

Market Leadership Study: Last Mile Distributed Solar and Energy Storage

A comprehensive study on the Residential Segment & Impacting Downstream Players within Major European Markets

Multi Client | EUPD Research |
July 2023

22+
YEARS
EUPD Research



BACKGROUND | INSIGHTS

The European Renewable Energy sector has experienced a massive upswing lately as a result of continent-wide initiatives such as NECP and REPowerEU. Solar PV is viewed as the leading candidate to bridge most of the renewable ambitions of EU countries

Furthermore, European Solar PV sector has seen a record growth over the past 5 years, and with ambitious targets in place, this upward trajectory is expected to continue in the coming years

The report provides a comprehensive analysis of the European solar PV landscape, with a special focus on the residential segment. It covers the top markets of the European Union-27 nations and the United Kingdom. The report presents key statistics pertaining to historical and projected growth of solar PV installations, accompanied by relevant Key Performance Indicators (KPIs). Furthermore, it examines the drivers, barriers, and emerging trends that shape the industry

An extensive evaluation of the **top ten markets** is an integral component of the study, encompassing an in-depth analysis of energy transition trends, solar PV statistics, regulatory mechanisms, drivers, barriers, SWOT analysis, and sector coupling potential for each country

The study provides a thorough competitive landscape assessment of downstream players (installers) in the solar PV sector targeting the residential segment within each country to depict their current positioning and future potential

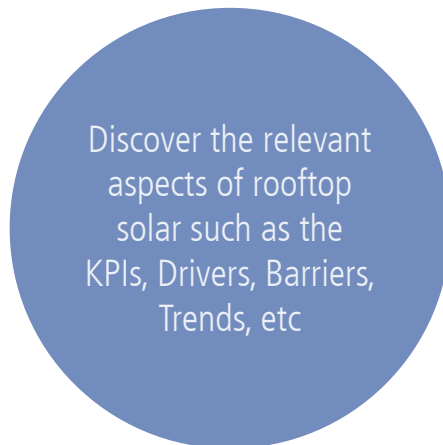
BENEFITS

Utilize the Report to understand:

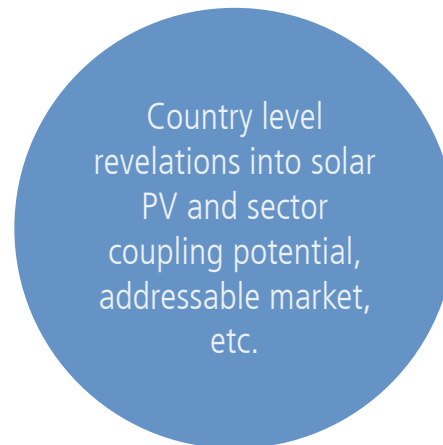
SOLAR PV MARKETS



KEY FACTORS
INFLUENCING
DISTRIBUTED SOLAR PV



THOROUGH INSIGHTS
INTO THE TOP 10
MARKETS



COMPETITIVE LANDSCAPE
ASSESSMENT

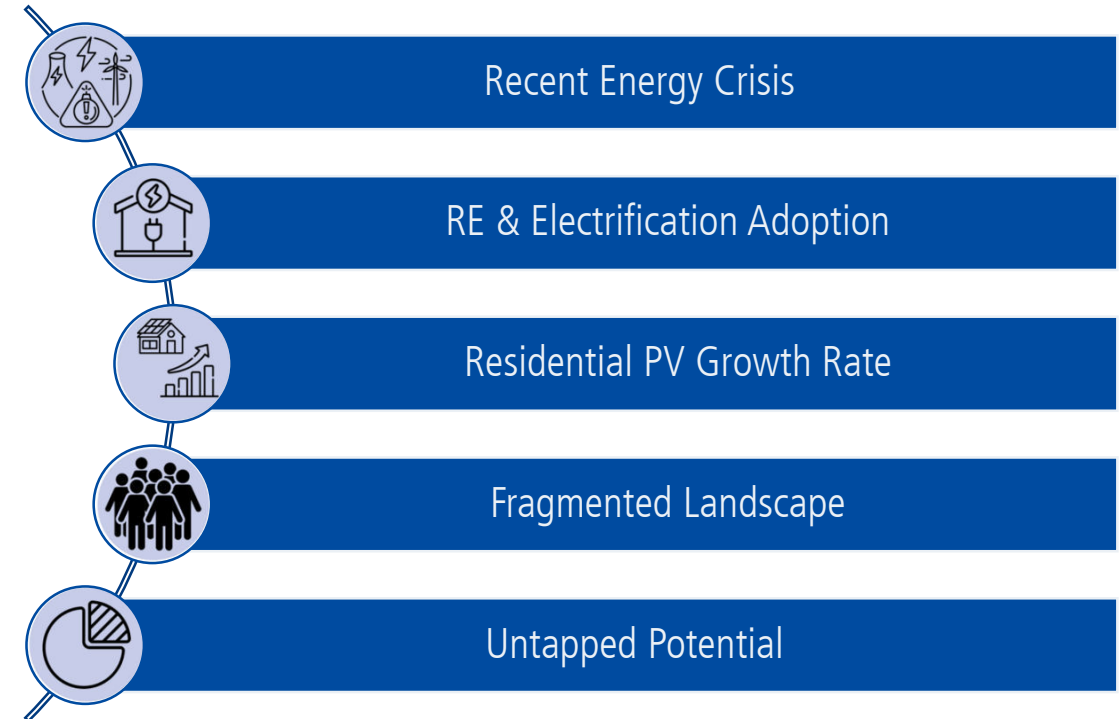


RENEWABLE ENERGY & SOLAR PV GROWTH IN EUROPE

The growth of renewables and distributed solar PV within the EU-27 and the UK are thoroughly explored by analyzing the recent trends and events impacting the sector:

- Recent [initiatives to boost solar PV](#) such as REPowerEU
- Revised [solar PV targets of the EU-27](#) and the [UK](#) for 2030
- Historical and forecasted [solar installations \(2018-2027\)](#) of the EU-27 and the UK
- [Rooftop PV trends](#) and domination in the region
- [Key Performance Indicators \(KPIs\)](#) of residential solar PV
- [Top 10 markets](#) for residential solar PV
- [Drivers and barriers](#) of residential solar PV
- [Remaining addressable market](#) in the top European markets

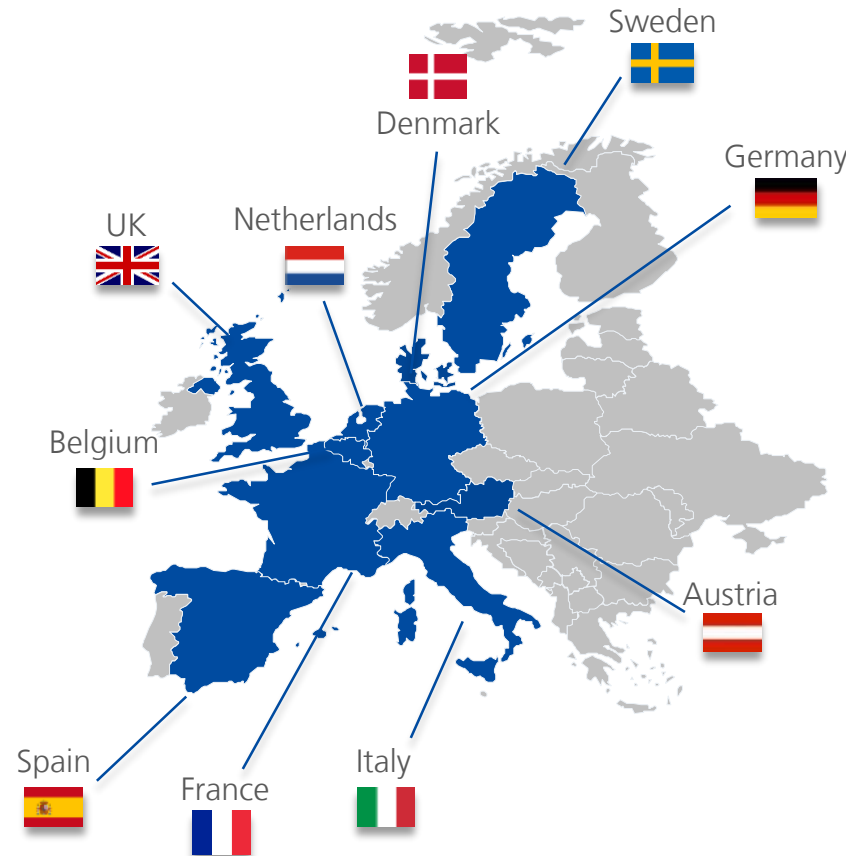
Drivers for Residential Solar PV within the EU



COUNTRY LEVEL DEEP DIVES

The study includes comprehensive insights from the following country markets:

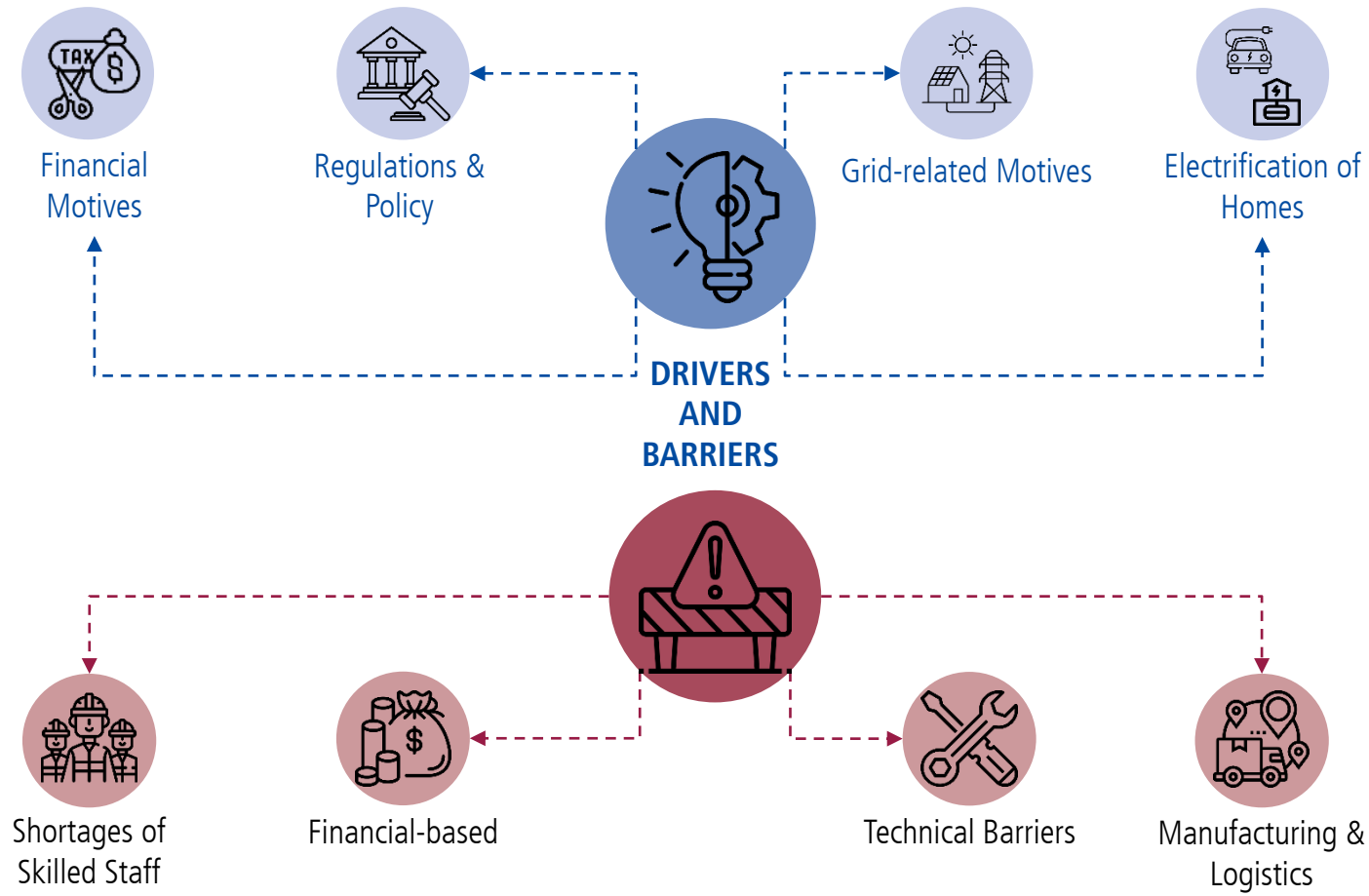
Country	2022 Newly Installed Annual Residential Capacity (MWdc)
Austria	365
Belgium	801
Germany	1,473
Italy	1,103
Netherlands	1,900
Spain	963
Sweden	562
Denmark	77
France	450
UK	448



Opportunities and Challenges

- Top PV markets in Europe have made impressive progress in the development of residential solar PV systems
- The report delves into the advancements made thus far and provides insights into the anticipated trajectory for residential solar PV within these markets
- Various installers' survey results are included to highlight the potential opportunities in these markets such as sector coupling and the current challenges faced by downstream players

COUNTRY LEVEL DEEP DIVES

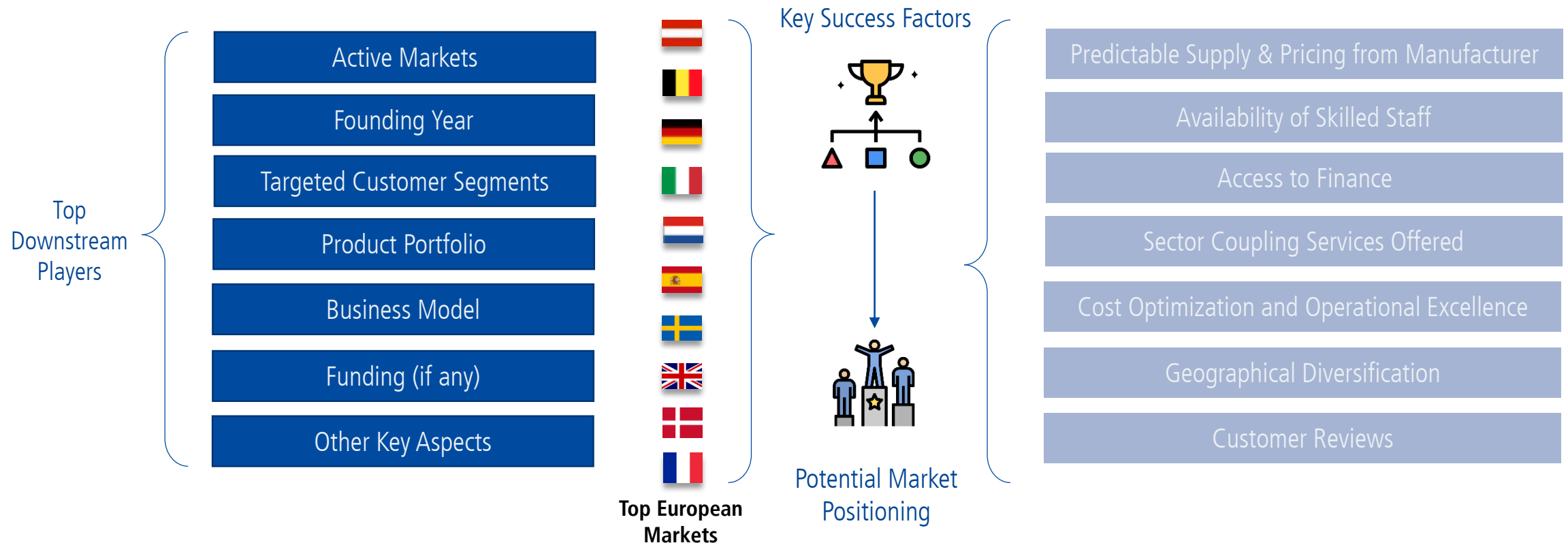


Drivers and Barriers

- Each market is explored to identify the existing drivers and barriers that influence the growth of residential solar PV installations
- Changes in key policy and regulatory framework are mapped on a timeline for each market having an impact on the residential segment
- Sector coupling potential is explored to identify the upcoming booming markets
- Country-specific relevant drivers/barriers are included such as Tax benefits, EV trends, shortage of skilled staff, waiting times for components, funding schemes & government incentives applicable, etc. based on primary research

COMPETITIVE ANALYSIS

Competitive analysis involves thorough examination of the major downstream players within European country markets. This includes identifying the key players in each market, assessing their current market position, and evaluating their performance against the key success factors to determine their potential market standing



COMPANY PROFILES

The report provides comprehensive company profiles of leading downstream players catering to the residential PV markets in Europe across the top 10 markets

▶ 1KOMMA5°

Introduction

- Founded in 2021, the company has 80,000+ solar PV installations, 60,000 storage units, 2,000 heat pumps (16 MW) and 30,000 EV charging stations
- In addition, 1KOMMA5° also has in-house energy IoT platform
- It offers one-stop-shop solution through its in-house vertical electrical planning, logistic and warehousing.

Targeted Geography: Germany, Sweden, Denmark, Italy & Finland

Website: <https://www.1komma5grad.com>

Product Portfolio:

- Solar PV System
- Energy Storage
- EV charging stations
- Heatpumps
- IoT Solution, VPP

Other Key Aspects

- The company offers solutions on 100% sales model to the aims to acquire 80 such businesses by 2030. The inorganic growth
- As a result, 100% of the installations are carried out by in-house



▶ SVEA SOLAR

Introduction

- Headquartered in Sweden, SVEA Solar offers residential solar systems to homeowners in Sweden, Germany, Belgium, Netherlands and Spain
- Claims to be the company with the largest PV installation base in Sweden and third biggest in Europe
- Tied-up with IKEA, to offer residential solar solutions in Germany

Targeted Geography: Multiple European Markets | Website: <https://www.zolar.de/>

Product Portfolio:

- Solar PV System
- Energy Storage
- Wallbox

Funding:

- Total number of Funding Rounds: 3
- Total Amount Raised: \$118.5 M
- Lead Investors: Total 3 (incl. Altor)

Other Key Aspects:

- In June 2022, raised \$100M+ investment from CarVal to fund utility scale projects in Europe

SVEA
SOLAR



Management Team:

- Erik Martinson (Co-Founder & CEO)
- Björn Lind (Co-Founder)

REPORT STRUCTURE (PAGE 1/2)

OVERVIEW

I. EUROPE

- A. Growth of Renewable Energy and Solar PV within European Union
- B. Solar Market Forecast | 2023E-2027E
- C. Rooftop Solar in the European Union
 - Trends, Residential Installations (MW), Country Rankings based on KPIs, Drivers and Barriers
- D. Downstream Players active in Residential Segment – Competitive Landscape
 - Major Players
 - Key Success Factors
 - Developing Competitive Advantages
 - Market Positioning of Downstream Players in Europe

COUNTRY LEVEL DEEP DIVES

II. GERMANY

- A. Energy Transition in Germany
- B. Sector Coupling: Unlocking Clean Energy Synergies
- C. Solar PV Market – Market Statistics, Regulatory Mechanisms, Drivers and Barriers, SWOT Analysis
- D. Residential Energy Storage System (ESS) Market
- E. Electric Vehicles Market
- F. Downstream Players | Competitive Landscape – Introduction, Market positioning

III. SPAIN

- A. Energy Transition in Spain
- B. Solar PV Market – Market Statistics, Regulatory Mechanisms, Drivers and Barriers, SWOT Analysis
- C. Downstream Players | Competitive Landscape – Introduction, Market positioning

IV. NETHERLANDS

- A. Energy Transition in the Netherlands
- B. Solar PV Market – Market Statistics, Regulatory Mechanisms, Drivers and Barriers, SWOT Analysis
- C. Downstream Players | Competitive Landscape – Introduction, Market positioning

V. ITALY

- A. Energy Transition in Italy
- B. Solar PV Market – Market Statistics, Regulatory Mechanisms, Drivers and Barriers, SWOT Analysis
- C. Downstream Players | Competitive Landscape – Introduction, Market positioning

VI. BELGIUM

- A. Energy Transition in Belgium
- B. Solar PV Market – Market Statistics, Regulatory Mechanisms, Drivers and Barriers, SWOT Analysis
- C. Downstream Players | Competitive Landscape – Introduction, Market positioning

REPORT STRUCTURE (PAGE 2/2)

COUNTRY LEVEL DEEP DIVES

VII. SWEDEN

- A. Energy Transition in Sweden
- B. Solar PV Market – Market Statistics, Regulatory Mechanisms, Drivers and Barriers, SWOT Analysis
- C. Downstream Players | Competitive Landscape – Introduction, Market positioning

VIII. UNITED KINGDOM

- A. Energy Transition in the United Kingdom
- B. Solar PV Market – Market Statistics, Regulatory Mechanisms, Drivers and Barriers, SWOT Analysis
- C. Downstream Players | Competitive Landscape – Introduction, Market positioning

IX. AUSTRIA

- A. Energy Transition in Austria
- B. Sector Coupling: Unlocking Clean Energy Synergies
- C. Solar PV Market – Market Statistics, Regulatory Mechanisms, Drivers and Barriers
- D. Residential Energy Storage System (ESS) Market
- E. Electric Vehicles Market
- F. Downstream Players | Competitive Landscape – Introduction, Market positioning

X. DENMARK

- A. Energy Transition in Denmark
- B. Solar PV Market – Market Statistics, Regulatory Mechanisms, Drivers and Barriers, SWOT Analysis
- C. Downstream Players | Competitive Landscape – Introduction, Market positioning

XI. FRANCE

- A. Energy Transition in France
- B. Solar PV Market – Market Statistics, Regulatory Mechanisms, Drivers and Barriers, SWOT Analysis
- C. Downstream Players | Competitive Landscape – Introduction, Market positioning

XII. COMPANY PROFILES - KEY DOWNSTREAM PLAYERS IN EUROPE (EXCERPT)

XIII. ABOUT EUPD Research

XIV. EDITORIAL

MARKET LEADERSHIP STUDY: LAST MILE DISTRIBUTED SOLAR AND ENERGY STORAGE

Hereby we order (please tick):

Study	Price*
Market Leadership Study: Last Mile Distributed Solar and Energy Storage (Full Report) - 250+ slides with graphics and text in English	<input type="checkbox"/> 19,900 € 18,900 €
Market Leadership Study: Last Mile Distributed Solar and Energy Storage (Any 5 markets)	<input type="checkbox"/> 13,900 € 12,400 €
Optional in addition: Online presentation of the study results	<input type="checkbox"/> 1,500 €
Please notice: Payment terms: 100% upon order All prices plus VAT and travel expenses * Discounted Price valid until 31 st August, 2023	

Please per scan and e-mail to: p.bhamre@eupd-research.com

Name: _____

Company: _____

Street: _____

ZIP-Code / City: _____

Phone: _____

E-Mail: _____

Tax-ID: _____

☐ We accept the general terms and conditions (pages 15 and 16)

Signature: _____

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- Market Analyses
- Competition Analyses
- Product Analyses
- Price Analyses



EUPD Research

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- Top Brand PV[©] | Top PV Supplier[©]
- Energiewende Award[©]
- Customer Satisfaction



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- Strategy 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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General Terms and Conditions of Business 1/2

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 Research 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.

General Terms and Conditions of Business 2/2

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 Research 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 Research 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 2020