

HeatPumpMonitor[©] 2023

Understanding the installers' view of the
heat pump market

Study focus: Air-to-water heat pumps in residential buildings

Primary survey of heat pump installers for home heating in [Germany](#)

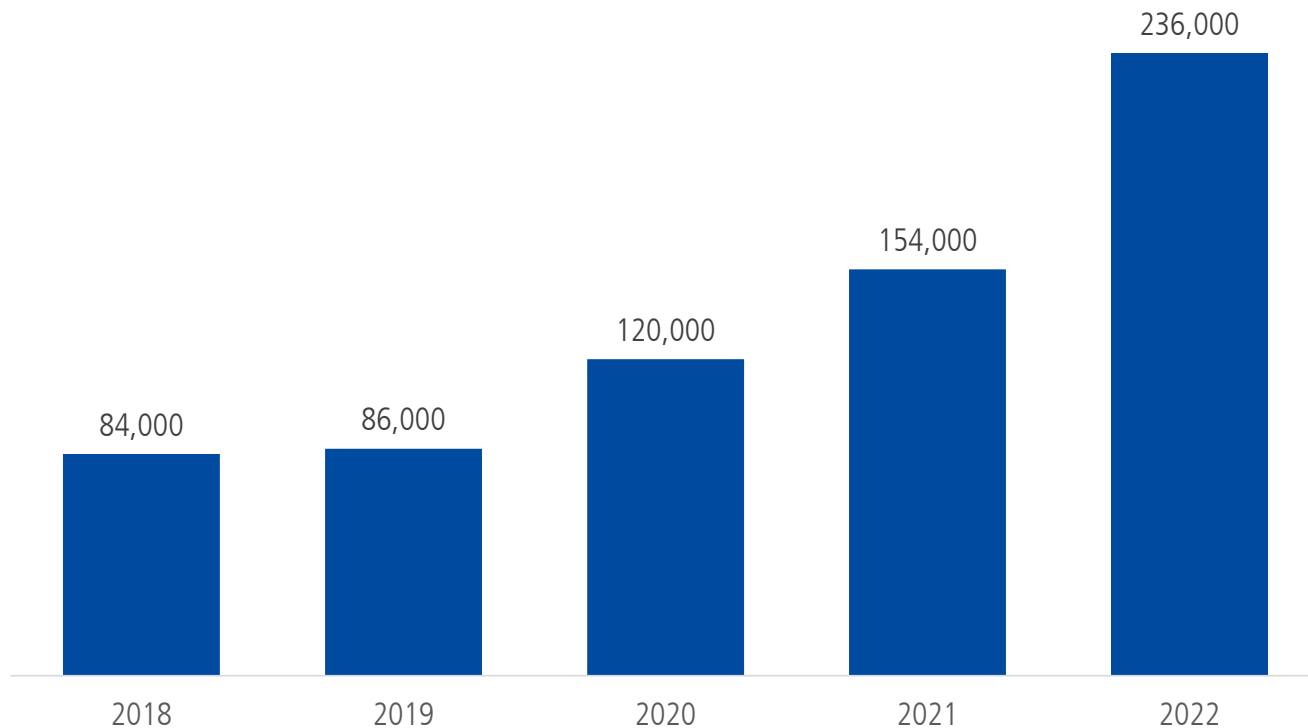
EUPD Research | Shared Service | August 2023



22+
YEARS
EUPD Research

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Development of heat pumps* 2018 to 2022 | Germany



Source: EUPD Research 2023; BWP / BDH Statistik

*The data on this slide and throughout the study refer to heating heat pumps. For readability reasons, these will be referred to as 'heat pumps' in the subsequent text.

Study background

The heat pump market in Germany has grown strongly in recent years. Due to rising energy costs and awareness of environmentally friendly energy options, more and more people are interested in heat pumps as an efficient heating method. This leads to a high demand for heat pumps and a strong growth of the heat pump market. In Germany, there are a large number of suppliers offering a wide range of heat pump products for different requirements. Different heat pump technologies exist based on the heat sources air, water and earth.

Air-to-water heat pumps are the most widespread and their share will increase in the future.

Market challenges

The market for heat pumps has seen strong growth in recent years. Nevertheless, manufacturers and installers also face a number of challenges that they must overcome in order to be successful. Some of the biggest challenges in the heat pump market are:

Emerging market

Strong market growth

Strong competition

Multi-layered distribution channels

Customer Heterogeneity

Strongly growing demand is inhibited by limited capacities at manufacturers and installation companies.

Manufacturers are faced with **high growth pressure** to meet the strong increase in demand.

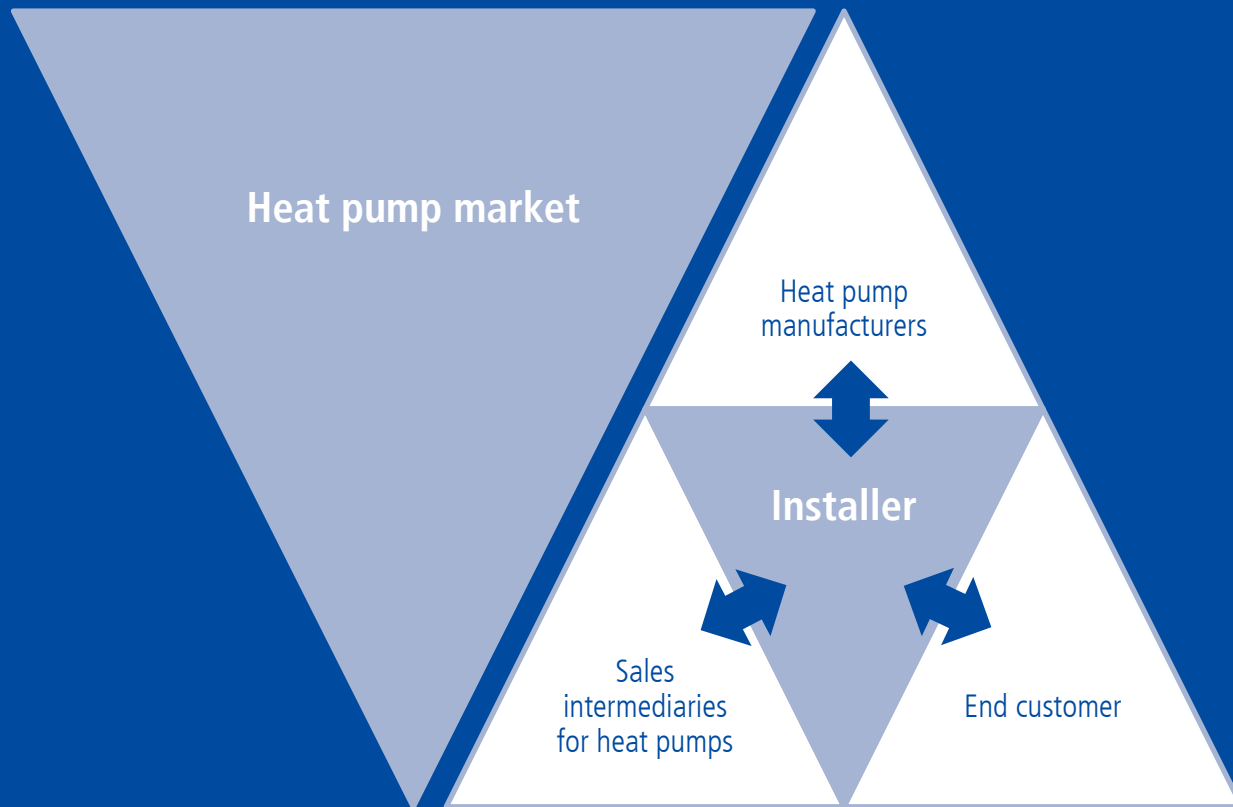
The industry is **large, new suppliers are entering the market** and competing with different players.

Numerous traders are active in both the **B2B** and **B2C** sectors

Different buildings (new/old building), type of house insulation, other technologies (PV system, storage, HEMS), etc. **must be taken into consideration for the installation.**

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As intermediaries, installers play an important role in brokering heat pump products and services from manufacturers to end customers. Installers interact with manufacturers, intermediaries and end customers.



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

- Receive feedback on the use and performance of their products.
- Gain a better understanding of market and customer requirements and challenges.
- Improve their products and services to meet the demands and needs of the market.
- Identify new business opportunities resulting from 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.

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The study provides exclusive information on:

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

Your added value for the implementation of:

Efficient marketing

Optimal product positioning in the market
and with the installer

Adjusted business strategies

Better understanding of customer motives

Service packages tailored to target groups

Content of the HeatPumpMonitor[©] 2023

* The data on this slide and throughout the study refer to space heating heat pumps. For readability reasons, these will be referred to as "heat pumps" in the subsequent text.

Target group

The target group consists of installation companies that install air-to-water heat pumps in Germany.

This group includes:

- HVAC installers
- Electrical installers
- Solar installers
- Other companies

The sample was selected from EUPD Research's extensive address database of heat pump installers.

This database is constantly updated and expanded. Only installers who have already installed heating heat pumps are considered for the survey.

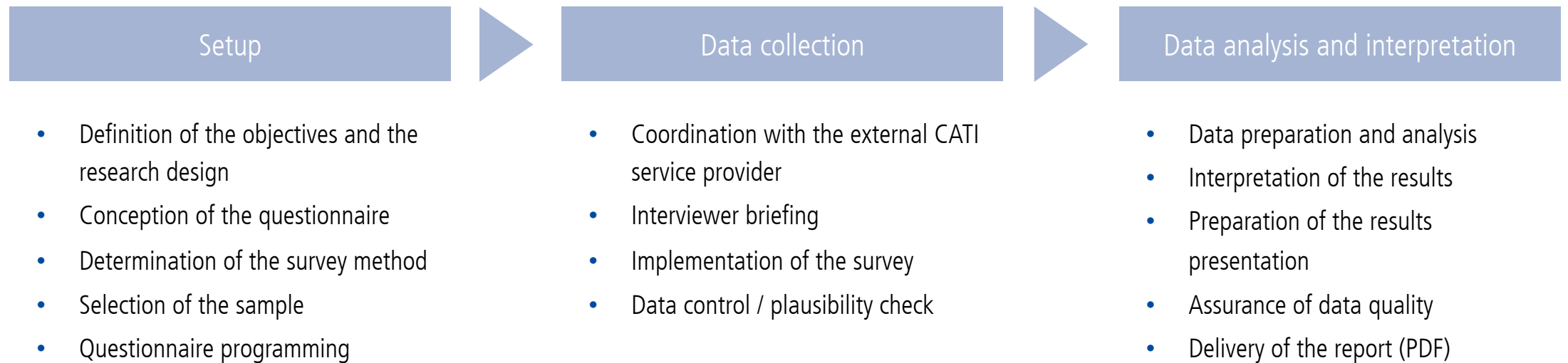


Country of survey



Methodology and approach

The study is based on an empirical survey (primary research) and market data (secondary data). The primary data collection is carried out by a quantitative telephone questionnaire (CATI). The results of the study are analyzed anonymously according to the requirements of modern market research. Secondary research is also included in the analysis: Through desk research and the use of internally available data, the information provided by the installers is enriched with figures on market development.



Methodology and approach

Survey group	Installers of heat pumps (e.g. HVAC and PV installers)	
Technology	Heat pump (focus on air-to-water heat pumps in private homes)	
Study content	Secondary data: market data	Primary data: survey of heat pump installers
	<ol style="list-style-type: none">1. Current market development in the heat pump sector2. Funding conditions3. Heat pump targets	<ol style="list-style-type: none">1. Sample description2. End customer insights3. Service portfolio4. Procurement management5. Brand management6. Market development

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Additional benefits - EXCURSES

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

The additional content offers further information on the technology. Moreover, the results of the HeatPumpMonitor® are compared with the results of EUPD Research surveys of PV installers and EV charging station installers or with end customers' responses. The presentation includes comparisons with the following EUPD Research studies:

- PV InstallerMonitor®
- Market Monitor Charging Stations for Electric Vehicles®
- SolarProsumerMonitor®

Additional content

EXCURSUS: Installation types of air-to-water heat pumps

Monobloc vs. split design of an air-to-water heat pump

Air-to-water heat pump with monobloc design

Advantages:

- Outdoor and indoor units are integrated into a single cabinet.
- Compact design, easy to install.
- Lower costs due to fewer components.

Disadvantages:

- Full outdoor unit with compressor and condenser coils is exposed to weather conditions.
- Limited capacity for larger buildings.

Air-to-water heat pump with split design

Advantages:

- Outdoor unit is protected from weather conditions.
- Higher capacity for larger buildings.
- Better sound insulation for the indoor unit.

Disadvantages:

- Higher costs due to more components.
- More complex installation.

Comparisons of study results from EUPD Research

EXCURSUS: Sector coupling - Comparison of technologies

The energy transition is characterized by sector coupling

Which technologies does the installer install?

Survey Period	Heat pumps	Photovoltaic (PV)	PV storage systems	EV charging	District Heating/HEIS
November 2023 to April 2024	100%	20%	20%	10%	10%
July 2023 to October 2023	100%	28%	24%	12%	10%
March 2022 to February 2022	100%	35%	18%	10%	10%

EUPD Research has surveyed installers with different experiences in various studies. The comparison of the three survey periods that focuses on the heat pump sector shows that the four technologies with some experience in their portfolio, installers of heat pumps, have the most experience with other energy technologies.

Learn more information about the background of the PV InstallerMonitor® and Market Monitor Charging Stations for Electric Vehicles® can be found at the end of the study.

Example slides for the HeatPumpMonitor[©] 2023

Secondary data | Market background

Market background

The market background provides an overview of the heat pump market's development based on secondary data and presents the most important subsidies and targets in the market. The contents include:

- Market development
- Funding conditions
- Heat pump targets

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

The screenshot shows two pages from a report. The left page, titled 'Development of the heat pump market', features a bar chart showing market growth from 2018 to 2022. The right page, titled 'What factors influence future developments in heat pumps?', contains a table with three columns: Influencing factor, Description of the influencing factor, and Impact.

Influencing factor	Description of the influencing factor	Impact
Funding by the Federal Office for Economic Affairs and Export Control (BAFA)	<ul style="list-style-type: none"> Since 01. July 2022, heat pumps have been subsidized by the Federal Office for Economic Affairs and Export Control as an individual measure in the case of renovation of existing buildings. A total of up to 40 percent of the investment up to 40,000 euros is subsidized (in a maximum of 24,000 euros). The subsidy consists of a 20 percent basic subsidy, plus 10 percent if an old but still functioning gas, oil, coal or night storage heating system is replaced with a heat pump, and a further 10 percent for heat recovery water or night storage. Heat pumps with an annual performance factor of at least 2.7 are subsidized from 2024, a value of 3.0 is required. 	++
Obligation to use 65 percent renewable energies when replacing heating systems	<ul style="list-style-type: none"> EEG amendment 2023: From 01. January 2024, as far as possible, every new heating system is to be powered by at least 65 percent renewable energy. The Federal cabinet has already approved the draft bill, and the amendment is expected to be passed by the German parliament (Bundestag) and signed (Bundesrat) in the summer of 2023. Heating systems that are capable of burning high-purity gas are to be installed and operated with natural gas and will only have to be converted with at least 65 percent hydrogen from 01. January 2025 onwards. 	++
Energy efficiency standard for new buildings	<ul style="list-style-type: none"> The minimum standard for energy efficiency in new buildings (defined by the Building Energy Act) has been raised to the Efficiency House Standard (EHS) 55 standard since 01. January 2023 with regard to the permissible primary energy consumption, while the specifications for the building envelope continue to correspond to the EHS 55 standard. The substitution of gas or oil heating systems will hardly be possible given the strict primary energy specifications. According to the coalition agreement, the EHS 40 standard is to apply from 01. January 2025. 	++

Secondary data | Market players

Market players in Germany - manufacturers and brands

The overview of the market players in Germany examines the most important brands and presents their profiles. The TOP brands for air-to-water heat pumps in Germany are selected based on the survey results on the brands included in the installers' portfolios. The profiles of the brands include:

- General information
- Type of heat pumps
- Air-to-water heat pump portfolio

KNOW YOUR COMPETITORS

- ✓ Identify and compare market competitors
- ✓ Understand the brand and product portfolios

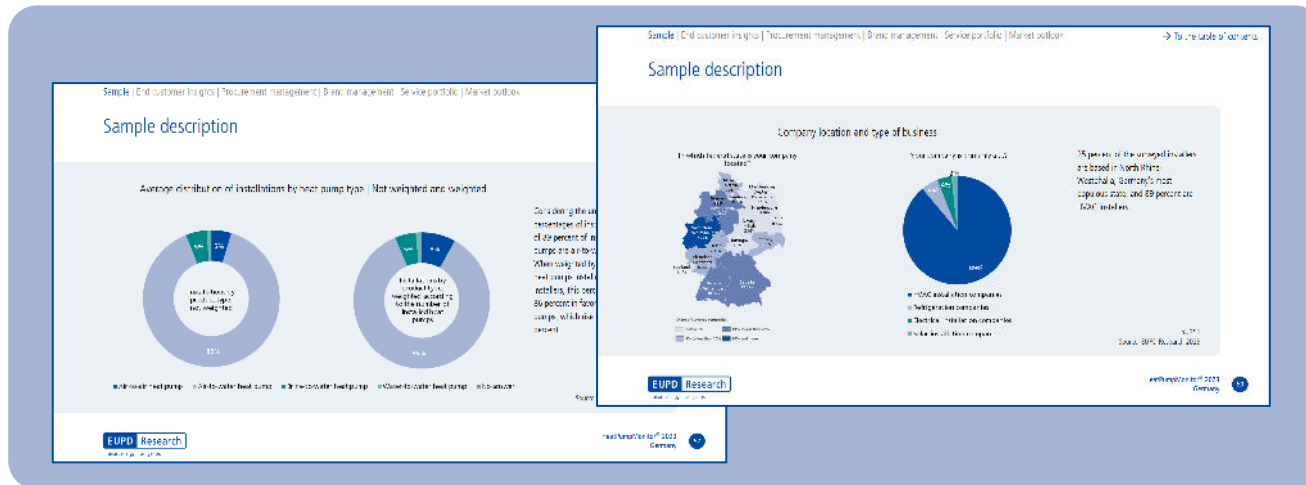
Primary data: Sample description

Installer background

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.

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



Primary data: End customer insights

Installers



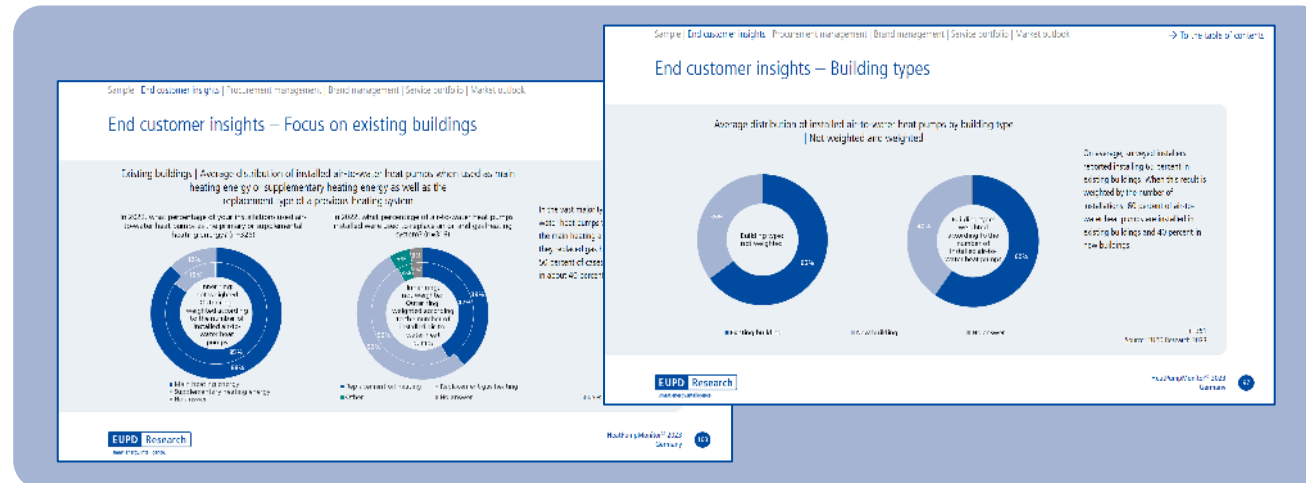
End customers

End customer insights - Taking a closer look at the installations

Find out more about the installations carried out by the surveyed installers. The aim is to identify who the customers are, where the installations are carried out (existing/new buildings), what difficulties there may be with the system design, what role system compatibilities currently play or why customers transition to heat pumps takes place.

IDENTIFY PROBLEMS AND CHALLENGES

- ✓ Identify problems during installation process and/or operation
- ✓ Receive optimization impulses for technical requirements of the products
- ✓ Understand end customers and gain insights for product optimization



Primary data: Service portfolio

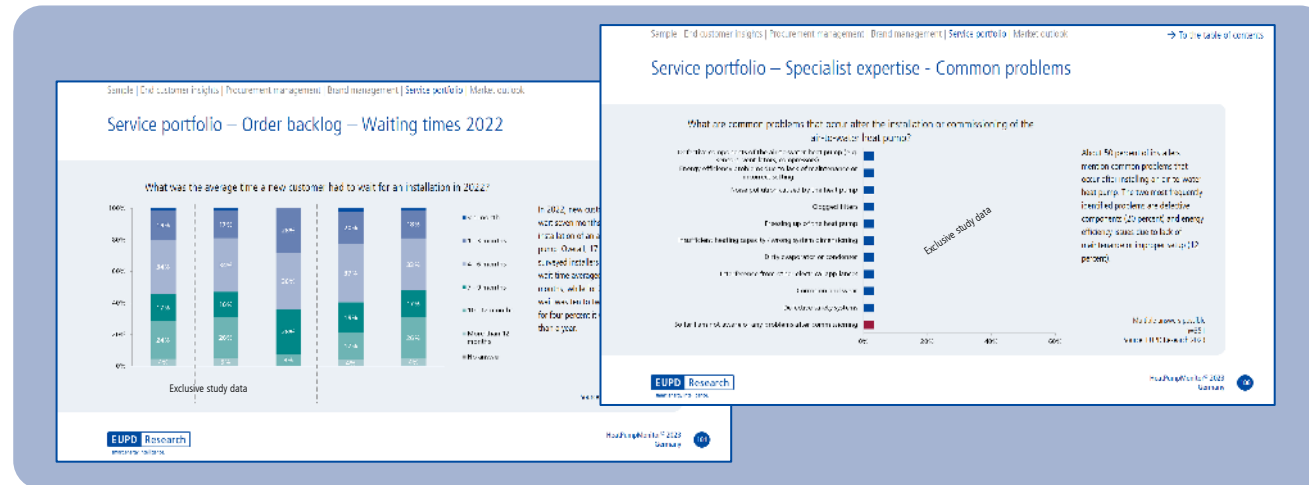
Service portfolio

The chapter 'Service portfolio' indicates how the installation company's portfolio is structured around installation, commissioning and after-sales services in the area of heating heat pump installation. This chapter deals with:

- Procedure regarding installation enquiries
- Scope of the survey on installations and manufacturers
- Service portfolio after heat pump installation
- Most frequent problems/difficulties encountered during installations

IDENTIFY SUPPORT POTENTIALS

- ✓ Recognize problems faced by the installers
- ✓ Enhance support for installers regarding installation, commissioning, maintenance and/or repairs



Primary data: Procurement management

Installers



Heat pump intermediaries

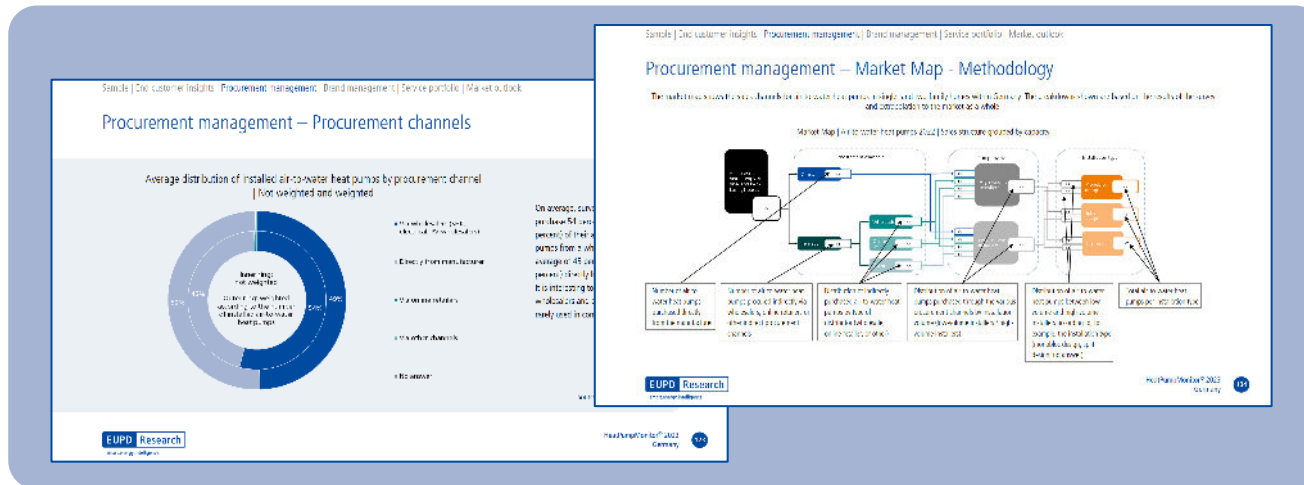
Procurement management

Procurement management addresses the supply chain that brings the heat pumps 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.).

In addition, the survey results cover information sources, procurement channels and purchasing motives.

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

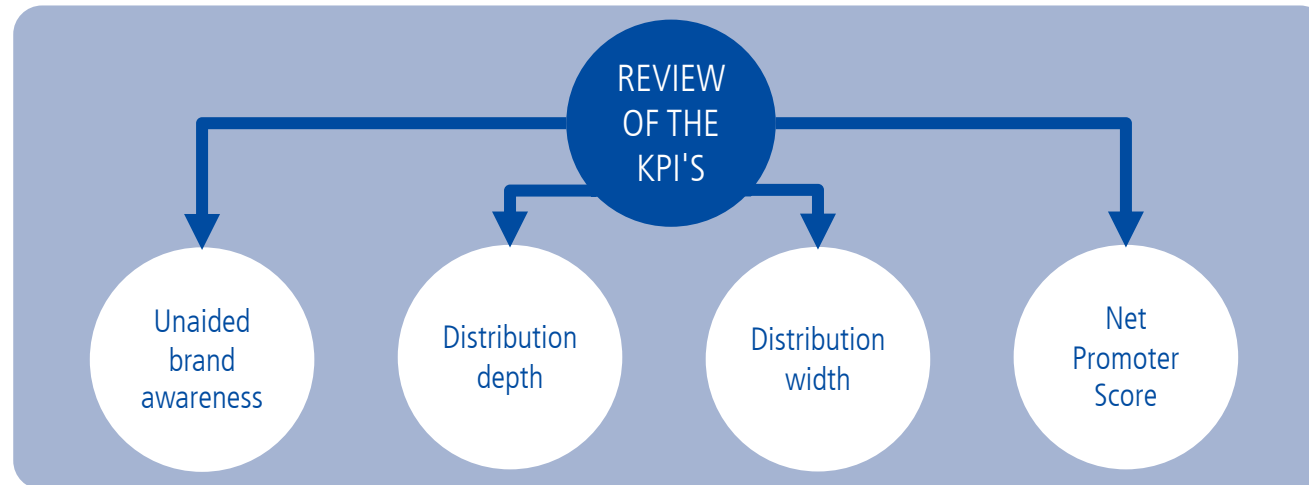


Primary data: Brand management

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
- Brand recommendation



Installers



Heat pump
manufacturers

UNDERSTAND BRAND PORTFOLIOS

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

Primary data: Market outlook

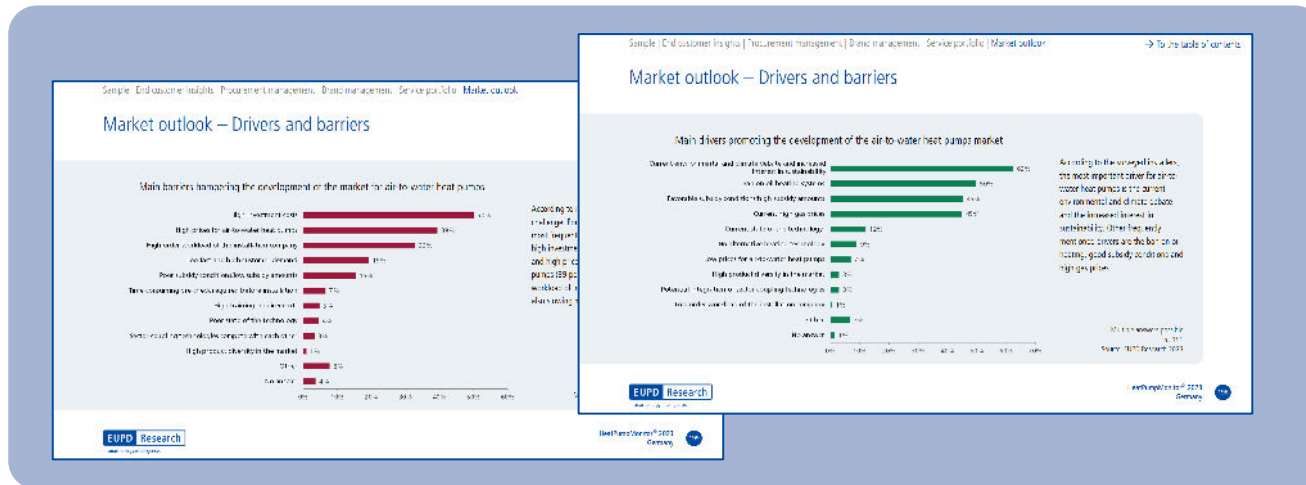
Market outlook

The chapter 'Market outlook' presents the installers' view of how they expect the market for air-to-water heat pumps to develop in the future. This chapter analyzes:

- Openness to new brands in the portfolio
- Expectations of the technological development in the market
- Drivers and barriers in the market

GLANCE INTO THE FUTURE

- ✓ Understand market dynamics and spot trends
- ✓ Understand expectations for the coming years and consider them for strategy development



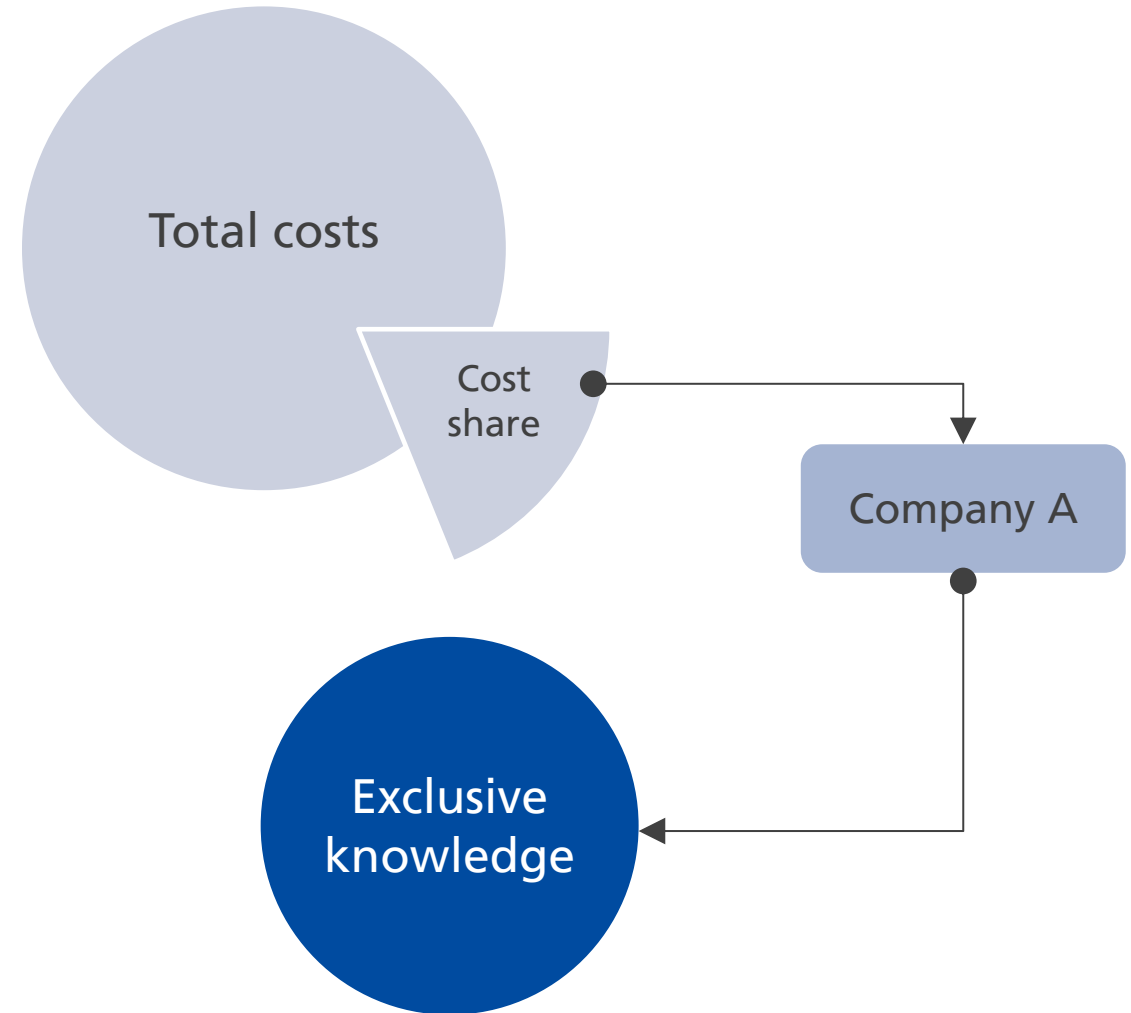
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SHARED COSTS AND COMPREHENSIVE RESULTS

Invest and benefit together!

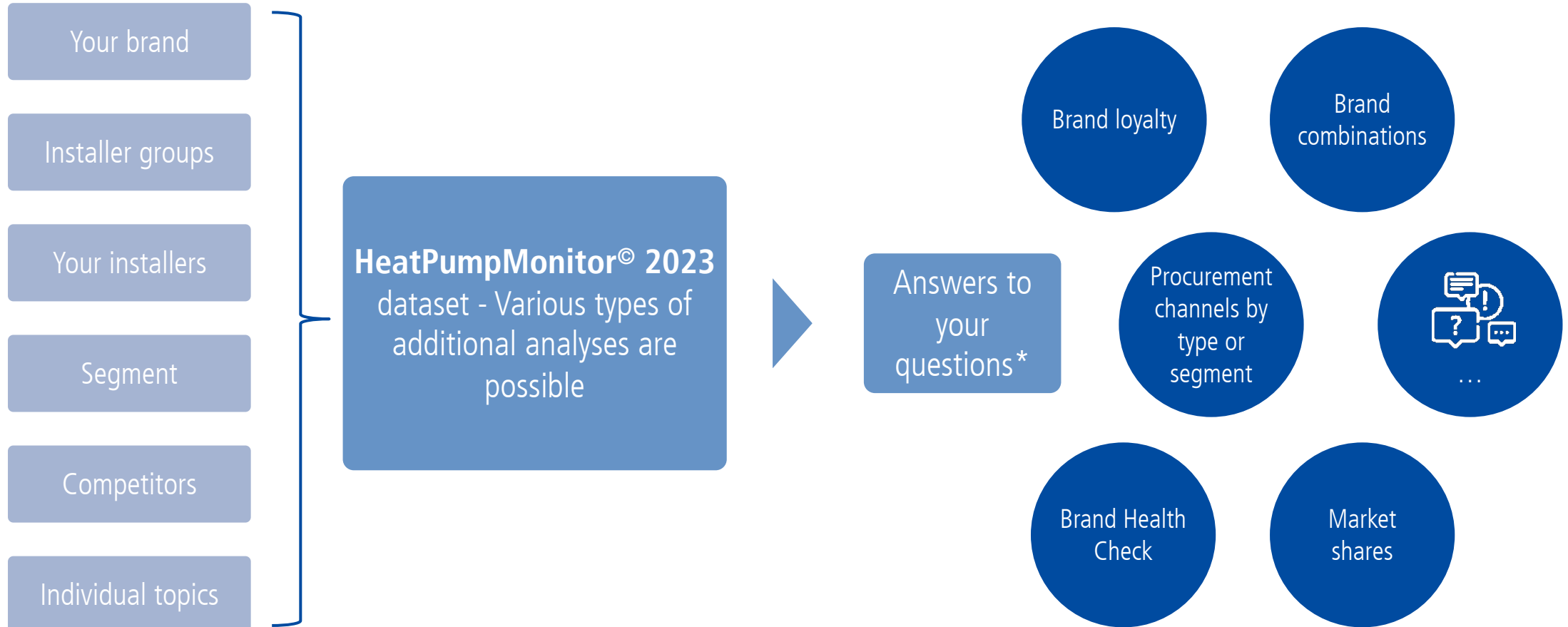
The implementation of the **HeatPumpMonitor® 2023** requires significant investment for the study design, questionnaire, installer survey, secondary research, analysis and implementation of the study.

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.



DATASET WITH FURTHER POTENTIAL

Optional: Individual analyses (e.g. company, competition or segment-specific analyses) | Further information on request



*Depending on the number of mentions and general data availability.

ADDITIONAL PRODUCTS AND SERVICES

BRAND HEALTH CHECK



The data set enables in-depth analyses that help answer individual questions for your company. In addition to the regular results of the **HeatPumpMonitor® 2023**, various questions are analyzed only for the installers who have your products (or those of selected competitors) in their portfolio. For Germany, EUPD Research is also able to collect a subset on end customers.

Customer Satisfaction

In order to ensure the long-term satisfaction of your customers, it is important to get an overview of the current position of your brand in the perception of the most important target group - the installers.

In coordination with you, a questionnaire will be developed to examine the Customer Journey: Communication and marketing, product policy, price, order processing, sales and service.

The "Voice of the Customers" reflects the successful areas and highlights potentials for improvement in the most influential areas in the relevant countries.

TOP BRAND HEAT PUMP® 2023



This year, EUPD Research awards the first **Top Brand®** seals to heat pump manufacturers who stand out due to their impressive brand awareness, distribution and recommendation. The data for the scoring comes from the **HeatPumpMonitor® 2023**.

About EUPD Research

EUPD RESEARCH

RESEARCH | CERTIFICATION | CONSULTING

EUPD Research

Market research

- Market analyses, e.g. SolarProsumerMonitor[®] PV InstallerMonitor[®]
- Competitor analyses
- Product analyses
- Price analyses

EUPD Research

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EUPD Cert

Certification

- Top Brand PV[®] | Top PV Supplier[®]
- SolarProsumer Award[®]
- Energiewende Award[®]
- Customer satisfaction



EUPD Consult

Exclusive consulting services

- Within the framework of strategic consulting, we focus on the review, further development or redevelopment of the company's strategy. We rethink concepts, measures and the positioning in the competitive environment and design growth paths and business models.
- Our future-oriented consulting services analyze both the business environment and the fundamental goals of the client.

THE REFERENCES OF EUPD RESEARCH – EXTRACT



SUNGROW
Clean power for all

IBC
SOLAR



JinKO Solar

SUNTECH



Trinasolar

ENPHASE.



KOSTAL



JASOLAR

krannich
Solar



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SENEC

LONGI Solar

aleo

GROWATT

qcells



Libra
ENERGY

MEMODO
energy storage experts



SUNPOWER®



VARTA



SOLA X POWER

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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 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 licensor 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