Solar Energy UK

Case Study
Ark Schools

Summary

- **Location:** Birmingham
- **Capacity:** 160.72 Kilowatts
- **Type:** Solar PV roof installation
- **Developer:** Solar Options for Schools
- **Owner:** Ark Victoria Academy and Ark Kings Academy
- **Panel type:** Trina Solar 415Wp Monocrystalline
- **Completion date:** December 2nd 2023 and December 7th 2023

Solar for Schools equips schools with solar panels and educational resources to reduce carbon emissions and teach students about sustainability. Our goal is to empower the next generation of climate leaders and create a more sustainable future.

Overview

Solar for Schools is dedicated to empowering schools to leverage solar energy, reduce carbon emissions, and enhance sustainability education. Our recent collaboration with National Grid Electricity Distribution exemplifies this commitment through a targeted funding initiative aimed at schools in South Wales, the South West, and the Midlands. The £2.7 million pledged in grant funding from National Grid, part of their Social Contract, is pivotal in enabling schools in areas of higher deprivation and those with free school meal eligibility to access clean, renewable energy without upfront costs.

Project Summary

The educational sector faces significant financial pressures, making investments in renewable technologies challenging. Solar for Schools addresses this by offering innovative funding solutions that allow schools to adopt solar energy without any startup costs. We raise funds through a diverse range of sources, including the Solar for Schools Community Benefit Society, which brings together retail investors to accelerate solar installations. Additionally, we secure grants to cover around 25% of project costs. National Grid's grant funding is a prime example of how a company can make otherwise unfeasible projects a reality. We also collaborate with Triodos Bank to scale community development and raise additional funds, ensuring that schools can adopt solar technology without bearing initial costs.

Ellie Patey, National Grid Electricity Distribution's Community Engagement Manager, said:

"This new fund aims to help more schools adopt solar power to decarbonise and to reduce energy costs. It's also an important way to engage pupils in ways to reduce carbon and emissions. Working together with Solar for Schools means our grants can unlock significant financial and carbon savings, as well as educational benefits, over and above what could have been achieved working in isolation."

Recent installations at Ark Victoria Academy and Ark Kings Academy in Birmingham illustrate the impact of this approach. Supported by National Grid and facilitated by Solar for Schools, these projects have transformed the schools' energy profiles and educational environments, demonstrating how targeted financial support can drive substantial benefits.

Outcomes

Within the first month, the schools saved £3,500 on their energy bills, with expected lifetime savings surpassing £1.2 million. These savings are crucial for reallocating funds towards critical educational resources and infrastructure.

Environmentally, the solar panels are set to reduce CO2 emissions by over 1,153 tonnes throughout their lifetime, equating to the removal of 260 fossil-fuelled cars from the road for a year. This significant reduction highlights the pivotal role of grant funding in supporting large-scale carbon reduction efforts and showcases the far-reaching benefits of such financial assistance.

Educationally, around 2,000 students have engaged in practical workshops, assemblies, and a diverse range of STEM resources linked to the solar project. The integration of live energy-savings dashboards and smart metering enhances this learning experience, offering students real-time data that fosters a deeper understanding of energy management and sustainability.

Local and Community Benefit

The energy savings from the solar installations at Ark Victoria Academy and Ark Kings Academy can be reinvested into educational improvements, enhancing the learning environment and supporting critical infrastructure. Our program provides students with hands-on experience in green technologies. They use drones to capture images before and after installation, observe the installation process, and participate in an annual educational program that introduces them to various green careers. This immersive experience helps students understand renewable energy and familiarises them with potential future roles in sustainability.

Bryan Knope, Head of Estates for Ark Schools, commented:

"We're thrilled to have National Grid's support through Solar for Schools to install solar panels across our schools. Reducing CO2 emissions is a key priority for us, and solar power is a crucial part of our strategy. The live energy-savings dashboard from Solar for Schools is invaluable, providing detailed insights into our consumption and helping us drive meaningful changes."

We deeply value our partnership with National Grid and the impactful role it plays in enabling schools to adopt solar energy and foster sustainability. We encourage more companies and retail investors to follow this lead and help us extend our reach to more schools.

If you are interested in supporting schools in your area and making a tangible difference, please reach out to Richard at **richard@solarforschools.co.uk**, Strategic Partnerships Manager.

Learn more about what's happening at Solar for Schools at www.solarforschools.co.uk

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