



FUEL MIX DISCLOSURES

IS YOUR ENERGY SUPPLY REALLY AS CLEAN AS YOU THINK IT IS?

SQUEAKY

INTRODUCTION

THE IMPORTANCE OF UNDERSTANDING YOUR ENERGY SUPPLY

Powering your organisation with clean energy is one of the most important actions you can take to move towards net zero.

This guide is designed to give you the tools you need to dig deeper into your organisation's true source of energy, and indeed, how clean it really is.

We will take a look at the key data and information available to you and suggest steps you can take to examine your supplier's energy supply so you can make informed decisions about the energy you are buying.

In this guide, you will learn all about Fuel Mix Disclosures; why they matter, and what the limitations are. You will also see how suppliers demonstrate their renewable energy supply and learn how to dig deeper into your supplier's energy supply. For ease, we've also provided the most recent clean energy data for key UK Industrial and Commercial (I&C) energy suppliers.

Let's get started.

Contents

What is a Fuel Mix Disclosure?	3
Limitations of the Fuel Mix Disclosure	4-7
How renewable energy is verified for the Fuel Mix Disclosure	8-9
How to get to grips with your energy supply	10-13
Conclusion	14

WHAT IS A FUEL MIX DISCLOSURE?



A Fuel Mix Disclosure (FMD) is a piece of statutory reporting which each and every UK licensed electricity supplier must produce annually as part of the conditions of holding a standard electricity license (known as SLC).

The FMD was introduced in 2005 with the aim of helping customers (whether domestic or commercial), know the makeup of the power they are buying. Suppliers must disclose this information to Ofgem each year by 1 October for the previous annual supply period (1 April to 31 March).

The FMD is a high-level overview of each published on their website.

LIMITATIONS OF THE FUEL MIX DISCLOSURE

Why does the Fuel Mix Disclosure matter?

If your business is concerned about its environmental impact, it is likely you will have chosen a 'green' energy tariff.

The FMD matters because it is the key piece of easily available information which tells you about the makeup of the power you are buying and helps you make more informed choices on your path to net zero.

Does my supplier's Fuel Mix Disclosure tell me everything I need to know about my energy makeup?

Sadly not.

The FMD is an important tool, but in our opinion, it just does not go far enough. And there are a few reasons why.

Read on to find out more.

3 main problems with the Fuel Mix Disclosure

It is not specific enough

The FMD only breaks energy sources into five categories.

1. Coal
2. Gas
3. Nuclear
4. Renewable
5. Other

So, essentially – fossil fuel, nuclear and renewable. But unfortunately, 'renewable' in this context is something of a catch-all term and covers a wide range of energy sources.

Not all renewable energy is clean

The term renewable doesn't necessarily mean non-polluting, sustainable or carbon neutral. For the purposes of the FMD, 'renewable' includes, not only clean sources (wind, solar, water, hydro and tidal), but energy sourced from a range of 'brown' sources too, including biomass, landfill gas, sewage gas and biogas.

Unfortunately, when one reads the term 'renewable energy' most of us tend to think of wind, solar and hydro power sources. But there's a good chance your 'renewable' energy tariff is actually being powered by 'brown' sources. This will come as a surprise to many.

But what do we mean by this?

Some suppliers use the word 'renewable' to disguise the fact that their energy source isn't in fact, clean. One good example is imported biomass. The UK government considers biomass to be a renewable energy since the biomass pellets are made from trees. But when you consider that burning biomass creates just as much CO2 as burning coal and the fact that all of those pellets are manufactured outside of the UK, often in places as far away as in North and South America, and given they are then shipped to the UK by fuel-powered boats, that so called green energy starts to look an awful lot browner.

What is 'clean energy'?

Genuinely clean energy translates as energy derived from natural, non-polluting resources that are capable of being replenished on a short timescale, such as wind, solar, geothermal, wave, tidal and hydropower.



Renewable energy certificates can disguise dirty energy

For every unit of renewable electricity generated in the UK, Ofgem issues a **Renewable Energy Guarantee of Origin (REGO)**.

A REGO is a certificate of proof issued to the organisation that generates the renewable energy (e.g. a wind farm or solar park) to show that the energy produced is renewable.

The REGO scheme was put into place to provide transparency to consumers and businesses about the proportion of electricity that suppliers source from renewable generation. The REGOs are submitted as part of a supplier's FMD to demonstrate the renewable credentials of its energy.

In total, UK suppliers submitted 103 TWh of REGOs for their 2020-2021 Fuel Mix Disclosures. This accounts for approximately 31.4% of overall electricity supply in that period. Later in this document we will explain how to check your supplier's REGO position.

However, there is a loophole which means REGOs can be bought on their own. This means that an energy supplier can buy a REGO without needing to buy the renewable energy itself.

For example: a supplier can purchase fossil-fuel generated power, like coal or gas, combine it with a REGO, and then claim it is renewable.

The best way to ensure you are buying genuinely clean energy is to choose a supplier which only supplies genuinely clean energy, alongside matching clean energy REGOs.



Not all REGOs are clean

It is also worth noting that, as mentioned above, REGOs are a broad-brush approach to a very granular issue.

REGOs are issued for all renewable generation – not just sources which you would think of as clean.



Suppliers can buy EU renewable energy certificates which do not contribute to the UK's energy transition

In recent years there has been a sharp rise in suppliers buying **European Guarantees of Origin – known as GOs or GoOs**. Indeed, energy suppliers in the UK submitted more than 64.4 TWh of European GOs, in the 2020-21 FMD period. This accounts for approximately 19.7% of overall electricity supply in that period. Later in this document we will explain how to check your supplier's EU GO position.

For those who may not be aware, a GO is the European counterpart of the UK's REGO scheme. GOs can be submitted to Ofgem alongside – or instead of – REGOs for the FMD.

There are multiple downsides to GOs.

To start with, not only may the suppliers be obfuscating the source of their power and then selling to you as renewable, but they are also charging customers (you) a premium for doing so. This doesn't seem fair as they are actually cutting costs by using GOs as this reduces the amount they must pay into the UK's Feed in Tariff scheme. This is (in our opinion) not only ethically wrong, but suppliers doing this are undermining the UK's support scheme for renewables.

To add further frustration to this, as a direct result of Brexit, we can import GOs to the UK, but we can't export REGOs.

In short, there are layers upon layers of reasons why GOs should be avoided.

Not all GOs are clean, and GOs do not contribute to the UK's net zero pledge

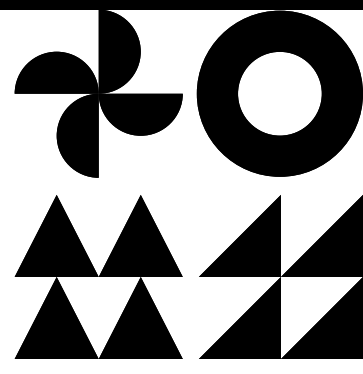
Like REGOs, GOs are also issued for the whole range of renewable energy generation – not just clean sources.

We'll explain how you can check your supplier's REGO and GO purchases shortly.

The key issues:

- Your renewable tariff may not be clean;
- Your supplier may be failing to buy REGOs (which contribute to the UK's clean energy transition) and are instead buying GOs;
- There is a lack of transparency and granularity of data.





HOW RENEWABLE ENERGY IS VERIFIED FOR THE FUEL MIX DISCLOSURE

Each year suppliers submit their annual Fuel Mix Disclosure data to Ofgem for the previous supply year (1 April-31 March).

For every MWh of energy labelled as renewable energy, either a UK REGO or an EU GO must be submitted to Ofgem.

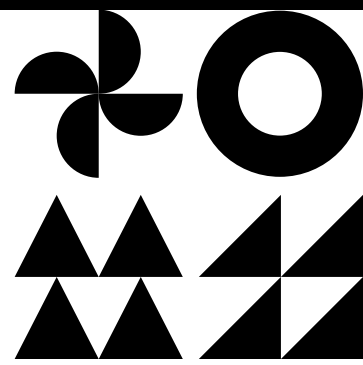
A UK REGO is a certificate of proof issued to the organisation generating the renewable energy (e.g. a wind farm or solar park) to show that the energy produced is renewable.

An EU GO is the EU equivalent for energy produced outside of the UK. EU GOs can be applied to UK supply, but have multiple downsides, including the fact they do not contribute to the UK's clean energy transition.

It is important to remember that both REGOs and GOs can be bought on their own and packaged with fossil fuel energy which is then badged as 'renewable'.

See pages 6-7 for a more detailed explanation of REGOs and GOs.





HOW TO GET TO GRIPS WITH YOUR ENERGY SUPPLY

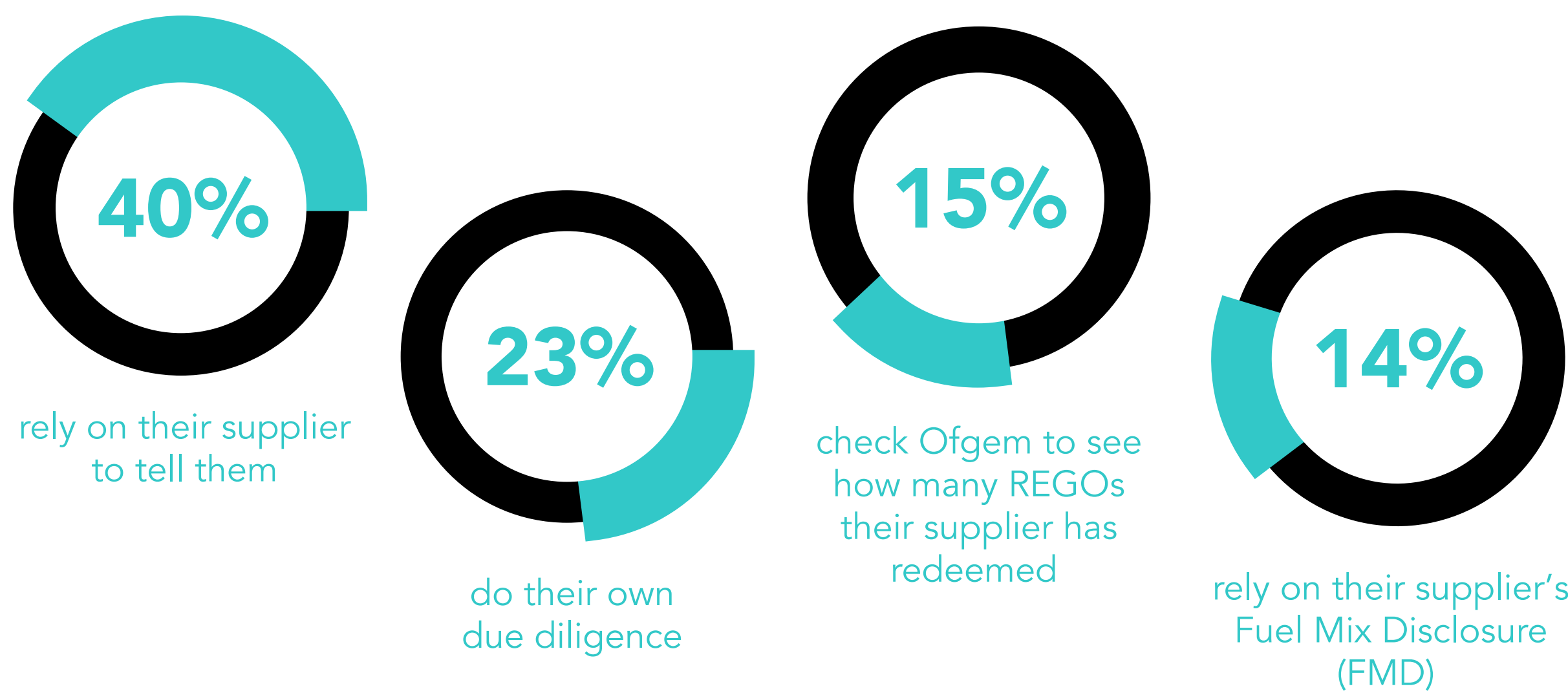
Going beyond the Fuel Mix Disclosure

In our recent survey of 250 sustainability and energy managers who work at FTSE250 and equivalent size companies, we asked them “What do you rely on to ensure your supplier is providing you with the energy they say they are?”

40% of respondents said they simply rely on their supplier to tell them, whilst 14% said they rely on the FMD of their supplier.

Only 15% of sustainability and energy managers at some of the UK’s biggest companies look up how many REGOs their supplier has requested - information which can be found on the Ofgem website.

How do sustainability and energy managers clarify the source of their energy?



To really get to grips with the source of your energy, you need to dig a little deeper. Information really is power.

The next part of our guide will walk you through how to get to the bottom of your energy supply.

By not understanding the true source of your power, you could be falling foul to greenwashing – albeit inadvertently.



Compare your supplier’s Fuel Mix Disclosure to other suppliers

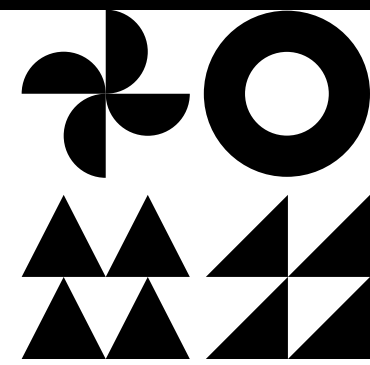
This first step is easy. You simply need to navigate to your supplier’s website and take a look at their FMD. This will immediately tell you if there are obvious fossil fuels in your energy supply.

To make things even easier though, we have compiled a table of the UK’s key I&C suppliers’ FMDs for the last available reporting period (1 April 2020-31 March 2021) below.

Fuel Mix Disclosures of key UK I&C suppliers 2020-2021

Company	Coal (%)	Gas (%)	Nuclear (%)	Renewable (%)	Other (%)	Carbon CO2 Emissions (g/kWh)	Radioactive Waste (g/kWh)
British Gas	0.0	0.0	25.0	75.0	0.0	0.00	0.001800
Bryt Energy	0.0	0.0	0.0	100.0	0.0	0.00	0.000000
Drax (also incorporates Haven)	0.0	0.0	0.0	100.0*	0.0	0.00	0.000000
E.ON	3.5	43.5	5.7	43.7	3.6	35.00 (coal) 165.00 (gas)	0.001000
EDF	1.3	7.5	62.1	29.0	0.1	42.00	0.004300
Engie	3.0	31.0	4.0	60.0	3.0	163.58	0.000286
Npower	4.2	52.6	6.9	31.9	4.4	277.00	0.000500
Shell	0.0	0.0	0.0	100.0	0.0	0.00	0.000000
SmartestEnergy	2.1	26.1	3.4	66.2	2.2	138.00	0.000000
Squeaky	0.0	0.0	0.0	100.0**	0.0	0.00	0.000000
SSE	0.0	40.0	0.0	55.0	5.0	193.00	0.000000
TotalEnergies	3.0	39.0	5.0	50.0	3.0	203.00	0.000700
UK Fuel Mix 20/21	2.7	38.2	16.1	40.3	2.7	182.00	0.001100

Table 1: Fuel Mix Disclosures for the reporting period 1 April 2020-31 March 2021 | Source: supplier websites
* Drax Renewable volume includes 25.3% biomass
** Squeaky’s energy is not only renewable but 100% clean - sourced purely from wind, solar and hydro with no fossil fuel legacy
NB: FMD data is by supplier across their entire business



Dig deeper into your supplier's renewable energy

To really understand the energy you are buying, you will need to investigate the renewable portion of your supplier's fuel mix. Not all renewable energy is the same, and if you are serious about moving your organisation towards net zero and avoiding greenwashing, it is important to understand the whole picture.

Reminder: Suppliers have to submit either a UK REGO or an EU GO for every MWh of renewable energy supplied. In the 2020-2021 reporting period, 103 TWh of REGOs and 64.4 TWh of GOs were submitted to Ofgem for Fuel Mix Disclosures.



Check your supplier's REGO position

REGO information is publicly available on the Ofgem site. It is also useful that REGOs are broken down by type of generation, meaning you can see what kind of certificates your supplier is submitting for the renewable portion of its FMD.

Wind, Solar and Hydro REGOs are sometimes known as 'Deep Green' or 'Dark Green', and typically cost more than REGOs from other sources. To be confident you are powering your business with genuinely clean energy, look for renewable energy fully backed by these clean energy REGOs. Remember, under the current system, these UK certificates are the 'gold standard' as they invest money back into the UK clean energy system, thus accelerating the UK's energy transition.

Find out if your supplier is buying EU GOs

Although EU GOs can legitimately be submitted for the renewable part of the FMD, there are multiple problems with them, as we've outlined earlier. The key issue for organisations committed to the UK's clean energy future is this: **if you are buying energy backed by GOs (rather than REGOs), you are not contributing to the UK's transition towards clean energy.**

Renewable Energy makeup of key UK I&C suppliers 2020-2021

As there is a lot of data to sift through on the Ofgem website, we've extracted the latest available REGO and GO data for the UK's key I&C suppliers and presented it below.

Supplier	Percentage of overall energy supplied which is renewable (%)	Renewable energy which is UK REGO backed (%)	Of the energy backed by UK REGOs		Renewable energy that is EU GO backed (%)	Of the energy backed by EU GOs		Renewable supply which is clean based on UK REGO only (%)	Overall supply which is clean (UK REGO only) (%)
			Clean (%)	Non-Clean (%)		Clean (%)	Non-Clean (%)		
British Gas	75.0	7	60.64	39.36	93	63.52	36.48	4	3
Bryt Energy	100.0	1	100	0	99	100	0	1	0.7
Drax (including Haven)	100.0	26	1.28	98.72	74	93.1	6.9	0	0.3
E.ON	43.7	81	68.47	31.53	19	93.35	6.65	55	24.2
EDF	29.0	55	84.19	15.81	45	84.98	15.02	46	13.4
Engie	60.0	88	31.89	68.11	12	94.42	5.58	28	16.8
Npower	31.9	99	53.43	46.57	1	100	0	53	16.9
Shell	100.0	83	81.53	18.47	17	96.03	3.97	68	67.7
SmartestEnergy	66.2	9	96.8	3.2	91	87.65	12.35	8	5.6
Squeaky	100.0	100	100	0	0	0	0	100	100
SSE	55.0	77	87.53	12.47	23	94.76	5.24	68	37.2
TotalEnergies	50.0	81	84.41	15.59	19	82.88	17.12	68	34.1

Table 2: Breakdown of key UK I&C Suppliers' Renewable Energy for the reporting period 1 April 2020-31 March 2021. Calculated using each Supplier's FMD, REGO and GO data.
Sources: [REGOs - Ofgem Renewables & CHP Register](#) | [GOs - Ofgem Recognised Guarantees of Origin 2021](#) | [Overall UK Supply Data - BEIS Energy Trends March 2022](#)

CONCLUSION

UNDERSTANDING WHERE YOUR ENERGY COMES FROM IS CRITICAL TO YOUR BUSINESS REACHING NET ZERO

The most important thing you can do for your business' transition to net zero is to buy clean energy.

As we've explained, it is crucial to ensure the energy you are procuring is genuinely clean. To do that, you may need to dig deep to understand the makeup of your supplier's energy.

We know this can be daunting. Not least because there is a lack of transparency. And we know that suppliers may have 'dirty' secrets. But, taking the steps we've outlined in this guide will give you the tools you need to make an informed decision about your energy supply.

This is essential due diligence that will mean you understand more about your energy. But, more than that, you will reap wider benefits too.

Here is an opportunity to mitigate the risk of greenwashing, make serious progress towards net zero targets, and increase your knowledge and understanding of this critical issue.

Moreover, this is an opportunity for your organisation to lead the way in clean energy.

Lead the way.



SQUEAKY

For 100% clean energy direct from UK wind, solar and hydro sources, get in touch today.



020 8051 9791



team@squeaky.energy



www.squeaky.energy

© 2022 Squeaky Clean Energy Group Ltd. E&OE
Squeaky Clean Energy Group Ltd. Registered in England and Wales, Company No.13173060
Registered Address: 151 Wardour Street, London, W1F 8WE

