

Introducing Bristol City Leap

Bristol City Leap is a world-first approach towards decarbonisation at city scale. We are a 20-year joint venture partnership between Bristol City Council and Ameresco, which will enable the delivery of over £1 billion of investment into Bristol's energy system.

Ameresco is an energy solutions provider dedicated to helping reduce costs, enhance resilience, and decarbonise in the global energy transition. Our portfolio includes implementing smart energy efficiency solutions, upgrading ageing infrastructure, and developing, constructing and operating distributed energy resources.

This means a transformative boost in the amount of renewable energy and decarbonised heat powering our city, meaning a cleaner, better and healthier place to live, learn, work and play.



Why are we Developing Renewables?

In 2018, Bristol City Council became the first local authority in England to declare a climate emergency. Including an ambitious target for Bristol to achieve net-zero carbon emissions by 2030. To reach this goal, it is essential to significantly increase the production of renewable energy within Bristol. By ramping up our renewable energy generation, we can reduce our reliance on fossil fuels, thereby mitigating the impacts of climate change and fostering a more sustainable future for our city.

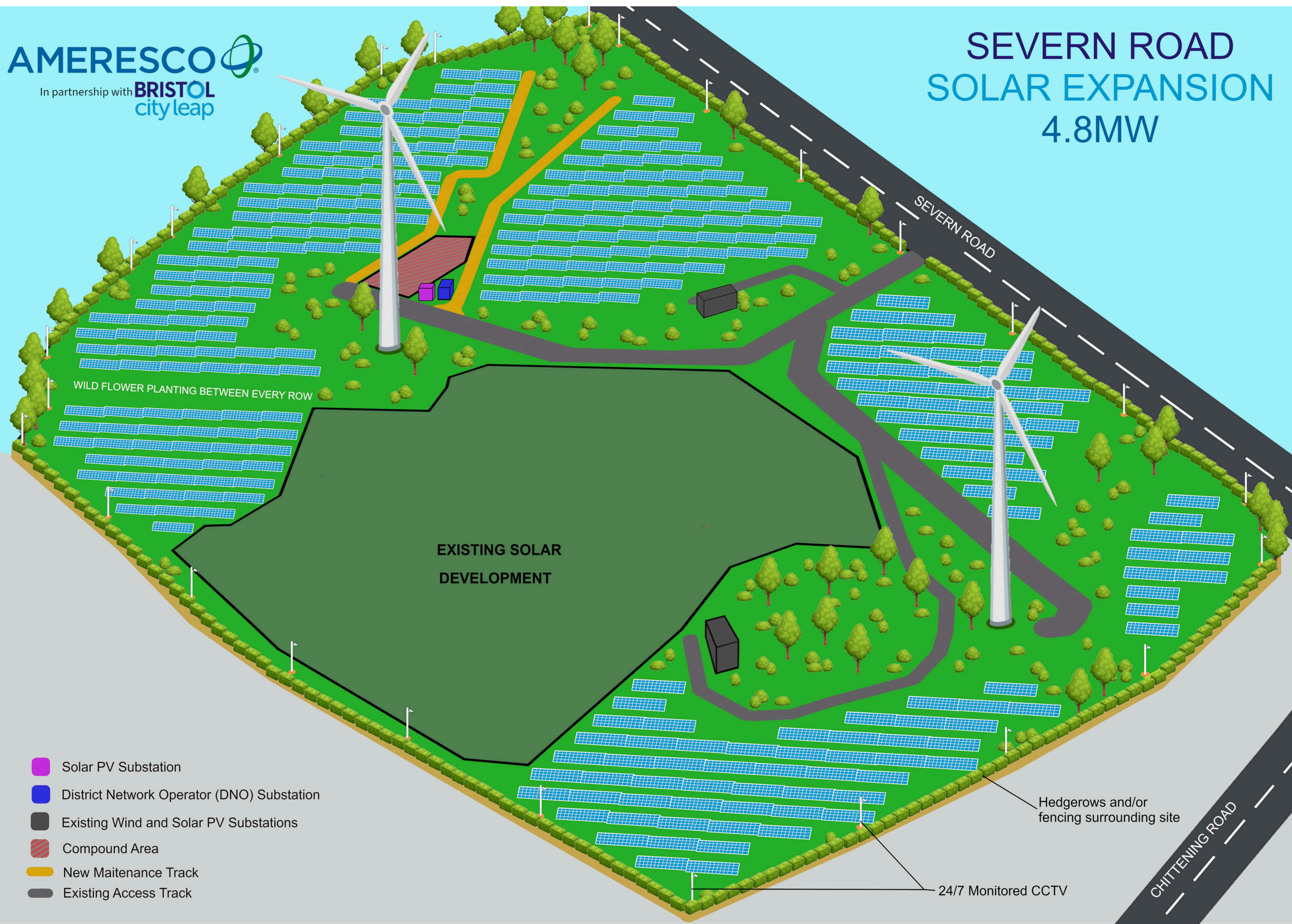


The process for selecting sites involved reviewing all available land owned by Bristol City Council. A shortlist was created based on a thorough set of criteria, including connectivity to the local grid and potential for energy generation. Sites were chosen based on their appropriate size, ensuring that the projects could be effectively implemented without attempting to create excessively large installations.

Severn Road Solar Farm Extension

The proposal is to extend the existing solar array, which is sited next to the two wind turbines owned by Bristol City Council, located on Severn Road A403.

The 20-acre brownfield site would have an installed capacity of 4.8 MegaWatts and would power the equivalent of 1868 homes per year. The site would be sown with a wildflower mix which would serve as an important habitat for a variety of species.



Plan to show the layout of the proposed solar farm

Community Benefit

This project embodies the same values as all Bristol City Leap initiatives, with a focus on benefiting our local communities. A portion of the funds generated will be allocated to support community projects. Building on the success of our existing Bristol City Leap Community Energy Fund, this project will enable us to provide even more targeted support to the community. **This is where you come in!** If you know of a local organisation or project that you feel would benefit from this funding, let us know! We want to hear how you feel this money can best benefit your community.



Separate from this project, our £1.5 million Bristol City Leap Community Energy Fund supports and enables community-led energy projects.

The funding that we are making available is part of our commitment to social value, and this initiative focuses on decarbonisation of Bristol whilst supporting community projects that deliver for local people.

The total amount awarded through the fund is over £460,000 so far. The organisations receiving funding include Bristol North West Foodbank, among many others.

Bristol City Leap will generate at least £61.5 million worth of social value across a range of areas in our first five years.

Our partnership is not just about achieving the transition to a low-carbon economy; it's about achieving a just transition that works for everyone. This ethos is central to our approach and drives our commitment to delivering social value in all our practices.

How to Build a Solar Farm

1. Initial Feasibility Study: Assess the suitability of the land, considering factors like sunlight exposure, land size, and proximity to the grid
2. Site Selection and Land Acquisition: A site is chosen with flat terrain or a south-facing slope. The land is secured through purchase or lease agreements
3. Planning and Permits: Planning permission is obtained from the local authority. This involves submitting detailed plans and conducting environmental impact assessments
- 4 . Grid Connection: Secure agreements for grid access and infrastructure. This step ensures that the generated electricity can be fed into the national grid
5. Design and Engineering: Develop designs for the solar farm, including the layout of solar panels, inverters, and other equipment
6. Construction: Prepare the land, install mounting systems, and set up the solar panels. This phase also includes installing inverters and transformers
- 7 . Testing and Commissioning: Conduct tests to ensure the system operates efficiently and safely. Once everything is in place, the solar farm can be connected to the grid
8. Operation and Maintenance: This includes cleaning panels, managing the vegetation, and monitoring output.

Building a solar farm is a complex process, but it can provide significant environmental and economic benefits.



Planning and Studies

We are committed to ensuring that the ecosystem of this site continues to thrive once the project is completed. To achieve this, we are currently conducting a series of studies to gain a comprehensive understanding of the environment in which we are working.



The surveys we are undertaking or have completed include:

- Habitats survey
- Biodiversity Net Gain Assessment
- Bat activity monitoring
- Breeding bird surveys
- Great crested newt assessment
- Dormouse monitoring
- Water vole and otter surveys
- Reptile assessments

While our surveys are ongoing and it is too early to draw definitive conclusions about all species and groups, we know that the site consists of a mix of scrub and grassland, with much of the grassland associated with the existing solar park. We will continue to monitor and analyse the data to ensure responsible management of the ecosystem.