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# German Emobility User survey 2015 – Reasons why even electro mobility friendly people are not buying electric cars!

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**Short Abstract**

In 2015 a big survey among very electro mobility experienced people was conducted in Germany. This survey is part of the government founded "monitoring and impact research for the German showcase program for electro mobility". As in the last years the perception gained majority that people need more experience with electric cars, the news value of this survey is that only well-informed people were asked. Therefore, the main question in the survey was to get more information about the reasons why even well informed people with a positive attitude concerning electric cars are not yet buying them. The conclusions of this survey will be used for developing measures to activate and stimulate the German market.

## 1 Introduction

In 2015 a big online-survey among more than 500 very electro mobility experienced people was conducted in Germany. This survey is part of the government founded "monitoring and impact research for the German showcase program for electro mobility (Begleit- und Wirkungsforschung Schaufenster Elektromobilität, 2014)[1]". As in the last years the perception gained majority that people need some experience with electric cars, the idea was to exclude the influence of knowledge of people about electro mobility. So the news value of this survey now is, that only well-informed people were asked. The main question in the survey was to get more information about the reasons why even well informed people with a positive attitude concerning electric cars are not yet buying them. The conclusions of this survey will be used for developing further measures to activate and stimulate the German market.

For this survey only full electric Vehicles (BEV) were relevant. Plug In or Range Extended Electric Vehicles were excluded in this survey, as the have only economic restrictions, but not range.

The results of this survey will be published in Germany first in November 2015 and will only be available in German language. So the EVS would be the first event, where the results will be published in English Language.

As this is a independent survey there were almost no references necessary.

### 1.1 Method of survey

As the participants of this survey should be very experienced in electric mobility the survey was sent out to more than 800 persons who are part in all the German electric mobility research projects. To increase the

[1] Cf. www.schaufenster-elektromobilitaet.org

number of participants the survey afterwards was additionally sent to online communities in social networks and Internet Forums of electric car fans. The basic questions asked for socio-demographic issues and about property of users like parking and ownership. For example, it was obvious, that electro mobility starts in rural areas and the ownership of properties has positive effects in buying electric cars because of the charging possibility. Further, there were some validation of the user experience with electro mobility and the quality of answers.

# 2 Results of Survey

## 2.1 Preferable Range of electric cars

One of the most discussed issue of electric cars is the range, so the users were asked for their preferred range, that an electric car should be able to drive. So more than 50% of users in Germany would have a preferable range of electric cars between 200-400km.

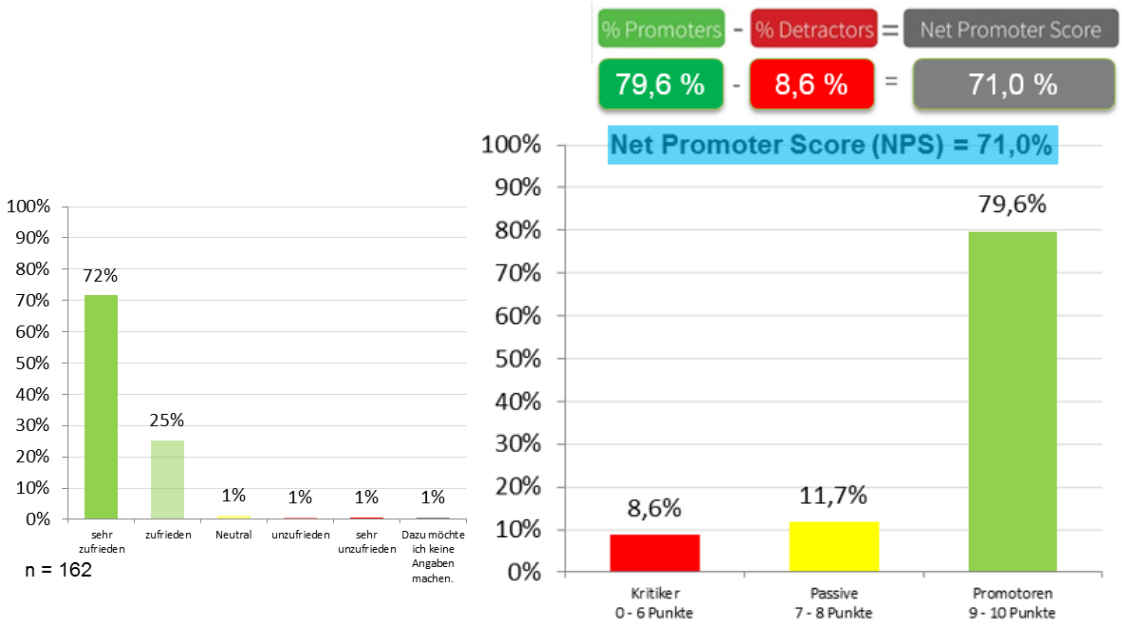
However, the range in this survey was not available as a reason for not buying, but as an influence in reasons like costs, everyday live or technics.

## 2.2 Reasons for buying electric cars

Most of the owner of electric cars in this survey drive a Tesla Model S or a Renault Zoe. The main reason for buying the electric car was the driving pleasure and driving comfort. Second important reason for the owner is to get experience with electric cars and to try electric driving itself. Only after that ecology reasons were mentioned.

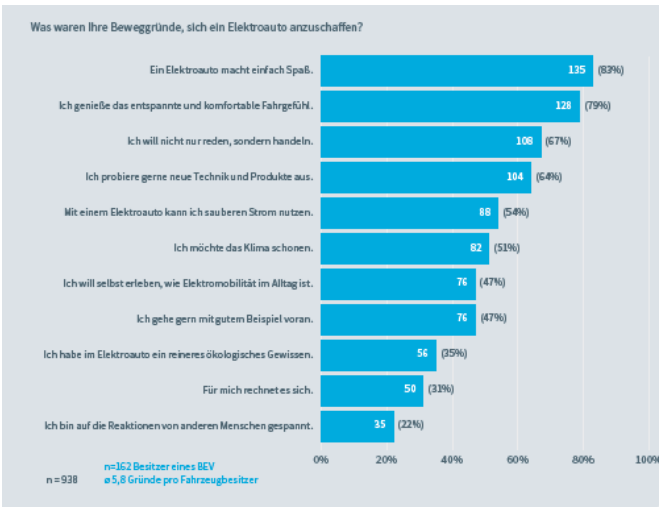
## 2.3 Owner of electric cars

In the survey more than one third of the participants already were owners of electric cars (162) - much more than expected. The key figure of owners was that the customer satisfaction of electric car owners is extremely high. The Net Promotor Score[2] is 71%.




[2] Cf. Bain & Company (2011), S. 3 ff.

Further the main reason for buying an electric car was driving pleasure and curiosity, but not ecological reasons.




## 2.4 Parking Situation at home

Almost every owner of electric cars have an garage or an personal parking lot and 82% of them have a charging infrastructure installed. So it is obvious that an own parking lot is an important requirement for the possession of an electric car.

## 2.5 Non-owner of electric cars

For Non-owner it is obvious, that they have more than one reason (1,79) not to buy an electric car. Main reason is Economy with 46%, but road capability, no need, charging and available cars. The minor reason was doubts at technics.

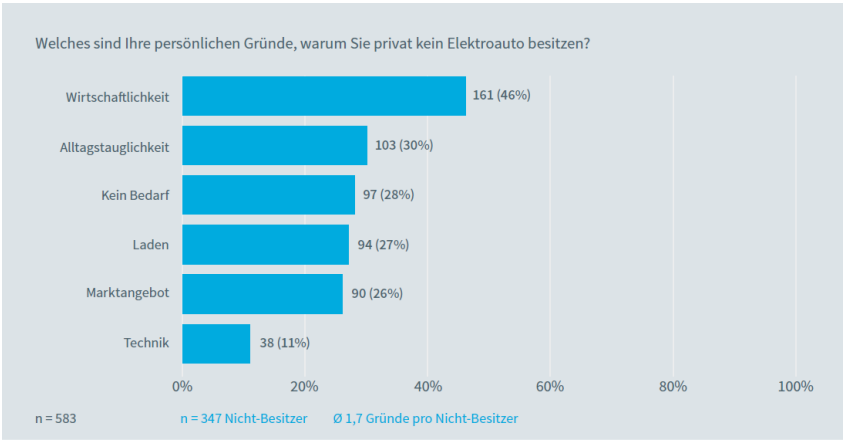



Figure 1: Personal Reasons of Non-Onwers not to own an electric car

To every possible reason there were further more detailed questions to detect the influences concerning this reason.

## 2.6 Economics of electric cars

The main reason for refusal for 46% is the deficient economics. So they expect the total cost of ownership higher than at combustion cars.

## 2.7 Road capability

For 30% of participants of survey the lack of road capability is the second important reason for refusal. 77% of them told, that they don´t want to interrupt their trips for charging and 47% are afraid to breakdown with an electric car.

## 2.8 Charging opportunities

27% of the non owners the charging of elecrtric cars is a problem. No possibility for charging at home is for 87% the big topic, followed by the lack of public charging stations.

## 2.9 Market offer of electric cars

Also the small number of electric cars is a reason for refusal for 26.%. Many people expect a better availability of electric cars also in popular car categories like compact, middle size, Vans and small cars.

## 2.10 Special analysis

Additionally three special analysis were carried out to investigate conspicuous differences. Owners vs. Non-owners, Non-Owners member of research program vs. Non-owner other people and Non-owners with different experience with electric cars.

There were some intersting results:

- Persons in big cities have higher expectations concerning range as inhabitants of small cities
- A personal parking lot prefers the ownership of electric cars
- Participants in support program have higher requirements concerning electric cars than other persons
- Non-owners with some experience with electric cars are more positive than persons with no experience in the categories road capability, cahrging problems and technical issues.

## 2.11 Conclusions

Finally, the results of the survey created some conclusions, how the results of the survey could be used to improve the motivation and willingness of people to buy electric cars!

- Awake curiosity
- More Range – new customers
- Battery costs is the key figure for economy
- Economy by transparency
- Reliable charging creates security
- Extended market offers

# References


[1] Begleit- und Wirkungsforschung der Schaufenster Elektromobilität (2015): www.schaufenster-elektromobilitaet.org, accessed on 2015-10-26

[2] Bain & Company (2011): Mit System Kunden begeistern, in: Results, 04_2011, S. 3 - 5.

[3]

# Author

Authors should provide a short biography of authors. Biographies should have a typical length of 5 to 10 lines, in 9,5pt font, be limited to main educational background and description of current activities, and preferably be accompanied by a photograph sized 20 by 30 mm. The photograph shall be lined up with the bottom of the text paragraph.

*Matthias Vogt was born on September 09, 1975. Following his studies at the University of Applied Sciences in mechanical engineering Matthias started his career as a service engineer for Daimler Passenger Cars.*

*For more than 14 years he worked on reliability issues, customer experience, research and development and product management of passenger cars and buses at Daimler AG.*
*Then Matthias switched to bridgingIT as a senior consultant is responsible for innovations in smart mobility market. At this, Matthias Vogt advises large companies and corporations as well as governmental organizations on aligning their strategy.*

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- Dipl. Ing. (BA) Mechanical Engineering
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