

The role of energy infrastructure in shaping early adoption of electric and gasoline cars

SND-ID: 2021-202-1. **Version:** 1. **DOI:** <https://doi.org/10.5878/j8af-b705>

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electric_vehicles_regressions.dta (16.81 MB)

electric_vehicles_regressions.xls (56.09 MB)

Figure 2.do (1.19 KB)

hedonic regressions reproduction.do (15.47 KB)

logistic regressions.do (17.08 KB)

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Associated documentation

readme.txt (7.58 KB)

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2021-202-1-1.zip (~72.94 MB)

Citation

Taalbi, J., & Nielsen, H. (2021) The role of energy infrastructure in shaping early adoption of electric and gasoline cars (Version 1) [Data set]. Lund University. Available at: <https://doi.org/10.5878/j8af-b705>

Creator/Principal investigator(s)

[Josef Taalbi](#) - Lund University, Department of economic history

[Hana Nielsen](#) - Lund University, Department of economic history

Research principal

[Lund University](#) - Department of economic history

Description

Electric vehicles have a potential to lower greenhouse gas emissions but still face challenges. This study asks what can be learned from US automobile history. In 1900 there were three equal contenders in the US automotive industry: gasoline, electric and steam cars. Only a decade later the gasoline car had achieved a crushing dominance. This dominance is often attributed to techno-economic factors, such as an innate inferiority of electric cars. Meanwhile, the role of infrastructures is not well understood. The research project examines the mechanisms behind this process, using information on more than 36,000 passenger car models. One result is that the slow diffusion of electricity infrastructure gave gasoline cars the upper hand.

Data contains personal data

No

Language

[English](#)

Unit of analysis

[Geographic unit](#)

[Object](#)

Population

American personal vehicle models

Time Method

[Longitudinal](#)

Sampling procedure

[Total universe/Complete enumeration](#)

Time period(s) investigated

1895 - 1942

Data format / data structure

[Numeric](#)

Data collection 1

- Mode of collection: Transcription
- Source of the data: Registers/Records/Accounts

Geographic spread

Geographic location: [United States](#)

Lowest geographic unit

Municipality

Highest geographic unit

Country

Responsible department/unit

Department of economic history

Funding 1

- Funding agency: Jan Wallander and Tom Hedelius foundation
- Funding agency's reference number: W2015-0445

Funding 2

- Funding agency: Jan Wallander and Tom Hedelius foundation
- Funding agency's reference number: W2017-0025

Research area

[History](#) (CESSDA Topic Classification)

[Science and technology](#) (CESSDA Topic Classification)

[Society and culture](#) (CESSDA Topic Classification)

[Economic history](#) (Standard för svensk indelning av forskningsämnen 2011)

Keywords

[Electric cars](#), [Gasoline cars](#), [Technology choice](#), [Infrastructure](#)

Publications

Taalbi, J.; Nielsen, H. (2021) The role of energy infrastructure in shaping early adoption of electric and gasoline cars, Nature Energy, doi: 10.1038/s41560-021-00898-3

DOI: <https://doi.org/10.1038/s41560-021-00898-3>

If you have published anything based on these data, [please notify us](#) with a reference to your publication(s). If you are responsible for the catalogue entry, you can update the metadata/data description in DORIS.

Accessibility level

Access to data through SND

Data are freely accessible

Use of data

[Things to consider when using data shared through SND](#)

License

[CC BY-NC 4.0](#)

Versions

Version 1. 2021-08-19

Contact for questions about the data

Josef Taalbi

josef.taalbi@ekh.lu.se

Download metadata

[DataCite](#)

[DDI 2.5](#)

[DDI 3.3](#)

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