

## CASE STUDY 1 - DUNSTABLE

Residential solar panels case study of an install of a Solar Panel System of 18 TrinaSolar Vertex S+ 435W Solar Panels (7.83 kWp) on the roof of a house in Harlington, Dunstable, UK.

### INTRODUCTION

This case study delves into a residential solar panel installation of a 7.83 kWp solar PV system in Dunstable, designed and professionally installed by MCS Certified Solar PV Installers NXTGEN Energy Ltd. We'll explore the technical details, financial projections, and environmental impact of this solar panel system.

## **PROJECT DETAILS**

Installer: NXTGEN Energy Ltd. Location: Dunstable, UK **Technology:** 18 Trina Vertex S+ 435W Dual Glass N-Type Solar Panels (7.83kWp Solar System) **Installation:** January 2024



## SOLAR SOLUTION

NXTGEN Energy Ltd Solar Specialist Bobby proposed a 7.83 kWp Solar Panel System tailored to the specific needs and roof characteristics of this customers home.

Here's a breakdown of the key components:

## SOLAR PV SYSTEM

Powerhouse Panels: 18 Trina Vertex S+ 435W Dual Glass N-Type panels boast superior light capture, high reliability, even in harsh conditions. The white backsheet enhances aesthetics and improves the temperature management of the solar panels.

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

## NXTGEN ENERGY LTD. CASE STUDY 1 - DUNSTABLE

## 5-STAR CUSTOMER REVIEW



# JONATHAN WYNN - DUNSTABLE Probably the best Solar Installer out there!

We have had a wonderful experience with NXTGEN Energy Ltd. From quotation through to installation the service has been slick and professional. The fact they can do the scaffolding and installation in house is a big asset and simplifies the job, no doubt adding savings as well. The price for the job was very competitive compared with other quotations; but I am 100% sure the service was levels above what I would have received via any other contractor. Special thanks to Bobby Barnes for all his help and advice who project managed the job throughout and was very attentive and considerate.

Inverter Brains: The Growatt SPH 6kW Dual MPPT Hybrid Inverter efficiently converts DC (direct current) electricity from the solar panels to usable AC (alternating current) power for your home appliances. Its dual MPPT technology maximizes solar energy harvest by tracking the performance of individual panels, under uneven sunlight conditions.

Battery Backup: The Growatt GBLI 6.5kWh LFP Solar Battery Storage empowers energy independence. Excess solar energy is effectively stored, allowing you to tap into clean power even when the sun sets or hides behind clouds, which happens a lot in the UK.

Solid Foundations: The Fastensol pitched roof solar panel mounting system, specifically designed for concrete tiles, secures the solar panels firmly and reliably, weathering the elements easily.

## **SOLAR RESULTS**

Sun-kissed Savings: This Solar PV Array has an estimated annual energy generation of 6,766 kWh which translates to potential savings of £3,000 in the first year. Over the solar PV system's expected lifespan of 25 years, the financial gains can be substantial.

Payback Period: The initial investment of just over £9,800 is projected to be recouped within 3 years through reduced energy bills. This timeframe makes the system an attractive investment, especially considering the rising cost of Grid-supplied energy.

## **Smart Export Guarantee (SEG):**

This UK government scheme rewards homeowners who export excess solar energy back to the Grid. With an estimated 2,656 kWh of excess solar energy exported annually, you could earn income from your system while contributing to a cleaner energy future in UK.

## CONCLUSION

The Solar PV System installed in Dunstable presents a case for harnessing the power of the sun. With its potential for significant financial savings, reduced environmental impact, and energy independence, it's a worthwhile investment for not only the eco-conscious, but for all homeowners in the UK. Consideration of technical specifications, financial projections, and potential challenges helps ensure a successful solar journey with the expert solar energy team at NXTGEN Energy Ltd.

Remember, this case study is just a starting point. Consulting with a qualified solar installer like NXTGEN Energy Ltd. for a personalised assessment and free no-obligation quote on 01268 928 690 or email the solar team at info@nxtgen.ltd for a quote tailored to your property and your needs is crucial before making any final decisions.

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