

Economic Footprint of the Mobility Transformation







Council4 GmbH (Economica Institut für Wirtschaftsforschung, Cognion Forschungsverbund, FAS.Research, pantarhei advisors Unternehmensberatung)

in cooperation with:

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The Austrian Automotive Economy

	<p>Employment: 177,608 direct 314,106 total</p>	<p>Gross Production Output: 43.69 bn. € direct 66.96 bn. € total</p> 
	<p>Taxes and Duty: 8.46 bn. € direct 12.95 bn. € total</p>	<p>Gross Value Added: 15.99 bn. € (Share of 4.6%) direct 26.15 bn. € (Share of 7.6%) total</p> 

Data from the study: Staying on the winning track. Building the automotive cluster of the future

Significance of the Automotive Economy

The economic importance of the automotive economy is often underestimated. The automotive economy is made up of a large number of sectors and not only the automotive industry (production of motor vehicles and motor vehicle components). For example, car dealerships, workshops, taxis, insurance companies and gas stations are also part of the automotive value added network.

There is a large discrepancy between the general understanding of the automotive industry and the presumed figures for the automotive industry.

Economic Footprint Automotive Economy

With direct gross value added amounting to 16 billion Euro, more than 177,000 employees and tax revenues of 8.5 billion Euro, the automotive economy is one of the strongest exporting key sectors of Austria.

If the upstream and downstream effects triggered in Austria are taken into account, the total effect of the automotive economy increases to a value added of more than 26 billion Euro. IN addition every 13th Euro generated in Austria is directly or indirectly attributed to the automotive economy.

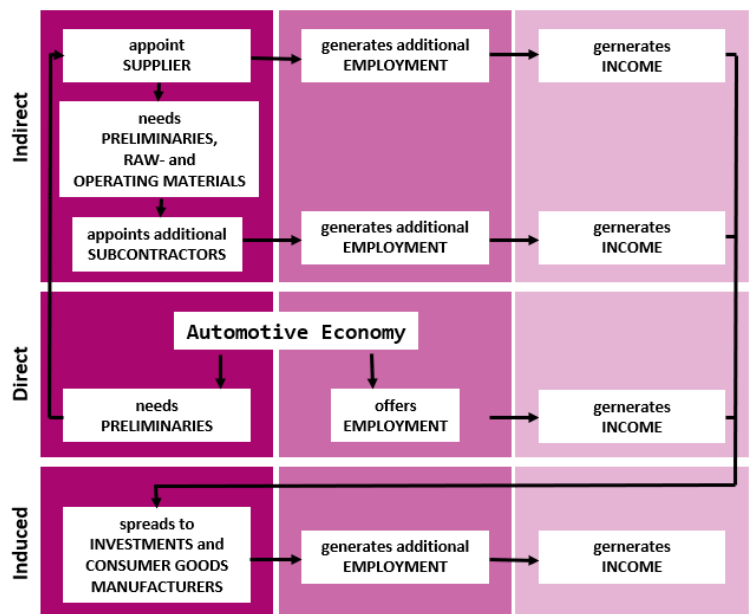
Economic Model: Satellite Account Automotive Economy

Our developed satellite account for the automotive economy maps the entire value-added network within the framework of national accounting.

This enables the calculation of real economic effects in:

- the automotive economy (**direct effect**),
- at suppliers (**indirect effect**) and
- through the consumption of employees (**induced effects**).

The model enables the calculation of the most important economic indicators such as **gross production value, gross value added and employment**



Direct, indirect and induced effects

Mega-trends: Automotive Industry

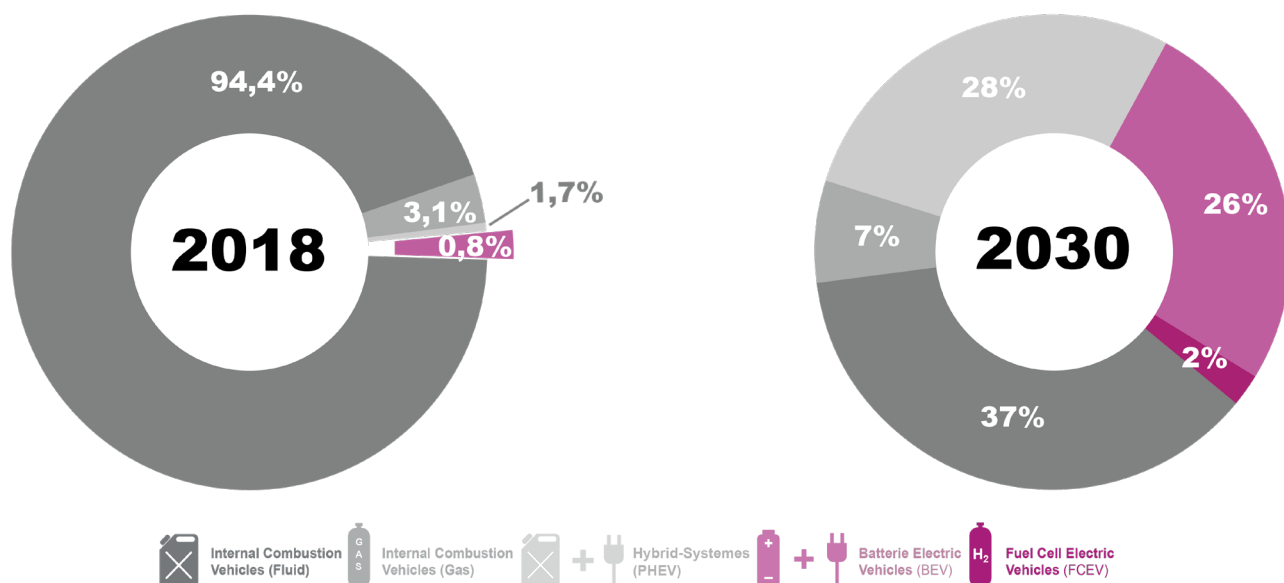
The global automotive industry is undergoing profound structural change. The intensity and pace of future developments depend above all on:

- **climate change** and emission regulations,
- **digitalization** with autonomous mobility,
- **sharing** as well as new mobility/usage concepts &
- **market developments** alongside with China as a new dominant player.

Global Market Shares of Drivetrain Technologies: 2018 vs. 2030

These mega-trends are changing the market shares of drivetrain technologies. While combustion engines still dominate today, electric motors will achieve a breakthrough by 2030.

In the most realistic of four scenarios, more than one in four cars will run on battery (26%) or fuel cell/H₂ (2%), and hybrid systems will be well established as a transitional solution.



Scenario-Analysis Austria

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Auf der Siegerstraße bleiben Automotive Cluster der Zukunft bauen

Szenarien-Analyse und Studie

im Auftrag des Bundesministeriums für Verkehr, Innovation und Technologie (BMVIT) und der Vereinigung der Österreichischen Industrie (IV)

Oktober 2019

Commissioned by:

 Bundesministerium
Klimaschutz, Umwelt,
Energie, Mobilität,
Innovation und Technologie

 **IV** INDUSTRIELLEN
VEREINIGUNG

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The Mobility Transformation

The mobility transformation presents great challenges and opportunities for countries and regions, the whole sector and individual companies:

Our model supports you in successfully managing the mobility transformation.

Opportunities and Challenges of the Mobility Transformation

- Which countries will benefit, which are facing major challenges?
- Which companies are disproportionately affected by the changes?
- Which sectors will particularly benefit from the opportunities that arise?
- How strong will the trends affect the labour market?
- Are we equipped for the changes at regional, national and international levels?
- Will it be possible to translate the opportunities that arise into value creation and employment?

By type

- Gross production value
- Gross value added
- Employment
- Fiscal effects

By origin

- directly
- indirectly
- induced

By effectiveness

- International (EU, Global)
- National (Countries)
- Regional (Federal States)
- Cluster, Networks

By time

- Status quo
- 2030 and subsequently

These questions arise for governments:

- Where are gaps in the value added network?
- Where can companies be located in order to avoid losing value added?
- How can an optimal promotion of producers and/or consumers be designed?
- How do changes, for example in private consumption or in exports (Brexit, punitive tariffs . . .) affect the industry and the economy?
- How can newly emerging mobility clusters be designed?

In order to answer these with constantly changing framework conditions - the automobile satellite account was expanded by:

- the cost and production of the different drivetrain technologies
- updating the market share scenarios for 2030 and later.

Staying on the Winning Track

This methodology was used by the authors of the study "Staying on the winning track. Building the Automotive Cluster of the Future". Published in October 2019 by Federal Ministry of Climate Action, Environment, Energy, Mobility, Innovation and Technology and the Federation of Austrian Industries. Download: www.bmk.gv.at.

The first part of the study analyses the automotive industry in Austria, the global mega trends and the demand development of the automotive industry. In the second part, the consequences of the drivetrain electrification on the Austrian automobile economy were examined and evaluated by means of employment, gross value added, gross production value and fiscal effects. From these key figures we have derived recommendations for Austria as an industrial location.

Our study model can be adapted to the challenges that are important to you. Megatrends such as digitization, sharing and market developments as well as external factors (trade tariffs, Brexit, COVID19 . . .) can also be taken into account.