 2005, which may be due to the strong economy in 2006.