Harborough Solar One Annual Output Summary

01AUG22/DJR/v1.0 (FINAL)



Harborough Solar One Limited created by



OUR PURPOSE

- To engage local organisations and businesses in the opportunities offered by installing low carbon systems like solar panels, battery storage, biomass and heat pumps to generate clean energy
- To show how the local community can work together to generate its own clean energy, improve energy efficiency in homes and facilitate access by all to affordable clean energy
- To generate greater community benefit through our wider energy related work, such as reducing energy costs and improving the carbon footprint of local businesses, schools and public facilities

Harborough Solar One



OUR CURRENT PROJECTS

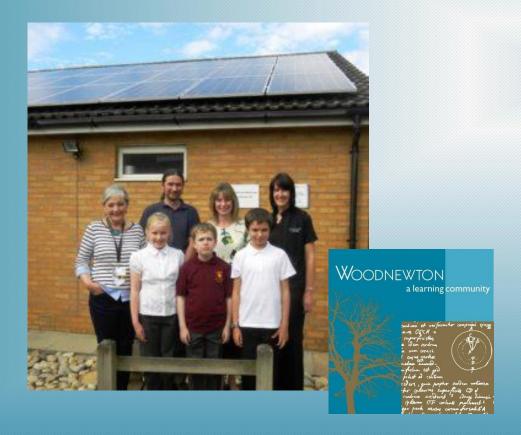
Harborough Solar - Project 1 (installed mid 2016)

Links to our case studies for **Woodnewton** and **Archway**

Harborough Solar One

Woodnewton Academy - Corby
56.2 kW installation across 4 roofs

Archway House - Harborough 10.3 kW installation





OUR CURRENT PROJECTS

Harborough Solar - Project 2 (installed end 2018)

Link to our news article about NBJ

NBJ Joinery - Sibertoft Road, Husbands Bosworth 102.6 kW ground mounted installation



Harborough Solar One

Harborough Solar - Summary Solar PV Output

Our 170 kW of community owned installations at Woodnewton, Archway and then NBJ have generated 680,000 kWh* of clean electricity since our first installations in AUG 2016 - saving 307 Tonnes of CO2*

* As at 01AUG22 - based on data from The Energy Meter Information Gateway (eMIG)

Host Site Output	Woodnewton Roof 1&2	Woodnewton Roof 3	Woodnewton Roof 4	Archway House	Project 1 Total for	Capacity Factor % (kWh	Project 2 Total for	Capacity Factor % (kWh	Rolling Total
(Capacity / Started)	(20kWp 23AUG16)	(20kWp 31AUG16)	(17kWp 31AUG16)	(10kWp 23SEP16)	Year (kWh)	Output / kWp Cap Per An)	Year (kWh) NBJ (103kWp 15DEC18)	Output / kWp Cap Per An)	Output (kWh)
AUG16-JUL17	14,945	15,764	12,682	6,897	50,288	9 %	-	-	50,288
AUG17-JUL18	16,960	18,284	14,688	8,821	58,753	10%	-	-	109,041
AUG18-JUL19	16,813	18,068	14,501	8,763	58,145	10%	56,951	11%	224,137
AUG19-JUL20	17,528	18,570	15,565	9,206	60,869	10%	108,116	12%	393,122
AUG20-JUL21	14,750	14,548	14,059	8,516	51,873	9 %	79,626	9%	524,621
AUG21-JUL22	16,532	14,162	14,804	8,564	54,062	9 %	101,191	11%	679,874

Notes - 'Capacity Factor' indicates relative efficiency independent of size (avg. was 10.8% for UK solar PV in 2019)
- Project 1 output approx. 11 mths of 16/17; Project 2 output approx. 7 mths in 18/19.

WOODNEWTON ROOF 1&2 - 01AUG22

Harborough Solar One

Last reading	97,501.64 kWh (43,809.44 kg CO ₂)
received at	Aug 1, 2022 11:59 AM

Last 24 hours 65.88 kWh 29.60 kg CO₂

Last Week 393.32 kWh 176.72 kg CO₂

Last Month 2 362 12 kWh 1,061.35 kg CO₂

Last Year 16,532.87 kWh 7,428.55 kg CO₂

WOODNEWTON
a learning community

a learning

Installation Details

SIM Enabled

Meter ID 16079837

Installed Aug 23, 2016

Registered on Aug 24, 2016 8:46 AM eMIG

kW Peak 19.76 kW

WOODNEWTON ROOF 3 - 01AUG22

Harborough Solar One

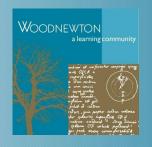
received at Aug 1, 2022 11:57 AM

Last 24 hours 56.32 kWh 25.31 kg CO₂

Last Week 345.38 kWh 155.19 kg CO₂

Last Month 2.134 14 kWh 958.91 kg CO₂

Last Year 14,162.92 kWh 6,363.68 kg CO₂



Installation Details SIM Enabled Meter ID 16038858 Installed Aug 31, 2016 Registered on Aug 30, 2016 12:39 PM eMIG kW Peak 19.76 kW

WOODNEWTON ROOF 4 - 01AUG22

Harborough
Solar One

Last reading 86,460.63 kWh	(38,848.49 kg CO ₂)
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received at Aug 1, 2022 11:57 AM

Last 24 hours 56.99 kWh 25.61 kg CO ₂
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Last Week 355.39 kWh 159.68 kg CO₂

Last Month 2 173 48 kWh 976.59 kg CO₂

Last Year 14,804.21 kWh 6,651.83 kg CO₂

WOODNEWTON

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Installation Details

SIM Enabled

Meter ID 16038857

Installed Aug 31, 2016

Registered on Aug 30, 2016 12:37 PM

eMIG

kW Peak

16.64 kW

ARCHWAY HOUSE - 01AUG22

Harborough Solar One

Last reading 50,821.99 kWh (22,835.34 kg CO₂)

received at Aug 1, 2022 7:59 AM

Last 24 hours 12.64 kWh 5.68 kg CO₂

Last Week 191.14 kWh 85.88 kg CO₂

Last Month 1.204.92 kWh 541.40 kg CO₂

Last Year 8,564.87 kWh 3,848.37 kg CO₂

Archway HEALTH HUB

Installation Details

SIM Enabled

Meter ID 16079836

Installed Sep 23, 2016

Registered on Sep 21, 2016 2:36 PM

eMIG

kW Peak 10.26 kW

NBJ - 01AUG22

Last reading 348,069.18 kWh (156,394.45 kg CO₂)

received at Aug 1, 2022 12:01 PM

Last 24 hours 405.09 kWh 182.02 kg CO₂

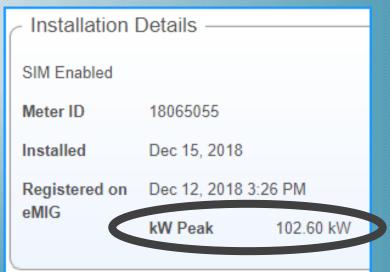
Last Week 2,359.21 kWh 1,060.04 kg CO₂

Last Month 13 831 81 kWh 6,214.91 kg CO₂

Last Year 101,191.08 kWh 45,467.18 kg CO₂

Harborough Solar One





NBJ Exported Energy (01AUG21 to 31JUL22)



Harborough Solar One



Note: In addition to regular payments from our hosts under their Power Purchase Agreement (PPA), Harborough Solar One are paid quarterly (via Good Energy) for our generated electricity and for the electricity 'exported' by the host site (at rates set by the Government in our Feed in Tariff agreements).

This is either:

- 'Deemed' at 50% for Woodnewton and Archway (reported via EMIG) or
- 'Metered' as with NBJ (via Stark)

HOW ARE WE PERFORMING? NBJ Exported Energy (01AUG21 to 31JUL22)

Exported (available to Consumers via Grid)

32,540 kWh



Energy consumption equivalent to:

1 litre kettles boiled

285,440



Energy saving light bulbs in use all year

186

Electricity Conv. Factor for: 0.233 kg CO2e/kWh; : 0.233 kg CO2e/kWh (from UK Government CO2e (including Scope 3))

Energy consumption for boiling 1L water in kettle = 0.114kWh based on value from which? (http://www.which.co.uk): Energy saving light bulb power rating equal to 20W

Saved (by Grid Consumers)

7,595 kg CO2e



Emissions equivalent to:

Number of hot air balloons filled

1.5

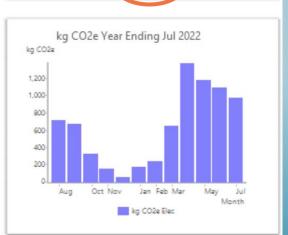


No. times round the Earth in a car

0.9

Volume of Typical Hot Air Balloon at 2500m³; Average Car emissions 0.20282 kg CO2e per km

Month	kWh Year Ending Jul 2022	kg CO2e Year Ending Jul 2022
Aug	3,055	713
Sep	2,871	670
Oct	1,410	329
Nov	659	154
Dec	253	59
Jan	749	175
Feb	1,054	246
Mar	2,775	648
Apr	5,852	1,366
May	5,043	1,177
Jun	4,660	1,088
Jul	4,160	971
Total	32,540	7,595



Harborough Solar One

For further details, please visit our website:

www.HarboroughEnergy.co.uk

Or contact us on:

Info@HarboroughEnergy.co.uk



Our Generation data is provided by The Energy Meter Information Gateway (eMIG) - an online tool for remotely measuring and monitoring energy generation.

Our Export data is provided by **STARK** – a <u>specialist platform</u> for energy data and analytics.