## EXAMPLE PV FINANCIAL REPORT

## GENERATION

The system is expected to generate 5074 kWh per year initially, decreasing gradually as the solar cells degrade. Over the 25 year term of this financial projection the total generation is expected to be 119224 kwh , of which 61062

## NET PRESENT VALUE

The total present value of future benefits and costs, using a discount rate of $4 \%$ per year, is $£ 36,944.08$. The cost of the PV system is $£ 9,999.00$. The net present value of the project is therefore $£ 26,945.08$. A positive net present value is a good indication that the project is financially worthwhile.

## IRR

The Internal Rate of Return is a useful measure for comparing the relative profitability of investments.

## DISCLAIMER

Our financial model calculates the benefits of a solar PV installation (such as savings in electricity, or payments for exported electricity) and costs (the initial purchase cost, and any future maintenance costs if entered), over the projected lifespan of the system. Values are corrected for inflation, system degradation, and discount rate - a measure that accounts for the fact that a promise of a monetary sum in the distant future is usually considered less valuable than the promise of the same sum in the near future.

A model is only as accurate as the assumptions it makes. You should consider whether the values chosen are appropriate for your situation. There are many variables that dictate the financial return of a solar installation and we cannot forecast how they may change in the future. This financial projection shows a likely scenario for future financial returns. Actual returns may vary significantly from this forecast.

## ASSUMPTIONS

| Inflation rate | $\mathbf{5 \%}$ |
| :--- | :--- |
| Cost of electricity | $£ 0.5 / \mathrm{kWh}$ <br> increases with inflation |
| System size | 5.6 kWp <br> degrades at $0.5 \%$ per year |
| Discount rate | $\mathbf{4 \%}$ |
| Projection length | $\mathbf{2 5}$ years |

## INCOME AND SAVINGS

The projected income from the system over the project lifetime in payments for generated and exported electricity, along with electricity savings, are shown in the table and graph below.

These figures assume an inflation rate of 5 percent.

## TOTAL EXPORT PAYMENTS

OVER 25 YEARS

## $£ 5620$

## ELECTRICITY SAVINGS

OVER 25 YeARS


EXPORT
PAYMENTS

| Year 1 | 127 | 1329 | 1455 |
| :---: | :---: | :---: | :---: |
| Year 2 | 132 | 1388 | 1520 |
| Year 3 | 138 | 1450 | 1588 |
| Year 4 | 144 | 1515 | 1659 |
| Year 5 | 151 | 1583 | 1734 |
| Year 6 | 158 | 1654 | 1811 |
| Year 7 | 165 | 1728 | 1892 |
| Year 8 | 172 | 1805 | 1977 |
| Year 9 | 180 | 1886 | 2065 |
| Year 10 | 188 | 1970 | 2158 |
| Year 11 | 196 | 2058 | 2254 |
| Year 12 | 205 | 2150 | 2355 |
| Year 13 | 214 | 2247 | 2461 |
| Year 14 | 224 | 2347 | 2571 |
| Year 15 | 234 | 2452 | 2686 |
| Year 16 | 244 | 2562 | 2806 |
| Year 17 | 255 | 2676 | 2931 |
| Year 18 | 266 | 2796 | 3063 |
| Year 19 | 278 | 2921 | 3200 |
| Year 20 | 291 | 3052 | 3343 |
| Year 21 | 304 | 3189 | 3492 |
| Year 22 | 317 | 3331 | 3649 |
| Year 23 | 332 | 3480 | 3812 |
| Year 24 | 346 | 3636 | 3983 |
| Year 25 | 362 | 3799 | 4161 |



## THE BOTTOM LINE

The table and graph below show the discounted costs for the project (including the initial capital required for the installation), against the total discounted benefits from income and savings on electricity bills.

The system pays for itself in 7 years.

|  | dISCOUNTED benefits | cumulative BENEFITS | $\begin{aligned} & \text { DISCOUNTED } \\ & \text { COSTS } \end{aligned}$ | cumulative costs | ASHFLOW |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year 1 | 1426 | 1426 | 0 | 9999 | 1455 |
| Year 2 | 1430 | 2856 | 0 | 9999 | 1520 |
| Year 3 | 1434 | 4291 | 0 | 9999 | 1588 |
| Year 4 | 1439 | 5729 | 0 | 9999 | 1659 |
| Year 5 | 1443 | 7172 | 0 | 9999 | 1734 |
| Year 6 | 1447 | 8619 | 0 | 9999 | 1811 |
| Year 7 | 1451 | 10071 | 0 | 9999 | 1892 |
| Year 8 | 1456 | 11526 | 0 | 9999 | 1977 |
| Year 9 | 1460 | 12987 | 0 | 9999 | 2065 |
| Year 10 | 1464 | 14451 | 0 | 9999 | 2158 |
| Year 11 | 1469 | 15920 | 0 | 9999 | 2254 |
| Year 12 | 1473 | 17393 | 0 | 9999 | 2355 |
| Year 13 | 1477 | 18870 | 0 | 9999 | 2461 |
| Year 14 | 1482 | 20352 | 0 | 9999 | 2571 |
| Year 15 | 1486 | 21838 | 0 | 9999 | 2686 |
| Year 16 | 1491 | 23329 | 0 | 9999 | 2806 |
| Year 17 | 1495 | 24824 | 0 | 9999 | 2931 |
| Year 18 | 1499 | 26323 | 0 | 9999 | 3063 |
| Year 19 | 1504 | 27827 | 0 | 9999 | 3200 |
| Year 20 | 1508 | 29335 | 0 | 9999 | 3343 |
| Year 21 | 1513 | 30848 | 0 | 9999 | 3492 |
| Year 22 | 1517 | 32365 | 0 | 9999 | 3649 |
| Year 23 | 1522 | 33887 | 0 | 9999 | 3812 |
| Year 24 | 1526 | 35413 | 0 | 9999 | 3983 |
| Year 25 | 1531 | 36944 | 0 | 9999 | 4161 |



