

# GREAT

## Activity 7: Evaluation, Assessment and Future development

### Electric vehicle experience and intention

Sonja Haustein, Senior Researcher, sonh@dtu.dk  
DTU Management Engineering

$$P(i|V) = \frac{\partial \ln G(eV)}{\partial V_i} \int_a^b \varepsilon \Theta^{\sqrt{17}} + \Omega \int \delta e^{i\pi} = \{2.7182818284\}$$

$\infty$   $\chi^2$   $\Sigma$   $\gg$   $\approx$

# Aim and Method

## Aim:

- Monitor EV user experience and perceptions in Denmark and Sweden over the project period

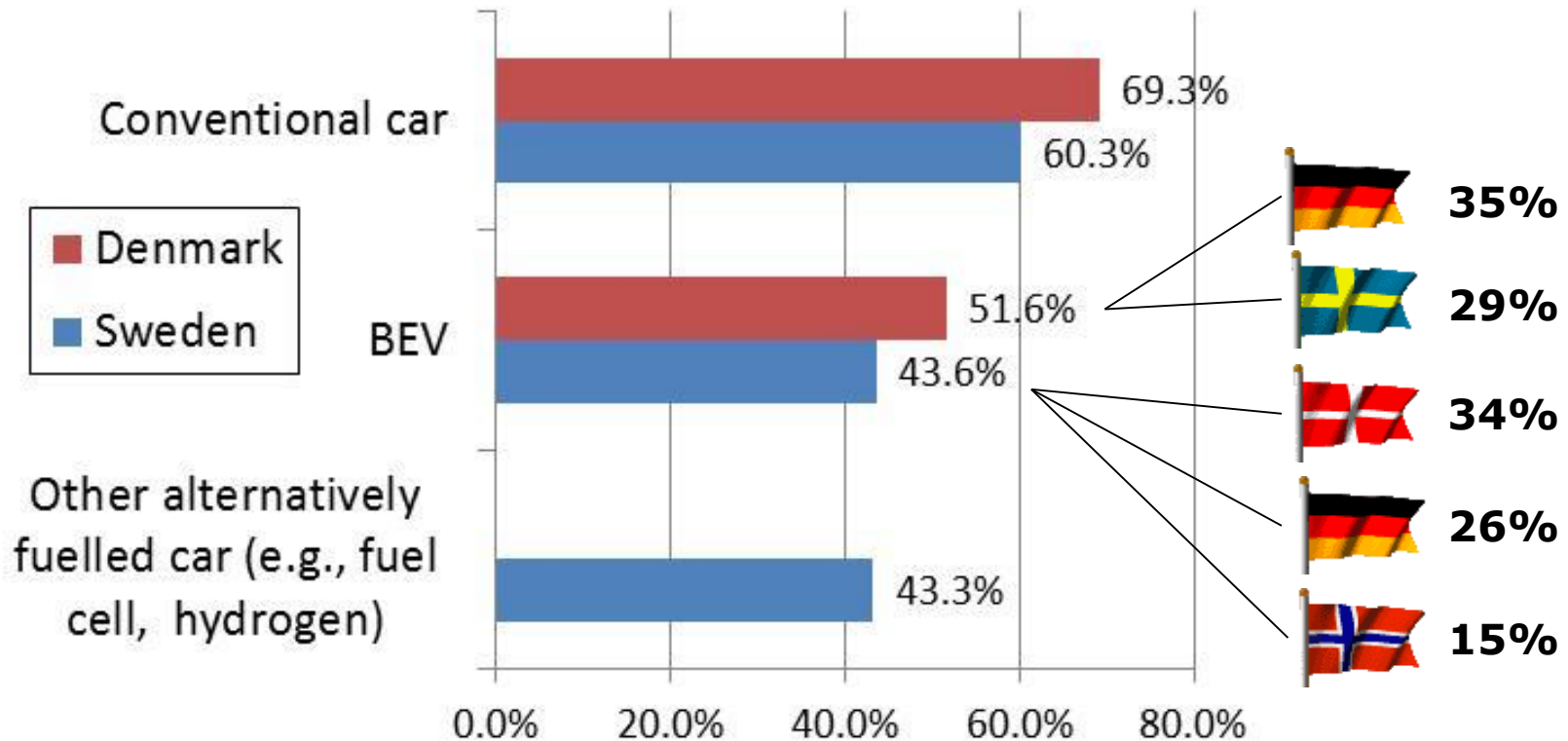
## Method:

- Longitudinal online-survey  
3 waves; partly with same participants

## Target groups:

- EV users (first wave:  $n=731$ )
- CV users (first wave:  $n=1793$ )

# Cross-border BEV use



- 91% who drove to foreign country tried to recharge (89% of Danes; 97% of Swedes)
- 25% reported problems; most of them compatibility problems (58%)

# EV perceptions

## Perceived barriers:

- 8% of EV users (strongly) agree that *"The need for charging makes EVs very unpractical for use in everyday life"* vs. 45% of CV users.

## Affective attitude / EV-Excitement:

- 99% of EV users (strongly) agree that *"It is fun to drive an EV"* vs. 30% of CV user.

## Symbolic attitude / EV-Status:

- 92% of EV users (strongly) agree that they *"feel proud of having an electric car"* while 51% of CV user would feel proud.

## Public incentives for EV purchase:

- 71% of EV users in DK and 39% in SE *find public incentives to buy EVs dissatisfying.*

## Environmental performance:

- 91% of EV users and 69% of CV user find the environmental performance of EV satisfying.

# EV intention: Linear regressions

|  | CV users' intention | EV users' intention |
|--|---------------------|---------------------|
| Perceived barriers   | -.22***             | -.33***             |
| <i>Attitude: symbolic</i>                                    | .32***              | .18***              |
| <i>Attitude: affective</i>                                   | .20***              | .22***              |
| Personal norm  | .12***              | ns                  |
| Subjective norm  | .18***              | .08*                |
| Satisfaction with price / public incentives                  | .08**               | ns                  |
| Gender (female)  | -.09***             | ns                  |
| University education   | .05*                | ns                  |
| Country: Sweden (reference: Denmark)                         | .09***              | .08**               |
| Access to a private parking place                            | .05*                | ns                  |
| <i>Change: Plan longer car trips more carefully</i>          | not included        | .07**               |
| <i>Change: I do not travel long distances by car anymore</i> | not included        | -.07*               |
| $R^2$  | .58                 | .44                 |

*Not significant:* Perceived mobility needs, satisfaction with maintenance costs, environmental performance, age, self-employed, household size, income, children, nr. cars in hh, gasoline/diesel car, Tesla, ever travelled in EV, ever charged an EV  
 \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$

# Session 2: Behavioural change – Creating a culture of sustainability

## Input from the GREAT survey

Sonja Haustein, Senior Researcher, sonh@dtu.dk

DTU Management Engineering

$$P(i|V) = \frac{\partial \ln G(e^V)}{\partial V_i} \int_a^b \epsilon \Theta^{\sqrt{17}} + \Omega \int \delta e^{i\pi} = \{2.7182818284\}$$

$\chi^2$   $\Sigma$   $\gg$   $\approx$