

Life Cycle Cost Analysis PV Solar Panels

Start of Life

- Installation of PV solar panels can cost between **£4,000.00** - **£6,000.00**.
- If a battery such as a Tesla Powerwall is installed, this will allow for further savings to be achieved. Approximate Cost - **£7,750.00**.
- Potential additional costs-
 - Truss reinforcement if installed on an existing property.
 - Start of life cost without battery (average) - **£5,000.00**
 - Start of life cost with battery - **£12,250.00**



In Use

- Low maintenance cost - Only need to be cleaned once a year and this can be done with a garden hosepipe. Cost - **£0.00**
- Companies often offer 20 – 25 years warranties. This means any issues during use will often be covered by the manufacturer. Cost - **£0.00**
- Homeowners insurance premiums may rise due to the need to increase coverage. But, with a new build it should be seen as a permanent fixture to the property. Cost - **£0.00**.
- Installing PV solar panels can reduce annual electricity bills by - **£240.00**
- If a battery is installed then the average home could be run completely off-grid. The average annual electricity bill is **£699.00**
- Saving per year without battery - **£240.00**
- Saving per year with battery - **£699.00**
- As well as the cost saving having solar panels installed will lower the homeowner's carbon footprint!

End of Life

- When the solar panels need to be disposed of companies can collect will arrange to collect them for free. Cost - **£0.00**.
- As well as this the majority of the materials used to make can be reused to make new solar panels or recycled.
- If solar panels are installed it will take nearly **21 years** for the installation of solar panels to break even.
- If solar panels and a battery is installed it will take nearly **18 years** for the investment to break even



Bibliography

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