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The Growth of Distributed Generation ("DG") Solar & Storage in the UK and Europe

Summary Market Report

June 2023



1. Introduction

Europe's ambitious goal of reaching net zero by 2050 has become more difficult due to the current energy crisis in the region, which has been led by the ongoing Ukraine and Russia conflict. By the end of 2022, Russian natural gas demand in Europe had fallen to **10% from 40% in 2021**, creating a record rise in gas prices. This has directly impacted retail consumers, with electricity prices reaching record highs, and at the time of writing are still 2-3x higher than 2021. Rapid increases in power prices drove inflation to decade highs and interest rates hikes followed in a bid to curb inflation. All these factors have created a bigger and more immediate challenge for Europe but have accelerated the need for energy independence and specifically for distributed generation (DG) and energy efficiency solutions.

The time is now for Europe to convert its climate leadership into actions that result in a sustainable recovery and have a positive, lasting effect on its citizens, businesses, and the environment. As an initial step, the European Commission has introduced the 'RePowerEU' initiative, aiming to reduce Europe's reliance on Russian gas well in advance of 2030. This proposed plan involves doubling the proportion of variable renewables in power generation, surpassing 60% by 2030. On a similar note, the UK government has set a target of achieving 95% low-carbon electricity by 2030 and is aiming to fully decarbonize the electricity system by 2035.

Buildings currently account for approximately **40% of the EU's energy** consumption and contribute **36% of the region's** energy-related greenhouse gas emissions. It is essential to implement measures that expedite the retrofitting of buildings with renewable energy sources and utilize digital technologies, such as smart management systems, to optimize their performance. These actions are critical for achieving decarbonization in the residential, commercial, and industrial sectors. The energy transition towards renewable and cleaner power sources continues to be significantly aided by DG, where solar photovoltaic (PV), Combined Heat and Power (CHP), and battery energy storage systems (BESS) will play a pivotal role in facilitating this swift transformation by offering essential onsite generation and system flexibility.

DG encompasses various technologies that possess the capability to generate or store energy, as well as regulate its consumption based on their specific type. Often, DG solutions are specifically defined as resources located "behind-the-meter", meaning the system provides power that can be used directly on-site without passing through a meter. Although energy efficiency and DG solutions have been in existence for decades, the recent surge in DG adoption can be attributed to favourable market dynamics and global sustainability drives by governments and consumers. According to the International Energy Agency (IEA), an estimated **179GW of distributed solar capacity** was installed globally between 2017 and 2020 led by China and US, whereas in the coming decade, Europe is anticipated to emerge as the highest-growth market globally.

Installing rooftop solar PV, whether on residential or commercial properties, is now an excellent investment opportunity for consumers. It offers significant savings on energy bills and the potential to earn income by supplying surplus power to the grid. Furthermore, the advantages can be enhanced by incorporating BESS which yields a number of benefits to the customer and local distribution system.

On the consumer side of the equation, energy price increases, ESG mandates being a top priority, and security of supply concerns, means demand for **green**, **reliable** energy at a **lower** cost can now be achieved Vs. standard retail supply. On the investor side of the equation, high customer demand for DG and strong regulatory tailwinds mean scalability in the sector is achievable, and the ability to deploy material capital now exists.

In summary, prevailing market conditions have now aligned to create **incredible growth potential** in the DG market over the coming decade.

We hope you enjoy this short report on the DG market and would welcome any feedback or comments. We're always looking for great team members, projects, and partners, so please do get in contact if you operate in the DG market or across the energy transition more generally.

John Behan CEO OME Capital



2. OME's Approach

OME Capital ("OME") is an innovative advisory and investment platform. We focus on building businesses at growth equity stage, which is often challenging capital for companies to raise but can unlock the best risk-adjusted returns for investors.

Put simply, we bring advice and capital together around growth equity stage companies or opportunities, backing management teams and scaling leading platforms across key energy transition verticals. We have assembled a market-leading team who are passionate about creating real value for our clients and investors whilst enabling the global energy transition.

Project Skylight – DG Capital Platform

The opportunity to build a leading DG platform in Europe & the UK is now. Market dynamics and key customer drivers have aligned to create a material opportunity for a sophisticated team to capitalize on a fragmented market. OME recently launched Project Skylight and is working on behalf of institutional investors to scale a DG capital platform in the UK and Europe, aiming to capitalise on the high growth opportunity over the next decade.

3. DG Market Key Drivers

For customers, generating green, reliable energy at a lower cost can now be achieved Vs. standard retail supply.

Major Market Drivers for DG Solutions

- 1. Energy Price Increases: With gas and electricity prices reaching record highs across Europe over the past year, the economic case and payback periods for solar PV have significantly improved, which is driving mass adoption. At the time of writing, retail electricity prices across Europe are still 2-3x higher than pre-Ukraine Russia conflict, which is a major problem for C&I customers.
- 2. Security of Supply: In order to lessen their reliance on imported fossil fuels and address concerns about energy security raised by Russia's invasion of Ukraine, EU nations are increasingly turning to renewable energy sources. Crucially, C&I customers are increasing their own energy independence and reducing any future energy price volatility through DG solutions.
- **3. Sustainability:** Environmental, Social & Governance ("ESG") is top of the agenda for customers globally. Renewable energy technologies play a critical role in achieving sustainability goals by lowering greenhouse gas emissions and enhancing energy security. Electricity produced by renewable energy sources emits between 90 and 99% less greenhouse gases (GHGs) than electricity produced by conventional fossil fuel power sources. Generating clean, on-site generation is now the most efficient way for customers to run their operations whilst achieving sustainability goals.
- 4. **Revenue Streams:** In addition to the above, in some instances renewable and energy storage installations enable customers to generate revenue by selling surplus electricity to the wholesale power markets or participating in ancillary service markets.

Some further factors to highlight across the general market are new government policies offering incentives and tax benefits for solar panel installations and addressing the high costs and long lead times associated with grid expansion in many markets. In addition, technological advancements leading to a reduction in solar panel manufacturing costs and improved efficiency have also played a significant role in the market's growth and will persist throughout the next decade.



4. Growth Outlook in the UK & Europe

The European DG power market is projected to grow at a CAGR of over 8.5% between 2022 and 2027, and Europe is projected to emerge as the largest market for DG during the same period. This growth is primarily attributed to the ongoing rise in energy consumption, particularly in the commercial and industrial (C&I) sectors. These sectors generate substantial demand for DG solutions. Furthermore, the demands stemming from key sectors such as IT, telecommunications, and the electrification of transport and logistics will also play a significant role in driving growth of the DG market.

DG Solar Market – UK

The commercial sector is poised to be a key driver of growth in the UK's solar PV market. With companies increasingly committed to decarbonizing their operations, onsite solar PV systems are offering an attractive pathway to achieve zero-carbon energy. We're observing many sectors, such as local authorities, universities, and hospitals in the UK, relying on solar PV to support their decarbonization efforts and progress towards net-zero targets.

The UK government's strategy for distributed PV involves several key measures. These include the implementation of design standards to promote rooftop PV installation on newly constructed buildings, enhancing access to affordable financing options, and streamlining the permitting process. When combined with recent energy price rises, there is an expected substantial increase in capacity growth in both residential and commercial PV segments, surpassing the expectations set in the previous year.

As part of **'Powering Up Britain – Energy Security Plan'**, the UK government aims to review the existing solar project regulations, focusing on domestic and commercial rooftops. While the current installed solar capacity is **14GW**, the UK government expects the sector to grow **fivefold by 2035**. Rooftop installation must double to achieve this. In this regard, the government is planning to publish a solar roadmap in 2024. Monthly planned commercial rooftop installations of more than 100kWp have increased significantly in the UK since FiTs expired at the beginning of 2019. In total, more than 5GW of rooftop solar capacity has been installed in the UK, including residential, commercial, and industrial applications.

Figure 1 below highlights that over the course of the next seven years (2023 to 2029), approximately **10.3GW of new rooftop capacity** is expected to be installed in the country. This capacity will be divided into 4.2GW for residential installations and **6.1GW for C&I** installations. However, these projections might be deemed conservative, given the untapped opportunities and the key market drivers which are creating high interest in rooftop PV.

Among notable latest developments, in May 2023, the newly established Solar Taskforce commenced its efforts to investigate strategies for promoting increased adoption of rooftop solar installations in the UK. The task force recognizes the vast untapped potential in various sectors, such as commercial buildings, schools, warehouses, and car parks, and is also considering the possibility of utilizing floating solar technology. The successful implementation of these initiatives has the potential to revolutionize solar power in the country.



Source: Solar Media Market Research



DG Energy Storage Market – UK

The UK Government considers energy storage to be of the highest importance and a crucial element in its commitment to achieving a net zero carbon economy. In July 2022, the UK government enacted the amended legislation on Energy (Energy Bill) wherein energy storage was classified as a distinct subset of generation resources. As per figure 2, between 2023-30, commercial energy storage capacity in the UK is expected to grow at a **CAGR of ~23%.** By 2040, the UK is expected to have approximately **18.3GW of battery** storage operational, driven by increased adoption of BESS by the residential, commercial, and industrial sectors.





DG Solar Market – Europe

Europe is set to significantly increase its utilization of solar PV as part of its efforts to tackle ongoing energy challenges and achieve climate goals. The **"EU solar energy strategy"** outlines a target of installing **750GW of solar-PV capacity by 2030**, a substantial increase from the existing 224GW installed capacity in 2022. This signifies a considerable rise in annual installations, increasing from approximately 26GW in 2021 to an estimated 70GW per year in the latter half of this decade.

McKinsey reports that the C&I sector constituted **~36% of the total solar market** in Europe in 2022. The C&I market is expected to add 125GW by 2030 (*See figure 3 below*), which would represent a material portion of annual installed solar PV capacity across Europe. As of today, German and Dutch C&I solar PV account for more than 50% of the current EU market due to successful tender schemes for large rooftop projects and feed-in tariffs for small roofs in Germany.

Record energy price rises across Europe have led to a significant increase in the demand for C&I solar PV systems. In 2022, the rooftop segment added 25GW of capacity, surpassing the previous year's installations by 8GW. Among all segments, the commercial sector, spanning installations from 10kW to 250kW, experienced the highest growth rate (55%) compared to the previous year.



Source: McKinsey & Company



The European Commission is targeting a new mandate that requires all commercial and residential buildings to have solar rooftops by 2027, with new residential buildings complying by 2029. This not only helps diversify the sources of solar energy but also supports the implementation of building-integrated photovoltaic (BIPV) systems throughout Europe. This development **would be a 'game changer'** in the rapid deployment of DG solutions across Europe.

DG Energy Storage Market – Europe

There are numerous factors supporting the expansion of the C&I energy storage market in Europe. The increasing deployment of renewable energy sources introduces grid volatility and intermittency, which pose potential risks and operational challenges. By integrating BESS with renewable energy, grid stability can be enhanced. Furthermore, natural disasters and supply-demand imbalances often result in significant economic losses due to power outages, with BESS gaining strong interest for its ability to provide backup power and resiliency in such situations.

To further promote the implementation of BESS in Europe, the European Commission has recently taken a significant step by adopting the "Recommendation on Energy Storage - Underpinning a decarbonised and secure EU energy system" on March 14, 2023. This recommendation specifically tackles the most urgent concerns to facilitate the rapid adoption of energy storage technologies by member states of the European Union.

According to the European Association for Storage of Energy (EASE), Europe's storage needs will be around **200GW by 2030 and 600GW by 2050**. Currently, the European frontrunners for distributed energy storage segment (residential + C&I) is Germany based on past financial incentives and ancillary service products, respectively.

Until now, utility-scale, front-of-meter batteries have dominated the battery storage market. However, it's expected that by 2026, **distributed behind-the-meter storage will start to close the gap with utility-scale installations**. Going forward, countries such as Italy, Spain, and France are expected to become important players in this market. As per figure 4 below, Bloomberg New Energy Finance forecasts that commercial energy storage capacity in Europe will grow at a CACR of 28% between 2023-30.



Source: BNEF

5. Challenges & Approach

Currently, the DG market is still immature and highly fragmented, with very few players offering a holistic solution for customers. Customers still have a lack of structured solutions, and providers are often operating across only one part of the value chain and have a lack of flexible funding options to offer customers. We should note that this is starting to evolve rapidly.

Whilst DG solutions have been implemented for decades, historically, there have been many barriers to adoption from customers and a lack of investment from major institutional investors. We believe things are different this time around, and below we have outlined some lessons learned and what we see as a good approach to the sector going forward.

- Scalability: going project by project is tough work, individual projects are small and if you aren't efficient, it's difficult to see a route to scalability. Typically, scalability has been a barrier for larger investors who struggle with the ability to deploy meaningful capital in a short timeframe. Going forward, however, we believe that due to strong market drivers and the subsequent big increase in demand from customers, scalability is finally achievable. Investors must work with quality channel partners, who can deliver volume, whilst focusing on multisite deals with standardised PPAs and contracts.
- 2. **Customer adoption & sales cycle:** energy is not a customer's core business and historically, energy spend has not been a priority. Energy price rises over the past year have accelerated the sales cycle, and what was once a mid-level decision is often being directed from C-suite level. In addition, compared to utility-scale renewables, requirements such as planning, permitting, and grid connections are relatively straightforward, whereas the customer sales cycle is usually the longest item. When building a DG business, focusing on reducing the time and cost of sales cycles must be a top priority.
- 3. Viewed as too complex: Typically, PPAs and shared savings models are deemed too complex by customers. There has been doubt whether it's truly a better deal over the longer term than staying with a retail energy supplier. We believe this view is changing due to several factors outlined in the paper. The ability to cut through complexity, demonstrate clear energy savings, benefits and providing simplified contracts is key to winning new business.
- 4. **Costs and contracting will destroy margin:** This isn't utility-scale renewables, if you intend to budget for comprehensive technical, legal, and financial due diligence on each project you will destroy margin. In many cases, we are looking at £500k-1m investment per site, and spending £50k on due diligence is not justified. With DG investment, you need to work on inhouse analysis upfront, have streamlined due-diligence scopes of work, and manage most of the contracting in-house. Contracting should not be complex and should be commercially driven first with a final legal sign-off. Aiming for standardization and replicability is the only way to succeed in maintaining strong margins for DG, which of course must be combined with high volume of assets.
- 5. **Building the portfolio correctly**: If you intend to own and operate multiple DG sites, even up to 100's of sites, if you start incorrectly, you will always be playing catch up. It's vital that portfolios are structured correctly, tightly managed operationally and all data is monitored and easily attainable. You should be obsessed with this approach; we have observed on too many occasions badly managed portfolios that significantly impact enterprise value and the ability for owners to exit.
- 6. Holistic approach will win: We believe that a holistic approach to the built environment will win. In many cases, there are effective energy efficiency technologies available to reduce customer demand by 20-30% before even adding generation. Where it makes sense, start with demand reduction first, add generation technologies, then add additional products such as EVs, and then optimize. Focusing on a single part of the value chain will often achieve a sub-optimal result for the customer and not efficiently deliver wider net zero goals.



6. Our 5 Key Markets to Watch

UK



We have addressed the UK market specifically throughout this report, and it's clear that the UK is considered one of the key growth markets over the next decade for DG solutions, with installations expected to increase 5x by 2025.

Below we outline some further detail on the newly announced Solar Taskforce (May 2023)

The Solar Taskforce operates within the framework of the government's objective to enhance solar capacity to **70GW by 2035.** Even upon achieving this target, the utilization of land for solar panels in the UK would still represent a small fraction of the total landmass. Consequently, the government has established the taskforce to stimulate additional expansion of solar power as a component of the 'Powering Up Britain' initiative, which aims to increase the use of nuclear, solar, and other clean energy sources in the UK.

Solar Taskforce has especially recommended introducing policies to explore the "untapped potential" of solar installations on commercial buildings like supermarkets and sites like schools and warehouses. Investments in rooftop solar installations is considered to be the best option available, offering significant savings on energy bills and the opportunity to be paid for sending excess power to the grid. The benefits can also be greatly enhanced by adding a BESS. The taskforce is even looking to make more incentives available to deliver an uptake in commercial solar installations.

Additionally, the taskforce discussed plans for:

- Publishing a solar roadmap next year to advance the initiatives required to achieve the UK's goal of nearly **tripling solar capacity by 2035.**
- Upskilling and expanding the solar workforce to meet increasing levels of demand, while creating well-paid long-term employment opportunities for Britain.
- Identifying opportunities to secure resilient supply chains and innovation within the global market, helping to generate opportunities for UK businesses to export their expertise around the world.

Spain

Spain is one of the major European hotspots for solar PV in Europe due to its energy policy and competitiveness in both utility-scale and DG. The cumulative installed capacity for solar PV in 2022 was 23GW, and it's expected to reach 55GW by 2030. According to the report from Spanish solar PV association Unión Española Fotovoltaica (UNEF), in 2022, Spain deployed **2.5GW of DG solar capacity**. This represents an increase of 108% from 2021, when only 1.2GW was commissioned. Out of the 2.5GW, **47% was installed in the industrial segment** of the market, whilst 32% was residential and 20% commercial. This brought the total DG capacity to 5.2GW.

The total investment in rooftop solar in Spain during 2022 amounted to €3.06 billion, out of which c.€1.4 billion corresponded to the investment in the C&I sector and rest to the residential sector.

One of the factors driving the growth in the DG solar market is the **investment grants provided by the Spanish government.** In June 2021, the government approved Royal Decree 477/2021, allocating €450 million to be transferred to the Autonomous Communities, dividing the ceiling into three sectors: (a) €200 million to residential, tertiary, and public administration segment, (b) €150 million to industry and agriculture segment, (c) €100 million to the commercial segment. The simplification of administrative barriers to self-consumption and the removal of working permits for these projects across the country, except in the Basque country, have also spearheaded the interest in selfconsumption in Spain.

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Germany



Germany, the leading solar PV market in Europe, is projected to achieve substantial growth in renewable power capacity between 2022 and 2027, with an estimated **expansion of 67%, equivalent to 97GW**. This increase is more than twice the growth observed in the previous five-year period. The significant growth is attributed to the implementation of ambitious new renewable energy targets aimed at reducing dependence on imported Russian gas and achieving climate objectives.

In July 2022, Germany implemented a revision to its Renewable Energy Sources Act (EEG 2023), marking the second revision in just two years since the previous version (EEG 2021). The latest revision aims to elevate the proportion of renewable energy in electricity generation from **65% to 80% by the year 2030**. Additionally, the government significantly raised the capacity targets for solar PV for the same timeframe. To support these targets, the government introduced accompanying policies, such as increased auction volumes and enhanced remuneration for distributed solar PV installations.

Solar PV energy is projected to contribute **70% of the total forecasted growth** in renewable energy capacity between 2022-27, with DG solar PV leading the way. DG solar PV is responsible for half of the upward revision to the forecast. The increased optimism in the forecast is attributed to the new EEG 2023, which provides greater support for its development. Notably, in 2023, feed-in tariffs (FiTs) and feed-in premiums (FIPs) will experience an increase for the first time since 2014. Additionally, monthly degression is halted until 2025, and the size limit for systems to qualify for the FIP has been raised from 750kW to 1MW. To encourage PV installations on unused roof space, the government provides a premium on top of remuneration received through the FIP or FiT for systems of less than 1 MW that do not self-consume and instead feed all their electricity into the grid. This should result in a record level of installation that the commercial sector has not seen since 2018.

Investor interest in energy storage deployment remains strong in Germany, with BNEF projecting installations to reach a cumulative capacity of **14.5GW by the end of 2030**. According to researchers at RWTH Aachen University, the **C&I BESS market experienced a 24% growth in 2022, adding 0.4 GW** to the cumulative installed capacity.

C&I renewable energy projects are subject to the same legal and regulatory framework as utility-scale renewable power projects in principle. However, there are exceptions for DG facilities and self-supply facilities, which may benefit from a reduction in statutory charges. The financing of renewable energy facilities is supported through the Renewable Energy Surcharge (EEG-Umlage), which is imposed on each kWh of electricity consumed from the grid and typically paid by end consumers. In 2022, the German Federal Government implemented measures to alleviate electricity costs for consumers by suspending the renewable energy facilities will no longer be financed by end consumers but will instead be covered by the Federal Government's special Energy and Climate Fund (Energie- und Klimafonds). The removal of EEG surcharge makes the business case of DG solar PV even more attractive.

Italy

Italy is projected to experience a significant increase in renewable capacity, with a **growth of 25GW** during the period of 2021-2027, representing a 40% expansion. This growth is primarily driven by two key sources: utility-scale solar PV and distributed solar PV, both contributing **40% each** to the overall growth.

The introduction of policies in response to the energy crisis is expected to drive rapid expansion in the DG solar PV sector. These new regulations have brought about significant simplification of the permitting process for rooftop PV systems installed on commercial buildings with a capacity of less than 200kW. Furthermore, the 110% tax rebate, initially introduced during the Covid-19 crisis, has been extended for an additional year. Additionally, the net-billing scheme has become more economically attractive due to higher electricity prices.

It is estimated that DG PV installations reached **nearly 2GW by the end of 2022**, marking the highest growth rate since 2012. In 2022, the C&I sector in Italy represented 28% of total new PV installations, equivalent to 678MW. These installations included systems with capacities ranging from 20kW to



1MW. In addition, Italy also achieved its highest recorded year for storage deployment, with a total **of 1.1GW of DG BESS** capacity installed.

Poland

Poland is	anticipated	d to almost	triple its	installed	capacity	by adding	31GW c	of renewable	energy
during th	ne period of	2022 to 202	7, with DC	solar PV	projects i	making up r	nearly 50	0% of the expa	ansion.

Poland's DG Solar PV capacity increased fivefold between 2019 and 2021, surpassing expectations set by the government due to investment subsidies, tax rebates, and a generous net metering programme. As a result, the nation has already achieved its 2030 PV goal in 2021. In 2022, Poland became the **third-largest solar market in Europe**, driven by the rapid uptake of PV microinstallations below 50kW in size.

Poland is witnessing an increasing demand in the C&I sector due to two key factors. Firstly, unlike residential consumers, C&I customers are exposed to market prices, which have remained relatively high, motivating them to explore alternative energy options. Secondly, companies are facing pressure to decarbonize their operations as part of initiatives like RE100. The rooftop PV market is likely to maintain its volume from last year, with **growth primarily driven by the C&I sector** instead of the residential sector. Despite scaling down subsidies and net metering in the first half of 2022, high electricity prices are making rooftop PV investments considerably more attractive in Poland.



References

- <u>RE-Source</u>, "On-site renewable electricity and storage for corporates: business models & policy framework", December 2020
- International Energy Agency (IEA), "Distributed energy resources for net zero", September 9, 2021
- Mordor Intelligence Report, "Europe distributed power generation market size and share analysis"
- <u>Energy and Power Industry News</u>, "Distributed Generation Market: Shift from Centralized to Distributed Power Generation", April 20, 2022
- International Energy Agency (IEA), "Renewable power's growth is being turbocharged as countries seek to strengthen energy security", December 6, 2022
- <u>The Times of India</u>, "The role of renewable energy technologies in sustainable development", February 17, 2023
- Mintel Group, "UK Solar Panels Market Report 2022"
- <u>Solar Media Ltd.</u>, "Unlocking and deploying_£25-30 billion to propel UK solar capacity to 40GW-plus by 2030", August 8, 2022
- Business Wire, "United Kingdom Energy Storage Systems Market 2022-2027", March 16, 2022
- International Energy Agency (IEA), "Renewables 2022 Report"
- McKinsey & Company, "Building a competitive solar-PV supply chain in Europe", December 13, 2022
- <u>Wood Mackenzie</u>, "Europe's grid-scale energy storage capacity will expand 20-fold by 2031", April 11, 2022
- Solar-The winning formula-Newsletter, "Solar Market forecast Europe '23-'26", March 12, 2023
- <u>Apricum GmbH</u>, "PV manufacturing in Europe", December 14, 2021
- <u>PR Newswire</u>, "A Closer Look at Sungrow PowerStack for European C&I Energy Storage Market", February 17, 2023
- Rabobank, "A Big Push for Energy Storage in Europe", March 23, 2023
- <u>IEA</u>, "Renewables 2022"
- <u>PV Magazine</u>, "Shifting sands of the Polish PV market", March 27, 2023
- <u>PV Europe</u>, "The evolution of the Italian PV market", February 15, 2023
- <u>PV Magazine</u>, "Italy deployed 1,121 MW/2,032 MWh of distributed storage capacity in 2022", March 10, 2023
- <u>Lexology</u>, "Battery energy storage systems in Italy: current regulation and investment opportunities", February 7, 2023
- <u>GOV.UK</u>, "Untapped potential' of commercial buildings could revolutionise UK solar power" May 26, 2023
- <u>Edie</u>, "Solar Taskforce looks at 'untapped potential' of commercial sites to drive UK's clean energy plans", May 26, 2023
- <u>PV Tech</u>, "Spain deployed 2.5GW of self-consumption solar in 2022"
- <u>Power technology</u>, "Solar PV capacity in Spain and major projects"
- <u>PV Magazine</u>, "Spain installed 2.5 GW of distributed PV systems in 2022"
- <u>VP Solar</u>, "The PV market in Spain promises to be one of the most interesting in the coming years"
- Mercom Capital, "Spain installs 2.6 GW of rooftop solar capacity in 2022"
- <u>EQ Magpro</u>, "MITECO Selects 146 MW Biomass & 31 MW Distributed Solar PV Under Spain's 3rd REER Auction"
- <u>PV Magazine</u>, "Portugal installed 890 MW of solar in 2022"
- <u>PV Magazine</u>, "Portugal added 546 MW of solar in H1"
- <u>Universal Kraft</u>, "The opportunities of the solar market in Portugal"
- <u>PV Magazine</u>, "Winners, prices of Portugal's record-breaking auction for floating PV"
- <u>PV Magazine</u>, "C&I rooftops turn toward the sun", June 2, 2022
- <u>Taiyang News</u>, "Rooftop Solar Systems Of Up To 30 KW Growing In Popularity In Germany As More States Adopt Solar", August 4, 2022
- <u>CMS Legal</u>, "Energy storage trends Spotlight on Germany", July 4, 2022
- <u>PV Magazine</u>, "Germany deployed 1.2 GW/1.9 GWh of residential batteries in 2022", March 28, 2023
- ICLG, "Renewable Energy Laws and Regulations Germany 2023", September 21, 2022
- RenewablesNow, "Germany approves tax benefits for small solar installations", December 05, 2022



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