

Your solar system design

Specification, performance & cost

A customised design for:

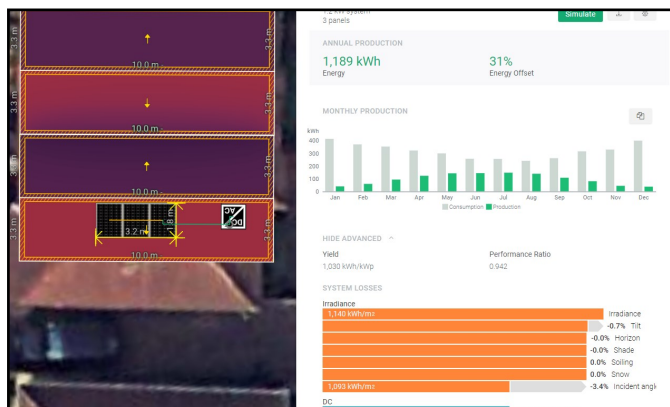
P Varghai

4& 4a Tandridge Rd Hove BN34LU

Thank you for requesting a solar system design from Leoht.

Unique to you, it reflects the exact size and location of your home, as well as your homes electricity consumption. Our aim is to provide you with a keenly-priced solar system that greatly reduces your electric bill and helps you minimise your carbon footprint.

Based on our advanced 3D modelling software, system component performance figures and local weather station data, your design is as detailed and accurate as it can be without a site survey. This means you can be confident we're proposing a solar system already tailored to the needs of your home.



System hardware

3 x 385W JA SOLAR ALL BLACK PERC HALF CELL PANELS

1 X 1500W GROWATT MIC 1500TL INVERTER

K2 ROOF MOUNTING KIT

MC4 CONNECTORS

1 X DC ISOLATOR, 1 X AC ISLOTORS

By industry regulations we are also required to conduct a full site survey following MCS (Microgeneration Certification Scheme) guidelines. So if our design meets with your approval, book an appointment now by calling us on 01273 286627 or visiting www.leoht.co.uk/appointment. We look forward to hearing from you.



£124

Savings in your first year



19%

Reduction in your electric bill



£4,506*

Your savings over 25 years



3,624

Your system cost

Petrol & Diesel Vehicles
Domestic Heating

974 Twh

VS

Domestic Electricity



105 Twh

Future Trends?

In 2018, the total energy consumed by petrol and diesel vehicles and domestic heating was over 9 times that of all UK domestic electricity.

If the trend towards electric vehicles and electric heating continues, how will a considerable increase in demand affect electricity prices?

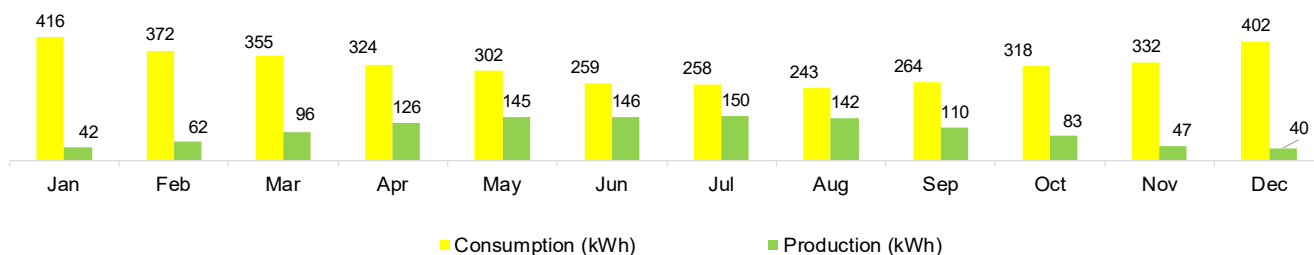
* Twh = Terrawatt hour (1,000,000 kWh)

*Based on electricity prices rising 3% per year

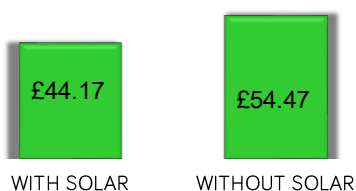
* Savings calculated from self consumption + smart export guarantee payments



Solar Energy Production Vs Electricity Consumption In Your Home



Average monthly electricity bill



Annual Production

1189 (kWh)



4,756

Miles worth of charge for an electric car

Energy production

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Consumption (kWh)	416	372	355	324	302	259	258	243	264	318	332	402
Production (kWh)	42	62	96	126	145	146	150	142	110	83	47	40

Data provided by our advanced 3D modeling software

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Electricity bill without solar	£71	£63	£60	£55	£51	£44	£44	£41	£45	£54	£56	£68
Electricity bill with solar (inc SEG* payments)	£66	£57	£51	£42	£37	£29	£29	£27	£32	£46	£50	£64

*Smart Export Guarantee

Environmental Benefits

Based on the above production data, your system's Co2 savings would be equivalent to...



165

Trees planted



1

Fewer flights from London to New York per year



1,451

Fewer miles driven per year



317

Fewer 20kg sacks of coal burnt during your system's lifespan



Freedom from high electricity bills, now and in the future



If your aim is to reduce your electric bills at home, then installing a solar power system from Leoht will help you do just that. More than that though, it means less reliance on energy companies and assured protection against future price hikes. It's added peace of mind.

Generating your own renewable energy from high-efficiency solar panels also means you're doing your bit for the environment. Free of carbon dioxide

emissions and other pollutants, solar energy is green energy. Helping you reduce your home's carbon footprint, it's kinder on our planet.

And thanks to your system's battery storage you really can make the most of all the energy you produce. Any unused energy that's generated during the daytime is stored away for use when it's dark. So your electric bill gets smaller.

Installing a solar power system in your home is simple and straightforward and can usually be done in less than a day. Its benefits on the other hand will last a lifetime.

Book your site survey today:

Call: 07714 566 314

Visit: www.leoht.co.uk/appointment



Maximise your savings



Help protect the environment



Monitor your energy production and usage via the app



Invest in your future
25 year warranty





About Leoht...

Our mission is a simple one, to provide UK homeowners with solar power systems in a way that is clear and transparent, with projections that are accurate and prices that are keener. Providing the best customer experience in the industry with the highest quality installations.

Leoht (*pronounced 'lee-ot', meaning 'Light' in Old English*) was founded by me, Thomas Moyes in 2020. I'd worked in the solar industry before and had always been passionate about the environmental and financial advantages of renewable energy.

Speaking to former contacts at solar system manufacturers and distributors, I found net component prices to be markedly lower than their retail prices on installation. I determined this was due to inadequate use of technology, inefficient buying processes, supply chain overheads and marketing costs.



Disclaimer

"This system performance calculation has been undertaken using estimated values for array orientation, inclination or shading. Actual performance may be significantly lower or higher if the characteristics of the installed system vary from the estimated values."

Production data is an estimate based on a 3D model of your roof and surrounding environment, modelling the system components based on the datasheets provided by the manufacturers and using irradiation data from various weather stations (mainly Gatwick airport or nearby airports) to predict your production. This ensures your production estimates are as close as possible to the real world.

While we are very confident in the numbers your system will generate based on those inputs, there are factors outside of our control (cloud cover, environmental factors, tree planting, variation in solar irradiation) that will affect production positively or negatively and so may be different from the estimates provided.

Estimated monthly electricity bills after solar and storage are an estimate based on production data and estimated current consumption and are an indication only. You may save more or less than the estimates given as a result of factors outside of our control. Changing behaviour to move heavy usage (washing machines, dishwasher, ironing etc) from the night to daytime hours or vice versa will have an additional effect on bills. Tariff changes, smart export guarantee changes, natural production variations will all have an effect on bills.



How do we calculate the figures?

We aim to be as transparent as possible. Here we provide you with the evidence-backed data on which our modelling is based.

Assumptions

Assumes no standing charge for simplicity.

Electricity production figures exported from software model.

Average UK electricity price including standing charge (£/kWh):	£0.17
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Electricity consumption based on the estimate provided. Extrapolated over 12 months adjusting for seasons	
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40% of the electricity generated is consumed immediately:	40.00%
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60% of production exported/available to the battery (up to capacity):	60.00%
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Electricity price inflation per year	3%
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SEG Payments (£/kWh):	£0.055
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Size of battery system (kWh) *USEABLE CAPACITY* :	0
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Average Co2 emissions (Kg/kWh grid electricity) (Gov.uk, 2018)	0.283
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Net solar Co2 emissions (Kg/kWh) (Prof Hertwich et al, PNAS.org)	0.006
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Average car emissions per mile (Kg/mile) (Statista.com 2018)	0.227
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Average Co2 absorbed by a tree per year (Kg) (Forestry commission, 2018)	2
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Average Co2 emissions from a London LHR to New york JFK flight (Kg) (ICAO.int)	335.4
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Miles per kilowatt for a Tesla Model 3 (EPA)	3.84 kWh/m
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Co2 released by burning 20kg of coal (Kg) (www.eia.gov)	25.96
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Please note: This is not a replacement for an MCS (Microgeneration Certification Scheme) certified estimate. Industry regulations require us to conduct a full site survey following all MCS guidelines.

If you would like to change the assumptions for your report then please let us know and we can easily send you out another report with the different assumptions applied.

