

# **CASE STUDY 2 - DILKES ACADEMY**

Commercial solar panels case study of an install of a Solar Panel System of 45 TrinaSolar Vertex S 425W (19kWp) Solar Panels at Dilkes Academy School in South Ockendon, Essex.

#### INTRODUCTION

In the midst of December 2023. amidst festive cheer and chilly winds, Dilkes Academy School in South Ockendon, Essex, UK, took a significant step towards environmental sustainability. Partnering with MCS Certified Solar PV (panels) Installer and MCS Certified Battery Storage Installer NXTGEN Energy Ltd., the school chose to embraced clean energy by installing a robust Solar PV System on its premises. This case study delves into the details of this solar project, exploring its benefits, challenges, and the potential it holds for similar educational institutions in Essex and further afield in the UK.



# **COMMERCIAL PROJECT DETAILS**



# DILKES ACADEMY SCHOOL

- Installer: NXTGEN Energy Ltd., 66-72
  High Street, Rayleigh, Essex SS6 7EA
  Tel: 01268 928 690 info@nxtgen.ltd
- Location: Dilkes Academy, Garron Lane, South Ockendon, Essex RM15 5JQ
- Technology: 45 TrinaSolar Vertex S 425W (19kWp) Solar Panels
- Installation: December 2023

#### **SOLAR BENEFITS**

# **Environmental Impact**

The 19kWp solar PV system is estimated to generate around 16,000 kWh of clean electricity annually, offsetting roughly 10 tonnes of CO2 (carbon dioxide) emissions. This translates to a significant reduction in the school's carbon footprint and contributes positively to combating climate change in UK.

#### Financial Savings

Over its lifespan of 25-years, the solar PV system is expected to generate substantial financial savings on electricity bills. These savings can then be reinvested in more educational resources, infrastructure upgrades, or other school priorities.

#### **Educational Value**

The solar panels act as a living learning tool, providing teachers and students with a tangible way to understand renewable energy concepts and their practical applications. This fosters environmental awareness and empowers students to become responsible citizens.

## CHALLENGES

# **Roof suitability**

Assessing the roof's structural integrity and ensuring compatibility with the chosen solar panel system was crucial. NXTGEN Energy's expertise in evaluating and handling such challenges ensured a smooth installation process.

## Weather considerations

Installing during the winter presented logistical challenges due to colder temperatures and shorter daylight hours. NXTGEN Energy's skilled technicians adapted their approach to ensure timely and efficient completion of this solar project.

# **FUTURE POTENTIAL**

Dilkes Academy's initiative sets a positive precedent for other academies, schools, colleges and universities in the UK. As energy costs continue to rise and environmental concerns escalate, solar panels offer a solution for educational institutions to secure their energy independence, reduce costs, and promote sustainability in the UK.

#### CONCLUSION

The Dilkes Academy and NXTGEN Energy partnership demonstrates the benefits of integrating solar energy into school infrastructure. By harnessing the power of the sun, Dilkes Academy is not only saving money and reducing its environmental impact, but also starting a culture of sustainability and environmental awareness among its students. This project paves the way for broader adoption of solar energy in the educational sector, contributing to a green future for generations to come in the UK.

The Dilkes Academy School is an example of how commercial solar panels can help schools cut energy costs, reduce carbon emissions, and attract ecoconscious parents and students. NXTGEN was able to provide a tailored solar energy solution that met the Dilkes Academy's energy needs and expectations.

Are you an Academy, School, College or University that is interested in going green with commercial solar panels? Get in contact with us today on 01268 928 690 or email info@nxtgen.ltd for a free quote.

NXTGEN Energy Ltd. Tel: 01268 928 690 Email: info@nxtgen.ltd Website: https://nxtgenenergy.co.uk