

GreenGas

CERTIFICATION SCHEME

Biomethane Day 2017



RENEWABLE ENERGY ASSURANCE LIMITED





Meter registers each kWh gas injected into grid.
RGGOs created for each kWh gas injected



Producer registers sale contract with Supplier A



Supplier A acknowledges sale contract with Producer

RGGOs transferred to Supplier A's account



EITHER Supplier A registers sale contract with Supplier B



Supplier B acknowledges sale contract with Supplier A

RGGOs transferred to Supplier B's account



EITHER Supplier B registers sale contract with Supplier C



Supplier C acknowledges sale contract with Supplier B

RGGOs transferred to Supplier C's account



OR

Supplier A registers sale contract with End-use consumer.
Certificate with associated RGGOs passed to consumer



OR

Supplier B registers sale contract with End-use consumer.
Certificate with associated RGGOs passed to consumer



Associated RGGOs retired out of the system.
Certificate can be validated independently to check for authenticity

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CERTIFICATION SCHEME

Example Certificate – Does not contain any valid Renewable Gas Guarantees of Origin

Date Created:	03/01/2017 17:15:20
Date Printed:	16/03/2017 10:19:10
Certificate issued to:	Acme Enterprises Ltd
Renewable Gas Guarantees of Origin:	G0001BF00000001E0211 to G0001BF00000002E0211
Injection Date:	May 2016
Technology/Feedstock:	Biogas from food waste
Injection Location:	England
Amount:	10395371 kWh
Certificate Pin Number:	XXXXX
Green Gas Producer:	Example Biomethane Plant Ltd 3 Cherry Lane, Yorkshire, YO34 7HJ
Green Gas Supplier:	Example Gas Supplier Ltd 24 Amesbury Avenue, Swindon, SN1 5TF

- Date of creation
- Customer name
- Range of RGGOs
- Injection Date
- Technology/feedstock
- Country of injection
- Total amount kWh
- Pin Code
- Producer
- Supplier

The lifecycle emissions associated with the production of this biomethane is no more than 125.28 g CO2 equivalent per kWh. For 10395371 kWh this is no more than 1,302.33 tonnes of CO2. For further information on GHG emissions including factors for reporting to the GHG Protocol please visit the website here - www.greengas.org.uk/certificates/emissions-reporting

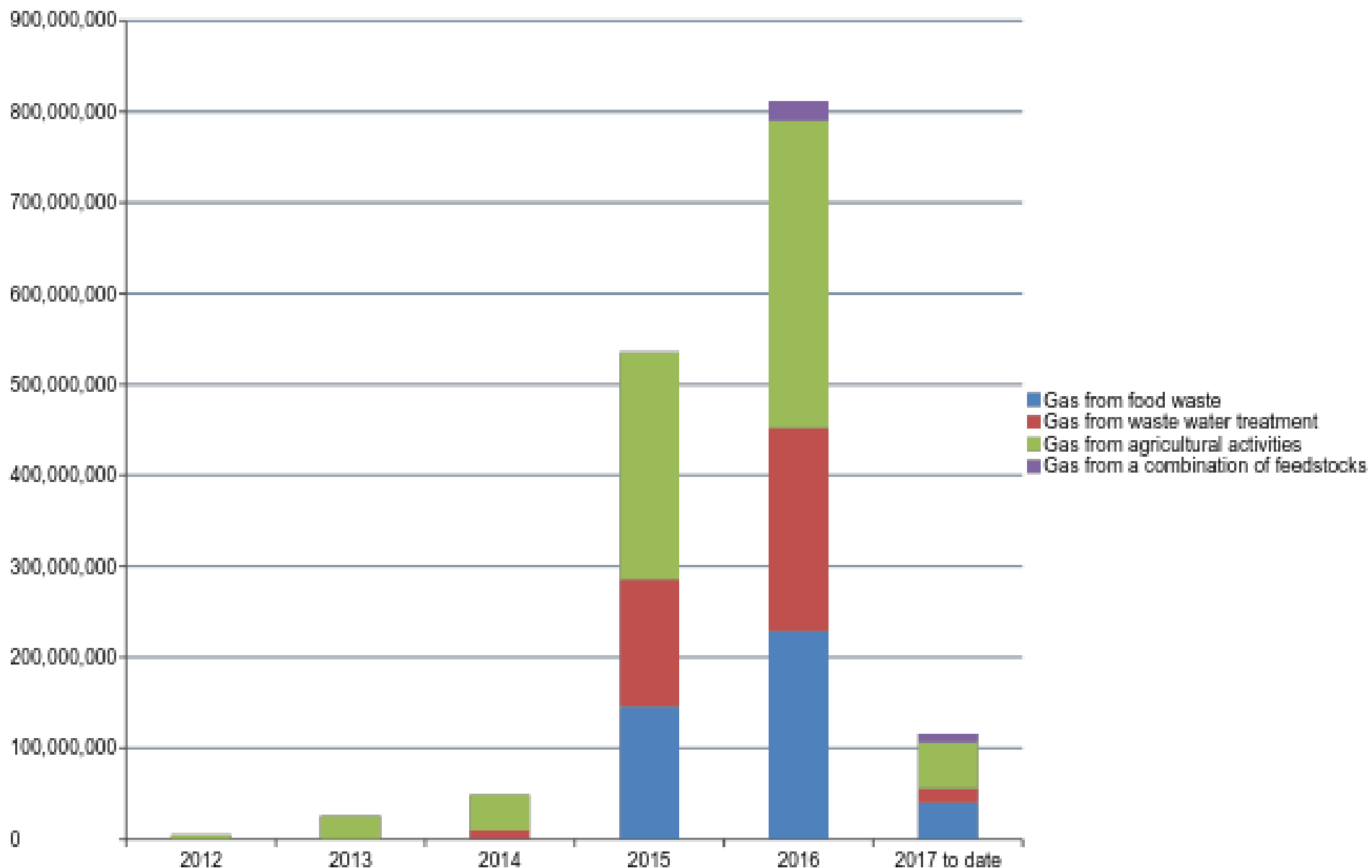
About this Certificate

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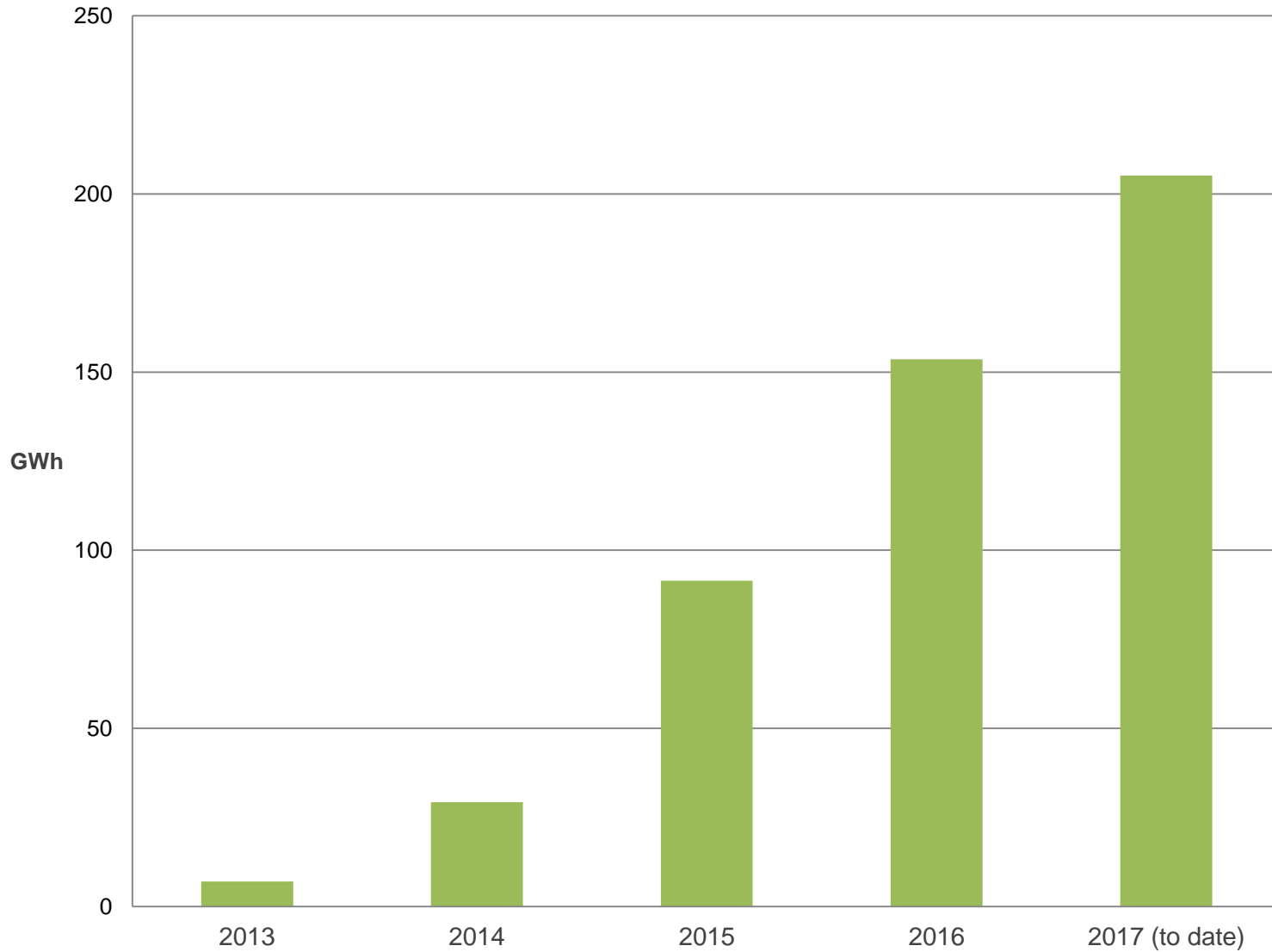
Current Scheme Status

- 33 Producers registered
- Capacity of producers 1.7 TWh per annum
- 28 Suppliers registered
- 1.5 TWh of RGGOs created
- 445 GWh (0.445 TWh) RGGOs sold

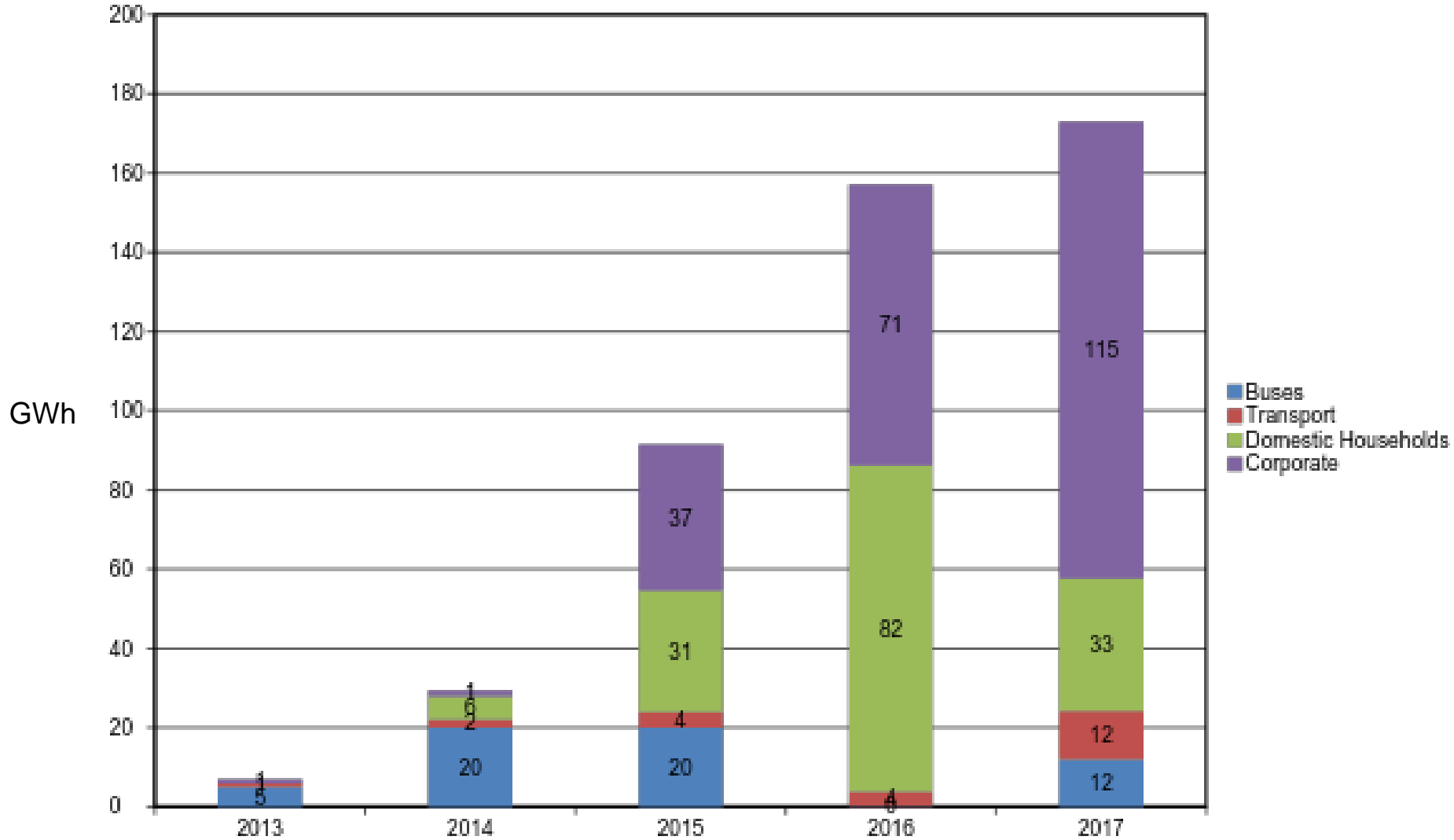
Biomethane Registered and RGGOs Created



Volume of RGGO sold to End-Use Consumers



RGGO sold by market sector

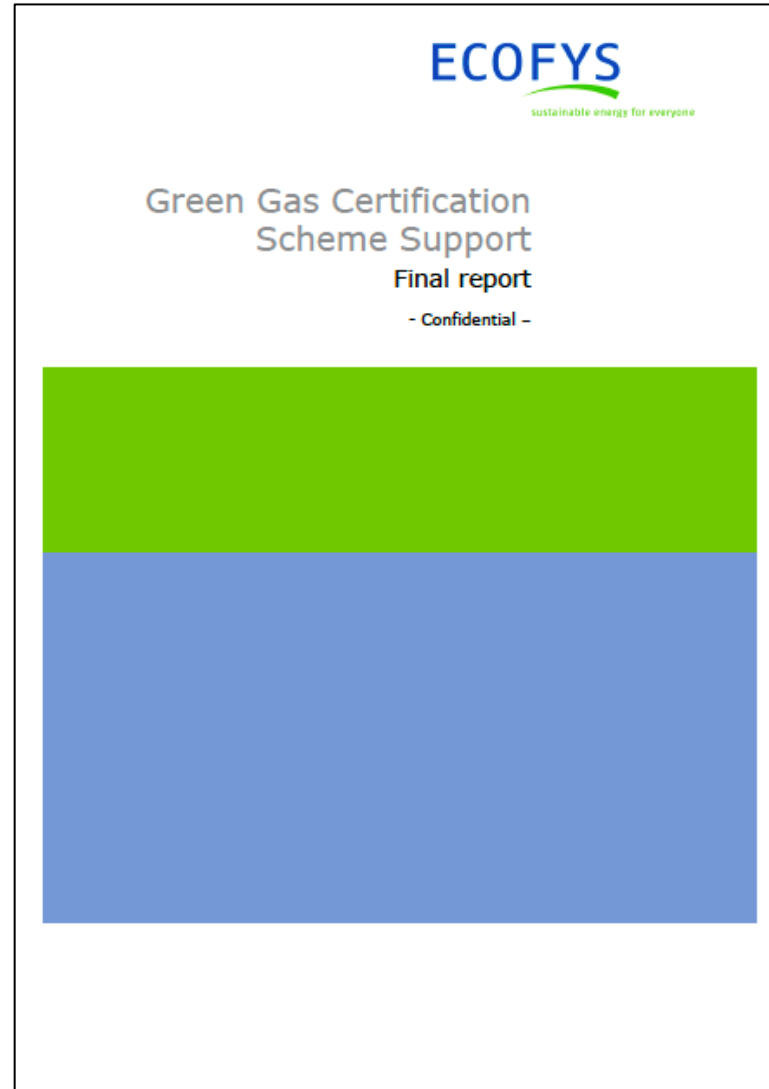


Progress since last BMD

- CO₂ emission figure

- RHI participants must meet a lifecycle GHG emissions target of 34.8g CO₂ eq/MJ of heat.
- Since all biomethane on the GGCS has received the RHI then it is possible to say that all units of gas has emitted no more than 34.8g CO₂ eq/MJ and we now include this on our Certificates

GGCS study by Ecofys commissioned



Progress since last BMD

- corporate reporting

- Our work with GHG Protocol is starting to pay off
- CDP Technical Note recognises role for Green Gas Certificates

Looking Forward

- Further growth in the corporate market as knowledge of use of Certificates in emission reporting grows – Unilever, Sainsburys, John Lewis, Kingspan to be joined by many more. 250+ companies reporting to the CDP.
- Further growth in demand from domestic suppliers – 100,000+ households to be supplied with Green Gas?

Looking Forward

- Upcoming changes to our feedstock classification.
- Moving from labelling RGGOs by plant type to labelling by feedstock-to-gas apportionment.
- One plant may now generate, for example, X number of RGGOs from waste and X number of RGGOs from product/co-product.
- Many further RGGOs categories possible - giving the flexibility to adapt scheme for the RTFO

Looking Forward

- Use of RGGOs/Green Gas Certificates in transport sector
 - RTFO guidance has identified that “a supplier may wish to use a third party gas certificate scheme to provide evidence of the mass balance”
 - Transport Scotland has reconfirmed role of RGGO in BSOG
 - Use of Certificates to evidence green value to customers in the transport sector e.g. Calor