

Summary:

Car-sharing in Oslo

TØI Report 1156/2011

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Oslo 2011, 54 pages Norwegian language*

There are clear targets to reduce traffic related emissions and noise, as well as improve accessibility for travelers in Oslo. One way to address these challenges is to examine alternatives to private car ownership. Car-sharing is a good example of this type of alternative. Knowledge and experience from both Norway and abroad show that car-sharing can lead to a reduction in car-use because car-sharing members dispose of their cars, use cars less often and/or delay the purchase of a car. Car-sharing is often chosen by members for financial and practical reasons, yet there are positive environmental outcomes as well. Most members in the Norwegian car-sharing organization Bilkollektivet are in their 30's-40's, well educated, financially stable and have access to public transportation. They are very satisfied with the service, which is positive in terms of the potential for an increased market share in Oslo. To achieve this, identifying new potential users, linkages to public transportation organizations and various forms of public support need to be considered.

The results of this report are based on a national and international literature review, discussions with key informants and an Internet survey among members of the Norwegian car-sharing organization Bilkollektivet.

Car-sharing and sustainability – studies of environmental effects

The literature review, from both Norwegian and international studies, shows that car-sharing can stimulate concepts related to sustainability. Environmentally, car-sharing can contribute to fewer cars on the roads and a reduction in the number of miles driven by privately owned cars. This, in turn, can have a positive effect on CO₂ emissions. A reduction of 28-45 percent in driving length per year and car ownership that is one-tenth of what it could be if all members had privately owned vehicles has been seen.

One study concluded that for car-sharing members, CO₂ emissions were reduced by between 40-50 percent. Results such as improved urban environments with less traffic and noise and a reduced need for parking spaces have also been seen.

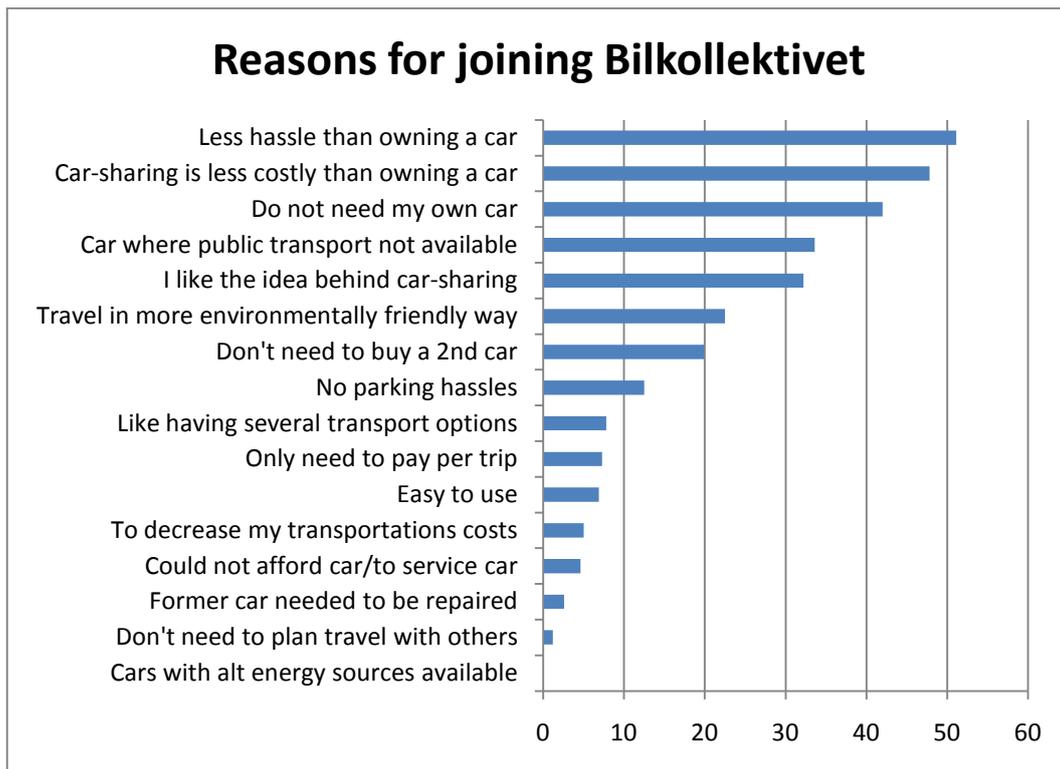
If the car-sharing fleet consists of electric vehicles, it is likely that positive results such as this are even more substantial, given that power is generated from non-CO₂ emitting sources. In Norway, this is plausible given the available hydro power.

In terms of social development, car-sharing organizations can enhance the overall mobility for certain groups who cannot afford to buy a car. Additionally, the move from goods to services is regarded as a positive change in terms of consumer trends, seen from a sustainability perspective.

Reasons for joining Bilkollektivet

The results from the online survey are consistent with other findings on car-sharing from abroad. The barriers for members to use a car are likely to be higher compared with those who own a car. 81 percent responded that they did not need to buy a car after membership, and 19 percent sold a car after membership. Based on these results, it is reasonable to imagine that car-sharing contributes to fewer cars. Members often delay buying a car, sell their car or find that they do not need a car once they become members.

When it comes to members' reasons for participating in a car-sharing organization, it appears that the hassles associated with owning a car is the main motive for participation. The fact that car sharing is cheaper than owning a car is also an important factor for membership. The following table summarizes why members in Oslo decided to participate in a car-sharing scheme.



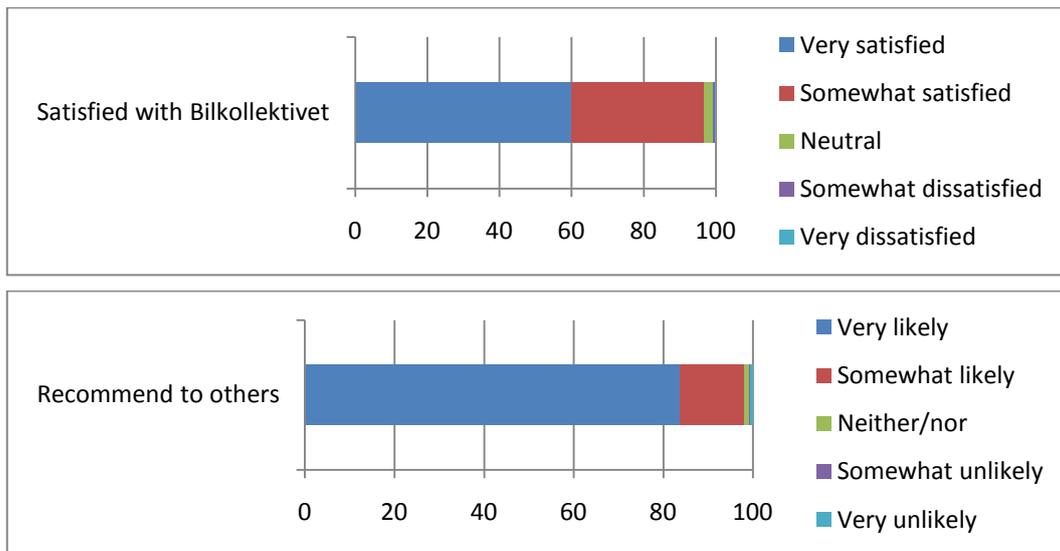
Reasons for joining Bilkollektivet (%)

It is interesting to note that over 30 percent of respondents marked that they liked the idea behind car-sharing as a reason for joining Bilkollektivet. This may indicate that motives for participating in car sharing schemes might imply a certain commitment to, or belief in, environmental and societal challenges, and that being a member has a social value in itself. However, it is nevertheless pragmatic reasons that make up the essential motives for participation. The hassle

of owning a car and financial reasons are the main drivers. These results correspond with various international studies on car-sharing.

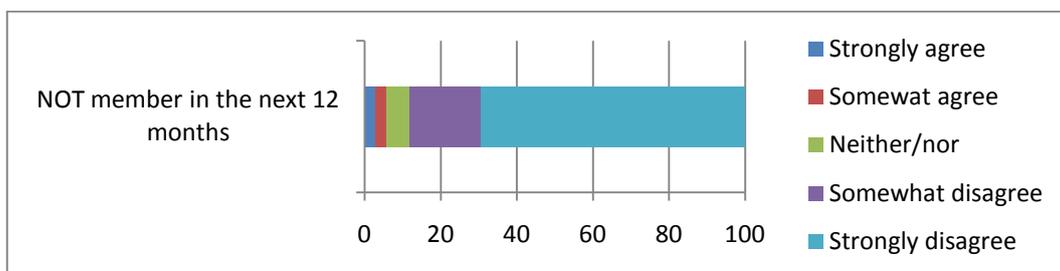
Satisfaction with Bilkollektivet

Bilkollektivet in Norway has very satisfied members. 97 percent say they are very or somewhat satisfied with the arrangement, and 98 percent believe it is very or somewhat likely that they would recommend Bilkollektivet to friends or acquaintances. 96 percent responded that the service has met their expectations to a very or fairly great extent. The following tables summarize some of these results.



Satisfaction with Bilkollektivet (%)

When evaluating results such as this, it should be noted that these questions were posed to respondents who are members of a car-sharing organization. A likely scenario is that dissatisfied customers have cancelled their membership. Therefore, a question about the likelihood that they retained their membership in the next 12 months was also presented. According to the results, Bilkollektivet will most likely retain their members in the foreseeable future.



NOT member in the next 12 months (%)

Environmental and market potential

The possible outcomes in Oslo and internationally in terms of the potential effects of car sharing are encouraging. The effects are related to, among other things, a reduction in private car ownership, less need for parking and an increased mobility for the population at large. This in turn may have a promising effect on emissions data, fuel consumption, urban development and land use, road traffic and the number of pedestrians, cyclists and public transportation passengers.

At the same time, it is important to note that this study as well as other studies on car-sharing have many limitations. Comparing this study with studies from abroad and similar studies from Norway can only be done to a limited extent because methodologies vary throughout. For example, it is difficult to determine whether respondents drive less because they are members of a car-sharing organization, or if they travel less because they have less need for transportation. Market potential is difficult to assess when based on those who are already car-sharing members.

When it comes to Bilkollektivet, results are promising in terms of the organization itself and use of its services. The results provide a sound foundation for further marketing of the service but is difficult to assess in terms of overall car-sharing potential. Other studies show that car-sharing continues to be a niche product, yet market potential has been estimated at 3-25 percent of the population. For example, a Swedish study among random citizens showed that 23 percent were interested in becoming car-sharing members.

Various studies and qualitative analysis have shown that institutional and/or public support and cooperation, in terms of incentives and education, can be especially valuable in realizing the potential of car-sharing. Swedish Trafikverket points to the following success criteria:

- Convenience and ease of booking, pick-up and availability
- Reduction in transportation costs
- Reliability of the organization and vehicles
- Cooperation between public transportation organizations and car-sharing organizations
- Local enthusiasts and entrepreneurs

To increase the market share of car-sharing in Oslo, identifying new potential users, linkages to public transportation organizations with car-sharing organizations and various forms of public support need to be considered.