

Science for Environment Policy

Congestion schemes have positive spillover effect on green behaviour

Congestion schemes can encourage people to adopt environmentally friendly behaviours more generally, a new study suggests. Researchers who surveyed car owners after the introduction of a congestion scheme in Stockholm found that after its introduction nearly half of people surveyed adopted greener behaviours such as conserving energy and water.

Air pollution, greenhouse gas emissions, **noise** and driver stress are all important reasons for tackling **traffic** congestion. However, a new study hints that congestion charging also encourages pro-environmental behaviour in other areas of people's lives. This 'spillover effect' has been noted before but has not been well studied.

The researchers sent questionnaires about the Stockholm congestion charging scheme to 1 210 people living in Stockholm county and received 370 responses. They answered questions based on a trial congestion scheme in 2006, although by the time of the study, the scheme had become permanent. The participants were asked how they travelled on a daily basis before and after congestion charging was introduced, as well as about recycling, shopping, their use of energy and resources, and weekend travel.

Before the scheme, 60% of those surveyed travelled by car on week days. Most of the remainder used public transport and a few walked or cycled. After congestion charging was introduced, the number who drove dropped slightly to 56%. In real terms, a relatively small number of people – just 22 – actually swapped their cars for public transport, bicycle or walking, while 151 carried on using their cars. In addition, a few people who were previously using more environmentally forms of transport started driving instead.

However, the results suggest that although only a few people changed how they travelled, nearly half changed their behaviour in other ways. People who already took public transport, walked or cycled were more careful about saving energy and resources – they used water and heating more sparingly and switched off lights when not in use. Even those who began driving after the scheme was introduced became less wasteful. Meanwhile, those who did change to greener forms of transport also adopted other environmentally friendly behaviours. The only group that showed little change were the individuals who began and remained as car drivers.

Most of the positive spillover behaviours related to energy and resource use. Survey respondents showed little change in patterns of weekend travel, shopping or recycling. The researchers suggest this is because they are not such 'everyday' behaviours.

These results suggest environmental policy measures may play an important role in raising awareness of environmental issues more generally. The increase in pro-environmental behaviours may be because environmental information publicised through the scheme meant people were "intentionally or unintentionally educated to be more environmentally responsible", even those who were not drivers. They also suggest that because some people were forced by the congestion payment to consider the cost-benefit balance of driving, they may have extended that thinking to other contexts.



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Contact:
naoko.kaida@sk.tsukuba.ac.jp

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