Why do some of the financial savings appear to be different on the Customer Proposal and Easy PV Project Report?

Easy PV uses two different methods of calculating financial savings.

1) We do a basic calculation to work out a headline **year one/first year saving** figure that can be used on proposal summaries, etc. This calculation doesn't take into account inflation or degradation rate.

2) We calculate a **financial forecast** showing payback for a longer period (25 years by default). This takes into account inflation, degradation, and discount rates. In the first year, we apply half the % values for each of these rates rather than the full % value. If you're wondering why we use half the % values for the first year, please see below for an explanation.

Further information

When you pay for a PV install you do so in a lump sum on day 0. You then start getting savings and export income from it. But by the end of the first year, monetary values have risen by inflation. So if you were saving £100 / month for electricity on day 0, by the end of the year - day 365 - you are saving £104 / month if the inflation rate is 4%.

When working out the savings for year 1 therefore, we need to work out the average for the year. If savings were £100/month at the beginning, and £104/month at the end the average is £102/month. So for that first year, we use half the inflation value to work out the average savings.

For year two, we again need to use the average value of money over the course of the year. This will have increased by the value of inflation from the value that we used for year one. Basically we are comparing the value of money at 6 months to the value at 18 months. So £102 for year one becomes £106.08 (£102 * 1.04) if the inflation rate is 4%.

It's exactly the same with degradation. On day zero the panels are generating at 100%. By day 365 they have degraded slightly. With degradation of 1% a year we would expect them to be at 99% capacity. The expected *average* generation for the year is halfway between those two values, so we use 99.5% for year one rather than 99%.