res

Diversify your land with solar energy

Working in collaboration with landowners and local communities across the UK & Ireland to support a more sustainable future.

developmentsolaruki.res-group.com



Why choose solar?

Combat climate change

The sun is an abundant natural energy source. Using the sun to generate clean energy reduces the need to burn harmful fossil fuels such as coal, oil and natural gas.

Provides a long-term source of income

A solar farm can offer a sustainable dual income stream for land that can be of multi-use.

Support our energy security

Solar farms bolster the UK and Ireland's energy independence by reducing our reliance on imported fossil fuels, enhancing energy security, and mitigating geopolitical and economic risks. Stable and homegrown energy production also supports regional economic growth.

Preserve agricultural land and enable soil recovery

Where a solar farm is installed on land which has been intensively farmed, it enables the ground to recover. Solar farms can help regenerate soil quality and contribute towards the continued availability of high-quality agricultural acreage for future generations.

Boost biodiversity

Properly managed solar farms can coexist with agricultural activities (agrivoltaics) and support biodiversity. Planting biodiverse rich vegetation near solar farms can create habitats for pollinators and other wildlife, enhancing local ecosystems and boosting biodiversity.



Did you know?

A typical solar farm uses around just 5% of the total site area with the rest of the land remaining undisturbed, creating significant opportunities to provide a range of ecological benefits.

Project milestones

A solar farm typically takes around 5 years to develop from first concept through to being consented, constructed and ready to start generating clean green electricity.



Initial feasibility work

Once a potential site is identified, we will assess the suitability of the land and check the grid connection availability for a solar installation. An exclusivity agreement will be required with a fee paid to the landowner, whilst terms for the land agreement are negotiated.



Design

A project layout is developed and designed after detailed surveys and assessments are conducted, including site, access, grid infrastructure and environmental impact surveys, to understand the potential impacts of the project.



Consultation

We undertake pre-application community consultation to share more information about the project and enable the local community and interested parties to view and comment on the preliminary proposal. This feedback is taken into account, alongside the results of ongoing site surveys and assessments, as the design is developed.



Landowner option agreement

An option agreement for lease is completed and the first option payment is made and paid annually until the lease is granted.



Planning process and consent

We submit the planning application to the relevant determining authority and a statutory consultation will be held to enable the public, as well as statutory consultees, to submit their comments on the proposal. In parallel, we will work with the distribution or transmission network operator to secure a grid connection, except in Northern Ireland and the Republic of Ireland, where a grid connection cannot be secured until the project has planning consent.



Landowner option agreement exercised and land leased

Once the option agreement for lease is exercised and the lease is completed, the first rent payment is made. The lease is then paid annually on the date of the initial lease payment until the end of the lease.



Construction

Once any planning conditions associated with the consented scheme are discharged, the solar farm is constructed.



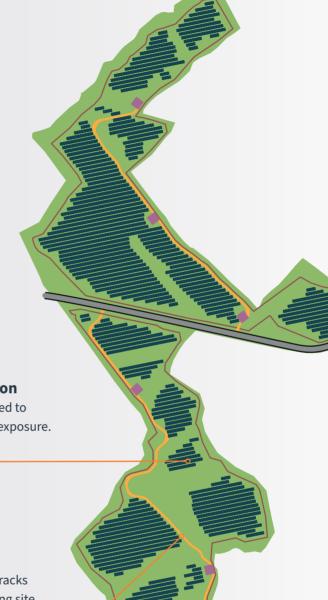
Operation

Once the project is commissioned and operational, asset management and operations and maintenance teams monitor and maintain the solar farm whilst it generates clean, green home-grown electricity.

Typical features of a solar farm

We work closely with landowners to design a solar farm that integrates with their land, business and the local community whilst also maximising energy generation. We aim to deliver hybrid project solutions for a combination of technologies where possible, with solar and battery storage hybrid sites leading the way.

This illustration shows the typical features and design considerations of a hypothetical solar farm.





Panel orientationPanels are positioned to maximise sunlight exposure.



AccessAccess points and tracks
for vehicles attending site.



ScreeningExisting or new vegetation is used to screen the solar farm visually and acoustically.

Did you know?

If planning permission for a solar development is granted, there is a period of around a year where planning conditions are discharged, detailed design undertaken, etc. Construction of the project would take around 1 - 2 years, dependent on the grid connection.

Local road intersecting the solar farm.

Substation

Houses the switchgear and regulates the voltage before it is exported from the site.



Inverters

Inverters convert the Direct Current (DC) into Alternating Current (AC).



Biodiversity enhancements

Bat and bird boxes, reptile hibernaculum, native tree and wildflower planting, hedgerow preservation.



Deer fencing

Usually situated inside the site boundary to deter deer.



About RES

The power behind a clean energy future.

RES, a British company with headquarters in Hertfordshire, is the world's largest independent renewable energy company. We have been at the forefront of the industry for over 40 years, developing, building and maintaining renewable energy projects across the globe.

Our expertly designed projects harness nature, use the latest technological innovations, and benefit from our unique, full life cycle asset expertise to deliver the clean energy solutions the world needs.

With regional offices across the UK & Ireland, we also currently work across 24 countries and are active in wind, solar, energy storage, green hydrogen, transmission, and distribution.

Sustainability is at the heart of what we do here, from the solutions we provide to how we operate our business.

Built on the foundations of our company values, RES' sustainability agenda powers positive change by ensuring all areas of our business make a positive contribution to our three key principles; society, industry and the environment.

RES is committed to ensuring that, wherever possible, local contractors and employees are used in all aspects of our developments. From engaging surveyors and consultants who are familiar with the area, to sourcing local contractors helping to inject new business opportunities and growth into the local economy, we always seek to establish local partnerships.

Read our report



RES' Power for Good report provides our environmental, social and governance strategy and activity, and highlights the achievements of our company and our people.

Visit our website to view the latest report: res-group.com/sustainability



Why partner with us

We team up with landowners to create successful projects that maximise local environmental, social, and economic benefits while transforming the way the world generates and consumes energy.

We'll handle everything throughout the development process, from liaising with consultants, planning authorities, consultees and contractors, to engaging with the media and members of the public, all the while respecting your wishes and minimising disturbance to existing activities on your land.

End-to-end project management

A dedicated project manager provides access to our in-house skills across all aspects of project development.

Respect for your land

In support of rural diversification, we design projects that co-exist with current land use to have minimum impact.

Experienced structured approach

Tried and tested approach to mitigate project risk and deliver above market success rates.

Stakeholder relationships

We have considerable experience engaging with local communities and key stakeholders throughout the development of our renewable energy projects and beyond.

Choosing to enter into a partnership with us offers you the highest likelihood of development success.



Our experience in the UK & Ireland

We are market-leading in the development of solar energy projects, with a track record of delivery from inception to generation.

Our highly skilled people use cutting edge tools created in house, plus state-of-the-art meteorological and mapping studies to identify potential sites with the best natural resource and suitable grid connections.

We provide support across the full lifecycle of solar energy projects, from day-one development, planning and engineering to construction and long-term management.

Our holistic service solutions are underpinned by our in-depth asset knowledge, and innovative technological and digital solutions. Our skilled people provide first-class asset management and operations and maintenance support to improve solar energy projects, so they perform for longer, minimising unnecessary downtime through smarter management.

4+ GW
In development

2+ GW
In planning

1+ GW
Consented

Figures correct as of January 2025



"With several team members from farming backgrounds, we understand the issues faced by landowners and can provide an informed development proposal for your land."

Karl O'Mullan, Development Director - Solar

We advocate for sustainable farming, so future generations can continue to benefit from the land we seek to protect.



Working with the local community

We are passionate about ensuring renewable energy can be a power for good, especially in the local communities that neighbour our projects.

Local engagement

Our dedicated approach and reputation for working closely with key stakeholders ensures that we design projects which deliver maximum benefit and minimum impact.

We recognise that local people can make a valuable contribution to the proposals by offering their local knowledge, raising issues that may not have been considered as well as identifying benefits and opportunities, which can be considered when developing and designing a project. In many cases consulting a local community can result in a stronger proposal.

Case study

Ballinaclough Solar Farm, Co. Tipperary

During the site selection and initial planning phase of the project, one unforeseen constraint arose regarding the buffer distance from the adjacent river. Initially, a standard 10-metre buffer was applied, however, during the planning stage, the planning authorities requested an increase to a 15-metre buffer.

To accommodate this change, the site layout was revised, leading to several positive outcomes. The expanded buffer allowed for the development of a more extensive riparian zone along the riverbank, including the additional planting of trees. This zone will be maintained to preserve its ecological function as well as prevent livestock from accessing the river. Additionally, the larger buffer provides an enhanced amenity area for local fishermen, promoting recreational use and community engagement while protecting the natural habitat.

This adjustment demonstrates how adaptive planning can transform challenges into opportunities for improved environmental stewardship and stakeholder benefits.



Community benefits

We seek to be a power for good in communities that neighbour our projects by working openly and constructively to ensure tangible local benefits. While community benefits are not a material planning consideration, we believe that our renewable energy projects should provide direct, lasting benefits to local communities and there are a number of ways this can be achieved.

Some examples of our support include:

- · Apprenticeships / educational schemes
- Funding for schools and local community groups
- Improved broadband provision
- Improvements to local footpaths and/or signage
- Business start-up initiatives
- · Improvements to village halls
- · Community defibrillators
- Electric car charging points

Case study

Derril Water Solar Farm, Devon

In response to the cost-of-living crisis, the Pyworthy Village Hall management committee aimed to create a warm and safe community space for residents, particularly those in hard-to-heat homes, facing isolation, or worried about rising energy bills. However, the hall's age and inefficient heating system made it financially challenging to sustain such a hub.

To address this, RES contributed a £15,000 donation for the installation of solar panels and a battery storage system in early 2024. RES made a further donation match funding £7,500 raised locally by the hall committee through community events like coffee mornings, bingo nights, and film screenings.

This renewable energy solution significantly reduced the running costs of maintaining a warm hub and the efforts of the village hall committee fostered a stronger sense of community.



Local Electricity Discount Scheme (LEDS)

Since 2013 RES has been operating its unique Local Electricity Discount Scheme (LEDS) which offers properties closest to a participating operational renewable energy project, an annual discount on their electricity bill. LEDS delivers direct and tangible benefits to local communities, while also supporting home grown, zero carbon electricity generation.

Initially developed in response to research and feedback from local communities around operational wind farms, RES has more recently begun to administer LEDS for operational solar projects on behalf of our clients. As part of our pre-application consultation, we seek feedback on ideas, from the local community and stakeholders, for local benefits and priority projects that people would like to see supported or delivered in their community, should the proposed solar farm receive planning consent. Ultimately, whether or not LEDS forms part of a tailored package of benefits depends on the level of community appetite and funding available.

Biodiversity

Besides generating clean, green energy, a well-designed solar farm can benefit the local environment and enhance biodiversity.

During the design development process, we undertake biodiversity surveys and assessments. These help to inform the Biodiversity Management Plans which seek to maximise the positive impacts the project can offer the surrounding environment throughout the project lifecycle.

Our biodiversity enhancement measures can include:

- Wildflower and species-rich grassland seeding for meadow creation
- Tree protection plans and native tree planting
- · Hedgerow preservation
- Pond and habitat creation including bat and bird boxes, insect 'hotels' and reptile hibernaculums

Case study

Leaford Solar Farm, Staffordshire

The Leaford Solar Farm proposal, which was submitted into planning in early 2024, was specifically designed to be dual-purpose allowing continued agricultural use in the form of sheep grazing and the production of renewable energy.

The proposal included an extensive range of biodiversity measures including the planting of wildflower meadows, native trees, over 2km of new hedgerow as well as the installation of hedgehog houses, bee banks and bird boxes. As well as reducing potential visibility from residential properties and Public Rights of Way, the planting will provide wildlife corridors and vital resources for mammals, birds, and insect species. Through these measures, the proposed solar farm could deliver a 74% biodiversity net gain (BNG) for habitat units and a BNG of 22% for hedgerow units.



"We often find, and expect, that the introduction of a solar farm with sheep grazing on previously arable land leads to a reduction in pesticide use, including herbicides, which supports soil and land recovery."

Claire Chamberlain, Senior Project Development Manager

Testimonials

"As the landowner of an operational solar farm, I'm pleased to have a strong working relationship with RES that includes enabling visits for other landowners looking to host a solar project on their land that also is used to graze sheep. The team at RES are reliable and considerate of me and my land."

Arthur Gaston, Landowner at Ballygarvey Solar Farm, Co. Antrim, Northern Ireland

"Working with RES has been an informative and beneficial experience from start to finish. Their attentiveness to our questions as well as their efforts to implement and prioritise biodiverse measures to accommodate our farming practices has been greatly appreciated. We are pleased to have partnered with RES to host a solar farm that will not only generate clean energy but allow us to continue to graze sheep under the panels bringing a dual benefit."

Jack Bayly and Kirsten Bayly Parker, Landowners at Ballinaclough Solar Farm, Co. Tipperary, ROI



FAQ

What land is suitable for a solar farm?

There are several factors to consider when determining whether a piece of land may be suitable for solar farm development.

- **Relatively flat.** Sites that are relatively flat are the most suitable to develop, although land with a minor gradient can also be considered, depending on which direction the land slopes.
- **Minimum acreage.** The minimum acreage of land for a solar farm varies by location, however as a rough guide, we prefer to develop projects with a minimum of 50 acres. We can also seek multiple landowners with neighbouring land to form a partnered project, increasing the overall development size.
- **Grid connection.** Only land that is relatively close to a grid connection be that a substation or overhead line is typically suitable for development. As development experts, we can help assess if this is the case.

How long will a solar farm operate for?

Solar farms are robust and can operate for over 40 years, providing long-term income for landowners. Our leases include an additional year before and after operation to construct and decommission the project.

Can a solar farm still be farmed?

Sheep may be able to graze on the land the solar farm occupies, providing two streams of income from the same parcel of land.

How will the solar farm benefit the community around me?

It will not only benefit the environment but also the local community where it is located. We work with the local community during the planning process to communicate and adapt the design of projects. One area that is of particular interest is community benefit opportunities. The community benefit package we provide can take various forms depending on what the community would find of most value.

How is the solar farm maintained?

On a day-to-day level the solar farm is remotely managed 24/7/365 by our Global Control Centre based in Glasgow, which allows us to monitor its performance and proactively plan maintenance. Technicians also regularly attend sites to perform physical inspections and repairs. Every 6-12 months the solar panels will be washed to remove any accumulation of dust, allowing us to maximise their efficiency for consumers.

Grass and hedge cutting can either be completed by the landowner or undertaken by us. Landowners can fertilise the land beneath the panels using specialised machinery and equipment. Many landowners also opt to let their land grow organically and lie fallow, whilst the solar farm is operational, allowing benefits such as habitat ecosystems to form and supporting soil recovery.

Can solar farms enhance biodiversity?

As a responsible developer, weaving in additional biodiversity enhancements on all sites is a priority for us – whether it's through tree and hedgerow planting, or meadow restoration via wild flowering and sowing species-rich grass.

What if the sun doesn't shine?

Solar farms are an effective technology that don't need direct sunlight to operate. The panels generate electricity from daylight. We use the latest and most advanced technology such as bifacial panels that can capture sunlight on both sides increasing their efficiency and yield.

What happens to the electricity generated on my land?

The solar farm is connected to the electricity network, allowing the clean, renewable electricity generated to be distributed to households and businesses across the country.

What happens when a solar farm comes to the end of its operational life?

At the end of the operational life of a solar farm the project will be fully decommissioned and the land reinstated.





Get in touch

Contact a member of the team today to find out more solarukinewsitesmanagers@res-group.com



For more information about our team and to access resources for solar on your land, scan the QR code or visit: developmentsolaruki.res-group.com

