Salix Programme Newsletter

Leicester City Council

Late July 2021

Welcome to the latest edition of the Salix Programme newsletter. This time we are introducing a new feature of our newsletter where we put one of the many decarbonisation technologies into the spotlight. Read on for more information and to find out about recent progress at Salix project sites in Leicester.

In the Spotlight: Solar Photovoltaic Panels

Solar electricity panels, also known as photovoltaics (PV), capture the sun's energy and convert it into electricity that can be used in homes and buildings. By installing solar panels, you can generate your own renewable electricity.

How do they work?

Solar PV cells are made from layers of semi-conducting material, usually silicon. When light shines on the material, electrons are knocked loose, creating a flow of electricity. The cells do not need direct sunlight to work; they can work on a cloudy day too. However, the stronger the sunshine, the more electricity generated. Most PV systems are made up of panels that fit on top of roofs, but they can also be installed on the ground. The electricity generated is a direct current, whereas the electricity required to power appliances is an alternating current. Therefore, an inverter is installed along with the PV system to convert direct current electricity to an alternating current.

Benefits of solar electricity

Cut your electricity bills - Installing solar PV panels will help to cut down your electricity bills. Sunlight is free, so once the initial installation has taken place, your building would be generating its own electricity free of charge, consequently reducing your consumption from the grid.

Cut your carbon footprint – Solar electricity is green, renewable energy as it can be replenished, unlike electricity produced by fossil fuels which are finite. Solar energy produces very little or no emissions when it is converted into electricity, so switching to solar energy would lower your building's carbon footprint.

Are solar PV panels right for your building?

There are some challenges associated with solar PV panels as not all buildings will be suitable. A majority of solar panels have a lifespan of around 25 years, and so your building's roof must have the structural capacity to withstand the weight for those years.

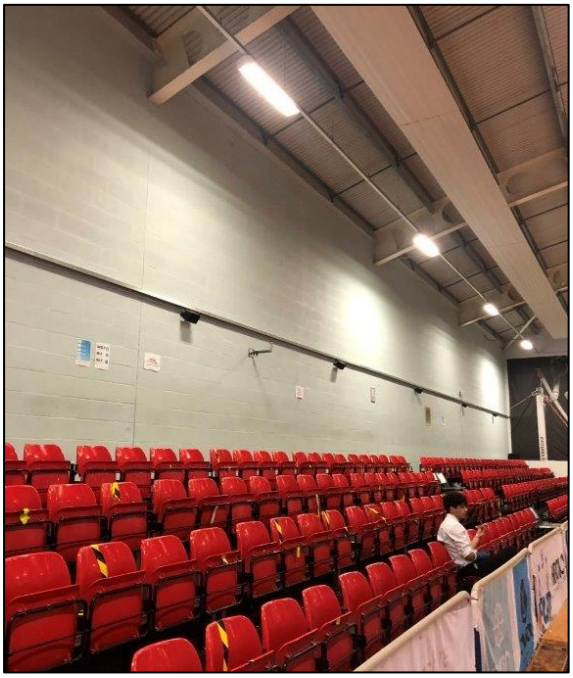
Ideally, a roof being considered for solar panels would be south-facing, unshaded and at a pitch angle of 30 to 40 degrees. East or West-facing roofs could still be considered, however North-facing roofs would not be recommended. Any nearby buildings, trees or chimneys that could shade the roof may have a negative impact on the performance of your building's solar PV system.

Works Carried Out

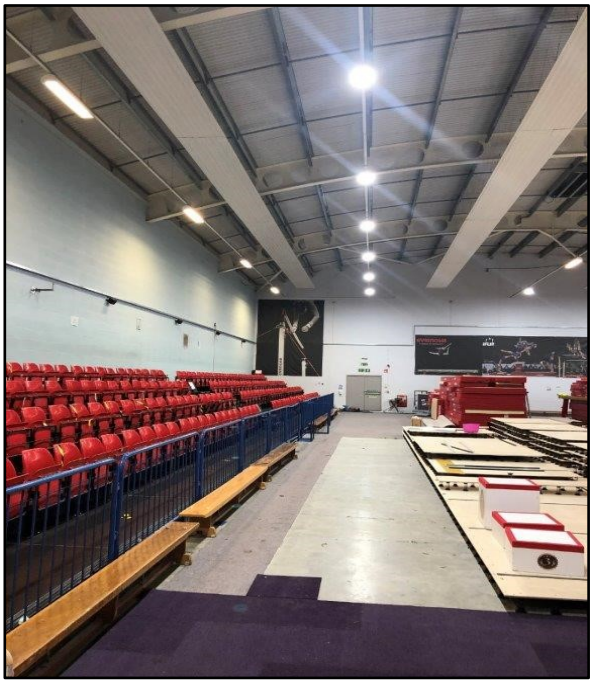
Recently, on behalf of the city council, ESL (Energy Saving Lighting) completed the installation of new energy efficient LED lighting at New College in Leicester.

"I must say the new lighting in the Gymnastics Centre is excellent and a huge improvement on what we had previously in there. Both the school, the club and more importantly 1,000s of young people will benefit from this."

- New College, Leicester



Existing lighting



New LED lighting alongside existing lighting

Asbestos Refurbishment Works

Following the feasibility surveys that have been carried out in recent months, a number of Salix project sites will require asbestos refurbishment and demolition surveys before the installation of decarbonisation technologies can take place. The city council has appointed Lucion Environmental to carry out remedial works, who will be working to a delivery schedule that prioritises school sites over the summer break. On behalf of the city council, Lucion, in conjunction with Perfect Circle – Pick Everard, will be contacting Premises Managers of individual sites to whom these works will apply, in order to carry out necessary intrusive works to collect samples for analysis.

Contact Us

Each site has a dedicated project manager (Alan Evans or John Squires), however if you have a general question or need to get in touch with the Salix Project Team email us at Salix.Project.Team@leicester.gov.uk