

Councillor Peter Black  
Chair  
Scrutiny Programme Committee

**BY EMAIL**

*Please ask for:* Councillor Andrea Lewis  
*Direct Line:* 01792 63 7442  
*E-Mail:* [cllr.andrea.lewis@swansea.gov.uk](mailto:cllr.andrea.lewis@swansea.gov.uk)  
*Our Ref:* AL/JW  
*Your Ref:*  
*Date:* 5 October 2021

Dear Councillor Black

Further to my attendance at the Scrutiny Programme Committee on the 14 September 2021 and Councillor Peter Jones' request of further clarification of green gas. The difference between green gas and natural gas and the extent to which it is being used. I respond as follows.

Green Gas comes from renewable sources (made from organic material such as food waste and farm waste) and is broken down by bacteria in huge tanks, or digesters. The breakdown happens without oxygen so it's called anaerobic digestion. This produces biogas. Biogas is then purified and the CO<sub>2</sub> is removed, turning it into biomethane. Biomethane has similar characteristics to natural gas so it can then be added to the gas grid and supplied to work and homes.

Natural Gas: In contrast, is formed when decomposing plant and animal matter is put under heat and pressure under millions of years. So it's not easily replaceable in our lifetimes and there's a limited amount of it.

Extent to which it is being used: There is c.5TWh worth of annual green gas production, so Total Gas and Power (TGP) (Gas Supplier) should be able to cover all of our usage. Green gas is more expensive than natural gas, there is a premium of approx. 0.09p/kWh on top of the natural gas unit rate charged. If the Authority decides to vary its gas energy contract and purchase 100% green gas, this will come at significant cost and will need to be funded appropriately as existing budgets would not be able to support the premium.

**Page 2**

For information, please find attached TGP green gas literature.

Yours sincerely

*Andrea Lewis*

**Y Cynghorydd/ Councillor Andrea Lewis  
Y Ddirprwy Arweinydd/ Aelod y Cabinet dros Newid yn yr Hinsawdd a  
Thrawsnewid Gwasanaethau  
Joint Deputy Leader/ Cabinet Member for Climate Change & Service  
Transformation**

# Green Gas

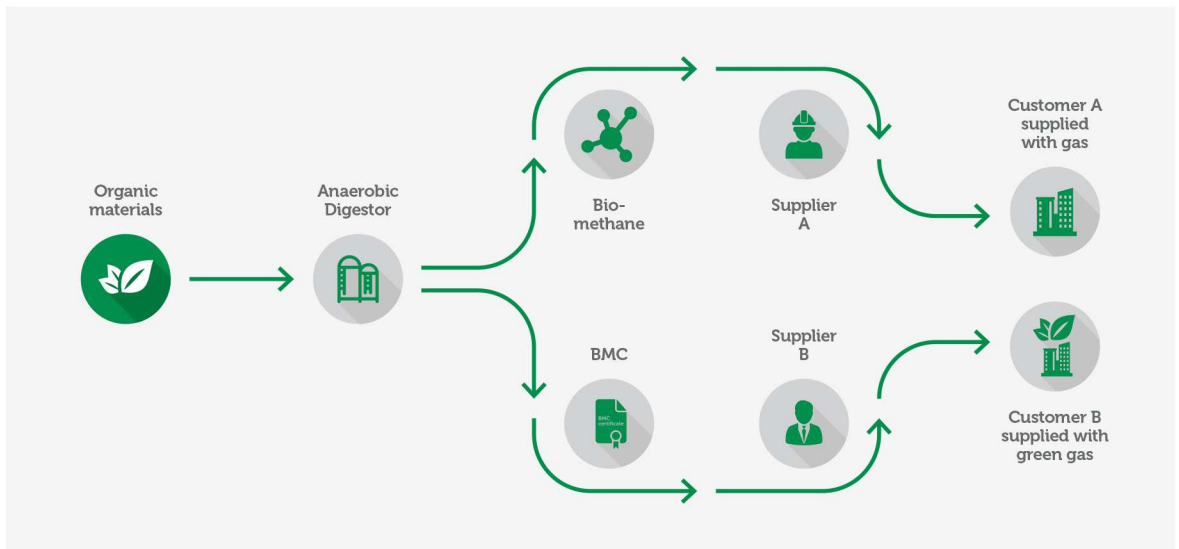


## What is Green Gas?

Green gas, or biomethane, is produced from the recycling of natural waste, such as plant material and organic waste. Biomethane offers a desirable alternative to natural gas, as it reduces the need for fossil fuels, cuts down on the harmful greenhouse gases being released into the atmosphere, and is a renewable source of energy that has the same applications as natural gas. Biomethane is recognised by the World Resources Institute as offsetting carbon emissions for gas consumption, and assigned a Biomethane Certificate (BMC) as proof of its renewable nature.

## What is a Biomethane Certificate?

BMCs represent and authenticate the renewable source of the gas and are awarded for a particular volume of Biomethane produced. The gas and BMC can then be traded separately, and the supplier selling gas will obtain the BMC as proof that a volume of gas being sold to the customer has been offset with 'green gas'. Total Gas & Power reserves certificates for customers that purchase green gas from us to prove that the source of their gas is renewable. Once a certificate has been used to an end customer, it cannot be re-used for anyone else.



Taking renewable supply with Total can help you to:

-  Reduce your carbon footprint
-  Fulfil your business' CSR responsibilities and commitments
-  Prove to your own customers that your business is environmentally responsible and sustainable

## How much does it cost?

Pricing depends on the gas volume required and the market price at the time. For further information please speak to your Account Manager.

**Account Manager**

