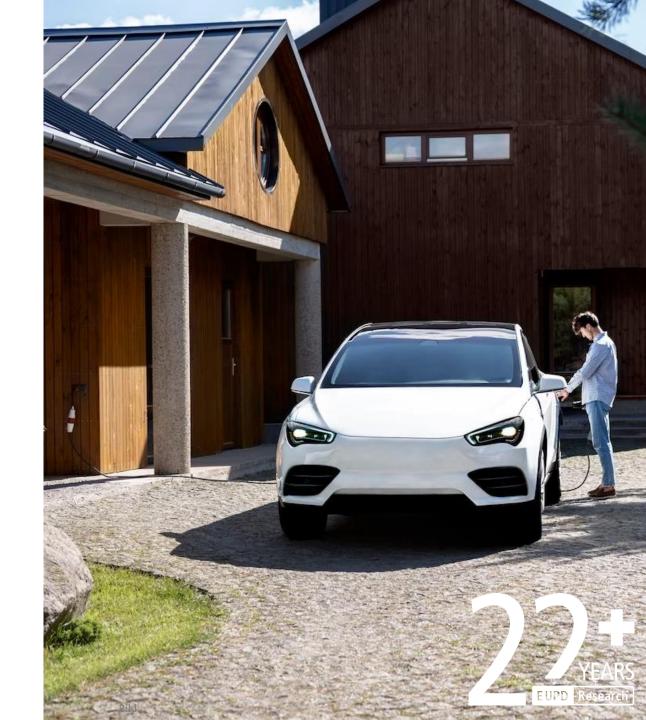


EV Charging Stations InstallerMonitor[©] 2023/2024

Understanding the installers' view of the EV charging station market

Primary survey of EV charging station installers

EUPD Research | Shared Service | September 2023



EV Charging Stations InstallerMonitor[©] 2023/2024



Private EV charging types

- 1. Charging with household electricity
- 2. Solar charging with PV surplus electricity

Study Background

Home charging of electric vehicles is a logical next step in the development of sustainable and future-proof home energy systems. It supports the acceptance of EVs, reduces the pressure on public charging stations and promotes energy independence, grid stability and environmental friendliness.

A wide range of components is available to create smart solutions. The integration of solar power, storage, energy management and home charging for electric vehicles is a logical consequence.

Growing consumer e-mobility is creating business opportunities for charging infrastructure manufacturers, smart grid operators and related renewable energy sectors.

From Components to Solutions

- High quality and compatibility of intelligent charging components is imperative
- The ability to communicate and work in a holistic system is necessary
- Integration into a home energy management system is a clear advantage
- Solar charging is the most economical solution for PV system owners
- Bi-directional charging allows those without a PV system to benefit from the price differences of fluctuating renewable energies
- Sector coupling is the way to go





Those who benefit from the EV Charging Station Monitor©:

Target groups:

- Charging Station Manufacturers
- Distributors
- Energy Providers
- High-Volume Installers
- Investors, Financial Institutions
- Energy Management Solution Providers
- Solar and Storage Manufacturers

Reliable data of the most important KPI's of each CS manufacturer

Essential feedback regarding the buying decision process of installers

In-depth evaluation of CS manufacturers for partnerships

Benchmark information for best-in-class portfolio planning

Information about Key Performance Properties of each brand



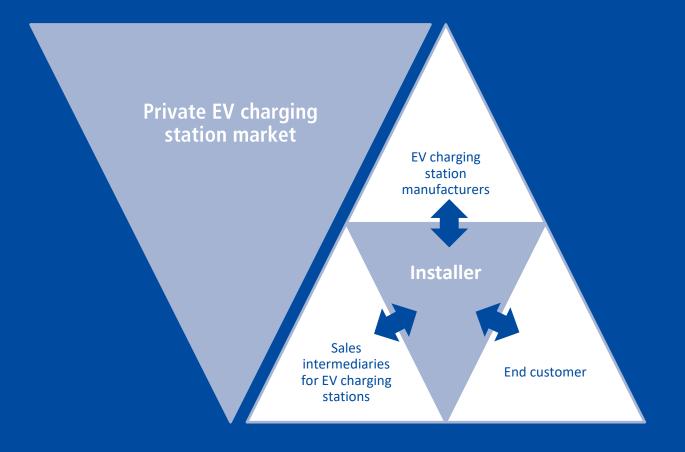
Challenges for Market Actors

High Complex Heterogeneous New Strong Distribution Market Customers Competition Market Growth Channels No fixed **Numerous** Numerous structures or **Short product** different consolidated **storage**, home life-cycles and **suppliers** are **brands** for active both in **B2B** energy growth pressure competing in the and in **B2C** sales customers and management market intermediaries



Installers as Gate Keepers

As installers interact with manufacturers, intermediaries and users they play an important role in promoting EV charging station products and services to end customers.



Market players can benefit from the expertise and experience of installers:

- Receive feedback on the use and performance of products
- Gain a better understanding of market and customer requirements as well as challenges
- Improve the products and services to meet the demands and needs of the market
- Identify new business opportunities based on installer experiences
- Ensure the quality of their products and services by working with installers
- Improve products by drawing on the experience and recommendations of installers

From Insights to Advanced Knowledge

The study provides exclusive information on:

- Market structures
- Market players
- Installer portfolios
- Procurement channels
- Products and brands

... which leads to added value for the implementation of ...

Efficient marketing campaigns and measures

Optimal product positioning in the market and with installers

Adjusted business strategies

Better understanding of customer motives

Further customized analytics for target groups



Content of the EV Charging Stations InstallerMonitor© 2023/2024

Survey Sample

The survey sample consists of installation companies that install EV charging stations.

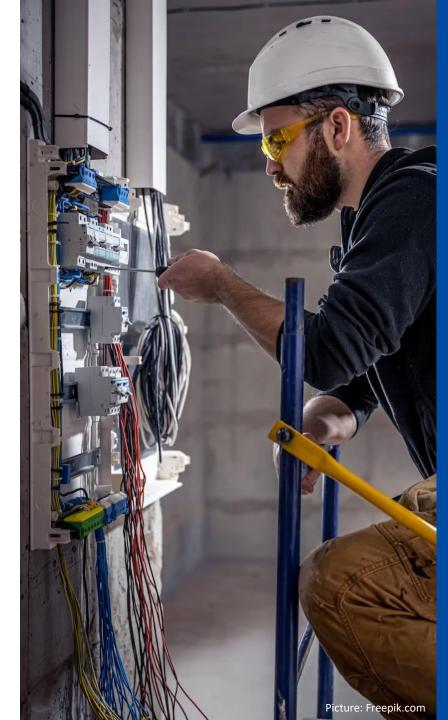
This group includes:

- Electrical installers
- EV charging specialists
- Pure solar installers
- **HVAC** companies
- Construction companies
- Roofers
- Other

The sample was selected from EUPD Research's extensive address database of EV charging station installers.

This database is constantly being updated and expanded. Only installers who have installed EV charging stations in 2023 in their domestic country market are being considered for the survey.





Countries of survey



Primary and Secondary Data

The scope of the study includes a survey of installers to obtain primary data, as well as extensive research to gather secondary data.

Primary data

The target group of this study are installers who have already dealt with the installation of EV charging stations.

Through the installations, they have extensive knowledge about charging stations and can also provide information about brands, procurement channels, and other aspects.



Secondary data

In order to describe the status quo of the market for charging stations, extensive research is required to obtain secondary data. Accordingly, information about the market, brands, products and suppliers, are researched.



Market Analysis



Product Analysis



Procurement Analysis



Competitor Analysis



Study Content

Survey group

Installers of EV charging stations

Technology

EV charging stations (focus on charging stations in private homes)

Study content Market background

Survey of EV charging station installers

Cross check: market players and solutions

- development
- Funding conditions

Current market

- Targets
- Solar charging
- Bi-directional charging

- Sample description
- Procurement management
- Brand management
- Sector coupling

- Brand profiles
- Charging station models and product features
- Compatibility checks

EV Charging Stations InstallerMonitor[©] 2023/2024



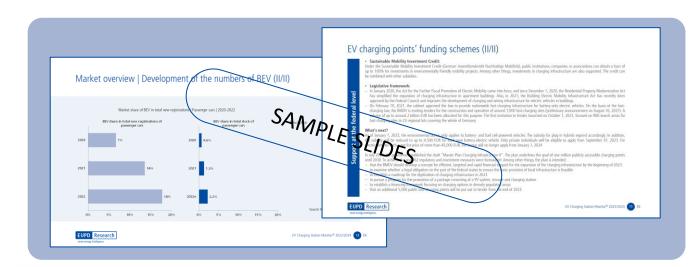


Example slides for the EV Charging Stations InstallerMonitor[©] 2023/2024

Market Background

The market background provides an overview of the electric mobility market based on secondary data and presents the most important subsidies and targets in the market. The contents include:

- Current market development
- Funding conditions
- Targets
- Solar charging
- Bi-directional charging



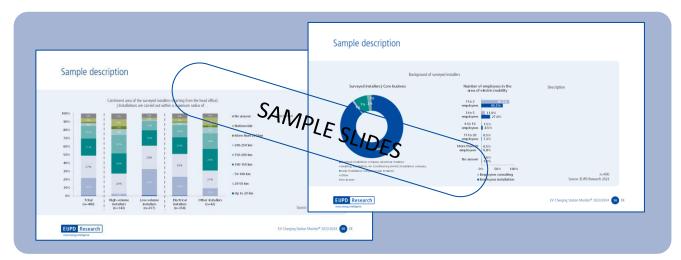
GAIN A BETTER UNDERSTANDING OF THE MARKET

- ✓ Get a compact market overview
- Understand market developments and trends
- ✓ Understand and monitor the legal and statutory framework
- ✓ Utilize the most important market data for your planning



Sample Description

The sample description is an important part of the analysis and plays a crucial role in guaranteeing the accuracy and validity of the survey results. In this section we will describe the sample size and the demographic characteristics of the surveyed installers.



EUPD Research

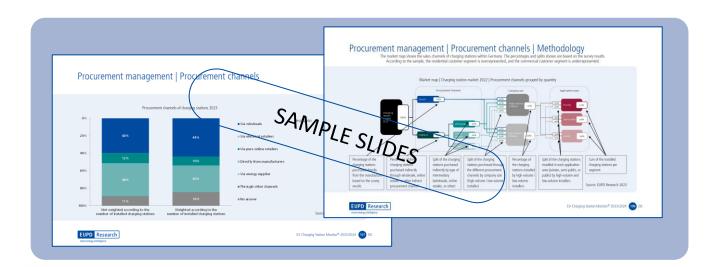
UNDERSTAND INSTALLERS

- ✓ Get to know the installers, find out how their companies are characterized and in which areas they operate
- ✓ Identify different target groups for your products

Procurement Management

Procurement management addresses the supply chain that brings the EV charging stations from the manufacturer to the customer, distinguishing between a two-tier (direct purchase from the manufacturer) and a three-tier distribution approach (via wholesalers, energy suppliers, etc.).

The survey results cover information sources and procurement channels.





Sales intermediaries

UNDERSTAND PROCUREMENT CHANNELS AND SALES MARKETS

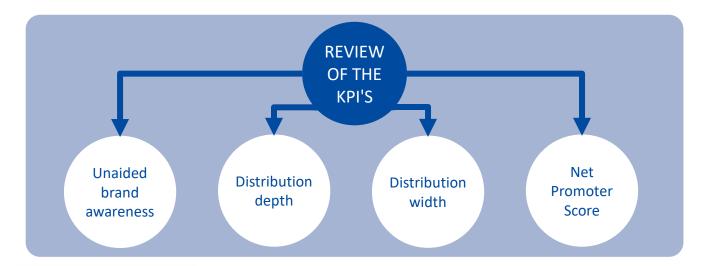
- Compare your own sales channels with those of the market
- ✓ Understand customer needs
- ✓ Improve your supply chain
- ✓ Improve your marketing strategies



Brand Management

This chapter allows for an in-depth analysis of the installers' portfolios and provides valuable information on the portfolio structures associated with specific brands. Especially in the private sector, installers decide which brands to install and recommend to their customers. Contents include:

- Unaided brand awareness
- Most frequent brands in installers' portfolios (distribution width)
- Exclusiveness of the brands in the installers' portfolios (distribution depth)
- Brand recommendation



Charging station manufacturers

UNDERSTAND INSTALLER PORTFOLIOS

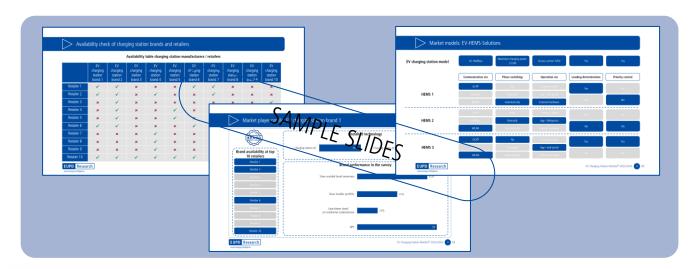
- Measure the percentage of installers who buy your products and solutions
- ✓ Analyse how exclusively your brand is positioned in installers' portfolios
- ✓ Find out if you are a first choice or a replaceable filler
- Follow the path and development from a rarelybought niche product to a frequently-demanded brand dominating the portfolios of installers
- ✓ Optimize brand communication and positioning



Cross Check: Market Players and Solutions

The overview of the market players examines the most important brands and presents their profiles. The TOP brands for private EV charging stations are selected based on the survey results about the brands included in installers' portfolios. The details of the chapter include:

- Compatibility check of charging station brands and distributors
- Compatibility check of charging station brands and energy management systems
- Brand profiles
- Charging station models and product features



KNOW YOUR COMPETITORS

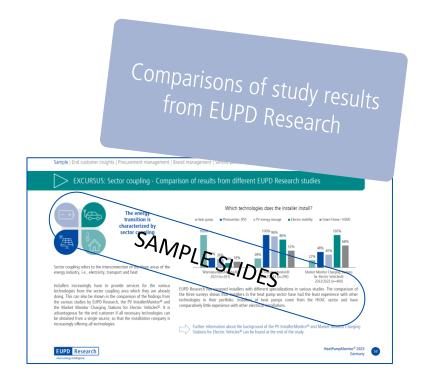
- ✓ Identify and compare market competitors
- ✓ Understand the brand and product portfolios
- ✓ Understand the solutions of EV charging stations in combination with energy management systems

Additional Benefits | Excursions

A special feature of the study is the additional knowledge, which is composed of **comparative study results from EUPD Research**.

The results of the EV Charging Stations InstallerMonitor[©] are compared with the results of EUPD Research surveys of PV installers and heat pump installers or with end customers' responses. The presentation includes comparisons with the following EUPD Research studies:

- PV InstallerMonitor© | EES InstallerMonitor©©
- Heat Pump InstallerMonitor[®]
- SolarProsumerMonitor[©]



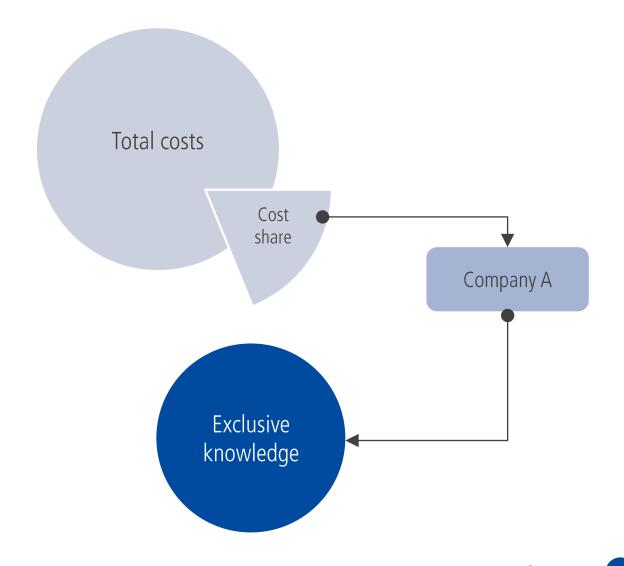
Get your copy of the EV Charging Stations InstallerMonitor[©] 2023/2024

Shared Costs and Comprehensive Results

Invest and benefit together!

The implementation of the **EV Charging Stations InstallerMonitor**© 2023/2024
requires significant investment for the study design, questionnaire, installer survey, secondary research, analysis and implementation of the study.

Participation via the shared service allows a reduced number of clients to share the costs and have exclusive access to the full results of the study.





Order Form EV Charging Stations Monitor[©] 2023/2024

Study	Price		
EV Charging Stations InstallerMonitor 2023/2024 Germany n = 400	□ 12,800 €		
EV Charging Stations InstallerMonitor 2023/2024 Austria / Switzerland n = 200	□ 8,800€		
EV Charging Stations InstallerMonitor 2023/2024 DACH – Germany, Austria, Switzerland	□ 19,900 €		
Add-on options:			
On-site management presentation of the study (about 90 min. per market + Q&A). Online presentation of the study results	□ 1,900 € □ 800 €		

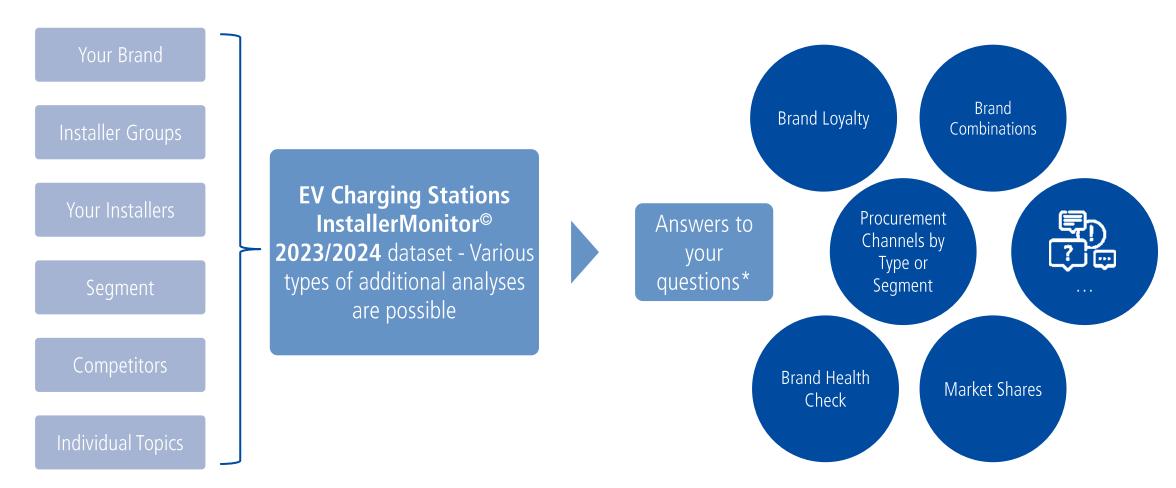
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Payment terms: 100% upon order All prices plus VAT and travel expenses

Company:
Name:
Street:
City / zip Code:
Phone:
E-Mail:
Sales Tax ID:
☐ I accept the terms and conditions of business (p. 29 and 30)
Date:
Signature:
E-Mail to the attention of
Leo Ganz Partner
l.ganz@eupd-research.com

Dataset with further potential

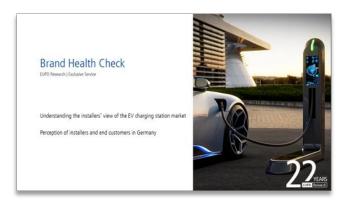
Optional: Individual analyses (e.g. company, competition or segment-specific analyses)





Additional Products and Services

Brand Health Check



The data set allows in-depth analysis, that will help you answer individual questions for your company. In addition to the regular results of the 'EV Charging Stations Monitor® 2023/2024', various questions are evaluated only for the installers that carry your products (or those of selected competitors) in their portfolio. For Germany, EUPD Research is able to include a part on end customers, as well.

Customer Satisfaction

To guarantee the sustainability of your customers' satisfaction, it is important to get an overview regarding the current status of the brand in the perception of the most important target group — the installers.

In consultation with you, a questionnaire is developed to review the customer journey: communication and marketing, sales, product policy, price, order processing, distribution and service.

A 'Voice of Customer Survey' documents the successfu areas and highlights the fields with potential for improvement in areas with the biggest impact in relevant countries.

Top Brand Charging Station



Since 2020, EUPD Research awards the 'Top Brand' seals to charging station manufacturers who convince with their successful brand awareness. The data for the scoring is derived from the 'EV Charging Stations InstallerMonitor[©] 2023/2024'.





Company Structure







Smart ESG Framework & Corporate Sustainability
Smart Energy & Environmental Sustainability
Smart Corporate Health & Social Sustainability









PLATFORMS & AFFILIATES

























EUPD Energy Portfolio

EUPD Research

Reports

- Global Energy Transition GET-MATRIX®
- Electrical Energy Storage Report Europe[©]
- PV InstallerMonitor© | EES InstallerMonitor®
- EV Charging Stations InstallerMonitor[®]
- Heat Pump InstallerMonitor[®]
- SolarProsumerAward[®]
- PV Commercial & Industrial EPCMonitor®
- PV Price & Inventory Tracker[©] |
 EES Price & Inventory Tracker[©]
- Market Leadership Study: EU[©]
- Market Leadership Study: The United States[®]

• ...

EUPD Cert

Certification

- Top Brand PV
- Top Brand PV EPC & Project Developers
- Top Brand PV Installer Award
- Top Innovation Award
- Customer Satisfaction Seal
- Energy Transition Award
- SolarProsumerAward



EUPD Consult

Exclusive Consulting

- Within the scope of strategic consulting projects, we focus on the review, further development or redevelopment of the company's orientation, we rethink concepts, measures or the positioning within the competitive environment and shape growth paths and business models
- Our future-oriented consulting services analyze both the corporate environment and the fundamental objectives of the client

EUPD Research | References (Extract)





























































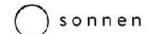


























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PARTNER j.muerke@eupd-research.com



PROJECT MANAGER f.bee@eupd-research.com



FOUNDER & CEO



EUPD RESEARCH | General Terms and Conditions of Business I

1. Scope

- 1.1 All contracts between EUPD Research Sustainable Management GmbH (hereafter EUPD GmbH) and the customer shall be subject to the following terms and conditions only. The customer's terms and conditions of business shall not be applicable and shall not put EUPD GmbH under any obligation to comply unless EUPD GmbH explicitly gives written acknowledgment and acceptance of such conditions.
- 1.2 Offers are aimed exclusively at commercial clients, that is, companies according to Article 14 BGB (German Civil Code). Private customers, that is, customers according to Article 13 BGB, are not permitted to place legally binding orders based on the aforementioned. Interested private customers should contact EUPD GmbH by telephone for information on how to place a non-commercial order. Furthermore, the legal right to return items as stated in consumer protection law does not apply to orders placed by commercial clients but does apply to orders placed by private customers.

2. Offer and Ordering Process

- 2.1 The presentation of the products together with the order form does not constitute a legally binding offer. Offers are subject to the written confirmation of EUPD GmbH. They are designated for the internal use of the customer only.
- 2.2 The purchaser places a binding offer for the product of choice when all relevant purchase details have been given and the general terms and conditions of business accepted. This will be confirmed immediately by email or fax sent to the address given by the customer. The contract to purchase between the purchaser and EUPD GmbH is valid from when the order is confirmed, or, the products are delivered either by mail or download.

3. Scope of Services, Remuneration and Prices

- 3.1 Services offered include but are not limited to the following:
- a. Multi-Client-Services: client-independent studies for an indefinite number of customers.
- b. Shared-Services: commissioned study on behalf of a limited number of customers for the exclusive purchase of those customers.
- c. Exclusive-Services: assignments carried out on behalf of a single customer who will have the exclusive license to use the product but only for an individually negotiated period of time. This exclusive license will be for a period no longer than 12 months. After a period of no longer than 12 months it will become a non-exclusive license.
- 3.2 The prices are net prices in Euros. They do not include sales tax/VAT or delivery costs. Sales tax/VAT will be added to the net costs according to the legally defined percentage. The prices valid at the time of ordering are binding.
- 3.3 Travel expenses incurred for EUPD GmbH workshops either provided in combination with studies or booked separately are not included in the scope of the offer. Prices have to be paid separately by the customer. This does not apply if it is explicitly agreed that the workshop or the resulting travel expenses for the workshop are part of the negotiated contract and thus do not to have to be paid separately.
- 3.4 Should circumstances arise beyond the control of EUPD GmbH which impose a temporary hindrance on the provision of services, then services and delivery appointments agreed on will be extended. Customers will be informed of any such event or other delay immediately

4. Terms of Payment and Delivery

- 4.1 Payment is to be made to the amount and method stated in the contract. Any addition and/ or aberration require the written confirmation of EUPD GmbH in order to be effective
- 4.2 Payment is generally to be made upon receipt of invoice. The products will be shipped as soon as full payment has been made to the account of EUPD GmbH.

The terms and conditions for payment and delivery of Shared- Services and Exclusive-Services are stipulated in the binding offer.

- 4.3 Delivery costs depend on the quantity of products ordered, their destination as well as type of delivery. There are no delivery costs for products which can be downloaded. The customer accepts that any fees or charges owed for customs or non-EU addresses will not be paid by EUPD GmbH nor is EUPD GmbH liable for them.
- 4.4 The method of delivery, route and company employed to deliver will be chosen by EUPD GmbH at their sole discretion. Once the purchaser has taken delivery of the item from the delivery service, the purchaser is responsible for the item. The company responsible for delivery is to be made aware of any damage sustained in transit immediately. These damages are also to be reported to EUPD GmbH immediately. Part deliveries are permissible where appropriate.



EUPD RESEARCH | General Terms and Conditions of Business II

- 4.5 EUPD GmbH retains ownership of all goods and all licensing rights pertaining to the usage of data files as well as intellectual property until payment of invoice has been made in full. Intellectual property rights are lawfully retained by the author.
- 4.6 The purchaser is only able to offset counter claims if they are acknowledged by law, uncontested, or prior written consent has been granted by EUPD GmbH. Customers are only have the right of retention if counterclaims are based on the same contractual relationship. The customer is prohibited from transferring any claims of payment against EUPD GmbH to a third party.
- 4.7 The estimated costs for the services provided by EUPD GmbH are based on project calculations and experience. Estimations are optimized and customer-oriented so that lower deviations may not be assumed.

However, it cannot be fully excluded that additional effort maybe required in the completion phase of the project. Should the suggested amount be exceeded, EUPD GmbH will inform the client promptly. Such additional efforts will be calculated on the basis of man-day costs and these may vary according to the qualification of the staff involved.

Upon notification of these additional costs the client may choose whether the project shall continue in accordance with the original cost estimation as stated in the proposal although full completion of the project may no longer be possible or agree to the revised cost estimation thus enabling full completion of the project. Should the client agree to the latter, this shall be subject to a separate written agreement.

5. Copyright and Licenses

- 5.1 The products and their intellectual property are protected by copyright. It is only possible to purchase a license to use the product and not the product itself or its content. The author/ creator remains the owner of intellectual property.
- 5.2 The customer is granted a non-transferable and non-exclusive license to use the product and the results and content in the product (with the exception of Exclusive-Services) for personal use only. As far as the customer (for example an agency) exclusively acts as the purchaser for a user mentioned by name within the order, then the right of use applies solely for said user.
- 5.3 Permission to use the licensed product in the national and international affiliates of the company is subject to the written approval of EUPD GmbH.
- 5.4 Any use of the product not explicitly permitted under copyright law is prohibited without the prior written consent of EUPD GmbH as the licenser and/or the written consent of the author. This includes but is not limited to copying, distributing, publishing, translating, saving, processing and reproducing the work in databases. Non-compliance will be prosecuted

6. Liability

- 6.1 The products were prepared with the utmost care, using professional methodologies and taking relevant legislation into account with the aim of assuring the best possible accuracy of the studies and their results. The data contained in this product is based on surveys of sample populations, conducted using standard statistical methods to the best of our knowledge. As such the study is subject to a certain statistical error rate and is based exclusively on the facts which were available at the time of the survey. Due to the aforementioned, no guarantee can be given for the accuracy and completeness of the studies and the data made available in them.
- 6.2 The studies contain specific information, but explicitly do not contain any definite recommendations on investments or actions to be taken. Should the user, having taken the above mentioned into consideration, choose to use the studies to support their decision making process, EUPD GmbH shall not assume liability for the economic success of such investments or actions.

7. Jurisdiction

The court of jurisdiction is Bonn. German law will be applied in all legal proceedings.

8. Severability Clause

Should any of these terms and conditions, either in full or in part, be invalid or incomplete, it shall not affect the validity of the other terms and conditions. In that case, the terms and conditions, as stated in German law come into effect.

As of October 2022

