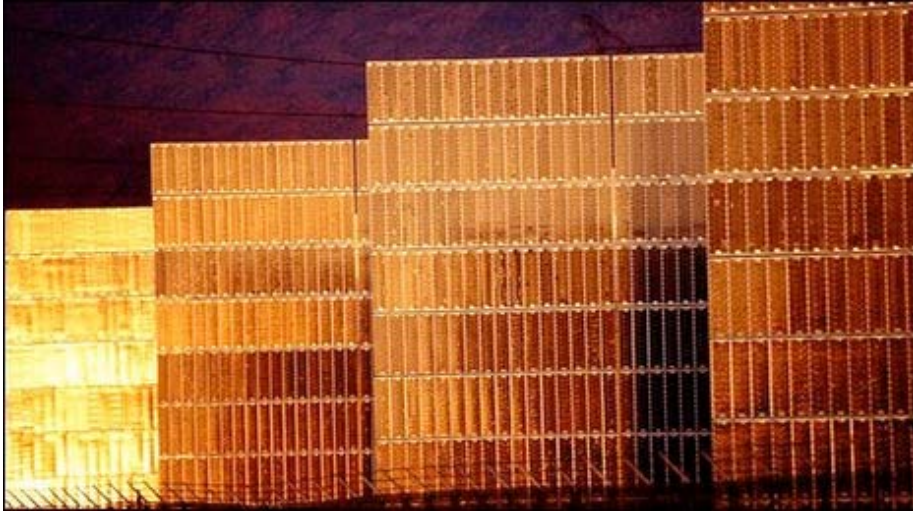


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Solar panel costs 'set to fall'

By Roger Harrabin

Environment analyst, BBC News



The fall in cost is due to the increased lifetime, the institute says

The cost of installing and owning solar panels will fall even faster than expected according to new research.

Tests show that 90% of existing solar panels last for 30 years, instead of the predicted 20 years.

According to the independent EU Energy Institute, this brings down the lifetime cost.

The institute says the panels are such a good long-term investment that banks should offer mortgages on them like they do on homes.

At a conference, the institute forecast that solar panels would be cost-competitive with energy from the grid for half the homes in Europe by 2020 - without a subsidy.

“ Basically everything (in the industry) is bound to grow still further. Growing further means less cost ”

Heinz Ossenbrink, EU Energy Institute

Incentive programmes for solar panels in Germany, Italy and Spain have created manufacturing volume that's bringing down costs. Solar panel prices dropped 30% last year alone due to an increase in output and a drop in orders because of the recession.

But Heinz Ossenbrink, who works at the institute, said China had underpinned its solar industry with a big solar domestic programme which would keep prices falling. There are large-scale solar plans in the US and India too.

Panels had been expected to last for 20 years and price calculations were based on this (with

a free energy source, purchase and installation represent almost the entire price of solar power).

But Dr Ossenbrink says the institute's laboratory has been subjecting the cells to the sort of accelerated ageing through extremes of heat, cold and humidity that has long been a benchmark for the car industry.

Long lifetime

It has shown that more than 90% of the panels on the market 10 years ago are capable of still performing well after 30 years of life, albeit with a slight drop in performance.

Dr Ossenbrink says 40-year panels will be on the market soon.

A key goal for solar is what is known as grid parity. That is the point when it is as cheap for someone to generate power on their homes as it is to buy it from the grid.

It varies from country to country depending on electricity prices, but the institute estimates that Italy - which has a combination of sunny weather and relatively high electricity prices - should reach grid parity next year. Half of Europe should be enjoying grid parity by 2020, it estimates.

Cloudy northern countries like the UK could wait further, possibly up to 2030. But the day would come when solar panels on homes would be cost-competitive without a subsidy, even in Britain.

Dr Ossenbrink says: "Basically everything (in the industry) is bound to grow still further. Growing further means less cost. Less cost means grid parity."

"We have been surprised in the past five years at the drop in prices. It's due to good incentive programmes first in Germany then Spain and Italy. That created a kind of a boom that was helping industry to reduce costs and get into profitability. And when an industry is in profit it drives on its own."

Owning solar

Professor Wim Sinke, from Utrecht University in the Netherlands, who leads the solar umbrella group the European Photovoltaic Technology Platform, says the industry has even greater ambitions.

"The target of the sector as a whole is to reach grid parity in almost all of Europe over the next 10 years. So by 2020 we should have grid parity in most of Europe," he told BBC News.

Key sticking points for domestic solar, he said, would be the lack of flexibility in electricity grids to take in surplus generated energy and difficulties with finance.

Dr Ossenbrink said: "What I would like to see is the finance sector saying solar power is a product like financing a house - except they can predict the value of the solar panel much more safely than they can predict the value of the house in a volatile market.

"Electricity will never be given away free. Banks should offer mortgages on people's solar

panels like they do on homes - the bank should own the panel, then it would transfer to the householder when the loan has been paid off. It would be perfect for life assurances."

It will take much longer for solar to match fossil fuel power at the point of generation, the institute says, as wholesale electricity prices are much lower than retail prices.