
Using Guarantees of Origin to track biomethane for mass balancing and customer claims

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GGCS is a biomethane registry. We issue, transfer and retire Renewable Gas Guarantees of Origin (RGGOs)

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- We issue one RGGO for each kWh of biomethane injected.
- Record information on biomethane production including feedstock, Carbon and Sustainability data, RHI support (or not), producer identity and location, injection period.
- Double sale not possible, transactions are recorded in a log for traceability
- Calculation of grid losses can be made and displayed on the final certificate
- Potential to include bespoke information and calculations as required

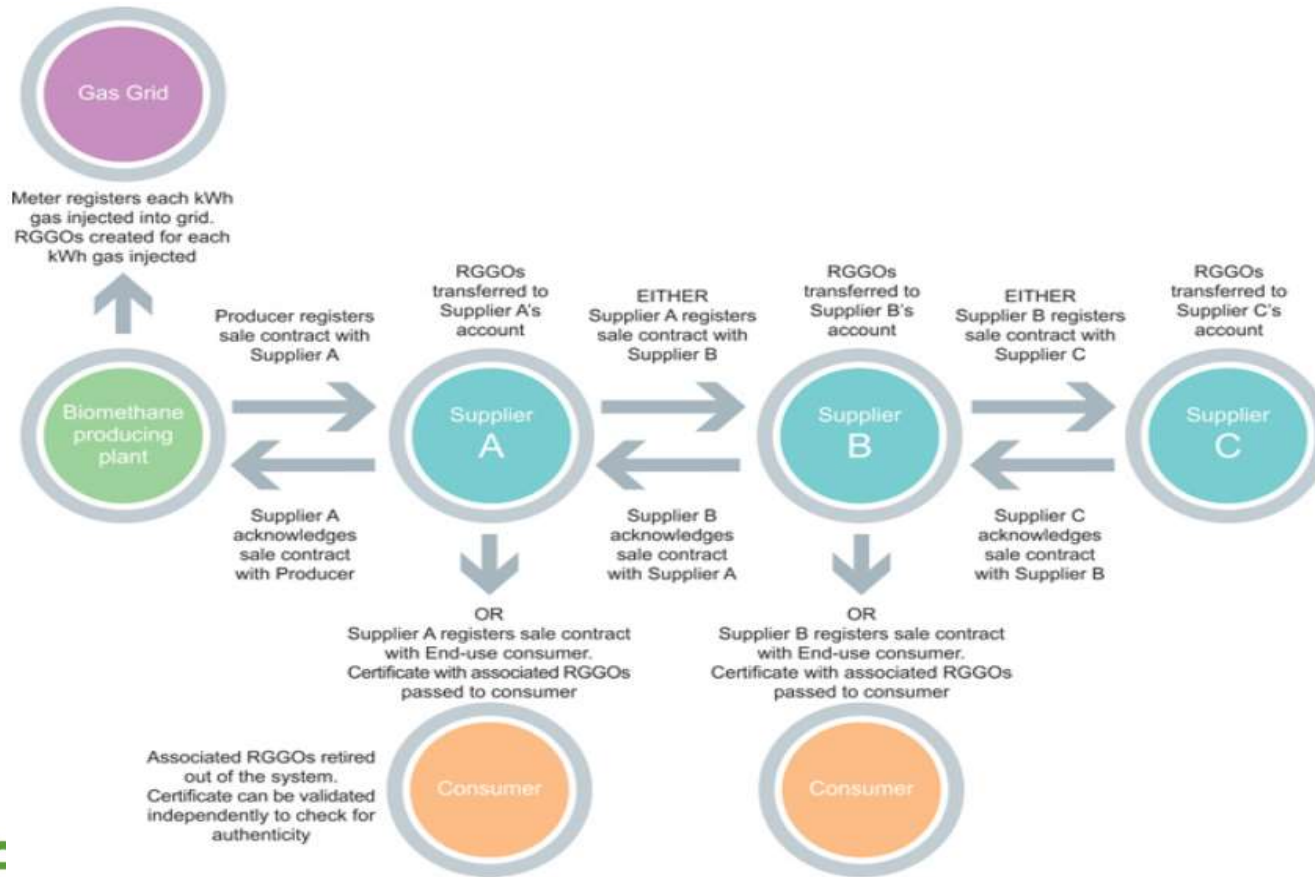
A bit more about us...



- Reputable third party
- Industry led, Not-for-profit
- Operating since 2010
- Issued RGGOs for 75% of all RHI supported biomethane
- Issued RGGOs for non RHI supported gas that has been awarded RTFCs



RGGO flow chart



50 suppliers/traders already using the system



TOTAL

BARROW GREEN GAS 



The logo for e.on, featuring the word "e.on" in a red, lowercase, sans-serif font with a white dot over the "e". The logo is set against a white rectangular background which is placed on a light green leaf graphic.

GreenGas
CERTIFICATION SCHEME

REA
RENEWABLE ENERGY ASSOCIATION

Example Certificate

Certificate lists retired RGGOs

Records the gas consumer or the biomethane supplier.

Can be validated online with pin number.



Date Created:	30/03/2018
Date Printed	30/03/2018
Certificate Issued to:	Example Haulage Ltd
Renewable Gas Guarantees of Origin:	G0014TS000000001E0318 to G0014TS0010000000E0318
Injection Date:	Quarter ending in March 2018
Injection Location:	England
Technology/Feedstock:	Biomethane from Food Waste - unsupported*
Amount:	10,000,000 kWh
Certificate Pin Number:	E98j%4f
Green Gas Producer:	Example Biomethane Plant, Home Close, Sutton Courtney, Oxfordshire, OX14 HT
Green Gas Supplier:	Example Gas Supplier, Warwick Road, Coventry, CV23 8BU

*Renewable Gas Guarantees of Origin (RGGOs) listed on this certificate have been generated in respect of biomethane that the GGCS has verified has not sought to claim the Renewable Heat Incentive. However parties involved in making a claim of green gas use based on ownership of this Certificate should be aware that this biomethane may have been rewarded under the Renewable Transport Fuel Obligation.

RGGOs on this certificate represent 10,000,000 kWh of biomethane injected into the grid by the producer. After accounting for grid losses of 0.15%, this amount should be matched to 9,985,000 kWh withdrawn from the grid.

The lifecycle emissions associated with the production and distribution of this biomethane is no more than 120.49 g CO₂e per kWh of the injected amount (33.47 g CO₂e per MJ). More details of lifecycle emissions may be available from the biomethane producer on request.

About this Certificate

Renewable Energy Assurance Ltd 2011. 'Green Gas' and the Green Gas logo are trademarks of Renewable Energy Assurance Ltd. All rights reserved. Only Certificates produced by the Renewable Energy Assurance Ltd using its proprietary systems are valid. You must not copy for an improper purpose, falsify, counterfeit or tamper with this certificate. It may be an offence to do so, or to knowingly provide a certificate which has been interfered with. The RGGOs listed on this certificate have been issued to the party named on the certificate and are not for resale. For further information on this certificate please visit – www.greengas.org.uk/certificates

Customer facing evidence of biomethane use

- GGCS is an established system that has been shown to meet the GHG Protocol Scope 2 quality criteria.
- This means that companies can report biomethane use and lower the GHG emissions
- Been through the auditing processes of Land Sec, Sainsbury's, Unilever, Sopra Steria and others
- We can build an API to connect to invoicing systems

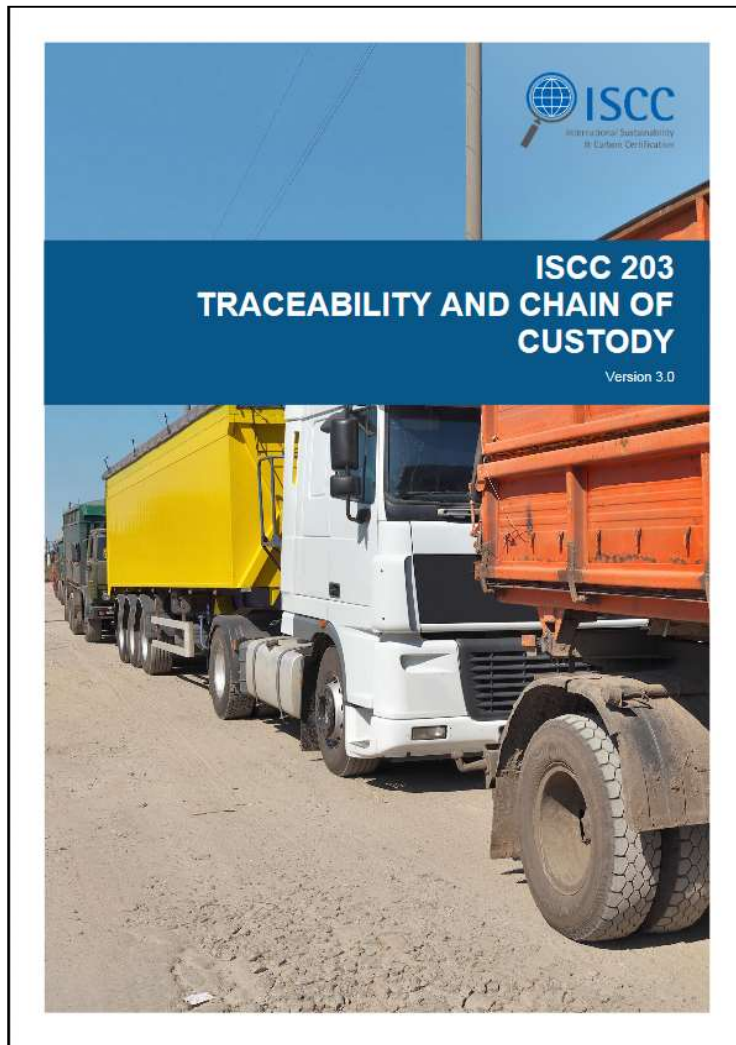
GGCS for mass balancing...

“A supplier may wish to use a third party gas certificate scheme to provide evidence of the mass balance. Different schemes offer different levels of assurance in respect of chains of custody. Any scheme that is to be used should operate a mass balance assurance, as book and claim schemes are not acceptable. Suppliers wishing to use one of these schemes must contact the Administrator first.”

RTFO Process Guidance



GGCS with ISCC



- ISCC certified management systems used to evidence mass balance are in widespread use – recommended reading!
- ISCC dictates the nature of management systems and policies but not the IT solution for tracking gas/recording the chain of custody
- So use of Green Gas Certification Scheme can complement ISCC certified management system. It's not one or the other.

ERGaR – mass balancing across borders

- Strong interest in mass balancing across borders to ensure a broad and liquid market for biomethane for transport
- European Commission currently considering recognition as a “voluntary scheme” for mass balancing (as is ISCC)
- Outcome would be removal of need to book capacity at interconnectors and trade physical units of gas across borders.
- Could be used to mass balance biomethane into the Republic of Ireland

Wrapping up...

Using the GGCS to track biomethane injections can...

1. Support RTFC claims by provide evidence of mass balance, helping verifiers to complete their assurance to DfT at minimum time and cost.
2. Provide consumers with documentation that has been established to meet the GHG Protocol Quality Criteria, allowing them to report that they have used biomethane and lower their GHG emissions.