Net Zero Carbon 2030

THE CHURCH OF ENGLAND

Green Tariff Definition Methodology

Church of England



Background

The Church of England has an ambition to reach Net Zero Carbon by 2030. Alongside reducing energy use in our buildings and decarbonising heating systems, an important step in that journey is for our buildings to be supplied by renewable energy.

Choosing a green energy supplier can be complicated. So, we appointed independent sustainability consultants, Turner and Townsend, to work with us to develop a robust definition and then to assess the tariffs available on the market against a set of criteria. The tariffs were then graded to help parishes make informed decisions about their energy procurement.

Turner and Townsend compiled research on existing green tariff definitions from other organisations and guidance from Ofgem. Then key stakeholders within the Church of England worked together to develop the definition and criteria. The result is a robust definition that aligns with our Christian values and the Five Marks of Mission.

The tariffs which have met the Basic or Better criteria are not only providing traceable renewable energy, but they are also operating ethically.

This definition has been endorsed by General Synod's Environment Working Group and the Net Zero Carbon Programme Board.

Background

The following groups of people were involved in developing the Church of England's Green Tariff definition, through a strategic and structured consultation process:

- Diocesan Environment Officers
- Diocesan Net Zero Carbon Officers
- Christian environmental charity A Rocha UK
- Independent consultants who provide energy advice to parishes
- Officers involved in energy procurement at Parish Buying
- Officers from the Net Zero Carbon Programme Team
- National Environment Policy Officer

Green tariff **principles and indicators**

Principles	Indicators									
Principle 1a: What should be included in green electricity tariffs	Green tariff sourcing & transparency			Additionality			Green tariff technology mix		Added Value: Own generation	
Principle 1b: What should be included in green gas tariffs	Source of gas			Traceability and certification			Carbon footprint			
Principle 2: What environmental goals and sustainable behaviour a supplier should demonstrate	Fossil fuel divestment	Supplier fuel mix	Demand capacity	Emission reporting		Net zero commitment	Added Value: Time of use	Added Value: Embodied carbon & circularity	Added Value: Decarbonisation support	Added Value: Research and development
Principle 3: What ethical and charitable behaviour should the supplier demonstrate	Ethical considerations								Added Value: Social value	
Principle 4: How cost competitive is the supplier and what is their service feedback	Cost competitiveness & transparency			Supplier Financial Standing					Added Value: Customer service	

Definition(s) **of Green Tariff for Electricity – condensed**

Best

The best green tariff must supply electricity directly from 100% renewable energy sources (PPAs and/or own-generation), backed by the relevant energy certificates, through appropriate renewable energy technologies; excluding biomass, nuclear and HVO. The green tariff must contribute to renewable additionality.
The supplier and its parent company must have divested from fossil fuels entirely, and the supplier should have a zero-emission factor for its entire supply portfolio. The supplier should demonstrate its commitment to sustainability by transparently disclosing all its emissions and be committed to the achievement of net zero, ideally compliant to a global initiative (E.g. SBTi). The supplier must transparently disclose information on a range of ethical topics and must not have evidence of any ethical non-compliance on any of these topics, throughout their corporate group.

Better

A better green tariff must supply at least 50% of its electricity directly from renewable energy sources (PPAs and/or own-generation), backed by the relevant energy certificates, through appropriate renewable technologies; excluding HVO, nuclear and biomass. The remaining renewable electricity supplied can be purchased through other sources, but it must be matched to renewable energy certificates of UK origin. The green tariff must contribute to renewable additionality.
The supplier should have divested from fossil fuels entirely and zero-emission factor for its entire supply portfolio. The supplier should demonstrate its commitment to sustainability by transparently disclosing its direct & indirect emissions and be committed to net zero. The supplier must transparently disclose information on a range of ethical topics and must not have evidence of any ethical non-compliance on any of these topics, throughout their corporate group.

Basic

A basic green tariff must supply at least 10% of it's electricity directly from renewable energy sources (PPAs and/or own-generation), backed by the relevant energy certificates, through appropriate renewable technologies; excluding HVO and biomass. The remaining renewable electricity can be purchased through other sources, but it must be matched to renewable energy certificates of UK origin.
The supplier should not have any new fossil fuel investments planned and should meet Ofgem's minimum Renewables Obligation requirements. The supplier should demonstrate its commitment to sustainability by transparently disclosing its direct & indirect emissions and be working towards a commitment to net zero. The supplier must transparently disclose information on a range of ethical topics and must not have evidence of any ethical non-compliance on any of these topics, throughout their corporate group.

Definition(s) **of Green Tariff for Gas – condensed**

Best

The most sustainable energy procurement strategy would exclude the use of gas entirely.

If the aim is to achieve the highest level of environmental sustainability and reduce carbon emissions to the minimum, then avoiding the use gas, even biogas from renewable sources, and electrifying heating systems would be a valid approach.

Better

The most sustainable energy procurement strategy would exclude the use of gas entirely.

If the aim is to achieve the highest level of environmental sustainability and reduce carbon emissions to the minimum, then avoiding the use gas, even biogas from renewable sources, and electrifying heating systems would be a valid approach.

Basic

A basic green gas tariff will supply gas generated from 100% biomethane produced in the UK from renewable sources and backed by Green Gas Certificates. Biomethane should be preferably produced from organic waste in plants which are fitted with carbon capture technology.
The supplier should not have any new fossil fuel investments planned and should meet Ofgem's minimum Renewables Obligation requirements.
The supplier should demonstrate its commitment to sustainability by transparently disclosing its direct & indirect emissions, be working towards a commitment to net zero and encourage its customers to decarbonise their operations through guidance. The supplier must transparently disclose information on a range of ethical topics and must not have evidence of any ethical non-compliance on any of these topics, throughout their corporate group.

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Scorecard used **to assess a green tariff**

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Tariff definition assessment approach

Principle	Indicator Category	Indicator
1	Compliance	Green tariff sourcing & transparency
	Basic	Additionality
	Basic	Green tariff technology mix
	Added Value	Own generation
2	Compliance	Fossil fuel investments
	Compliance	Supplier fuel mix
	Basic	Demand capacity
	Basic	Emission reporting
	Basic	Net Zero commitment
	Basic	Education and support
	Added Value	Time of use
	Added Value	Embodied carbon & circularity
3	Basic	Ethical considerations
	Added Value	Social Value
4	Basic	Cost Competitiveness
	Basic	Supplier Financial Standing
	Added Value	Customer service

Indicator class	Awarded Points
Best	3
Better	2
Basic	1

1. Suppliers are assessed by evaluating indicators in each principle.
2. Indicators are divided into three categories:
   - Compliance: Mandatory indicators required to be categorised as a green tariff
   - Basic: Non-compliance indicators, however more important than added value indicator
   - Added value: Non-mandatory indicator which can demonstrate additional contribution to sustainability
3. Each supplier has been assessed against the set of principles and indicators outlined in the slides.
4. For Principles 1 and 2: suppliers have been assigned points based on their performance in each area.
5. Principles 3 and 4 are evaluated on a Pass/Fail basis.

Compliance indicators are mandatory to achieve a tariff class against a particular principle

Tariff definition assessment approach

Principle	Indicator	Weightage (100%)	
Principle 1: What should be included in green energy tariffs	Green tariff sourcing & transparency	50%	20%
	Additionality		20%
	Green tariff technology mix		10%
	Added Value: Own generation	Added Value	
Principle 2: What environmental goals and sustainable behaviour a supplier should demonstrate	Fossil fuel investments	50%	10%
	Supplier fuel mix		10%
	Demand capacity		10%
	Emission reporting		10%
	Net Zero commitment		10%
	Education and support	Added Value	
	Added Value: Time of use	Added Value	
	Added Value: Embodied carbon & circularity	Added Value	
Principle 3: What ethical and charitable behaviour should the supplier demonstrate	Ethical considerations	0%	PASS/FAIL
	Added Value: Social Value		Added Value
Principle 4: How cost competitive is the supplier and what is their service feedback	Cost Competitiveness	0%	PASS/FAIL
	Supplier Financial Standing		PASS/FAIL
	Added Value: Customer service	Added Value	

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Green energy tariff **principles and indicators**

Church of England

Principle 1a: **What should be included in green electricity tariffs**

Three increasingly ambitious levels of requirements concerning the gas procured through a green tariff.

Level	Compliance: Green tariff sourcing & transparency	Additionality	Green tariff technology mix
Best	The green tariff includes: • Electricity supplied 100% from renewable energy sources, through agreements with renewable generating stations in the country (directly or independently owned); • With bundled Renewable Energy Guarantees of Origin (REGOs) certificates, ensuring clear traceability. • Confirmation from the supplier concerning the emissions intensity factor of the specific tariff offered.	The revenue from the green tariff offered directly finances the construction of new renewable energy installations in the UK. The supplier can clearly demonstrate this additionality.	100% electricity from renewable sources; Excluding biomass, nuclear, and Hydrotreated Vegetable Oil (HVO).
Better	The green tariff includes: • At least 50% of electricity from renewable sources, through agreements with renewable generating stations in the country (directly or independently owned); with bundled REGO Certificates, ensuring clear traceability; • The remaining 50% of electricity can come from other sources but is matched to unbundled REGOs. • Confirmation from the supplier concerning the emissions intensity factor of the specific tariff offered.	The green tariff offered directly finances the construction of new renewable energy installations in the UK. The supplier can clearly demonstrate this additionality.	100% electricity from renewable sources; Excluding HVO, nuclear and biomass plants.
Basic	The green tariff includes: • at least 10% of electricity from renewable sources, through PPAs with renewable generating stations in the country (directly or independently owned); with bundled REGO Certificates, ensuring clear traceability; • the remaining 90% of electricity can come from other sources but is matched to unbundled REGOs. • Confirmation from the supplier concerning the emissions intensity factor of the specific tariff offered.	The green tariff offered does not necessarily contribute to the installation of new renewable energy in the UK. The supplier does not demonstrate additionality or there is insufficient information available to justify this.	100% electricity from low to zero-carbon sources; Excluding HVO and biomass; But possibly including nuclear.

Added Value: beneficial but not essential

Own generation

Some of the renewable energy supplied comes from sites directly owned by the energy supplier, to maximise cost saving opportunities.

Justification for excluding **specific renewable energy technologies**

While renewable energy technologies offer numerous benefits, certain technologies are often excluded from consideration due to specific environmental concerns, or technological limitations.

Biomass

- Biomass energy involves burning organic materials like wood, agricultural residues, or dedicated energy crops.
- While it is considered renewable, it can lead to **deforestation, habitat destruction,** and **soil erosion** if not managed sustainably.
- Additionally, the combustion process releases **carbon dioxide** and other pollutants, which can contribute to **air quality issues** and **climate change.**

Nuclear

Nuclear power is low in carbon emissions during operation, but it comes with significant challenges. These include:

- The long-term management of **radioactive waste**, which remains hazardous for thousands of years.
- The **high costs** of building and decommissioning plants.
- The potential for **catastrophic accidents** (e.g., Chernobyl, Fukushima).

Hydrotreated Vegetable Oil (HVO)

- HVO is a biofuel made from vegetable oils and animal fats. While it can reduce GHG emissions at the point of combustion, compared to fossil fuels, its production often relies on **palm oil**, which is linked to **deforestation, loss of biodiversity**, and social issues such as **land rights violations**.
- The environmental benefits of HVO are also diminished or cancelled out if the feedstocks are not sourced sustainably, and if they lead to **indirect land-use change**.

Principle 1b: **What should be included in green gas tariffs**

Three increasingly ambitious levels of requirements concerning the gas procured through a green tariff.

Levels	Source of gas	Traceability and certification	Carbon footprint
Best	The most sustainable energy procurement strategy would exclude the use of gas entirely. If the aim is to achieve the highest level of environmental sustainability and reduce carbon emissions to the minimum, then avoiding the use gas, even biogas from renewable sources, and electrifying heating systems would be a valid approach.		
Better	The most sustainable energy procurement strategy would exclude the use of gas entirely. If the aim is to achieve the highest level of environmental sustainability and reduce carbon emissions to the minimum, then avoiding the use gas, even biogas from renewable sources, and electrifying heating systems would be a valid approach.		
Basic	We recognise that some establishments may not be able to transition to fully electric solutions in the near term. Therefore, the Basic level of 'green' gas tariff prioritises the most environmentally friendly gas options available within the market:		
	• Gas tariffs including only 100% biomethane produced in the UK from renewable sources and backed by Green Gas Certificates.	• Biomethane is preferably produced from organic waste. Plants for biomethane production are preferably fitted with carbon capture technology.	• The Green Gas Support Scheme from Ofgem is relied on to verify and guarantee the low-carbon nature of all the biomethane sourced. • The Green Gas Support Scheme ensures that all renewable gas sources are fully traceable from production to end-use. This includes detailed records of the origin, production process, transportation and embodied carbon at the point of network injection of the gas, as well as compliance with a strict set of sustainability requirements that also monitor land-use change risks.

Principle 2: **What environmental goals and sustainable behaviour a supplier should demonstrate**

Three increasingly ambitious levels of requirement concerning the environmental goals and behaviours of a green energy supplier

Level	Fossil fuel divestment	Supplier fuel mix	Demand capacity	Emission reporting	Net zero commitment
Best	Supplier and parent company disassociate from fossil fuels and do not invest in any fossil fuel assets or purchase energy from fossil fueled power plants.	• 100% of the supplier fuel mix is renewable • According to Fuel Mix Disclosure, Carbon intensity is 0	Plans for last 5 years and future plans to meet new customer demand are only by renewable addition.	The supplier reports on Scope 1 and 2 emissions and has started reporting Scope 3 emissions, adhering to a recognised framework (eg. GHG Protocol, SECR, ISO14064).	• The supplier is committed to achieving Net Zero and has published a comprehensive Net Zero strategy outlining their approach and milestones. • and has clear emission reduction plans. • The Net Zero target is set for 2050 or earlier. • Committed to or working towards SBTi or TPI
Better	Supplier does not invest in any fossil fuel assets.	• 100% of the supplier fuel mix is renewable • According to Fuel Mix Disclosure, Carbon intensity is 0	Customer demand in the near future is planned to be met by renewable addition.	The supplier reports their Scope 1 and 2 emissions and has plans or initiatives in place to begin reporting Scope 3 emissions.	• The supplier is committed to achieving Net Zero and has published a comprehensive Net Zero strategy outlining their approach and milestones. • The Net Zero target is set for 2050 or earlier.
Basic	Supplier does not invest in any new fossil fuel assets.	• Meets mandated Ofgem Renewable Obligation generation/supply threshold • Higher renewable energy percentage than UK grid average		The supplier reports their Scope 1 and 2 emissions.	• The supplier is working towards a commitment to Net Zero and/or has a target date set for 2050 with little information on how it intends to achieve this.

Principle 2: **What environmental goals and sustainable behaviour a supplier should demonstrate**

Three increasingly ambitious levels of requirement concerning the environmental goals and behaviours of a green energy supplier

Added Value: beneficial but not essential			
Time of use	**Embodied carbon & circularity**	**Decarbonisation support**	**Research & development**
Supplier offers preferential tariff rates and other mechanisms to stimulate demand side optimization and energy consumption during off-peak times or where renewable generation may be high (E.g. benefits for Sunday consumption)	The supplier has consideration for the embodied carbon of the technology used for renewable energy generation; Projects are preferred that have a low carbon footprint throughout their lifecycle, including end-of-life, sustainable decommissioning and waste avoidance.	The supplier provides decarbonisation support and products to support sustainable behaviors, improve energy efficiency and reduce customer emissions such as support with access to public funding, financial incentives for non-fossil fuel technologies (e.g. air source heat pumps, solar water heaters, etc.). The supplier can quantitatively demonstrate the effectiveness of the initiatives put in place.	While R&D efforts may not directly contribute to a greener tariff or company, or be conclusive over the course of the research, they could help distinguish top-performing energy providers. For instance, investments in alternative energy sources, grid flexibility, and smart tariffs could be a valuable differentiator for the highest-rated companies.
	The technology used for renewable projects is primarily low carbon, with some consideration for embodied carbon in key components and processes.	The supplier provides limited products to encourage sustainable behaviours and engage consumers.	

Principle 3: **What ethical and charitable behaviour should the supplier demonstrate**

One PASS/ FAIL assessment with requirements concerning the ethical and charitable behaviours of an energy supplier

Level	Ethical considerations (Ethical Consumer score matrix)	Added Value: Social value
All levels	• Suppliers will also be compliant with the National Church Institutions (NCIs) Supplier Code of Conduct • Suppliers will have a minimum score of 68 on the Ethical Consumer score matrix, with supporting evidence clearly shown. • Suppliers should transparently disclose information on, and should have no evidence of non-compliance on the following topics throughout their corporate group: • Human Rights • Workers' Rights • Supply Chain Management • Irresponsible Marketing (e.g. Greenwashing) • Treatment of vulnerable customers • Operations in oppressive regimes • Involvement in tobacco production/retail • Involvement in the arms trade • Involvement in developments that pose a threat to established ecological systems and biodiversity	Supplier should provide evidence of: • Financial donations • Charitable financial incentives • Community based partnerships • Programme to support vulnerable consumers • Supports other businesses in sustainability/social challenges to promote sustainable transformation

Principle 4: **How cost competitive is the supplier and what is their service feedback**

A PASS / FAIL assessment with requirements concerning the cost competitiveness and associated transparency.

Level	Cost competitiveness, transparency and flexibility	Supplier Financial Standing	Added Value: Customer service
All levels	• Transparency: Costs of green tariff & other associated costs e.g. switching costs, are clearly specified, easy to understand and regularly updated/communicated to consumers as per Ofgem Tariff Information Label recommendations • *Ideally* at least at the same price level as existing supply. • Cost flexibility: Willingness to offer the right price point for the needs of specific customers/energy users.	• A strong underlying financial solidity and stability, to minimize risks of supplier discontinuing operations. • A healthy debt-to-equity ratio. • A high credit score.	Which? energy survey results: • A total score of 70%+ • Where no total score, a Which? Assessment score of 70%+

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the GREAT SWITCH for creation

For further information please visit:

churchofengland.org/the-great-switch