



UK Government

Growing the UK Solar Supply Chain

A practical guide for businesses

March 2026



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Foreword

This is an exciting time for the UK solar sector.

With our solar capacity set to double over the next four years – and to increase even further over the next decade – opportunities for growth in the domestic supply chain have never been greater.

The UK has a strong background in electrical engineering and a rich Research and Development (R&D) landscape across many solar technologies, services, and processes – so we’re well placed to capture opportunities associated with the manufacture of balance of system components, batteries, and innovative technologies.

A strengthened solar supply chain can create good new jobs, foster significant export opportunities, build domestic capability, and increase energy security.

We have heard, however, that there isn’t always a clear route for businesses interested in joining the solar supply chain or expanding current operations to find information and get started.

That’s why the Department for Energy Security and Net Zero and Solar Energy UK committed to an action in the Solar Roadmap to assemble this information into an online ‘one stop shop’. We’re delighted to now launch this.

Funded by the UK Government and hosted by SEUK, these tools are good examples of what we can achieve when government and industry work closely together to remove barriers to growth. This document includes information about: the nature of the supply chain; priority growth areas; financial support; sourcing land; securing grid connections; and innovation funding.

We’d like to thank those who have contributed to the development of this project. We hope these tools are useful to those seeking to grow in the solar supply chain and thereby to support thousands of highly skilled jobs here in the UK.

**Michael Shanks MP,
Minister of State for Energy**

**Chris Hewett,
CEO, Solar Energy UK**



Introduction

The UK’s shift to a low-carbon energy system is accelerating, and solar energy is central to that transition. As part of the Government’s Clean Power 2030 Action Plan,ⁱ solar deployment is being expanded rapidly to help decarbonise the power sector, enhance energy security, and deliver economic opportunities across the UK economy, including in supply chains and related businesses.

Solar’s Growing Role in the UK Energy System

Solar photovoltaic (PV) capacity in the UK has expanded significantly in recent years. The latest official figures from the Department of Energy Security and Net Zero (DESNZ) show that installed solar capacity continues to rise, with just over 21 GW operational by the end of 2025.ⁱⁱ This represents millions of installations across homes, businesses, and large-scale sites.

Solar electricity also plays a material role in the energy mix. Collectively, renewable energy sources accounted for over 50% of the UK’s total electricity generation in 2025, with solar contributing a growing share of this output. By the third quarter of 2025 just over 10% of total generation came from solar.ⁱⁱⁱ

Bold Deployment Ambition

The UK Government and industry are working together through the Solar Roadmap^{iv} to scale solar capacity substantially over the coming decade. The roadmap sets out practical actions to increase solar deployment across multiple settings and supports the pathway to 45–47 GW of operational solar capacity by 2030, more than doubling current capacity.

This ambition reflects the importance of solar technologies in delivering the UK’s climate and energy goals:ⁱ

- Supporting a largely decarbonised electricity system by 2030
- Improving energy security by reducing reliance on imported fossil fuels
- Lowering long-term energy costs for consumers and businesses
- Providing business opportunities in supply chain growth and innovation



Current capacity (end of 2025)

21 GW

The 2030 ambition

45–47 GW



Aiming to more than

double current capacity in 5 years

Why a Solar Supply Chain Guide Matters

Meeting national solar ambitions at scale is not solely a matter of installing more panels. It depends on the capability, resilience, and competitiveness of companies operating across manufacturing, construction, electrical systems, digital services, and project delivery. They need clarity on what support exists, how to access it, and how to grow sustainably in a dynamic policy and market environment. This guide, therefore, brings together the most relevant information on government and partner support for the UK solar sector supply chain.

Who is This Guide For?

This guide has been designed for companies already active in the solar supply chain with ambitions to grow as well as companies seeking to enter this supply chain who need clear and practical information on the support available.



Existing Solar Supply Chain Companies Scaling Operations

Businesses already operating within the UK solar supply chain will play a central role in delivering the scale of deployment envisaged in the Solar Roadmap. Companies across manufacturing, engineering, installation, electrical systems, and associated services may, therefore, be considering how best to expand their operations by:

- Increasing production capacity
- Establishing or expanding UK manufacturing facilities
- Investing in new equipment or premises
- Investing in research and innovation
- Diversifying into adjacent parts of the value chain
- Competing for larger or more complex contracts and projects
- Accessing export markets

This guide brings together information on relevant government and partner support to enable business expansion aligned with national deployment ambitions.



Companies Entering the Solar Supply Chain

You may operate in a related sector and be considering entry into the solar supply chain. Relevant capabilities could include:

- Electrical systems manufacturing
- Advanced manufacturing and fabrication
- Civil engineering and construction
- Steel fabrication and structural supply
- Digital, AI or data services applicable to energy systems
- Engineering, procurement, and construction (EPC) services for the delivery of large scale and complex projects

This guide provides information on where opportunities exist in the solar value chain and how to access relevant support mechanisms to facilitate market entry.



International Companies Considering Entry into the UK Solar Supply Chain

You may be an overseas manufacturer, EPC contractor, technology provider or service company assessing opportunities in the UK market. The UK's long-term solar deployment pathway and policy framework provide demand visibility and growth potential. Companies considering UK entry may require information on:

- Establishing manufacturing or operational facilities
- Accessing finance or export support
- Planning and regulatory requirements
- Grid connection processes
- Certification and accreditation standards

This guide consolidates the relevant information to support informed market entry decisions.



Technology and Innovation-Led SMEs

You may be a small or medium-sized enterprise developing innovative products or services relevant to solar deployment. This could include:

- AI and digital optimisation tools
- Advanced inverter or power electronics technologies
- Novel mounting systems or materials
- Emerging solar technologies (eg innovative panel designs or system configurations)

The UK Government has emphasised the role of innovation and supply chain capability in delivering solar expansion. This guide outlines the available support for research, development, testing, demonstration, and commercialisation as well as some of the key academic, research, and innovation organisations that could support you with your developments.



What This Guide Does Not Cover

This guide does not provide detailed technical design standards for solar equipment, a comprehensive market forecast or commercial advisory service, detailed skills and workforce guidance (which is being addressed by Solar Energy UK, through a dedicated working group), or formal regulatory or planning advice. Neither does it provide guidance on public procurement rules, supply-chain due diligence, ethical sourcing standards or compliance with legislation relating to modern slavery and forced labour. Businesses should refer to the UK Government's public procurement guidance and guidance on the [Modern Slavery Act 2015](#) and transparency in supply chains, as well as relevant international standards and customer-specific requirements.



What Opportunities Are There For My Company in The Solar Sector?

Introduction

The expansion of solar deployment is creating a wide range of new business opportunities that extend far beyond the installation of solar panels and solar thermal systems.

Solar projects depend on a wide range of products, services, and expertise, including advanced materials, manufacturing, electronics and electrical components, electrical infrastructure, construction, digital systems, project development, finance, operations and maintenance, and end-of-life recycling. As the growth of solar installations continues, so too does the need for companies that can provide these capabilities.

As a result, the solar sector represents an opportunity to diversify, apply existing expertise in a fast-growing market, or develop new and innovative products and services. Companies already operating in areas such as electrical equipment, construction, roofing, engineering, manufacturing, software, and professional services may find that their skills and experience are directly transferable to solar. At the same time, new and innovative firms are developing technologies and services that will support the next generation of solar deployment.

Where businesses can participate

Opportunities exist at every stage of the solar value chain. These range from the development of new materials and components, through to engineering and construction and circular economy activities such as refurbishment and recycling. Many of these activities draw on capabilities that already exist across the UK's manufacturing, construction, electrical, digital, and professional services sectors.

For businesses considering entering into, or expanding in, the solar market, understanding where their existing capabilities fit within this value chain is an important first step. Some companies may already be supplying adjacent sectors such as construction, electrical engineering, energy infrastructure or advanced manufacturing and can adapt existing products or services for solar applications. Others may identify opportunities to develop new offerings specifically tailored to the needs of this growing market.

The solar value chain shows the key stages of a project lifecycle and the types of organisations that typically operate within them. This is intended to help businesses quickly identify where they may be able to contribute and where further support, partnerships or investment may be required.



Priority Growth Areas

While the solar value chain spans a wide range of activities, certain areas present particularly strong opportunities for UK-based businesses. These reflect both the UK's existing industrial strengths and areas identified by government and industry as strategically important to support the scale-up of solar deployment. These areas include:



Balance of System Manufacturing and Components

Balance of system opportunities include inverters, power electronics, mounting systems, tracking systems, electrical switchgear, cabling, and structural components.

The UK has established strengths in advanced manufacturing, precision engineering, and power electronics.



Engineering, Procurement, and Construction (EPC)

As deployment accelerates, demand for engineering, construction and installation services is increasing across both ground-mounted solar farms and rooftop installations. This includes civil engineering, structural installation, electrical works, commissioning, and project management.



Electrical Infrastructure and Smart Energy Integration

Opportunities exist for companies involved in grid connection, transformer installation, metering, power management systems, and smart energy solutions.

With increasing emphasis on flexibility, storage, and digital optimisation, businesses working in smart energy systems, data management, and distributed energy resources may find growing opportunities linked to solar deployment.



Digital Services and Artificial Intelligence (AI)

The expansion of solar capacity increases the importance of digital tools that improve generation forecasting, enable predictive maintenance, optimise performance or integrate solar with storage, and demand response.

Software developers, data analytics firms, and artificial intelligence companies can contribute to improving the efficiency and reliability of solar assets and supporting new business models in the energy system.



Operations, Maintenance and Lifecycle Services

As the number of solar installations increases, so too does the need for long-term operations, maintenance, and asset management. This includes inspection, cleaning, repair, monitoring, repowering, and eventual decommissioning.

There are also emerging opportunities linked to sustainability and circular economy approaches, including refurbishment, component reuse and recycling of non-functioning solar panels and associated equipment.



CASE STUDY

Solarport

A UK manufacturer entering the solar supply chain

Solarport is a market leader in clean energy infrastructure, specialising in the design, manufacture, and installation of high-performance solar structures. Rooted in years of EPC heritage, the company provides structural certainty by offering a sophisticated, integrated turnkey model that avoids the risks associated with fragmented supply chains. To lead sector advancement, Solarport recently established a dedicated Innovation Centre and Training School to drive R&D and certify its workforce, including its specialist installation subsidiary, SPS PowerBuild.

Operating UK manufacturing facilities, Solarport ensures supply resilience and unified accountability for the energy transition. By using high-quality British materials from partners like TATA Steel UK where practical, the company strengthens UK PLC while delivering bankable durability through advanced structural steel. Solarport's success is driven by decades of combined experience in design, manufacture, and hands-on solar deployment. This deep industry tenure allows them to anticipate and deliver exactly what a project requires, setting a high standard for quality that secures the long-term integrity of the UK's energy infrastructure.



What Help Can I Get for Research and Development, Innovation, and Testing?

Innovation will play an important role in enabling the UK to deliver rapid growth in solar deployment and to build a resilient domestic supply chain.

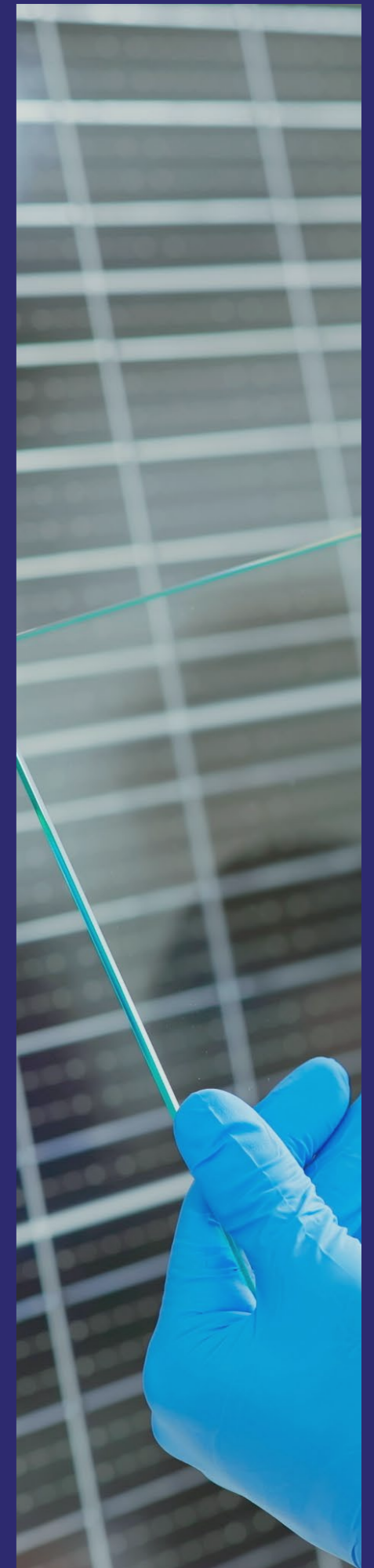
Opportunities extend beyond conventional photovoltaic modules and include advanced materials, thin-film photovoltaics, perovskite cells, power electronics and building-integrated PV, higher-value components and balance-of-system technologies (such as mounting systems, trackers, inverters and power electronics), AI enabled digital tools for monitoring and optimisation, new solar applications (for example building-integrated or floating solar), and improvements in sustainability, circularity, and end-of-life management.

The UK has a strong innovation ecosystem that can support businesses to develop and commercialise new solar products and services.

This includes:

- universities and research centres with specialist expertise in photovoltaic materials, device development, solar thermal technologies, energy systems integration, and sustainability assessment
- innovation centres such as the Catapults that bridge the gap between research and industry by providing access to facilities, technical expertise, testing environments, and commercial support

Support is available at different stages of the innovation journey, from early research and feasibility work, through applied R&D and prototyping, to demonstration projects, testing and validation, and ultimately scale-up and commercialisation. However, as with finance more broadly, innovation support is often delivered through programmes that are not labelled as "solar" but are highly relevant to solar supply-chain businesses operating in clean energy, net zero, advanced manufacturing, and digital technologies.





The Solar Innovation Pathway

From Research to Commercial Deployment

Developing new solar technologies, products and services, innovative manufacturing processes, novel installation techniques or systems, digital optimisation, and end-of-life recycling and recovery, typically involves a number of interconnected stages, from early research through to commercial deployment. Different types of organisations and funding programmes support businesses at each stage of this process. Understanding where your company sits can help identify the most relevant sources of support.



STAGE 1

Research and Discovery (TRL 1–3)

Purpose

Early-stage scientific and technical exploration.

What Happens at This Stage

- Novel photovoltaic and materials research
- Development of new module, inverter or mounting concepts
- Research into advanced materials recovery and recycling techniques
- Laboratory investigation of circular economy approaches
- Early-stage lifecycle assessment and sustainability modelling
- Exploration of low-carbon manufacturing and recovery processes

Delivered By

- Universities and research centres
- UK Research and Innovation ecosystem
- Academic–industry collaborations

Typical Funding Mechanisms

- Horizon Europe
- SMART: Scotland (Scottish companies only)
- Interface Innovation Vouchers
- Collaborative academic grants (typically awarded to academic organisations rather than companies)



STAGE 2

Applied R&D and Prototyping (TRL 3–5)

Purpose

Translating research into working prototypes and pilot processes.

What Happens at This Stage

- Feasibility studies
- Proof-of-concept development
- Engineering modelling and design optimisation
- Development of prototype recycling and materials separation systems
- Laboratory-scale validation of new recovery techniques
- Pilot-scale manufacturing or reprocessing trials

Delivered By

- Innovate UK-supported programmes
- Knowledge Transfer Partnerships (KTPs)
- Catapult centres
- Regional innovation agencies

Typical Funding Mechanisms

- Innovate UK Grant Competitions
- Knowledge Transfer Partnerships
- Horizon Europe
- SMART: Scotland (Scottish companies only)
- Scottish Enterprise R&D Grant (Scottish companies only)
- Interface Innovation Vouchers
- Welsh Government R&D funding (Welsh companies only)
- Invest Northern Ireland R&D support (NI companies only)



STAGE 3

Testing, Validation, and Demonstration (TRL 5–7)

Purpose

Proving performance, reliability and commercial viability in operational conditions.

What Happens at This Stage

- Pilot projects and field trials
- Demonstration of novel solar technologies or system configurations
- Demonstration of recycling and materials recovery processes at pre-commercial scale
- Certification and compliance testing
- Validation of recovery rates, material purity, and environmental performance
- Integration of recycling processes into operational workflows

Delivered By

- Catapult centres (Energy Systems, High Value Manufacturing, Offshore Renewable Energy)
- Specialist testing and validation facilities
- University–industry consortia

Typical Funding Mechanisms

- Innovate UK Innovation Loans
- Innovate UK Grant Competitions
- Knowledge Transfer Partnerships
- Ofgem Strategic Innovation Fund
- Horizon Europe
- Scottish Enterprise R&D Grant (Scottish companies only)
- Interface Innovation Vouchers
- Welsh Government R&D funding (Welsh companies only)
- Invest Northern Ireland R&D support (NI companies only)



STAGE 4

Scale-Up and Commercialisation (TRL 7–9)

Purpose

Transitioning from validated innovation to commercial production and market deployment.

What Happens at This Stage

- Scaling manufacturing or processing capacity
- Commercial deployment of new solar technologies
- Construction of recycling and materials recovery facilities
- Integration of circular economy models into supply chains
- Supply chain development and market entry
- Process optimisation for cost and efficiency

Delivered By

- Catapult centres
- Development finance institutions
- Private investors and growth finance providers

Typical Funding Mechanisms

- Innovate UK Innovation Loans
- Growth and capital investment finance (see Finance section)
- Equity investment

Technology Readiness Levels (TRL)

1. Basic principles observed
2. Technology concept formulated
3. Experimental proof of concept
4. Technology validated in the laboratory
5. Technology validated in relevant environment (industrially relevant environment in the case of key enabling technologies)
6. Technology demonstrated in relevant environment (industrially relevant environment in the case of key enabling technologies)
7. System prototype demonstration in operational environment
8. System complete and qualified
9. Actual system proven in operational environment (competitive manufacturing in the case of key enabling technologies; or in space)

Many businesses will access several of these programmes as their technology progresses. For example, a company may begin with a feasibility study supported by Innovate UK or SMART: Scotland funding, collaborate with a university through a Knowledge Transfer Partnership, and later secure demonstration funding through further Innovate UK funding for late stage development or the Ofgem Strategic Innovation Fund as the technology moves closer to commercial deployment.



CASE STUDY

Corrie Energy

Scaling a UK solar tracking innovation

Corrie Energy has accessed innovation funding to support the development of new solar technologies from concept through to demonstration.



Founded around a novel solar tracking concept, the company initially secured match-funded support from a local low-carbon hub to develop and test its first full-scale prototype. Early testing identified design challenges, including structural resilience under storm conditions, providing critical learning for further development.

Building on this early progress, Corrie Energy successfully secured an Innovate UK Smart Grant to support further engineering development, structural modelling, and independent technical validation, and a SBRI grant to address yield uncertainty. This enabled the company to refine its prototype and deploy systems at multiple trial locations across Scotland and England. The project strengthened internal capability while enabling access to specialist external engineering expertise.

The company subsequently secured support through the Energy Entrepreneurs Fund (DESNZ), allowing it to scale up testing, accelerate durability trials, and undertake further product optimisation. This funding supported advanced stress testing, supply-chain engagement, and real-world deployment, helping to de-risk the technology and prepare it for commercialisation.

Corrie Energy's journey demonstrates how UK innovation programmes can provide staged support across the innovation lifecycle, from feasibility and prototyping through to validation and scale-up, helping SMEs bring novel solar technologies closer to market.



CASE STUDY

Power Roll

Scaling next-generation solar manufacturing in the UK



Power Roll is developing a next-generation lightweight solar film designed for applications where conventional silicon solar panels are unsuitable, such as weak rooftops and vertical surfaces. The technology uses a roll-to-roll manufacturing process and aims to reduce reliance on overseas supply chains by enabling solar module production in the UK.

The company is transitioning from the R&D phase into early commercialisation, with initial modules now being trialled with strategic partners. Having invested heavily in research, pilot manufacturing, and technology development, the business is now focused on scaling production and securing investment to build its first commercial-scale manufacturing facility.

Power Roll's journey highlights the complex funding landscape faced by emerging clean-tech manufacturers.

The company has raised approximately £37 million to date, combining private investment, Innovate UK funding, and regional public funding to support research, pilot production, and early deployment.

However, securing finance for first-of-a-kind manufacturing facilities remains a significant challenge, with investors often preferring to fund later-stage scale-up rather than initial factory deployment.

The company's experience illustrates both the strength of the UK's innovation ecosystem and the challenges of moving from innovation to large-scale manufacturing. It highlights the importance of coordinated funding, access to testing and scale-up facilities, and clear pathways to support companies developing new solar technologies in the UK.



UK Research and Testing Facilities



Universities and Research Centres

The UK has a strong academic research base supporting solar technologies and the wider energy transition. Universities and research centres provide expertise, facilities, and collaborative opportunities that can help businesses develop new products, improve performance, assess sustainability, and explore new applications for solar technologies.

Businesses can engage with universities in a range of ways, including collaborative research projects, contract research, student placements, Knowledge Transfer Partnerships (KTPs), and access to specialist laboratories and testing facilities.

Key areas of expertise across the UK include photovoltaic materials and devices, solar thermal technologies, energy systems integration, digital optimisation, and life-cycle assessment and circular economy approaches.

Examples of some of the main academic institutions and research groups (this is not exhaustive) include:

PHOTOVOLTAIC MATERIALS AND DEVICES

- **University of Oxford** – research into next-generation photovoltaic materials and devices. ➡
- **University of Cambridge** – photovoltaic research spanning materials, devices, and energy systems. ➡
- **Imperial College London** – solar cell research and solar heating and cooling technologies. ➡
- **Northumbria University** – photovoltaic materials, device performance, and sustainable solar manufacturing. ➡

ENERGY SYSTEMS AND SOLAR DEPLOYMENT

- **University of Strathclyde** – energy systems integration and power networks research. ➡
- **University of Sheffield (Sheffield Solar)** – solar deployment, performance analysis, and energy system integration. ➡
- **Loughborough University (CREST)** – renewable energy systems and technology integration. ➡

SOLAR THERMAL AND ENERGY TECHNOLOGIES

- **Cranfield University** – concentrating solar power and solar thermal technologies. ➡
- **University of Southampton** – thermal energy systems, including solar thermal research. ➡

SUSTAINABILITY, LIFECYCLE, AND CIRCULAR ECONOMY

- **Tyndall Centre for Climate Change Research** – whole-systems analysis of solar deployment. ➡
- **UK Energy Research Centre (UKERC)** – solar and storage sustainability and circular economy research. ➡
- **University of Manchester, Durham University, and University of Birmingham** – life-cycle assessment and sustainability of solar technologies and supply chains. ➡ ➡ ➡



Alongside universities, the UK Catapult Network plays a key role in supporting businesses to move from research and development into testing, demonstration, and commercialisation. Catapult centres are independent, not-for-profit organisations funded by Innovate UK to help businesses develop, test, and scale new technologies. They can help businesses access facilities and expertise that would otherwise be difficult and costly to obtain, strengthen funding applications, and accelerate the commercialisation of new technologies.

Several Catapult centres provide capabilities that are directly relevant to solar technologies and the wider solar supply chain:

- **Energy Systems Catapult** supports innovation in energy technologies, business models, and whole-system integration. It offers modelling, market analysis, product development support, and real-world testing environments. Solar technologies are frequently considered as part of wider distributed energy, storage and flexibility solutions, making this Catapult particularly relevant to companies developing smart energy systems, digital tools, and new business models. ➡

- **The High Value Manufacturing Catapult** is a network of manufacturing innovation centres that support businesses to develop and scale new products and manufacturing processes. Centres within the network provide expertise in advanced materials, power electronics, digital manufacturing, and process optimisation. This Catapult is particularly relevant for companies developing solar components such as mounting systems, trackers, inverters, structural components, and related hardware. ➡

- **Digital Catapult** supports the adoption of advanced digital technologies, including artificial intelligence, data analytics, digital twins, and supply-chain digitalisation. These capabilities are increasingly important for solar asset monitoring, performance optimisation, forecasting, and smart energy integration. ➡

- While focused primarily on offshore wind and marine energy, the **Offshore Renewable Energy (ORE) Catapult** provides testing, demonstration, and supply-chain support across renewable technologies. Its facilities and expertise in renewable energy systems, innovation, and supply-chain development are relevant to companies working across the wider clean energy sector. ➡



In addition to universities and research centres, a number of organisations act as “front doors” to the UK innovation ecosystem. These organisations help businesses connect with academic expertise, identify collaboration opportunities, and navigate the wider landscape of research and innovation support.

- **Interface** provides a single point of access to Scotland’s universities, colleges, and research institutes. It helps companies to identify academic expertise, form collaborative research partnerships, and access specialist facilities. Interface can support companies at an early stage of the innovation process by helping to scope projects, identify suitable partners, and explore collaboration opportunities across the Scottish research base. ➡

- **Innovate UK Business Connect** helps companies to navigate the UK innovation system by providing networking, brokerage, and signposting services. Through events, sector networks, and one-to-one support, it helps companies identify relevant funding competitions, connect with potential collaborators, and engage with universities, Catapult centres, and other innovation organisations. [There is a dedicated solar point of contact.](#) ➡

I Want to Establish or Expand Manufacturing Operations – Who Can Help Me Find a Suitable Site or Land?

Companies seeking to establish or expand solar manufacturing operations in the UK will need to consider both site identification and planning requirements at an early stage.

Technology Developers, SMEs, and Start Ups

If you are a technology developer whose activities are focused on research, prototyping or early-stage manufacturing, you might be looking for laboratory space, facilities in a business incubator or a smaller industrial unit. These can often be found on science parks, innovation campuses, and in university-affiliated research facilities, which provide access not only to laboratories and flexible workshop space but also to shared testing equipment and specialist technical support. Many universities publish details of available laboratory and incubation space on their commercialisation or enterprise webpages. Developers should also engage early with local Growth Hubs in England, Scotland’s enterprise agencies (Scottish Enterprise, Highlands and Islands Enterprise, and South of Scotland Enterprise), Business Wales, and Invest Northern Ireland, all referenced in the “Where Else Can I Find Help or More Information?” section of this report. These organisations can advise on available innovation property, co-location opportunities, and local incentives.

Identifying a Site or Premises For Large-Scale Manufacturing

Solar manufacturing activities, such as production of mounting systems, structural components, power electronics or balance-of-system equipment, are typically located within industrial premises falling under established planning use classes (for example, Class B2, B8 or relevant elements of Class E(g) in England, with equivalent classifications in the devolved administrations).

Businesses may lease or purchase existing industrial units or acquire land to develop a purpose-built facility. Potential sources of site information include commercial property agents, local authority brownfield land registers, the [UK Government Land Registry](#) (England and Wales), [Registers of Scotland](#), and [Land and Property Services](#) in Northern Ireland. [Homes England’s Land Hub](#) may also provide visibility of public land being brought to market.

Once again, local and regional economic development bodies, all referenced in the “Where Else Can I Find Help or More Information?” section of this report, can provide guidance on site availability, local incentives, and sector support. Businesses may also wish to consider access to transport infrastructure, ports, supply chain partners, workforce availability, and grid capacity when selecting a location. In some areas, [Enterprise Zones](#) or [Freeports](#) may offer tax or business rate incentives, subject to eligibility.

Planning and Regulatory Considerations

Planning permission is generally required for new manufacturing facilities and is administered by the relevant Local Planning Authority under the Town and Country Planning system (or its devolved equivalents). In England and Wales, the [Planning Portal](#) is a recommended first stop with Scotland and Northern Ireland also having their own planning portals.

Early engagement with the local planning authority is recommended to confirm site designation, permitted uses, and building regulatory requirements.

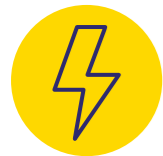
Support for the construction of new facilities, or the extension of existing facilities can be provided by the [Local Authority Building Control](#) in England and Wales and [Local Authority Building Standards Scotland](#) in Scotland, ensuring that projects comply with relevant building regulations. Depending on the nature and scale of operations, environmental permits may also be required from the [Environment Agency](#) (England), [SEPA](#) (Scotland), [Natural Resources Wales](#) or the [Northern Ireland Environment Agency](#).

Some local authorities operate [Local Development Orders](#) which can simplify planning processes in designated areas. Businesses will also need to consider building regulations approval, environmental compliance, and grid connection requirements (covered in the following section).

Early coordination with planning authorities, development agencies, and network operators can help reduce delays and ensure that site selection aligns with policy and infrastructure constraints.

How Do I Find Out More About Connecting My Facility to the Grid?

Connecting new large-scale manufacturing facilities to the electricity network is a critical early step in project development. Grid connection arrangements determine how much electricity a site can import or export, the timescales for delivery, and the associated costs. Early engagement with network operators and system bodies is strongly recommended.

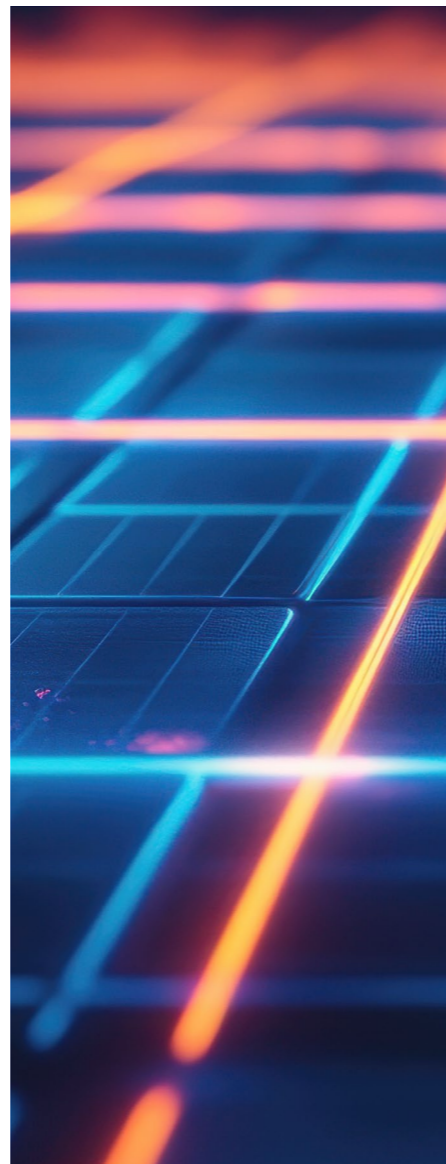


Businesses establishing or expanding manufacturing facilities may require a new or upgraded electricity connection to support increased demand or onsite generation. The first step is to identify the relevant Distribution Network Operator (DNO), which can be done using the Energy Networks Association (ENA) [online search tool](#). The DNO will apply its Connection Charging Statement to determine the costs and technical requirements associated with a new connection.

Most DNOs publish network capacity maps, or equivalent data, that indicate where spare import or export capacity may be available. These maps can be accessed via the ENA [online search tool](#). Reviewing this information early can help businesses assess site viability and avoid constrained areas of the network.

Where higher-capacity connections are required, developers must submit a formal application to the relevant DNO or, for transmission-level connections, through the National Energy System Operator (NESO). This process leads to a connection agreement setting out permitted capacity, network works, and delivery timelines. Businesses interested in flexibility or demand-side participation may also consult [NESO resources](#) on flexibility providers and connection reforms.

For large energy users, flexible grid connection agreements can help accelerate timelines or lower upfront costs by accepting occasional operational constraints during network congestion. Engaging early with frameworks such as those administered by Elexon under the Balancing and Settlement Code, and reviewing flexibility market information from National Energy System Operator (NESO), can support alignment with evolving grid requirements and emerging flexibility opportunities.



Where Can I Access Finance and Investment?

Understanding the Finance and Investment Landscape

Access to finance is one of the most common challenges for businesses looking to enter or expand within the solar supply chain. Companies may need investment to establish manufacturing facilities, purchase equipment, expand their workforce, develop supply chains, deliver large-scale solar projects or enter international markets.

Unlike research and innovation funding (covered previously), finance and investment support is typically focused on business growth, capital investment, and project delivery.

Solar supply-chain businesses can access a wide range of financial support delivered through government-backed investment institutions, public development banks, export finance organisations, and regional economic development agencies. These mechanisms, including loans, equity investment, guarantees, export finance, and tax incentives are designed to reduce investment risk, unlock private finance, and accelerate the growth of UK clean energy supply chains.



CASE STUDY

Great British Energy

Public investment to strengthen UK solar supply chains

Great British Energy (GB Energy) has been established as a publicly owned clean energy company to help accelerate investment in renewable energy projects and strengthen UK supply chains.





A key part of its role is to act as a long-term public investor that can co-invest alongside private partners and reduce the risk associated with large-scale clean energy investment.

In practice, GB Energy is working to build a pipeline of investment opportunities across renewable technologies, including solar, with a strong focus on supporting domestic supply-chain capability. This includes identifying opportunities to invest in manufacturing, infrastructure, and project development that can help expand UK capacity and reduce reliance on imports.

By investing alongside private sector partners, GB Energy aims to unlock additional private capital and provide long-term confidence for investors considering UK clean energy projects. This co-investment approach is intended to support the development of new facilities, strengthen domestic supply chains, and accelerate the deployment of renewable energy.

For companies in the solar sector, GB Energy represents a new source of strategic investment designed to help bridge the gap between public policy ambition and private sector investment, supporting the growth of UK manufacturing, infrastructure, and project delivery.



Organisation	Type of Finance	What It Can Be Used For	Typical Investment Size	Size of Companies Typically Supported			
				Small ≤ 50 employees and/or ≤ £10.2M turnover and / or ≤ £5.1M balance sheet	Medium 50 – 250 employees and £10.2M – £500M turnover	Large ≥250 employees and / or ≥ £54M turnover and/or ≥ £27M balance sheet	
Great British Energy 	Publicly owned clean energy company investing in UK renewable projects and supply chains	Capital investment and co-investment	Manufacturing facilities, UK supply-chain expansion, clean energy deployment	£1m – £100m+ (project dependent)			
National Wealth Fund 	UK Government's principal investor supporting growth and clean energy infrastructure	Equity, loans, and guarantees	Large-scale manufacturing facilities, infrastructure, supply chain scale-up	£10m – £250m+			
UK Export Finance (UKEF) 	UK export credit agency supporting international trade through finance and guarantees	Export guarantees, insurance, and direct lending	Overseas contracts, export working capital, buyer credit support	£1m – £200m+			
British Business Bank 	Government-owned development bank supporting SME access to finance	Growth loans, guarantee schemes, and venture programmes	SME scaling, working capital, capital investment	£100k – £10m			
Scottish National Investment Bank 	State-owned mission-led investment bank for Scotland	Loans and equity	Net zero-aligned manufacturing, scale-up, and infrastructure	£1m – £50m+			
Development Bank of Wales 	Public development bank providing finance to Welsh businesses	Loans and equity	Capital investment, premises, equipment, growth finance	£50k – £10m			
English Regional Growth Hubs  (insert postcode to find your local Growth Hub)	England's business support organisations offering access to routes to funding	Start up and growth loans, early stage equity, and capital support (depending on Growth Hub)	Business growth, manufacturing expansion, facilities, capital investment, inward investment (depending on Growth Hub)	£500 – £ low millions (depending on Growth Hub)			
Scottish Enterprise  Highlands and Islands Enterprise  South of Scotland Enterprise 	Scotland's regional enterprise agencies supporting business growth and inward investment	Co-investment, loans, and capital support	Manufacturing expansion, inward investment, scale-up	£100k – £20m			
Welsh Government Business Support 	Welsh Government programmes supporting business growth and investment	Loans and capital support	Business growth, manufacturing expansion, facilities	£100k – £10m			
Invest Northern Ireland 	Northern Ireland's economic development agency supporting business investment	Loans, equity, and financial assistance	Capital investment, export growth, scaling operations	£100k – £20m			
Freeports and Investment Zones  	Designated areas offering tax and business rate incentives to stimulate investment	Tax incentives and reliefs	Capital allowances, business rates relief, employer NIC relief, site development	Tax-based support (value varies by investment size)			

Navigating the Finance and Investment Landscape

Businesses operating in the solar sector may require different types of finance depending on their stage of growth, level of technological maturity, and role in the value chain. In practice, many businesses could draw on more than one type of financial support or investment as they grow.

Businesses unsure where to begin can engage with local Growth Hubs in England, devolved Enterprise Agencies in Scotland Wales and Northern Ireland, and industry trade bodies that can provide initial guidance on finance and investment opportunities and help identify relevant national and regional programmes.



Read more about where to find help and other information



WORKED EXAMPLE

Scaling a UK Solar Supply-Chain Business

A UK company manufacturing mounting systems for solar farms begins to see increased demand as deployment accelerates.

To expand production capacity, it secures growth and capital investment finance to purchase new equipment, recruit additional staff, and move into larger premises. This involves a combination of commercial lending and co-investment support delivered through national or regional development finance institutions.

As the business matures and wins contracts overseas, it accesses export finance to support international orders and manage payment risk. Over time, the company draws on different forms of finance, from capital investment for domestic expansion to export support for global growth, illustrating how solar supply-chain businesses may use multiple funding mechanisms at different stages of their development



Do I Need to Be Accredited or Certified to Supply into the Solar Sector?

Accreditation and certification requirements vary depending the point in the supply chain that products and services will be targeted.

While there is no single licence required to operate across the solar sector, compliance with recognised product standards and quality assurance frameworks is often necessary to access markets, demonstrate safety and quality, and participate in government-backed support programmes.

Manufacturers of solar PV products and associated components are generally expected to comply with recognised product and quality standards as well as some sector-specific standards. The Microgeneration Certification Scheme (MCS) provides a recognised framework for solar product standards. The [MCS Product Standards Library](#) sets out relevant technical requirements, including [Solar PV Product Standard](#), [Solar Heating Product Standard](#), [Solar Mounting Product Standard](#), generic [factory production control requirements](#), and [acceptance criteria for testing](#).

In addition to sector-specific standards, solar products placed on the UK market must typically carry [UK Conformity Assessed \(UKCA\)](#) marking where applicable. Many manufacturers also adopt internationally recognised management system standards, such as ISO 9001 (quality management), ISO 14001 (environmental management), and ISO 45001 (health and safety), which are widely expected within energy supply chains.


Electrical safety and technical design considerations are often guided by the Institution of Engineering and Technology's Code of Practice for [Grid-connected Solar PV Systems](#). Manufacturers may also align with international technical assurance standards developed by the International Electrotechnical Commission (IEC), including IEC 61730 for module safety and IEC 61215 for performance testing. Further guidance on broader UK standards can be obtained through the British Standards Institution (BSI), while independent testing and certification bodies such as TÜV can be used to demonstrate product performance and compliance for UK and export markets.



Where Else Can I Find Help or More Information?

In addition to the specific programmes and support mechanisms outlined in earlier sections, a wider ecosystem of government departments, public bodies, and industry organisations provide information, guidance, and practical assistance to businesses in the UK solar supply chain.

These include central government departments responsible for energy and industrial policy, devolved and regional economic development organisations offering a wide range of business support services, and industry and trade associations representing the sector. Together, they provide strategic direction, practical business support, market intelligence, and industry representation.



Department for Energy Security and Net Zero (DESNZ)

DESNZ is responsible for UK energy policy, including solar deployment and the Solar Roadmap. DESNZ provides policy updates, consultations, and strategic direction for the sector.




Department for Business and Trade (DBT)

DBT is the UK Government's central online portal for businesses, providing access to guidance, tools, and services to help companies start, grow, and operate in the UK.



NFRC (National Federation of Roofing Contractors)

NFRC provides a single location to find quality roofers and roofing materials, services, and information services, all in one place.



Business Wales

Business Wales provides specialist advice and guidance, which is fully funded, to support people in Wales that are starting, running, and growing businesses.




Enterprise Northern Ireland

Enterprise Northern Ireland provides timely support, informed guidance, access to finance, workspace, and advice to ambitious entrepreneurs throughout Northern Ireland.




England's Growth Hubs

These organisations deliver business support on behalf of local authorities and combined authorities. There are 41 in total and details of your local Growth Hub can be found on the [Business Growth Hub Finder](#). These organisations provide a range of services, including business advice and growth support, innovation programmes, and sector development, across their respective regions.



Scotland's Enterprise Agencies

Scotland's three enterprise agencies – [Scottish Enterprise](#), [Highlands and Islands Enterprise \(HIE\)](#), and [South of Scotland Enterprise \(SOSE\)](#) – support business growth, innovation, and inward investment across different regions of Scotland. Together, they provide financial assistance, account management, innovation support, property and infrastructure advice, and help with market development to strengthen regional economic performance and sectoral capability, including in clean energy and advanced manufacturing.




BEAMA

BEAMA is the UK manufacturing trade association for the electrotechnical sector, providing leadership, expertise, and independent influence in the areas of product safety, performance, energy efficiency, digital, and sustainability. Activities span a broad spectrum of technology groups, from energy networks through to electrical infrastructure and service technologies in the built environment.



Solar Energy UK

Solar Energy UK is an established trade association working for and representing the entire solar and energy storage value chain. It is funded largely by its membership and represents a thriving member-led community of over 400+ businesses and associates.



ECA (Electrical Contractors' Association)

The ECA is the UK's leading trade association for the electrotechnical and wider engineering services industry. It represents the interests of contractors who design, install, inspect, test, and maintain electrical and electronic equipment and services. Members can access a range of support and guidance from legal and business to operations.



Manufacturing Wales

Manufacturing Wales has been established to address the needs of manufacturers based in Wales, enhancing the reputation of Welsh brands, optimising supply chain opportunities, and fostering resilience for its member organisations.

Appendix

Support mechanism / organisation	Website / URL
BEAMA	https://www.beama.org.uk/
British Business Bank	https://www.british-business-bank.co.uk/
British Standards Institution	https://www.bsigroup.com/en-GB/industries/energy/
Business Wales	https://businesswales.gov.wales/
Cranfield University	https://www.cranfield.ac.uk/academic-disciplines/concentrating-solar-power
Department for Business and Trade	https://www.gov.uk/government/organisations/department-for-business-and-trade
Department for Energy Security & Net Zero	https://www.gov.uk/government/publications/solar-roadmap/solar-roadmap-united-kingdom-powered-by-solar-accessible-webpage
Development Bank Wales	https://developmentbank.wales/
Digital Catapult	https://www.digicatapult.org.uk
Durham University – Energy Institute	https://www.durham.ac.uk/research/institutes-and-centres/durham-energy-institute
ECA (Electrical Contractors’ Association)	https://www.eca.co.uk/
Elxon	https://www.elxon.co.uk/flexibility-markets/documents/about/delivery-plan/market-facilitator-delivery-plan-2026-2028/
Elxon	https://bscdocs.elxon.co.uk/bsc
Energy Systems Catapult	https://es.catapult.org.uk/?_gl=1%2Agtzq30%2A_up%2AMQ.%2A_ga%2ANTQzMzxmZMwLjE3Njg5OTMwNzc.%2A_ga_FJ67565W80%2AczE3Njg5OTMwNzcKbzEkZzEkdDE3Njg5OTMwOTEkajQ2JGwwJGgw
Enterprise Northern Ireland	https://enterpriseni.com/
Environment Agency	https://www.gov.uk/government/organisations/environment-agency/about
ePlanning.scot	https://www.eplanning.scot/ePlanningClient/
GB Energy	https://www.gbe.gov.uk/
Growth Hub Finder	https://www.growthhubfinder.co.uk/#hub-search
High Value Manufacturing Catapult	https://hvm.catapult.org.uk
Highlands and Islands Enterprise (Various Grants)	https://www.hie.co.uk/support/funding/?currentPageId=1891&page=1&showAllResults=false&filter_3491=3496
Homes England Land Hub	https://experience.arcgis.com/experience/c6f225e5589f498fa4581f7a8bbbc2
Horizon Europe	https://www.ukri.org/apply-for-funding/horizon-europe/
Imperial College London – Solar Cells	https://www.imperial.ac.uk/nano-at-imperial/research/solar-cells/
Innovate UK	https://apply-for-innovation-funding.service.gov.uk/competition/search
Innovate UK Business Connect – Solar	https://iuk-business-connect.org.uk/
Innovate UK Business Connect – Solar	https://iuk-business-connect.org.uk/energy/solar/
Innovate UK Innovation Loans	https://iuk-business-connect.org.uk/programme/innovation-loans/
Institution of Engineering and Technology – Codes of Practice	https://shop.theiet.org/code-of-practice-for-grid-connected-solar-photovoltaic-systems-2nd-edition
Interface	https://interface-online.org.uk/
International Electrochemical Commission (IEC)	https://webstore.iec.ch/en/
Invest Northern Ireland	https://www.investni.com/
Invest Northern Ireland – R&D Support	https://www.investni.com/support-for-business/funding-for-innovation-and-research-and-development
Knowledge Transfer Partnership	https://iuk-ktp.org.uk/
Local Authority Building Control	https://www.labc.co.uk/about-labc
Local Authority Building Standards Scotland	https://www.labss.org/
Loughborough University – Centre for Renewable Energy Systems Technology (CREST)	https://www.lboro.ac.uk/research/crest

Manufacturing Wales	https://www.manufacturingwales.com/
MCS – Standards Library	https://mcs-certified.com/standards-tools-library/
MCS Acceptance Criteria for Testing Required for Product Certification	https://mcs-certified.com/wp-content/uploads/2025/02/MCS-011-V2.1.pdf
MCS Generic Factory Production Control and Product Requirements	https://mcs-certified.com/wp-content/uploads/2025/02/MCS-012-Solar-Mounting-issue-3.0.pdf
MCS Solar Heating Product Standard	https://mcs-certified.com/wp-content/uploads/2025/02/MCS-004-Issue-4.0-Final.pdf
MCS Solar Mounting Product Standard	https://mcs-certified.com/wp-content/uploads/2025/02/MCS-012-Solar-Mounting-issue-3.0.pdf
MCS Solar PV Product Standard	https://mcs-certified.com/wp-content/uploads/2025/02/MCS-005-Version-4.0-Final.pdf
National Federation of Roofing Contractors	https://www.nfrc.co.uk/
National Wealth Fund	https://www.nationalwealthfund.org.uk/
Natural Resources Wales	https://naturalresources.wales/?lang=en
NESO – Demand Flexibility Services	https://www.neso.energy/industry-information/balancing-services/demand-flexibility-service/registered-providers-list
NI Direct	https://www.nidirect.gov.uk/articles/searching-land-registry
Northern Ireland Environment Agency	https://www.daera-ni.gov.uk/articles/northern-ireland-environment-agency
Northern Ireland Planning Portal	https://planningregister.planningsystemni.gov.uk/simple-search
Northumbria University – Photovoltaics Research Group	https://www.northumbria.ac.uk/about-us/academic-departments/mathematics-physics-and-electrical-engineering/research/photovoltaics
Offshore Renewables Energy (ORE) Catapult	https://ore.catapult.org.uk/
Ofgem Strategic Innovation Fund	https://www.ofgem.gov.uk/energy-regulation/technology-and-innovation/innovation/apply-strategic-innovation-fund-sif
Planning Advisory Service	https://www.local.gov.uk/pas/topics/local-development-orders/local-development-orders
Planning Portal	https://www.planningportal.co.uk/
Registers of Scotland	https://www.ros.gov.uk/
Scottish Enterprise	https://www.scottish-enterprise.com/
Scottish Enterprise R&D Grants	https://www.scottish-enterprise.com/how-we-can-help/funding-and-grants/business-grants-and-funding-calls/research-and-development-grants
Scottish Enterprise SMART: Scotland	https://www.scottish-enterprise.com/how-we-can-help/funding-and-grants/business-grants-and-funding-calls/smart-scotland-grant
Scottish National Investment Bank	https://www.thebank.scot/
SEPA	https://www.sepa.org.uk/
Solar Energy UK	https://solarenergyuk.org/
South of Scotland Enterprise	https://www.southofscotlandenterprise.com/support/grantsandfunding
Tyndall Centre for Climate Change Research	https://tyndall.ac.uk/
UK Energy Research Centre (UKERC)	https://ukerc.ac.uk/about/
UK Enterprise Zones	https://www.gov.uk/guidance/enterprise-zones
UK Export Finance	https://www.ukexportfinance.gov.uk/
UK Freeports	https://www.gov.uk/guidance/freeports
UK Government Land Registry	https://www.gov.uk/government/organisations/land-registry
UKCA	https://www.gov.uk/guidance/using-the-ukca-marking
University of Birmingham – Energy Institute	https://www.birmingham.ac.uk/research/centres-institutes/birmingham-energy-institute
University of Cambridge – Energy Interdisciplinary Research Centre	https://www.energy.cam.ac.uk/directory/research-themes/supply/Photovoltaics
University of Manchester – Energy	https://www.manchester.ac.uk/research/beacons/energy/
University of Oxford – Snaith Group (Department of Physics)	https://www.physics.ox.ac.uk/research/group/snaith-group
University of Sheffield – Sheffield Solar	https://www.solar.sheffield.ac.uk/
University of Southampton – Thermal Energy Group	https://www.southampton.ac.uk/engineering/research/groups/energy_technology/thermal_energy.page
University of Strathclyde – Energy Systems Research Unit	https://www.strath.ac.uk/research/energysystemsresearchunit/
Welsh Government Business Support	https://businesswales.gov.wales/
Welsh Government R&D Support	https://businesswales.gov.wales/topics-and-guidance/develop-innovative-ideas-organisations-products-or-services

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^{iv} <https://www.gov.uk/government/publications/solar-roadmap/solar-roadmap-united-kingdom-powered-by-solar-accessible-webpage> (Accessed 13 February 2026)