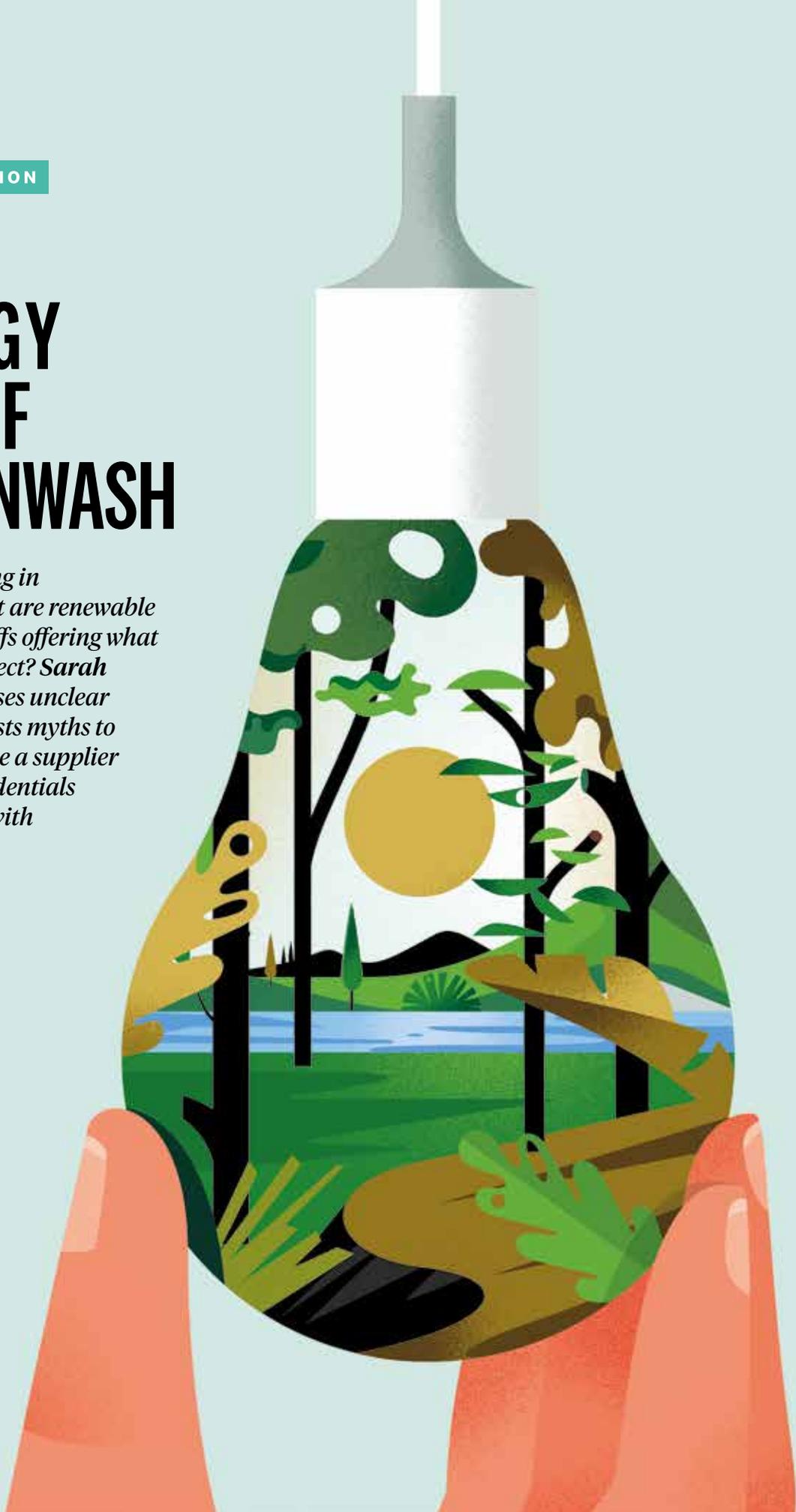


INVESTIGATION

THE ENERGY TARIFF GREENWASH

They're growing in popularity, but are renewable electricity tariffs offering what customers expect? Sarah Ingrams exposes unclear claims and busts myths to help you choose a supplier with green credentials you're happy with



If you're attracted to the idea of a renewable energy tariff to do your bit for the environment, a quick comparison suggests you've got plenty of choice. When we analysed the 355 tariffs on the market, more than half claimed renewable electricity credentials. Three years ago it was just 9%. The cheapest will cost you around £500 less than the priciest, per year. But you may be shocked to find out the differences between them.

In a survey of almost 4,000 people in late 2018, a third told us that if an energy tariff is marked 'green' or 'renewable', they expect that 100% renewable electricity is supplied to their home. Another 19% believed that the supplier generates some or all of the renewable electricity it sells.

But these expectations give most energy firms more credit than they deserve. A few do build and generate renewable power, but most merely buy certificates to show that renewable electricity has been put into the grid – although not by them. And it's staggeringly cheap and easy to do: companies can buy certificates to match the annual usage of a typical household for as little as £1.55. What's more, we've found that marketing messages do little to dispel misunderstanding or clarify what terms such as 'green' and 'renewable' actually mean.

Myth-busting

The truth is that the electricity you use to power your appliances is the same as your neighbour's, regardless of the tariff you're on (see right). It's not technically possible to direct 'renewable' electrons to certain homes and those from non-renewable sources to others.

But this isn't widely understood, and energy firms aren't helping: we called seven whose websites were unclear about how their renewable tariffs actually work, posing as a potential customer – four said we'd get renewable electricity directly to our home. One of these said they 'buy it in advance from suppliers and then redistribute

it through the lines to your property' – at best an example of staff ignorance.

Unclear claims

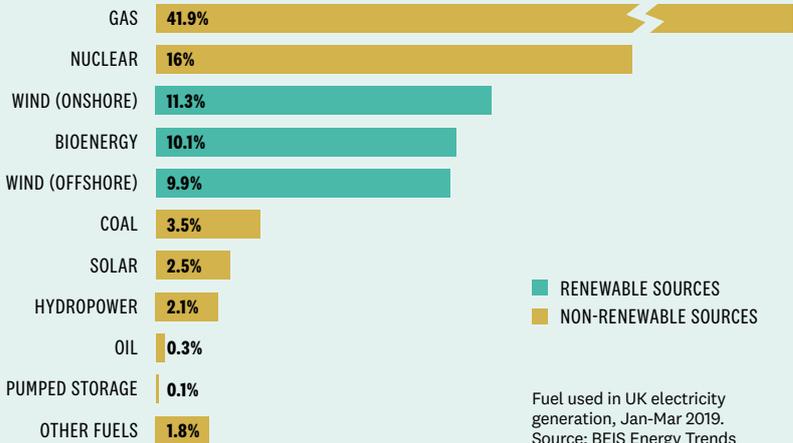
Myths aside, there are big differences in what companies do to support renewable generation but it's not always clear from their websites. When Good Energy states 'we match the power you use in a year with electricity generated from sun, wind and water', it means it buys electricity directly from renewable generators to match customer use for 90% of half-hour units throughout the year. But similar-sounding claims from others don't mean the same thing.

Most of us now switch energy supplier via a price comparison website, but these are adding to the confusion with options for 'green' or 'renewable' plans whose definitions vary. ➔➔

THE ELECTRICITY YOU USE TO POWER YOUR APPLIANCES IS THE SAME AS YOUR NEIGHBOUR'S, REGARDLESS OF THE TARIFF YOU'RE ON

THE MIX OF ELECTRICITY SENT TO YOUR HOME

It simply isn't possible to get renewable electricity delivered directly to your home from the grid, despite claims. Electricity is generated from a variety of sources (shown below), including 35.9% from renewables, according to the government's latest figures, but it's all mixed together through the National Grid, the company that runs the distribution network for electricity. Energy firms can't determine what arrives at your property. The only way to do this is to connect directly to a generator, such as solar panels on your roof.



Fuel used in UK electricity generation, Jan-Mar 2019. Source: BEIS Energy Trends

ILLUSTRATION: NATHALIE LEES

Shades of green

➔ Although many tariffs made renewable claims, just four firms said they own renewable generation (eg wind or solar farms). Six have parent companies that do. Around 15 buy some or all renewable electricity directly from generators using contracts called Power Purchase Agreements (PPAs). Ofgem says these 'provide a source of income to renewable generators that lets them be financially viable'.

Others buy from the wholesale market and buy certificates, called Renewable Energy Guarantees of Origin (REGO), to match renewable electricity already put into the system to what customers use. For every megawatt hour (MWh) of renewable power put in the grid, one REGO is issued to the generator.

Energy firms buy them to show the proportion of renewable electricity they sell. Some buy them alongside renewable power directly from a generator, while others buy them separately, after they've bought electricity for customers.

To help you find a supplier whose approach to renewables suits you, we've divided the firms and tariffs we found (see table, p23) into three broad categories:

■ **Dark green:** those that consistently generate enough renewable electricity themselves to match customer use, or buy the equivalent directly from generators.

■ **Mid green:** those that generate some renewable electricity or buy directly from generators – but this only accounts for a proportion of the energy they supply, or they've only started doing this recently.

■ **Pale green:** those that don't exclusively offer 100% renewable tariffs or that neither generate renewable electricity nor buy any directly from generators. They buy electricity on the wholesale market and purchase REGO certificates to match their customers' use.

A REGO costs around 30-50p per MWh of electricity, according to energy consultancy Cornwall Insight. If a customer uses around 3.1MWh in a year, it could cost a firm just £1.55 to say a customer's tariff is 100% renewable.

Renewable transformations?

When First Utility rebranded as Shell Energy in March 2019, it said that all customers now got 100% renewable electricity at no extra cost. First Utility's fuel mix was just 3.7% renewable. So how did it do it?

£1.55 - THE COST FOR A COMPANY TO SAY A MEDIUM-USE ENERGY CUSTOMER'S TARIFF IS RENEWABLE

Shell Energy said: 'As First Utility we bought no REGO certificates. Since our rebrand ... we've been purchasing REGO certificates to match all our customers' usage in addition to some PPA agreements.' Shell Energy declined to tell us how much it buys via PPA.

Other companies sell both 100% renewable tariffs and other tariffs without this claim. Npower says that those on its renewable tariff get 100% renewable electricity (backed by REGOs) while its other customers get 2% renewable electricity. British Gas, Green Network Energy and Ovo, among others, also don't exclusively sell 100% renewable electricity tariffs. So, while some customers are allocated clean power – others aren't.

GREEN CLAIMS THAT COULD LEAD YOU ASTRAY

What companies say and what that really means



It says: 'Electricity supplied to your home [is] 100% green.'

Reality: As shown in the graph on p21, no supplier can guarantee this. Foxglove Energy told us that it doesn't own any renewable generation and buys REGO certificates for each unit of electricity bought for customers.



It says: 'We sourced all of the electricity we supplied from renewable generators, including more than half from hydroelectric generators and a large proportion from wind.'

Reality: It's a retail supplier that doesn't own hydroelectric generators or wind farms. It has no PPAs to buy directly from them either. It buys REGOs.



It says: 'Our customers vote for either wind, solar, hydro, biomass or tidal. We'll then make agreements to source our energy according to each share of the votes.'

Reality: It doesn't have direct agreements with renewable generators to buy power. It buys REGOs to match customer use in line with votes.



WHO CAN YOU REALLY TRUST?

SARAH INGRAMS, WHICH? SENIOR RESEARCHER

If you want to be confident you're helping increase the amount of new renewable electricity generated, pick a 'dark green' supplier.

For example, Ecotricity uses its customers' bills to finance building new sources of renewable energy. Good Energy sets up contracts with small generators (such as farmers with a field of solar panels) who might otherwise struggle to get a good price for their power. Plus it uses high-tech forecasting to ensure it knows exactly how much power its generators are feeding into the grid, and buy enough renewable power to meet customers' use.

But the tariffs from these suppliers are among the most expensive. Energy regulator Ofgem recognised the cost when it exempted Ecotricity, Good Energy and Green Energy UK (which isn't categorised here as it refused to answer our questions) from the price

cap on standard tariffs. It found that their higher prices are directly due to the support they give to generating renewable electricity.

Others, such as Bulb and Octopus (mid green), have some direct contracts but are also keen to keep prices down. Octopus' blog explains it wants to 'hit that sweet spot between what's good for the planet and good for your wallet'.

Illusion of greenness

But 'pale green' companies selling '100% renewable' power backed exclusively by REGO certificates 'give the illusion of greenness to customers which can be misleading', says Dale Vince, Ecotricity's founder. 'When people buy these tariffs we think they expect something additional to happen'. Good Energy's regulation and compliance manager, Tom Seward, said firms buying only REGOs 'haven't faced any of the costs of doing it [supplying renewable power] properly'. Their tariffs look 'like something we spend a huge amount of time on [to try to] create a more renewable energy system'.

While firms aren't doing anything wrong according to Ofgem rules, we don't think the rules are clear enough to avoid confusion and help customers make an informed decision.

YOUR TARIFF'S GREEN CREDENTIALS

We've compared companies selling '100% renewable' electricity tariffs, using our dark/mid/pale green categories to help you pick a supplier whose renewable credentials you're happy with.

- Consistently generate/buy enough renewable electricity direct from generators (only Ecotricity and Good Energy qualify here)
- Generate/buy some renewable electricity direct from generators
- Don't exclusively offer 100% renewable tariffs or don't generate/buy renewable electricity

Company	Only 100% renewable electricity tariffs?	% of electricity that's renewable (overall)	Own renewable generator?	Buy's renewable electricity direct from generators?
Bristol Energy		79%	No	✓ (51%)
British Gas		43%	No ^a	✓ (15%)
Bulb	✓	100%	No	✓ (20%)
Co-operative Energy	✓	100%	No	✓ (8.5%)
Ecotricity	✓	100%	✓	✓ (c.75%)
Engie	✓	100% ^b	✓	✓
Eon	✓	16.7% ^c	✓	✓
Flow (supplied by Co-operative Energy)	✓	25.77% ^d	No	✓
Foxglove Energy	✓	100%	No	✓
Good Energy	✓	100%	✓	✓ (122%) ^e
Green Energy	✓	100%	f	f
Green Network Energy		23.6%	f	f
Green Star Energy	✓	100%	No	
iSupply Energy	✓	24.2%	No ^a	✓ (1%)
Npower		18.7%	No ^a	✓
Octopus Energy	✓	100%	No ^a	✓ (<10%)
Ovo Energy		42.9%	No	
Pure Planet	✓	100%	No	
Robin Hood Energy	✓	2.6% ^g	No	
Sainsbury's Energy (supplied by Npower)	✓	18.7%	No ^a	✓
Shell Energy	✓	3.7% ^h	No ^a	✓
So Energy	✓	100%	No	
Tonik Energy	✓	100%	No	
Yorkshire Energy	✓	100%	No	

Inclusion based on an Energylinx snapshot in June 2019 of direct debit tariffs with paperless bills. Sub-brands of Co-operative Energy (GB Energy Supply), Engie (Qwest Energy), Foxglove Energy (Economy 7 Energy, Outfox the Market), Ovo (Energy SW, Southend Energy) and Robin Hood (Angelic Energy, Beam Energy, Citizen Energy, Ebico, Fosse Energy, Great North Energy, Leccy, Ram Energy) aren't included separately where their data is the same. % renewable electricity based on the latest fuel mix disclosure on the company's website (April 2017–March 2018), plus changes where we are aware. **a** No but parent company does. **b** Engie's overall fuel mix is 34% renewable, but the majority of its customers are non-domestic. **c** 100% from July 2019. **d** New customers get 100% renewable electricity; existing ones get 50%. **e** Totals more than 100% as it provides a surplus in case a generator has a problem. **f** No information supplied. **g** 85% from July 2019. **h** 100% from March 2019.

