

Innovation: designing for a sustainable future

What makes customers choose a green tariff?

Narrator

Green power forms part of everybody's electricity bill.

All electricity suppliers must now purchase a small but growing percentage of electricity from renewable energy sources.

Some green power already comes from well-established hydroelectric schemes, but wind farms are increasingly adding green capacity to the electricity grid. Biomass and biogas projects are also being used the meet this Obligation.

But some companies are encouraging additional development of renewable sources by offering customers products known as green tariffs.

Deborah Glass-Woodin

I'm on a green tariff because I believe we are using up fossil fuels too rapidly, I believe that we ought to be encouraging investment in solar and wind energy and by leading by example hopefully I can show that that is the way of the future for energy production.

Alyson Duckmanton

It's fundamentally important, climate change is our biggest problem that we've got in the world today, it affects us all and will affect future generations. So it's, it's my job to do what I can to invest in renewable energy.

Narrator

Signing up to a green supply tariff means your electricity is generated exclusively from renewable sources. The supply companies guarantee that for every unit supplied, the same amount of electricity is generated from a green supply.

Juliet Davenport

Now what we promise to do for every customer that signs up to us is to bring the same amount of renewable energy from individual power stations across the UK and put those onto the national grid, so for every unit that our customers use and for every new customer we have to find more and more renewable energy.

We also put money back essentially through the government mechanism back into the market so that the market will effect more renewable power, and for that peace of mind customers pay essentially between two to three pounds a month extra, now that's on an average home. If you've got a bigger home it's slightly more, if you've got a smaller one it's slightly less.

Narrator

Most green tariffs involve the supply company charging a small premium. Some then invest the money directly in new renewable energy projects.

Alyson Duckmanton

The tariff I'm on is investing customers' money in building new wind turbines. It makes me feel better that my bill is going towards something that is going to be invested for future generations.

Deborah Glass-Woodin

They are investing in alternative means of producing energy so they are encouraging the use of wind farms not just for domestic use but for industry as well which is obviously is really the way forward.

Domestic users don't account for the largest carbon dioxide emissions, its industry that we have to be encouraging to show the way by investing in renewables, and so my little bit of money enables this production company to encourage others to do the same.

Narrator

Some of the Investment in wind is in large-scale projects.

This single turbine in the market town of Swaffham was partly funded by one of the green supply companies – Eco-tricity.

Green tariffs also provide funding for smaller scale installations.

These photovoltaic panels are the main source of electrical power for an urban eco-centre, but they can also export electricity back to the grid.

Juliet Davenport

The other side of what we do, one of the things that some of customers had wanted to go one step further from just purchasing renewable energy, which is obviously a very good first step, but they've gone one step further and installed their own renewable power in their homes.

Narrator

Good Energy currently purchase energy from about 150 so-called micro-generators who have invested in wind, photovoltaic or micro hydroelectric technologies.

It's not just individual households that are signing up to green tariffs.

The University of Oxford is the 7th largest purchaser of green electricity in Europe.

Brenda Boardman

We're actually a huge purchaser and we went for a contract to renew our electricity supplier and asked for various options, various percentage mixes of green, and as a result of that we found that in fact the cheapest option originally in the first contract was all green electricity, so it was a very easy decision.

Narrator

With strong student support, they are sticking with green electricity even though the tariff from their current supplier is slightly more expensive than electricity generated from conventional power stations.

Brenda Boardman

What it means is that the University of Oxford is able to say that we are taking responsibility for our environmental impact and our electricity purchases, and we are buying green electricity, it's mainly hydroelectricity that we buy, we buy electricity that is carbon free so for a large part of our environmental footprint we are trying to take responsibility, we are in fact taking responsibility.

Narrator

Electricity supply is a competitive market, and customers are becoming increasingly aware of environmental issues as well as price.

Kaihsu Tai

Originally I was with a company which is a big company but has different parts, some of them fossil-fuel based and some of them are actually renewable based and then I switched to a smaller company which has mostly renewables but they are not doing a lot of investment in creating new renewable sources, and finally now I am on a tariff that is both totally renewable and also the company is investing, re-investing in creating new sources of renewable energy.

Narrator

Green tariffs are attracting a growing number of customers who have decided to put the environment first.

Deborah Glass-Woodin

I can't think of any circumstances under which I'd come off a green tariff. I might change to a different one if I felt that not 100% of the money was being invested in renewables. That's what I like about the tariff I'm actually on that they are investing the money in the energy production of the future.

Alyson Duckmanton

I'd like to see a move away from conventional generation of electricity and I'd like to see all tariffs go to 100% renewable energy.

Kaihsu Tai

I'm actually thinking of investing in some of these companies that are creating new renewable sources of energy because I think it's not just enough to buy up old hydropower plants and selling that as green power. If we really want to replace fossil fuel as our source of energy, I think we need to create more sources of renewable energy and increase the fraction of the energy mix.