

Terms of Reference

Sector study

"Sustainable Mobility¹ in Germany - Opportunities for Dutch entrepreneurs who contribute to the transition to smart and clean mobility"

Introduction

Together with the automobile industry, the German government wants to promote a change in mobility. At the German "National Platform Zukunft der Mobilität (NPM)", a strategic dialogue focused on two core areas takes place:

On the one hand, the promotion of alternative propulsion systems, for example by means of purchase subsidies in which the federal government and the car companies participate. On the other hand, the expansion of the charging infrastructure to a million charging points in 2030, in which the automobile industry will also participate. In addition to e-mobility, hydrogen will also play a strategic role in new powertrain technologies. The federal government will present its hydrogen strategy later this year. Germany intends to become the world leader in this market. The momentum is therefore optimal. Also, autonomous vehicles play a bigger role in Germany in the future. What will this catch-up mean for Dutch suppliers and research institutes now and in the future?²

Why Germany?

Germany is by far the most important market for the Dutch automotive sector. The supply industry owes an important part of the export to customers such as BMW, Daimler and Audi. For example, BMW orders millions of euros each year for parts from Dutch suppliers, including exhaust systems (Bosal), screws (Nedschroef), aluminum parts (Brabant) and roof systems (Inalfa). In addition, BMW also has Minis and the BMW X1 produced at VDL NedCar.

Germany is a leading player in the international car market. The branch is strongly represented in southern Germany in particular.³ Opportunities arise mainly in the development of alternative propulsion systems and light, but also sustainable materials to reduce CO2 emissions. In addition, a clear shift is visible from sole car builder to mobile service provider with car sharing and 'connected car' services. This development offers opportunities for innovative companies and startups.

The role of fully electric cars will become increasingly important in the coming years.⁴ Although the German car industry picked up on this theme relatively late, it is now catching up. The ambition is to have at least ten million electric cars on German roads by 2030. The Netherlands is seen as an example, which Dutch companies can once again benefit from. The increasing demand for innovative products and systems in the field of smart and green mobility also offers opportunities for small and medium-sized companies.

The Netherlands is seen in Germany (among others by the NPM) as a leading market in the field of e-mobility. Germany wants to learn how the Netherlands achieved this. This allows Dutch companies to take advantage and show their solutions on various occasions. Experts (VDE, NPM) do not see the greatest innovation potential in e-mobility as such (driving systems etc.), but more in the services and applications around the topic ("Internet of Things").

The expectation is that on this topic and in the development of the (charging) infrastructure there will be interesting starting points for Dutch companies. Companies that work together with German partners in consortia have a greater impact. This was the focus of two Dutch "Partners for International Business E-mobility", which existed from June 2015 up to and including April 2019 (PIB from Amsterdam to Berlin and PIB e-mobility South and West Germany). These consortia have expressed themselves in favor of a follow-up, but in a broader context focused on smart and clean mobility.

¹ Smart and clean, both for the future and now.

² <https://nos.nl/nieuwsuur/artikel/2309231-groene-wende-op-duitse-wegen-wat-betekent-dat-voor-nederland.html>

³ <https://www.rvo.nl/sites/default/files/2019/05/Zakendoen%20in%20Zuid-Duitsland.pdf>

⁴ <https://www.rvo.nl/sites/default/files/2019/05/Elektromobiliteit%20in%20Duitsland%202018.pdf>

Objective

The sector study, with a geographical focus on Germany, provides insight into the market opportunities for Dutch companies (and organizations) that provide products or services that contribute to the transition to smart and clean mobility. The focus is on products and services in the field of:

- 1 smart transport, i.e. smart mobility (AV, connected vehicles, intelligent vehicle) and the associated infrastructure that attributes to this topic (including 5G),
- 2 clean transport, i.e. green mobility (EVs, batteries, hydrogen, power electronics) and the infrastructure that attributes to this (including charging and hydrogen infrastructure) ,
- 3 materials and production (e.g. Composites, thin-film electronics, flexible manufacturing, circular economy).

In addition to insight into market opportunities, the limitations in the business environment must also be clearly identified and suggestions must be made as to how entrepreneurs, government and knowledge institutions can best deal with this.

The results of the sector study are made public to Dutch companies and knowledge institutions by, among other things, organizing an opportunity seminar. If there is sufficient enthusiasm, involved parties will aim at a Pre-PPS⁵ trajectory (incoming and outgoing missions, seminars) with the ultimate goal of cluster formation / deployment of [Partners for International Business](#)(PIB).

This research is part of the multi-year PPS strategy with the business community, knowledge institutions and regions initiated by the Ministry of Foreign Affairs.

Research questions

- What are the opportunities for Dutch entrepreneurs who provide products and services that contribute to the transition to smart and clean mobility?
- Are there also limitations within those opportunities that emerge as a structural bottleneck (no incidents)? If so, which and what do these limitations demand from companies, government and/or knowledge institutions?
- Who are the most important players? What potential investments do these players make in the next five years?

Expected outcomes of this assignment

The sector study must answer the following questions:

- What are the German policy goals with regard to sustainable and smart mobility for the automotive sector and (charging) infrastructure?
- Within which 5 themes are the largest investments expected in the next five years?
- Which incentive measures (legislation, guidelines and standards, instruments and programs) are important in this regard?⁶
- Who are the key players (government, business community, universities) with the largest investments within each theme? In which regions are these located?
- Which Dutch organizations are already actively involved in the previously mentioned 5 themes in Germany?
- Which 3 examples/case studies can be named per theme? Which 5 leading organizations are involved in this (incl. most important contact person)?
- What opportunities and bottlenecks do key players see for Dutch organizations per theme? What does this demand from these Dutch organizations?
- What role do other European countries play for the key players?

⁵ Public-Private-Partnership

⁶ For Example German Charging Infrastructure Regulations:

https://www.rvo.nl/sites/default/files/2019/04/German%20charging%20infrastructure%20regulations%20report%20march%202019_0.pdf

To check the role of Dutch organizations that are active in Germany, the contractor can contact RVO sector experts Corine Te Brake and Roy Paulissen.

End product

Preferably, the report is written in easy-to-read Dutch or English for which the contractor is responsible. The sector study must provide a clear insight into the characteristics and opportunities of sustainable and smart mobility. The report will be made available to interested Dutch companies and knowledge institutions. These are large Dutch companies, industry associations and knowledge institutions, as well as SMEs active within the theme of (sustainable) mobility.

Timetable and reporting

Market research, by means of desk investigations and interviews with key players/stakeholders in Germany, must be conducted in the 3-month period following the start of the assignment. Two weeks before the deadline, the contractor submits a draft report to the Consulate-General in Munich. After comments from the Consulate-General, the contractor has one week to process comments.

Intended Timeline: the results of the sector study will be presented on March 25, 2020 in the Netherlands by means of an opportunity seminar/workshop at the Germany Day/German Business Day.

Delivery

The draft report will be sent to the Consulate-General in Munich by email before **2 March 2020**. The final report must be submitted in digital version (PDF) to the RVO Business Development Coach before **16 March 2020**. The report is presented during a seminar with at least 15 Dutch companies in the Netherlands.

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Budget

Maximum EUR 20.000 incl. VAT

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Attachments:

- List of available research reports
- "Holland vorne dran: Mobilität für die Welt von morgen"