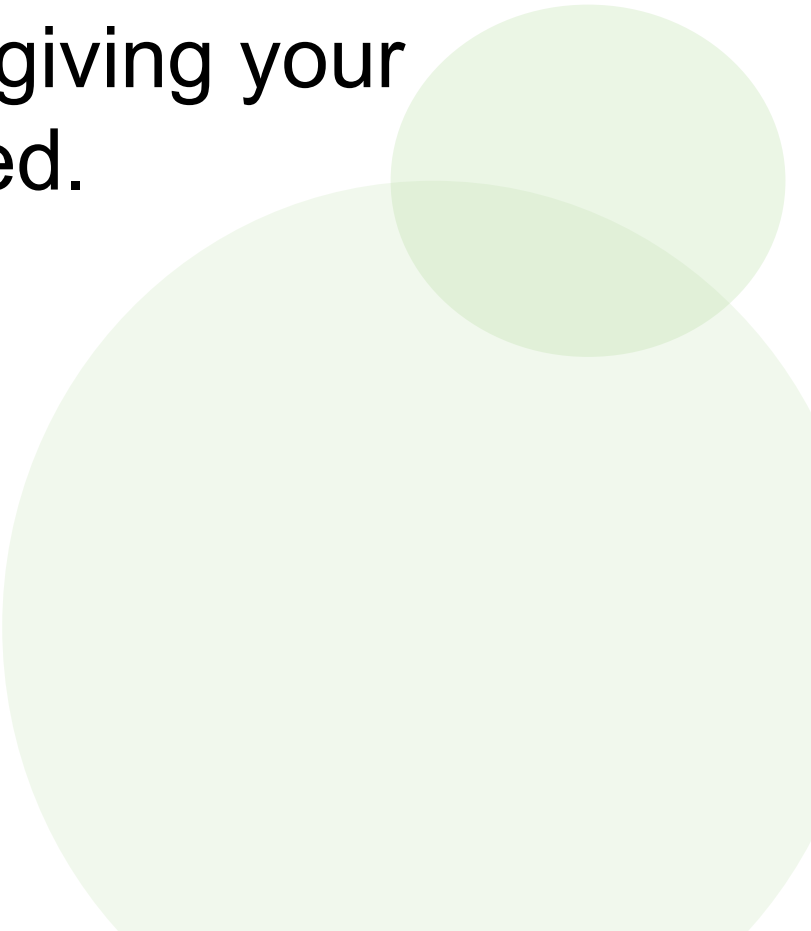

GGCS Oversight Panel Meeting
May 2026
(meeting starts at 2pm UK time)

Meeting recorded

- This meeting is being recorded.
 - By participating you are giving your permission to be recorded.
- 

Competition Law Compliance

DOs and DON'Ts

- Commercial decisions must be taken independently by individual companies.
- All participants must be aware that exchange of commercially sensitive information or intimation of intended commercial decisions, directly or indirectly, can result in competition law infringement.

There must be no communication of the following information:

1. Individual company or industry prices, including differentials, discounts, rebates, allowances, price levels or changes, mark-ups, terms of sale and credit terms.
2. Company plans as regards development, design, production, distribution or marketing of products/services, divestments, closures or expansion.
3. Rates for production or transportation of products.
4. Bids for contracts or procedures for responding to bid invitations.
5. Matters relating to individual suppliers and customers/potential customers, progress on negotiations or content of negotiations.

If at any point during a meeting discussion appears to be breaching policy guidelines, the Chair or a participant should immediately raise their concern and close the discussion.

Note – we may invite external speakers who will share details of their research on RGGOs prices. GGCS is not responsible for that research. GGCS members should not discuss their views on the accuracy of the prices referred to in any research shown.

1. Welcome, introductions and agenda

- Welcome and introductions – SE
- Actions, minutes and matters arising from last meeting – SE/JS
- Market and scheme update – JS
 - RGGO issuing, transfers and cancellation
 - GGCS Annual Report
 - GGCS Data Verification Statements
 - Notification of sanctions
- Tackling Methane Leakage during biomethane production – Christopher Leonard, QLM Technology
- Achieving ISCC Certification as a biomethane producer – Robin Askey, Envirosense
- ERGaR Policy Update – Christos Tzagkas - ERGAR Policy Officer
- REA and GGCS Policy Update - Syed Ahmed
- Date of next meeting – Nov 2026 – Online

2. Actions, minutes and matters arising from last meeting

Minutes

- Circulated after last meeting. Available in the GGCS Oversight Panel – [shared folder](#)
- No comments have been received

Actions from Previous Meeting

- There were no actions arising from the previous meeting

3. Market and Scheme Update

	Number of plants
NDRHI sites (scheme closed but some sites still commissioning)	143
Green Gas Support Scheme (Tariff Guarantees issued)	23
Green Gas Support Scheme (GGCS members)	13
Plant decommissioned/long term shutdown/liquidation	5
GGCS Producer Accounts	132

More information on UK biomethane production and use

- [News - Green Gas Certification Scheme](#) – quarterly market updates
- [Biomethane | Decarbonisation Knowledge Centre | Xoserve](#) – injection data from biomethane plants on distribution system/per distribution zone (subtract an assumed average of 9% for propane to get the value for biomethane injected)
- [Home | National Gas Transmission Data Portal](#) – injection data for the two plants on the transmission system (no propane added)
- Reports on subsidy payments - [Green Gas Support Scheme \(GGSS\) Quarterly Report Issue 17 | Ofgem](#)
- Biofuel Quota Stats – showing breakdown of production locations biomethane mass balanced to UK transport - [Renewable Transport Fuel Obligation \(RTFO\) statistics - GOV.UK](#)

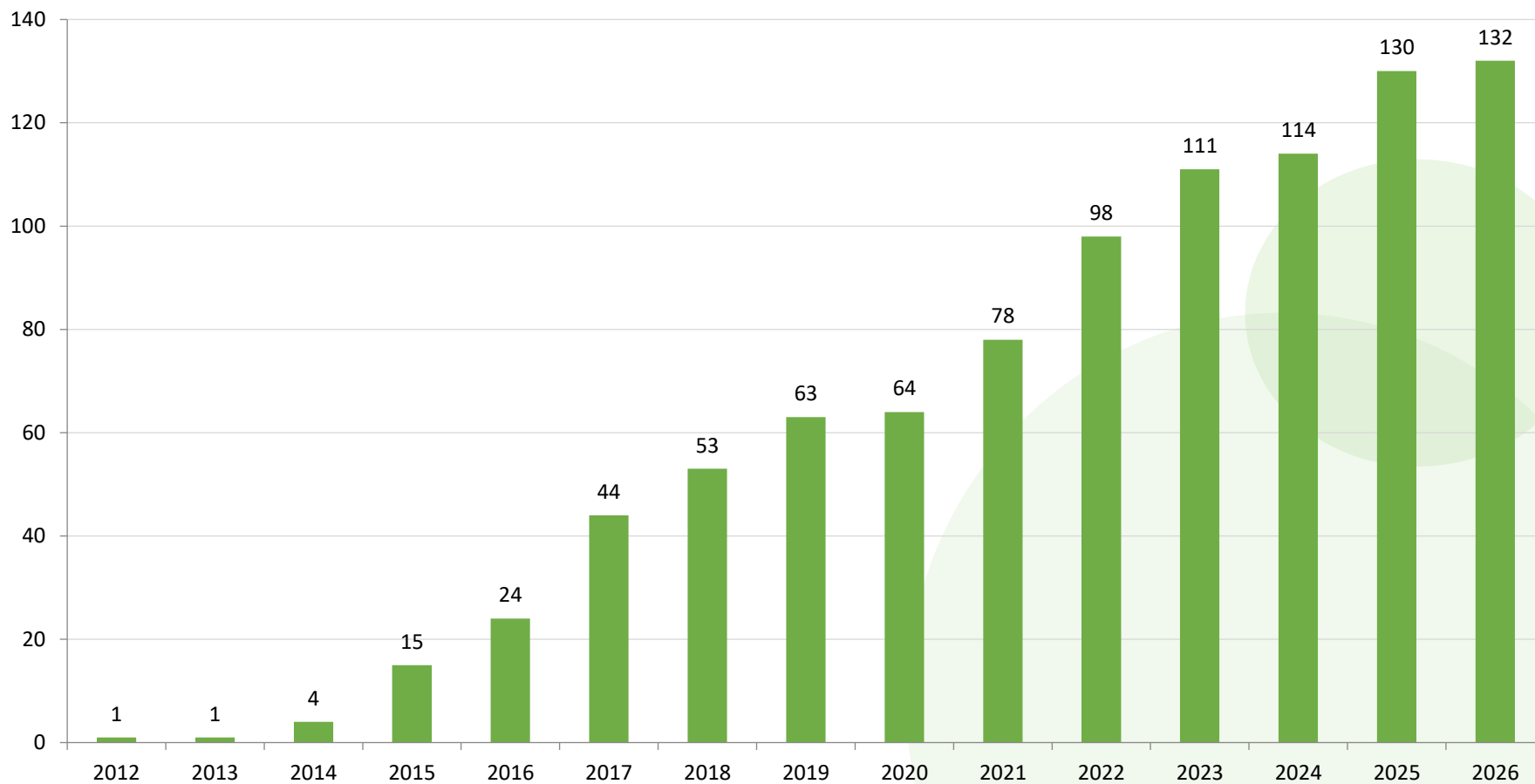
Green Gas Certification Scheme

- GGCS is administered by Renewable Energy Assurance Ltd, part of the REA group.
- Our mission is to provide trusted, independent assurance that builds confidence across the circular economy and renewable energy sector.
- In 2026 we are celebrating 20 years of providing trusted, independent assurance that builds confidence across the circular economy and renewable energy sector.
- GGCS has been operating since 2012 and issue RGGOs for 99% of biomethane produced in the UK

Scheme Staffing

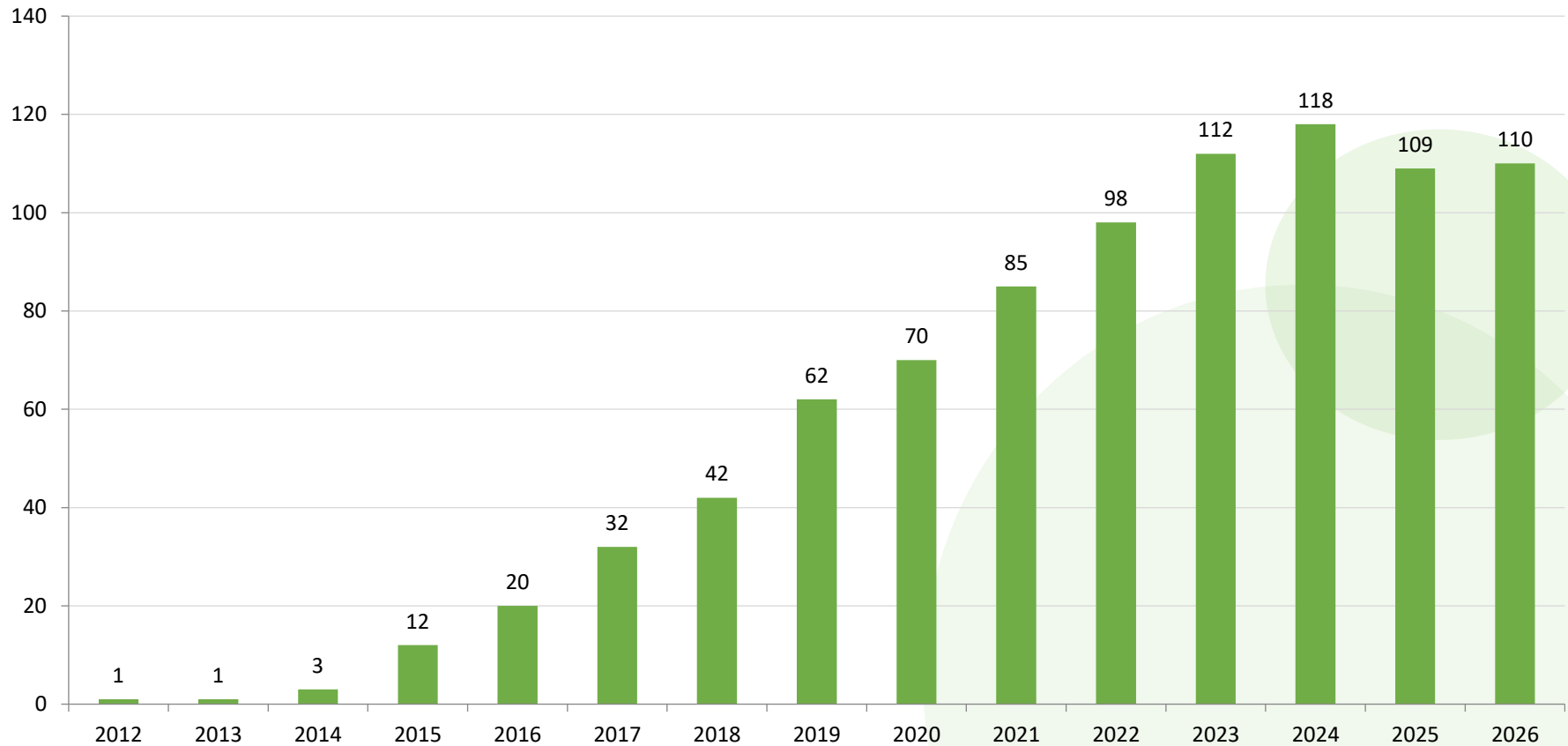
- Membership and Compliance Officer – Lily Maris
- Senior Membership and Compliance Officer - Boris Eremin
- Scheme Director - Jesse Scharf
- Support from;
 - Jon Harley – Renewable Energy Assurance Ltd - Managing Director
 - Syed Ahmed – Policy Analyst
 - Stephen Lister – Legal Advisor
 - Sam Watts – Internal Auditor
 - Sue Ellwood – Chair of Oversight Panel
 - Pamela Taylor – Chair of Compliance Committee

Number of GGCS Producer Accounts

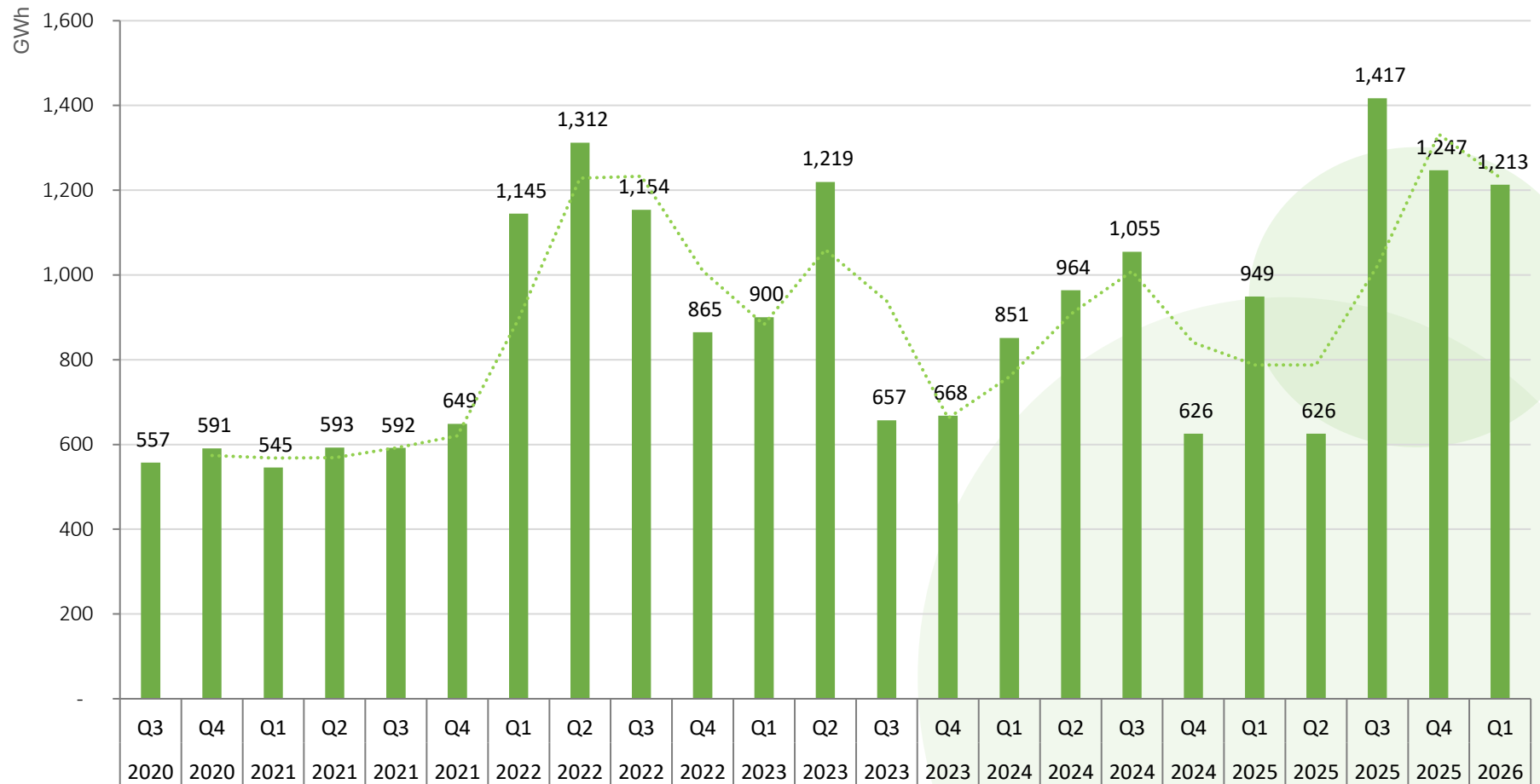


Number of GGCS Trader Accounts

(NB: reduction in 2025 numbers in part due to closure of accounts linked to producers after integration of trader functions into producer accounts in new IT/G-REX)

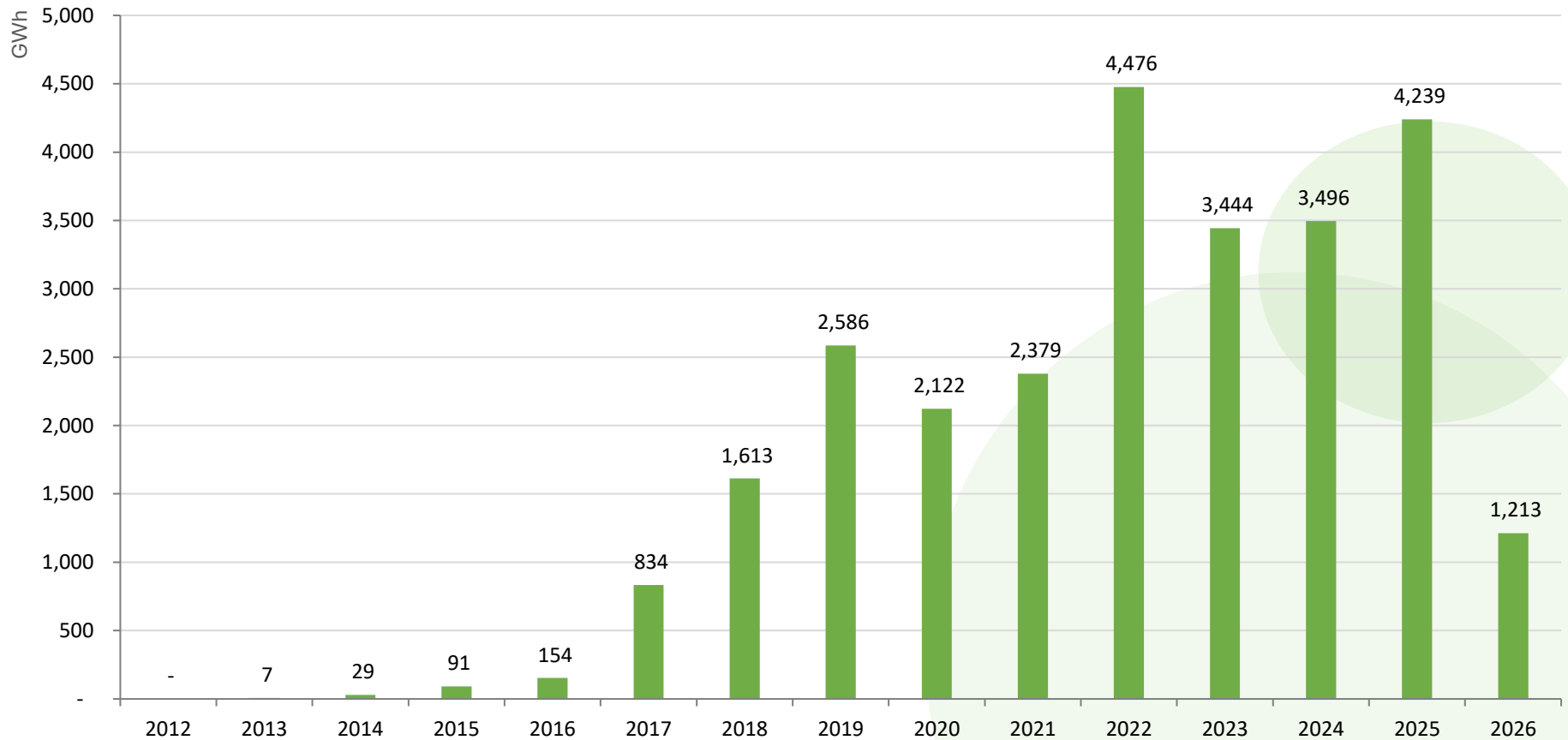


RGGOs Exported (via ERGaR CoO Scheme) or Cancelled by Quarter



RGGOs Exported (via ERGaR CoO Scheme) or Cancelled by Year

14



RGGOs Exported or Cancelled by Country of Consumption (During Q1 2026) ¹⁵

Values are stacked by quarter. Refer to shading colour in key at bottom of graph.

GWh recorded as cancelled outside the UK have been cancelled "ex-domain" i.e. directly from a GGCS account without transfer to another registry, towards gas consumption in the named country.

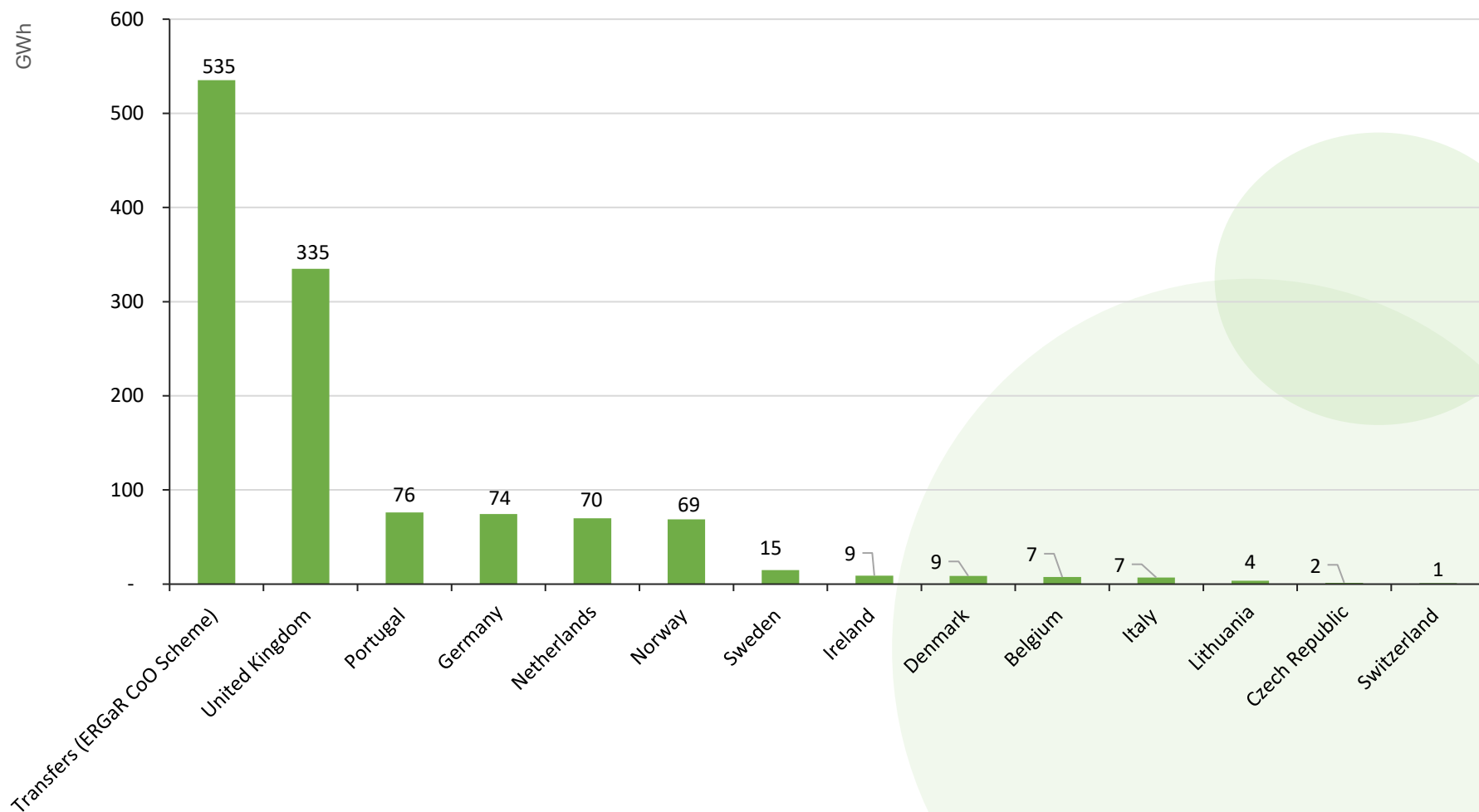
Where RGGOs are exported to another registry, then that registry may or may not cancel those RGGOs for consumption in the same country where that registry is based. We understand both AGCS and DENA allow ex-domain cancellation.

At the end of the year, we will provide a breakdown of UK consumption into domestic, non-domestic, and transport uses.

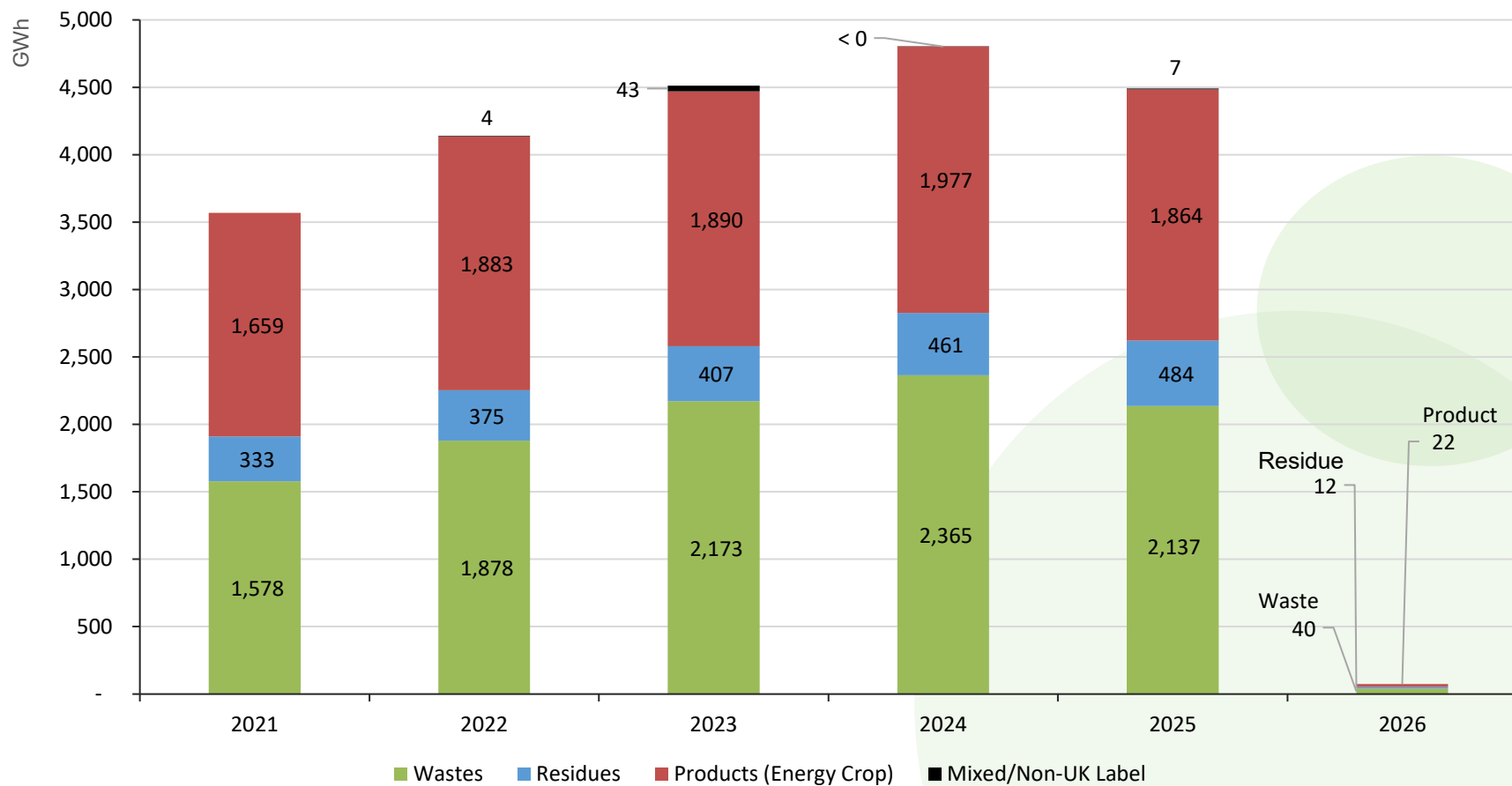


RGGOs Exported/Transferred or Cancelled by Country of Consumption (During Q1 2026)

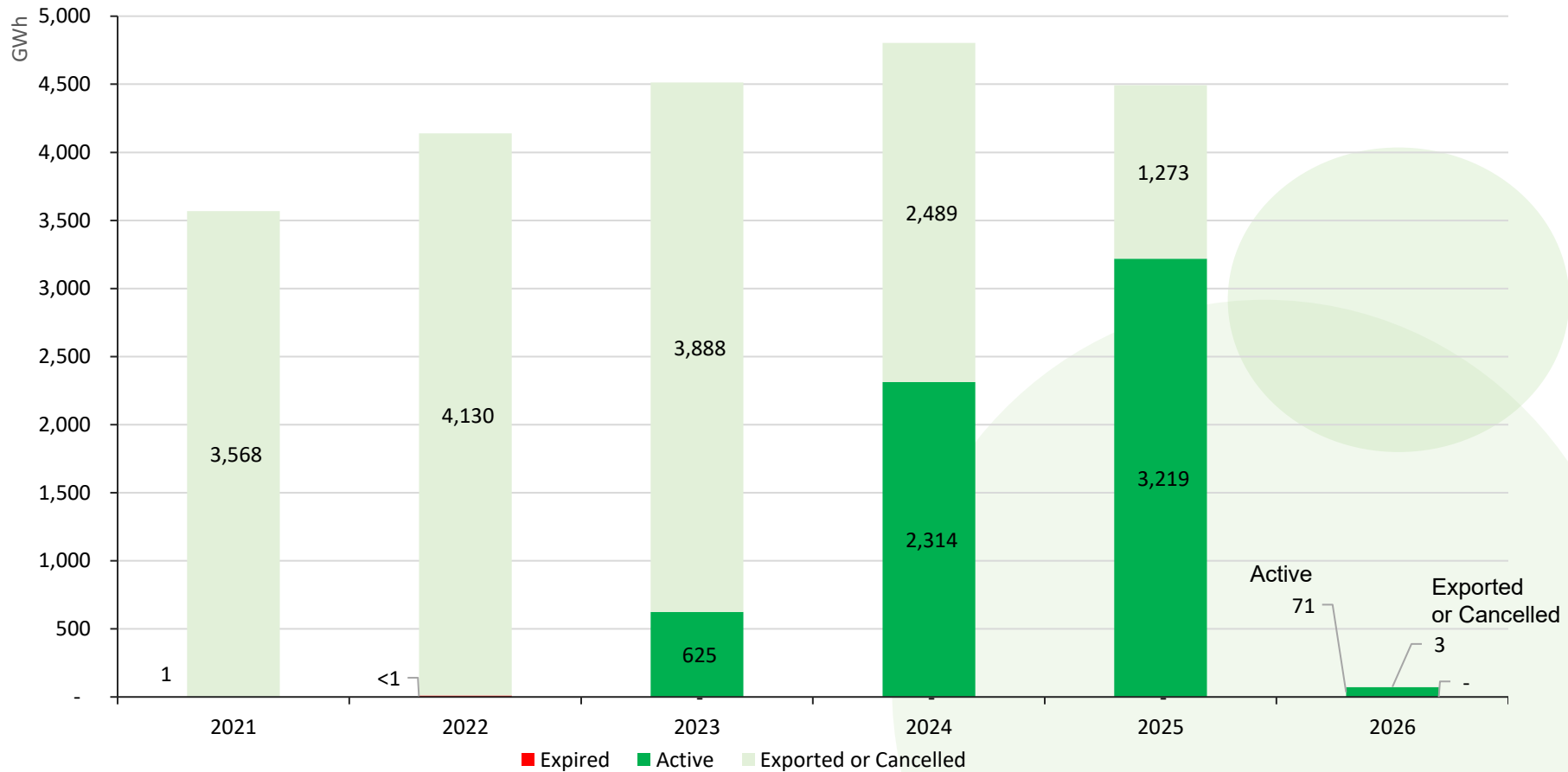
16



RGGOs Issued by Production Year and Energy Source Label



RGGO Status by Vintage (Production Year)

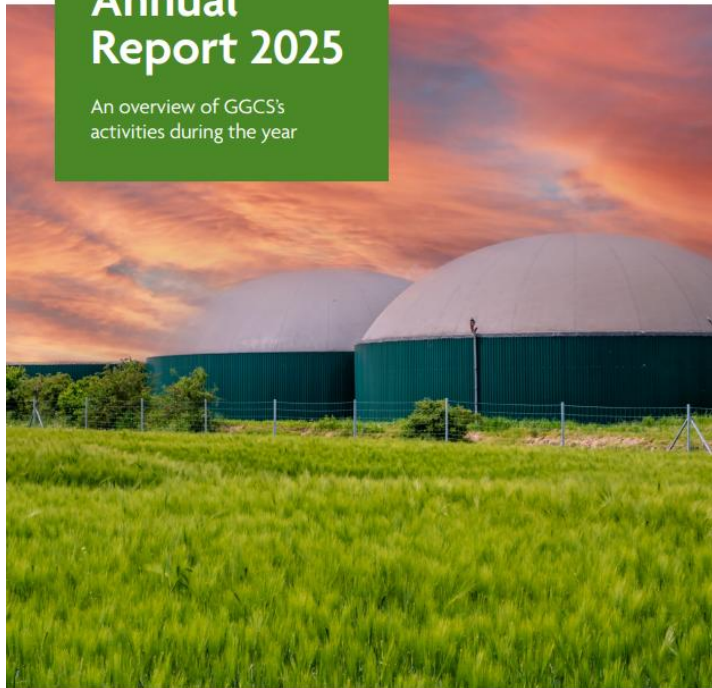


GGCS 2025 Annual Report

GreenGas
CERTIFICATION SCHEME

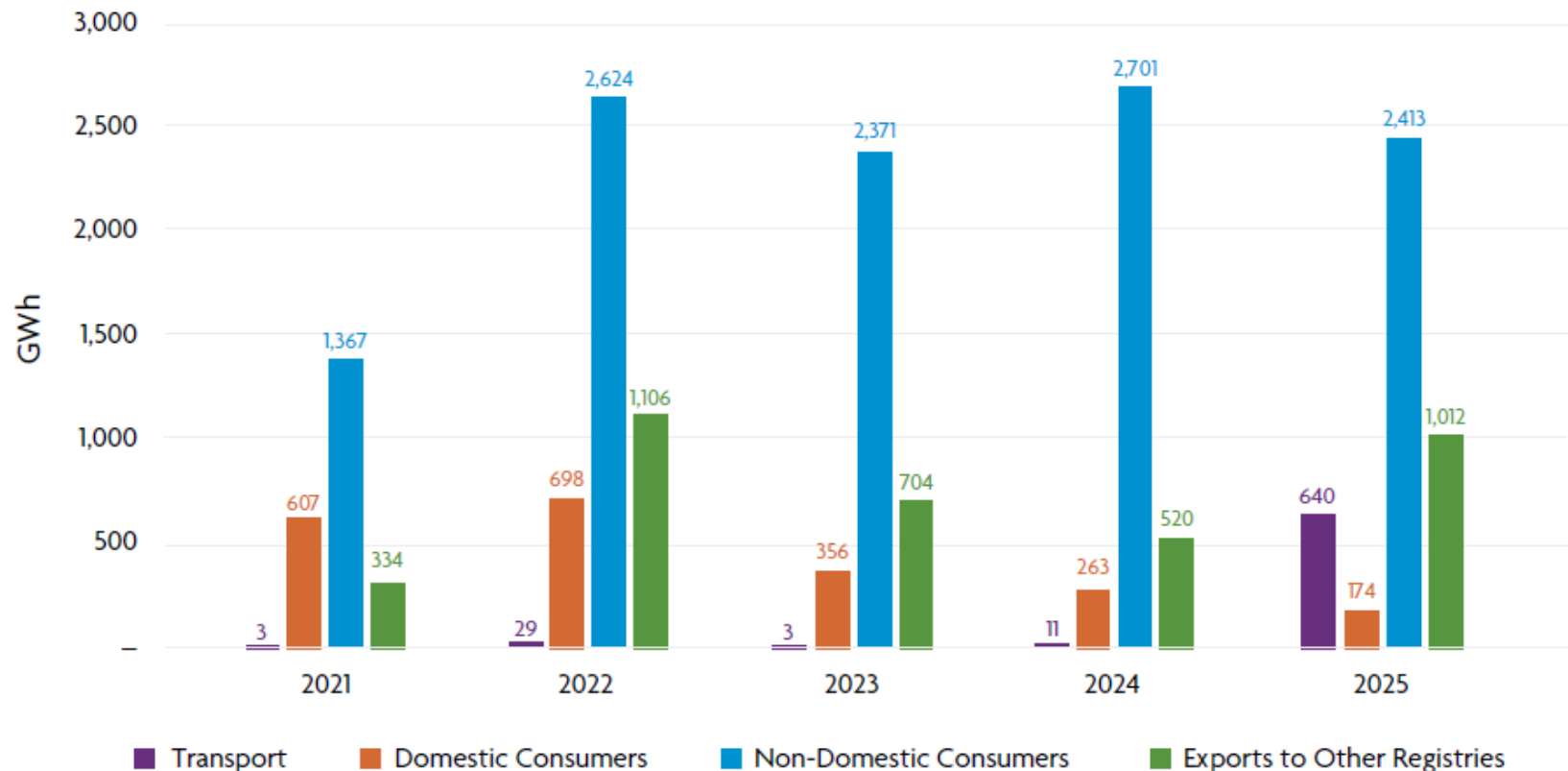
Annual Report 2025

An overview of GGCS's
activities during the year



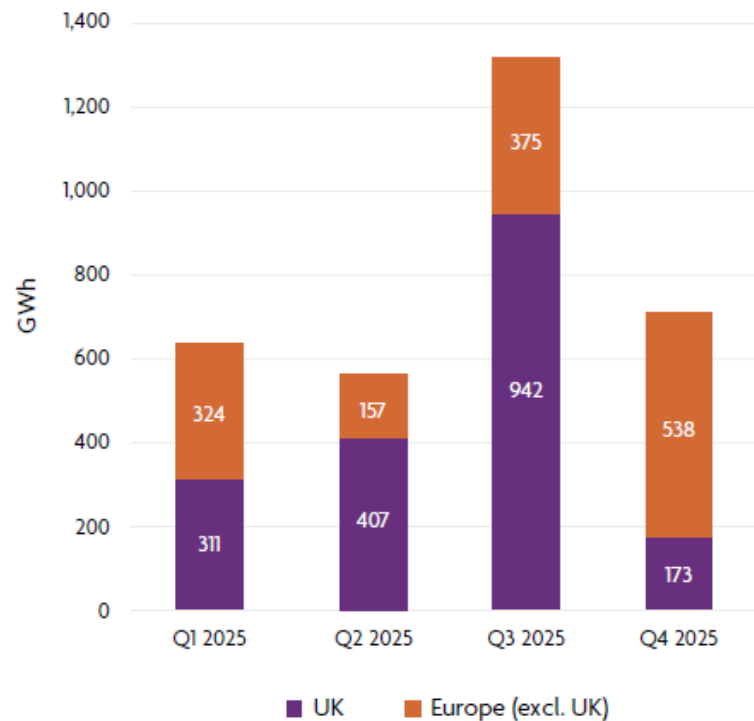
<https://www.greengas.org.uk/news/2025-annual-report-released>

RGGO cancellation and export



- GWh of RGGOs cancelled and exported each year (by sector)

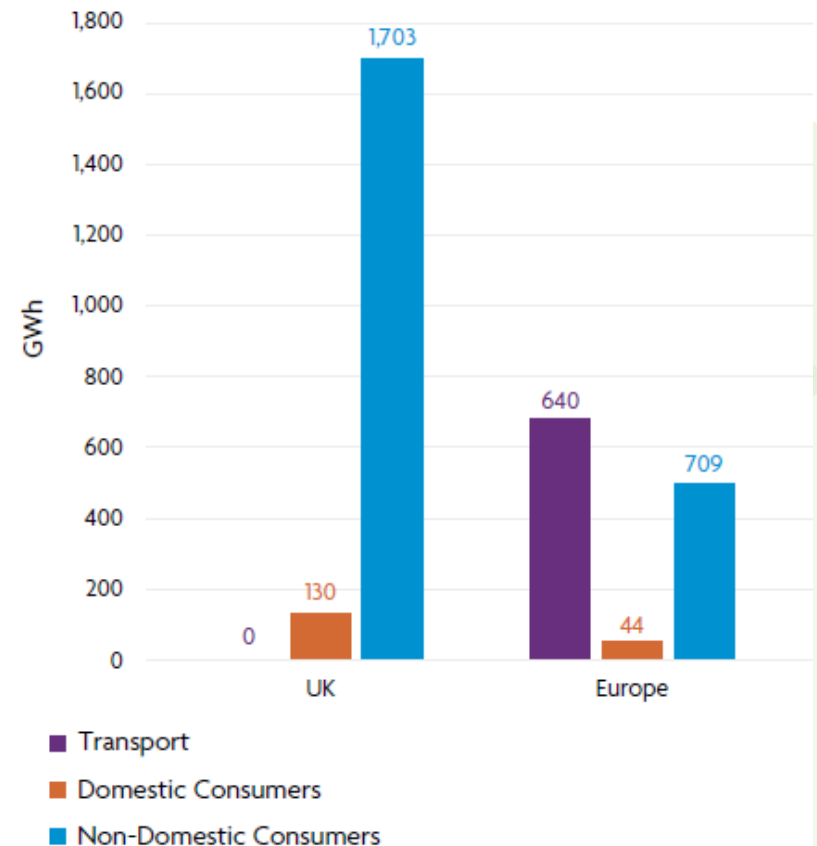
Ex-domain cancellations were 43% of all cancellations in 2025



Cancellations for consumers in the UK accounted for 57% of RGGOs cancelled in 2025. The last quarter of the year saw an uptick in the volume of RGGOs cancelled for consumers in Europe and a decline of RGGOs cancelled for consumers in the UK.

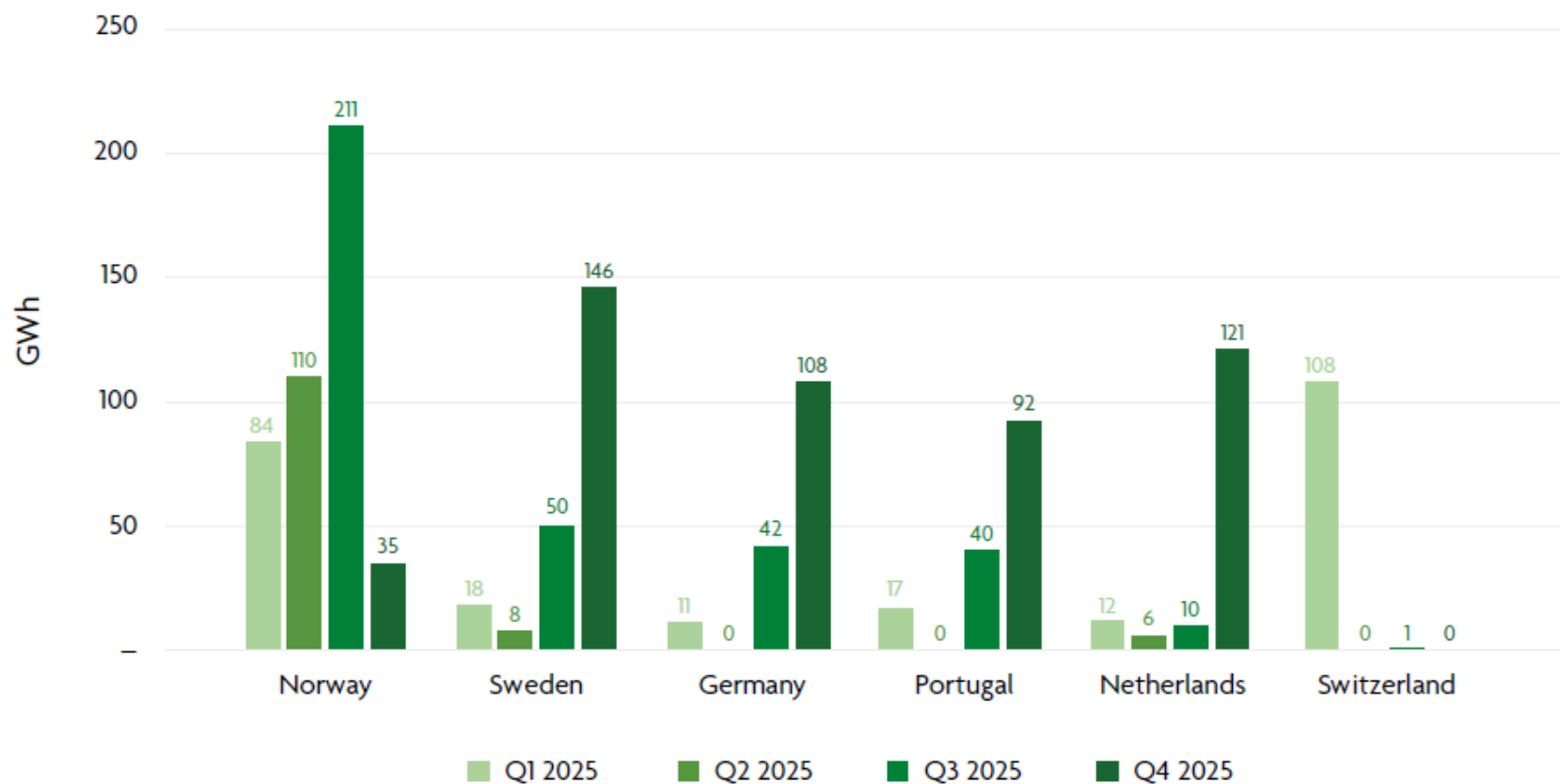
Ex-domain cancellations by consumer type

- Ex-domain cancellations have been boosted in 2025 by transport users
- GGCS has not completed a full historical analysis but we believe this is a new user group
- Domestic consumers in Europe has fallen – we previously allocated consumption by Swiss utilities to this sector – believe those RGGOs are now being exported to Pronovo and then allocated to same utilities



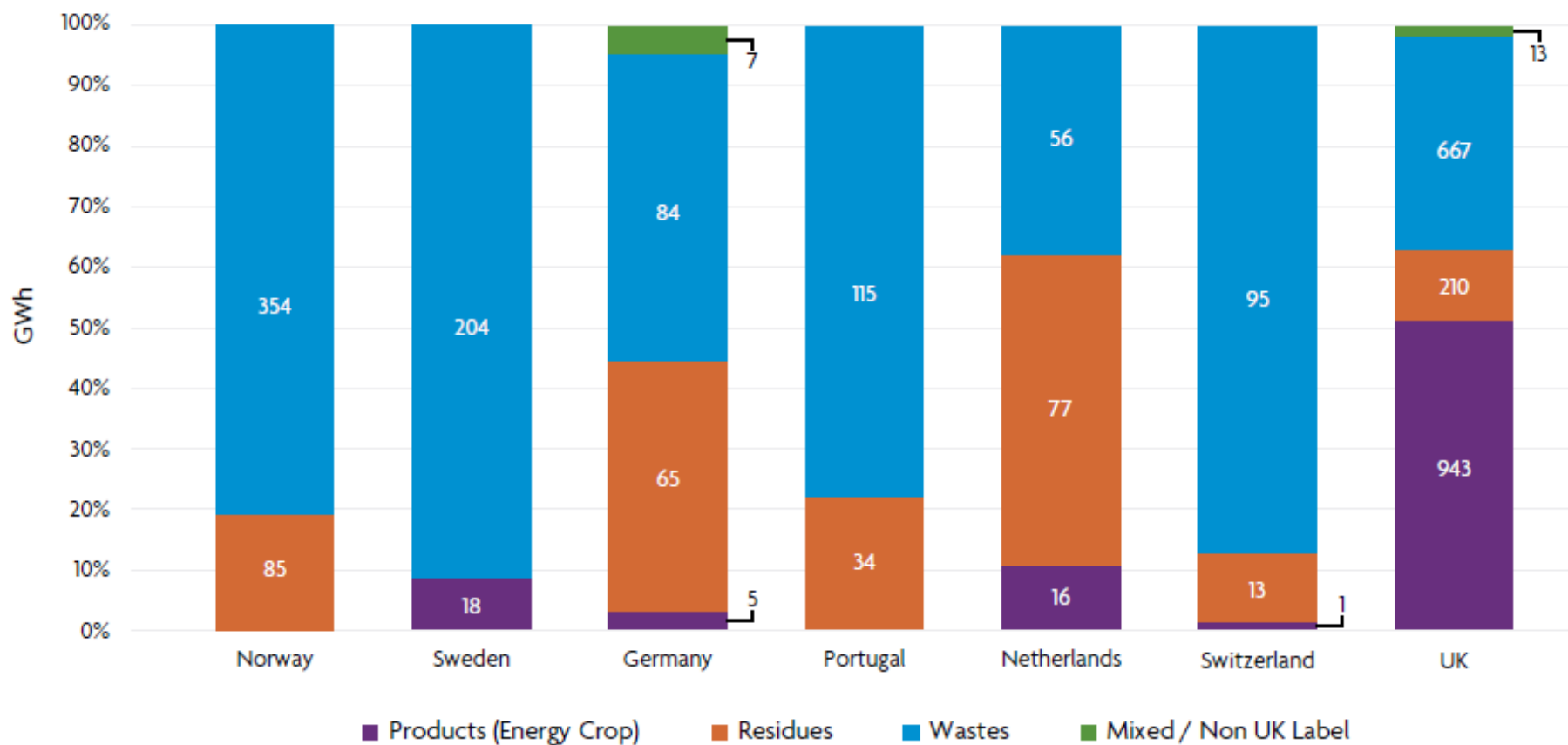
GWh of RGGO cancellations by category

Ex-domain cancellations by top 6 locations



GWh of RGGO cancellations for European consumers (excluding the UK)

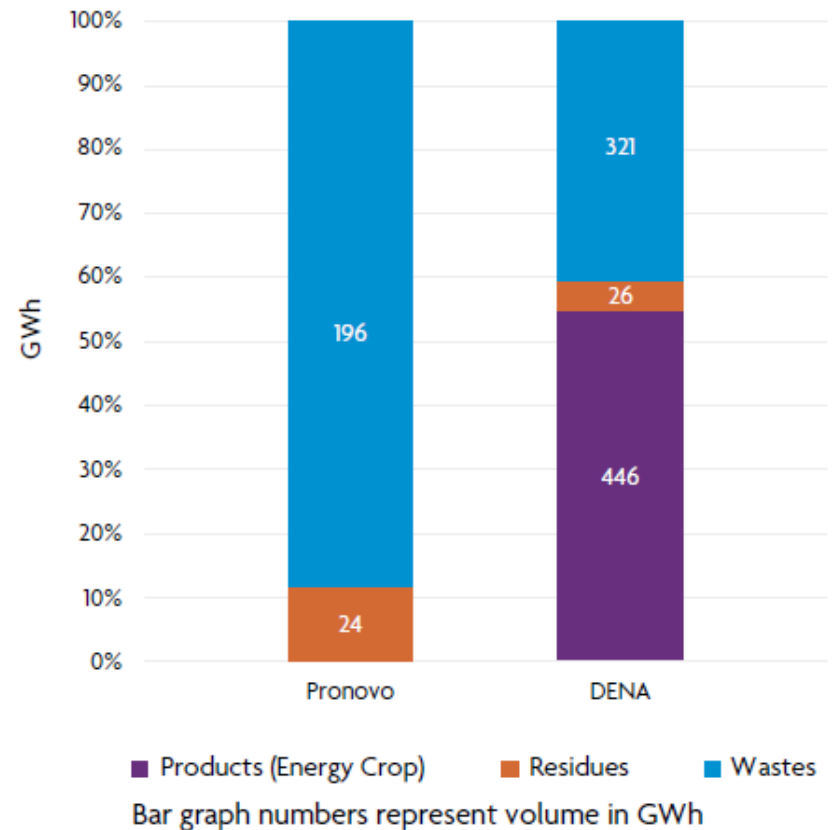
Energy source of RGGOs used in UK and ex-domain cancellations



Bar graph numbers represent volume in GWh

Exports (2025)

- Pronovo don't accept imports of crop based RGGOs
- Split of exports to DENA is quite even



GWh of 2025 RGGO exports by feedstock type

System Update – Withdrawal Report

- We will inform members if they are holding “non-compliant” RGGOs and are affected by any RGGO withdrawal.
- **Members reminded of Scheme Rules withdrawal provisions. Recommend providing for potential withdrawals in your commercial arrangements**

Date of report	Number of RGGO withdrawals per quarter
Q1 2023	1
Q2 2023	3
Q3 2023	2
Q4 2023	1
Q1 2024	3
Q2 2024	5
Q3 2024	3
Q4 2024	6
Q1 2025	10
Q2 2025	8
Q3 2025	6
Q4 2025	4 (all from producer accounts)
Q1 2026	14 (2 – incorrect apportionment, 8 related to a complicated injection arrangement at 1 plant, 4 related to GHG values and ISCC information)

Sanctions

- Check Producer and Trader User Guides for details of our Sanction Policy ([guidance documents folder here](#)).
- Level 4a sanctions require notification of the Oversight Panel
 - “The Scheme Administrator will terminate the letter agreement according to clause 7.1 of the letter agreement. Oversight Panel will be made aware of the identity of the Scheme Participant who has been sanctioned and with consideration for the confidentiality required by the letter agreement, the nature of the non-compliance may be noted.”
 - “the non-compliance has **directly impacted** Scheme Participants who have been involved in RGGO transfers with the sanctioned Scheme Participant”
- No level 4a sanctions have been applied since Nov ‘24
- Official warnings and lower-level sanctions (if applied) are not reported to the Oversight Panel

Scheme Auditing

- Our quarterly internal audits have been completed as normal.
- Our annual external audit covering 24-25 was completed and we were found to be operating according to our Scheme Rules and management system.

Use of G-REX

- Ensure your account users and permissions are up to date
- Lock access when staff leave (you can't delete if they have been active making transfers/cancellations)
- Instructions as follows:
 - Log in
 - Select *Users* from the left hand menu and select *My Organization*
 - Select the relevant person's first name and select "Lock User Access"
 - That user will then have their access to that account (Organisation) blocked. If you have multiple organisations on G-REX you will need to switch Organisation via the menu at the top right and block the user there also.
 - If the User has not completed any tasks on G-REX then you can also select *Delete*. But if they have activity recorded, then the database needs to keep that entry and that user cannot be deleted.

Use of G-REX

- Transfers and cancellations are immediate with standard account settings
- 4eye function can be activated for transfers and/or cancellations
 - First user makes a cancellation or transfer request
 - Second user logs in and confirms request
- We cannot reverse cancellations once they occur so it's important you are confident in their accuracy and have relevant processes in place.
- To activate the cancellation or transfer "4-eyes" function (you can choose one or both) please have someone with the AH ROOT user role email us at info@greengas.org.uk.

GGCS and Xoserve Data Sharing

- GGCS will receive injection meter readings for all plants from May 2026
- Now - we will use to perform additional checks on RGGO accuracy
- 6-12 months time - provide data to DVS authors to improve efficiency
- 2-3 years - Long term goal to integrate into RGGO issuing process



New annual audit (DVS) requirement

- We will be publishing in next few days the next version of the Data Verification Statement (DVS) template (v1.4).
- Mandatory for all compliance cycles ending May 1st onwards.
- Small tweaks and clarifications
- New requirement to report on methane leakage
 - Need to support consumer confidence in the market (in light of increased scrutiny of methane leakage)
 - If Leak Detection and Repair Activity (LDAR) processes are already in place then no additional on site process are required
 - Proportionate with significant value of RGGO sales

Methane Leaks – the bigger picture

- Methane leakages (sometimes referred to as “fugitive methane emissions”) will occur during the biomethane production process as well as during transportation and use.
- Addressed by producers with Leak Detection and Repair (LDAR) activity
- Emissions during production must be accounted for when evidencing compliance with the NDRHI and GGSS GHG thresholds
 - NDRHI default values of 1% during biogas production and 1% during biogas to biomethane upgrading process (lower values can be used if evidenced from manufactures specification)
 - GGSS – default values of 1% from biogas production and 3% during biogas to biomethane upgrading (lower values can be used if evidenced from manufactures specification)
- The Green Gas Support Scheme Greenhouse Gas Calculator - [Calculating greenhouse gas emissions on the Green Gas Support Scheme - GOV.UK](#) - shows that every 1% of methane slip adds 5gCO₂/MJ (18gCO₂/kWh) therefore leakage rates above 5% are likely to result in the GGSS GHG threshold of 86gCO₂/kWh being breached and leakage rates of 7% would lead to the NDRHI threshold of 125gCO₂/kWh being breached.

UK gov scrutiny

- UK gov is a signatory to the Global Methane Pledge
- Environmental Agency (EA) published a [Methane Action Plan 2024 to 2026](#)
- AD plant with EA permits have to submit and adhere to a LDAR plan.
- UK gov commissioned two reports assessing leakage rates (MEAD 1.0 and MEAD 2.0)
- Mentioned in Green Gas Support Scheme mid-scheme review and updated guidance issued in 2025 regarding default and actual values to be used and conditions of use.

DVS requirement 1

Provide details of % values for methane leakage used in NHRHI/GGSS GHG calculations

- GGCS to be able to report in more detail about how methane leakage is being accounted for and offer assurance to stakeholders e.g. RGGO consumers, that credible values are being used

DVS requirement 2

Provide reference number for environmental permit (if held)

- GGCS can then access permit and check for further details of LDAR activity/commitments

DVS requirement 3

External auditor to confirm that methane LDAR activity has occurred

- if not then GGCS will ask for assurances it will be put in place)
- aim to cover any gaps where UK gov has not imposed any requirements to implement LDAR

DVS requirement 4

Provide high level details of LDAR activity
e.g. daily, weekly, quarterly checks in place
using various methods from visual checks
on tanks through to use of optical monitoring

DVS requirement 5

Report any significant methane leaks that have been detected.

1. Currently unclear how detected leaks must be accounted for in NDRHI or GGSS GHG calculations. % of methane released during leak events will be hard to calculate but we may ask for expert opinion as to risk of GHG thresholds being breached.
2. Significant leaks must be reported even if you believe you have complied with the NDRHI/GGSS calculation method, so we can assess the risk that the biomethane produced does not meet our definition of a Green Gas.
3. **As always plants are obligated under our Scheme Rules 8.13 “Gas Producers will inform the Scheme Administrator at the earliest opportunity of any information which may give rise to the need for RGGOs to be withdrawn.”**

GGCS View

- To remain credible in the market place, RGGOs must only be issued for “Green Gas” being gas that has a lower GHG impact than its fossil equivalent
- GHG threshold met should be a recognised value with a recognised calculation methodology e.g. NDRHI or GGSS
- Clear risk that AD sites with significant (5%+) methane leakage will not be meeting NDRHI/GGSS thresholds
- Some sites e.g. Green Gas Support Scheme or using waste, we can be confident are already investing in LDAR activity. Crop only NDRHI plants we don’t have any data on currently.
- NDRHI/GGSS rules are based on some conditions
- **Overall picture is of a fragmented framework. We believe more work is needed to mitigate risk RGGOs are issued for gas which does not meet our definition of a “green gas”**
- **By implementing these checks in the DVS process GGCS can offer assurance to stakeholders that risk of excessive methane leakage has been assessed and mitigated.**

Effect on RGGO issuing

- GGCS recognises :
 - it may not be possible to identify the exact time period during which a leak occurred and
 - it is challenging to measure the exact amount of methane that has leaked during any recorded incident.
- However, if in collecting this data we become aware of instances where it is clear that material methane leakages have occurred over significant period:
 - we may ask for additional assurances from producers that over a quarter the relevant GHG threshold will have been met
 - i.e. ask producers to provide an opinion from an expert GHG auditor or the DVS author.
- If Producer reports a significant methane leakage **before RGGOs are issued**:
 - it may create a delay (while we obtain further information/opinion on the GHG impact of the leak) and/or
 - it may ultimately prevent the issuing of RGGOs.
- **After RGGO issuing:** If the DVS identified that leaks were found:
 - the GGCS may request further information regarding the nature of the leaks and
 - we may implement our withdrawal process (see section 14 of our Scheme Rules) if it becomes clear that RGGOs already issued represent biomethane where GHG savings thresholds are unlikely to have been met.
- All information shared with the Scheme is confidential, including any information we receive regarding methane leakage, but we may share or publish aggregated and anonymised data.



GGCS Oversight Panel Meeting

**Tackling methane leakage during
Biomethane production**

14th May 2026

qlmtec.com



COMPANY PROFILE



- QLM Technology Ltd
- Founded in 2017
- 14 International Patents
- UK R&D and manufacturing
- 23 personnel and growing
- University of Bristol spin-out

➤ Strategic Partner with SLB



QUANTUM GAS IMAGING (QGI) LiDAR

Unique Laser Imaging Tech for Gas Leaks



ENHANCE
SAFETY



DRIVE
EFFICIENCY



PROTECT
THE PLANET

A powerful new tool to help you manage methane

- Pinpoint **emission origins**
- Accurately **quantify emissions** *(single-photon sensitivity)*
- **Real-time** detection
- **Site-wide** coverage

The complete package for low-cost autonomous, continuous monitoring, 24 / 7 / 365, across large scale operations.



UNIQUE QUANTUM GAS IMAGING (QGI) LiDAR CAMERA



Accurate

Precise location and
leak quantification

Patented

Unique technology that
outperforms competitors



Wide Area Coverage

200m range, x20 zoom,
and 12 Hectare coverage



High Sensitivity

Detect leaks as small as 0.2 Kg/hr
with single photon sensitivity



Methane Specific

No impact from
other gases or water



Continuous Autonomous

EPA Approved Methane Test Technology
Methane monitoring 24 / 7 / 365



Safe, Reliable & Robust

Harsh environment capable, ATEX options,
uncooled, telecom laser - eye safe



Low Cost & Scalable

Mature technology & supply chain

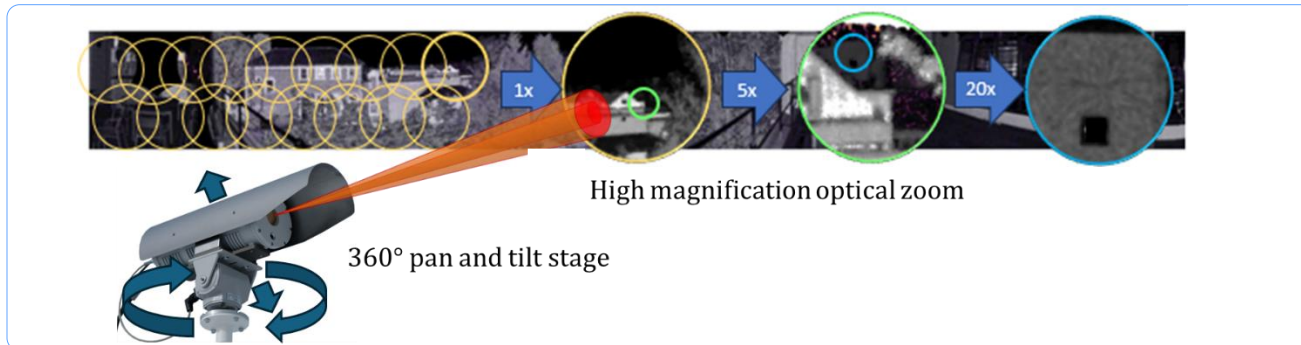
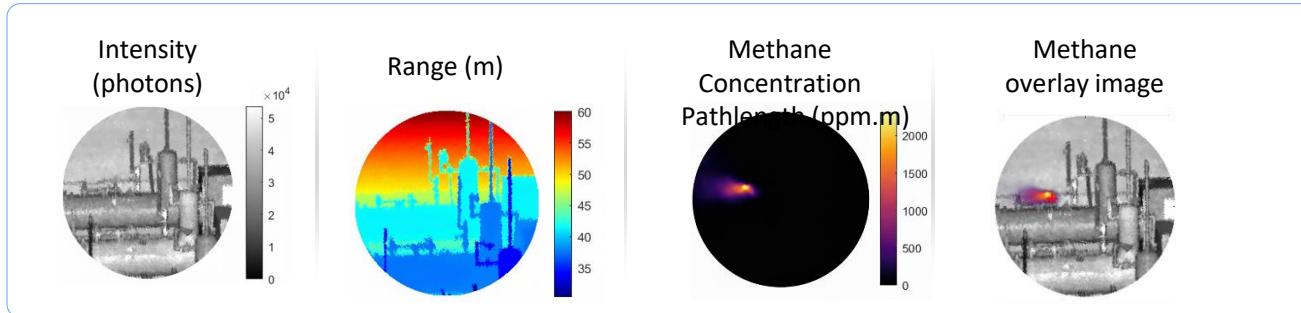


Low Power

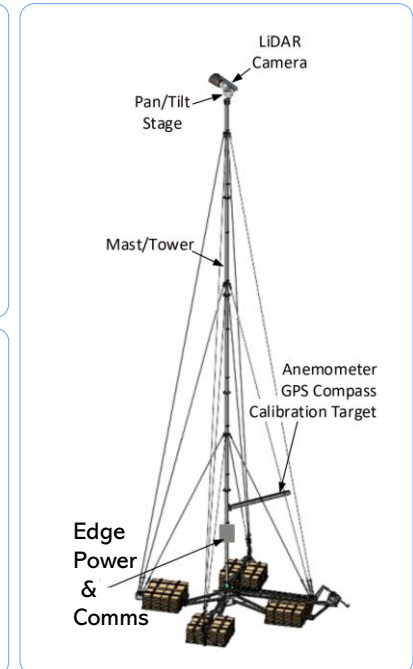
Battery and solar power options
Fixed and mobile options



We can measure exactly where gas is being emitted



Panoramic site-wide coverage of methane emissions



Easily deploy on a mast or an existing structure

The Sustainability Challenge

-  **Net Zero Goals:** Biomethane is critical for decarbonising the gas grid, but leakage can undermine its environmental credentials.
-  **Climate Impact:** Methane is >80x more potent than CO₂ over a 20-year period.
-  **RGGO Value:** Producers must demonstrate absolute leakage control to protect the integrity of Green Gas certificates.
-  **Public Confidence:** Robust oversight ensures "Green Gas" claims remain credible and verifiable.



GGCS Oversight & Integrity



Auditing

Ensuring that every kWh of biomethane injected is matched by rigorous production sustainability standards.



Transparency

Providing market confidence through auditable data on greenhouse gas reduction and process efficiency.



Verification

Validating that "fugitive emissions" do not exceed thresholds that would invalidate renewable origin status.

The Hidden Threat

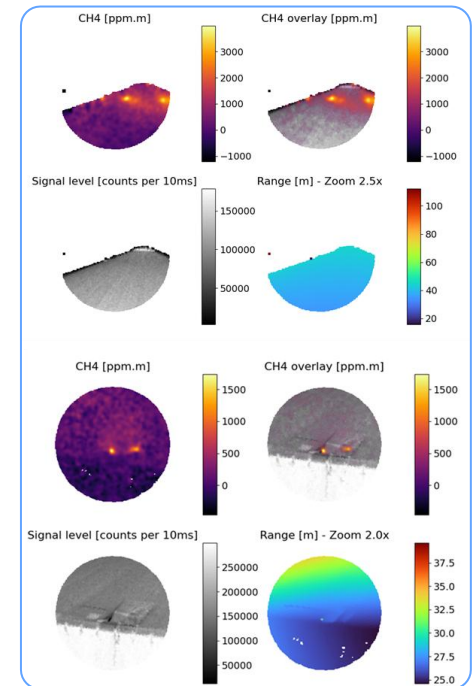
Traditional methods often fail to see the "invisible" threat of fugitive methane leaks from AD plants.

Impact of Leakage:

- ! Financial loss from escaped product.
- ! Safety risks to site personnel.
- ☁ Significant increase in site's carbon footprint.

Digestate storage

- 0.1 – 4.5kg/hr., contributed 15% of site emissions over survey period



Monitoring Limitations

Current auditing typically relies on periodic, manual LDAR (Leak Detection and Repair) surveys, which face significant challenges:

-  **Temporal Gaps:** Leaks occurring between surveys remain undetected for months.
-  **Quantification:** Handheld sniffer probes identify presence but struggle to measure *rate*.
-  **Safety:** Requires personnel to enter hazardous areas for inspections.

3.2%

The leakage threshold where biomethane loses its climate benefit over coal.

The QLM Quantum Solution



Quantum Lidar Methane (QGL)

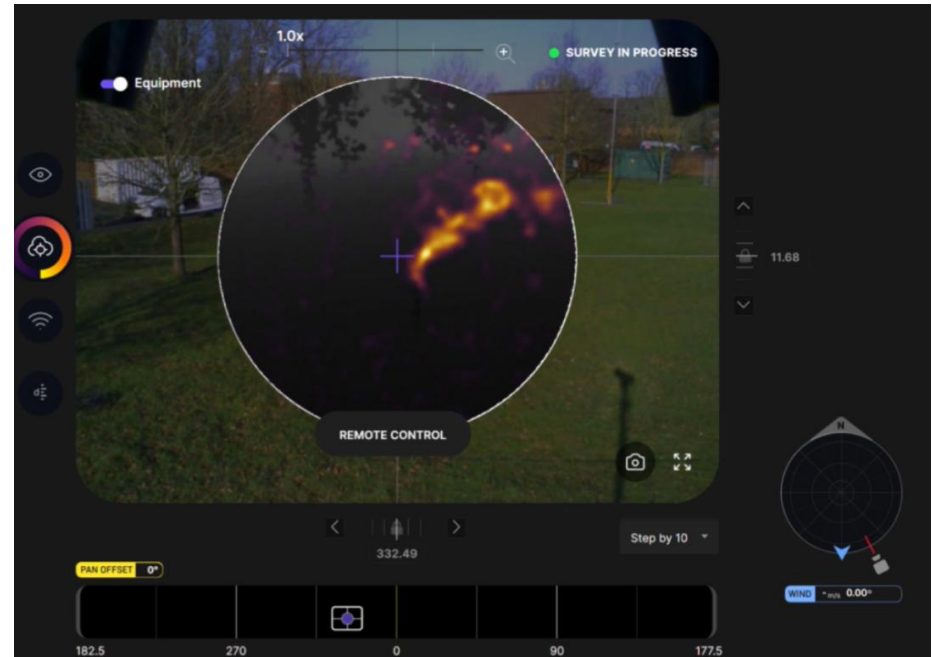
QLM Technology provides the world's first "security camera for gas," utilising quantum-enabled LiDAR to:

-  **Visualise:** Create real-time 3D images of gas plumes.
-  **Quantify:** Measure the exact flow rate of the leak.
-  **Automate:** Continuous 24/7 monitoring without human intervention.

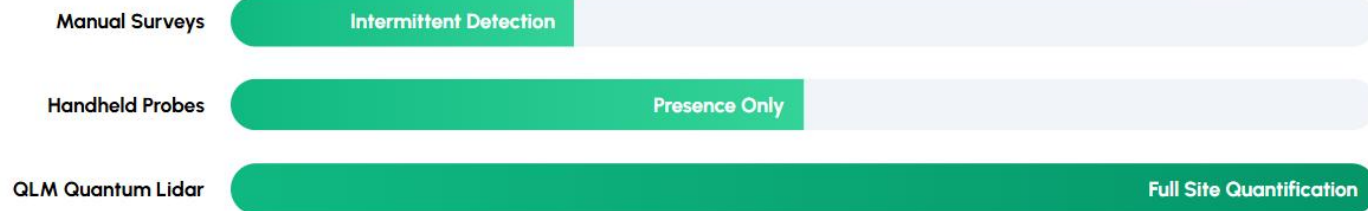
3D Visualisation & Rate

Using single-photon sensitivity, QLM's cameras map methane density over a site-wide area up to 200m.

- Precise Localisation:** Pinpoint exact leak source for rapid repair.
- Wind Integration:** Advanced algorithms account for weather to calculate emissions mass.
- Actionable Data:** Alerts triggered only for actionable leaks, reducing noise.



Continuous Monitoring Benefits



"You cannot manage what you do not measure continuously."

Enhancing Audit Transparency

Feature	Standard LDAR	QLM Continuous
Detection Speed	Months (between surveys)	Seconds (real-time)
Quantification Accuracy	Qualitative / Estimates	Mass Flow (kg/hr)
Evidence for GGCS	Survey Report (Static)	Digital Audit Trail (Dynamic)
Operational Efficiency	Manual / Resource Heavy	Autonomous / Alerts Only

Biomethane Site Applications

Anaerobic Digestion (AD)

- Monitoring digester seals and pressure relief valves.
- Tracking "burps" during feedstock loading.
- Ensuring high-efficiency gas capture for grid injection.

Grid Injection Units

- Continuous monitoring of compressor stations.
- Verification of grid-entry sustainability.



Data Integration for RGGOs



QLM Cloud & Reporting

Digitalized emissions management provides a robust foundation for the GGCS Oversight Panel:

-  **Verified Carbon Accounting:** Transparent data for scope 1 reporting.
-  **RGGO Pairing:** Future potential to link production certificates directly to real-time leakage control data.
-  **Risk Mitigation:** Early warning of leaks prevents environmental damage before it escalates.

Fugitive methane emissions: what is reported?

Calculating fugitive methane emissions as part of the greenhouse gas criteria on GGSS

Summary of fugitive methane emissions guidance – not to be read in isolation		
AD site leaks: This emission point covers the entire AD site. This includes all on-site assets that are part of the biomethane production, storage and utilisation process, including any on-site pre-treatment and storage of feedstocks and digestate management.		
Standard value	1%*	Conditions of use: Annual Leak Detection and Repair (LDAR) inspection and implemented repairs.
Standard value	20%*	No conditions of use. This value represents a potential worst-case scenario where assets are not regularly inspected and maintained.
Actual value	X%*	Producer to submit their own approach.
Whole digestate storage: Whole digestate storage is storage of the output of the digesters, before any potential solid-liquid separation, e.g. dewatering, has been conducted on site.		
Standard value	0%**	Conditions of use: Gas tight covered whole digestate storage and annual LDAR inspection on whole digestate storage elements of the AD site.
Standard value	6%**	No conditions of use. This is for producers who do not have gas tight covered whole digestate storage or do not conduct LDAR on their digestate storage. However, efficient digestion that maximises biodegradable matter conversion and abatement strategies that suppress digestate methanogenic activity are likely to reduce this value, and producers may want to submit actual values to evidence this.
Actual value	X%**	Producer to submit their own approach.
Upgrading unit: In the context of biogas upgrading, slip refers to the release or loss of methane from the upgrading units, typically through the off-gas stream, resulting from inefficiencies in the separation of methane contained in biogas.		
Standard value	0%***	Conditions of use: Upgrading unit uses off-gas combustion. In this case, the off-gases are considered to be flared with a high efficiency of methane conversion, so that no methane is released in the atmosphere.
Standard value	3%***	No conditions of use.
Actual value	X%***	Producer may submit the slip value provided by the manufacturer of the upgrading equipment.
Actual value	X%***	Producer to submit their own approach.
Definitions Actual values: Where a producer considers their approach to yield emissions as low or lower than the standard values outlined above but that approach is not covered by the relevant condition of use, they are encouraged to provide an actual value and provide their justification. An actual value is likely to comprise of measurements taken on site but could also be information taken from a technical specification. *% of biogas generated (in MJ _{LHV}) **% of biogas generated (in MJ _{LHV}) ***% of biomethane input into the upgrader (in MJ _{LHV})		

Biogas customer use example

Hypothetical example

- 1MW power plant consumes ~350 to 500m³/hour of biomethane
- Or, 600-700m³ of biogas per hour
- Assuming production = consumption, using 1.15kg/m³ for biogas, and 650m³/hr:
 - ~750kg/hr, which at AD site leaks 20% worst case equates to emissions of 150kg/hr
 - Using 60% methane, equates to 90kg/hr, or ~790t/year
- UK ETS civil penalty 2026 is £49.61/tCO₂e
- Using CH₄ GWP28, that equates to ~£1M.
- If CO₂ is included, that adds ~£30k.
- Note this assumes zero environmental cost to gas delivered to power plant

Questions & Discussion

How can QLM technology support the GGCS Oversight Panel in evolving auditing standards for the next generation of biomethane production?

Achieving ISCC Certification as a biomethane producer - Robin Askey

ISCC EU BASICS



EnviroSense 15 May 2026

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Existing Clients



Statkraft



Know Your Supply Chain



ISCC different from RHI, RTFO, GGSS etc where a more general assumption of origins or harvest are made.

ISCC is based on a chain of custody system

Uncertified material of unknown origin, even if it is clearly a waste, is not permitted.

Best = PoO or Farm to Plant



Self Declaration Receipt

No Self Declaration from Point of Origin or Farm Supplier= **not** an eligible feedstock and cannot be counted towards the ISCC certified energy generation

Self Declarations must be renewed annually: an administration effort

Mass Balancing Eligible Inputs

Principle: **Only sell** on the ISCC PoS the proportion of sustainability energy output (plus correctly calculated GHG emissions value)

= energy proportion of individual feedstocks (dry matter mass x BMP) of total

'Eligible' means meeting the sustainability and scheme requirements of ISCC

Mass Balancing - Similar to RHI





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Link the MBS Output to the PoS

1. General Information

Type of Product		Biomethane			Eec GHG Method	fulfils Art. 29 REDII ³	waste / residues ⁴	low ILUC risk ⁵	Intermed. Crop ⁶
#	Quantity [KWh] LHV	Quantity [KWh] HHV	Feedstock	Country of Origin					
1	2,864,710.27	3,151,181.30	Corn / Maize	UK	Actual	Yes	No	Yes	No
2	-	-	Wheat	UK	Actual	Yes	No	Yes	No
3	224,199.99	246,619.99	Wheat	UK	Actual	Yes	No	Yes	No
4	-	-	Sugar Beet	UK	Actual	Yes	No	Yes	No
5	-	-	Residue from the processing of	UK	Actual	Yes	Yes	Yes	No
6	2,538,882.59	2,792,770.85	Whey Permeate	UK	Actual	Yes	Yes	Yes	No
7	-	-	Food Waste	UK	Actual	Yes	Yes	Yes	No
8	3,055,514.65	3,361,066.12	Manure (Poultry)	UK	Actual	Yes	Yes	Yes	No
9	-	-	Manure (Cattle)	UK	Actual	Yes	Yes	Yes	No
10	1,030,133.16	1,133,146.47	Intermediate Crop (Grass)	UK	Actual	Yes	No	Yes	Yes
11	65,486.45	72,035.10	Sunflower	UK	Actual	Yes	No	Yes	No



GHG Calculations

The GHG lifecycle equation is based on the RED

$$E = e_{ec} + e_l + e_p + e_{td} + e_u - e_{sca} - e_{ccs} - e_{ccr}$$

Ensure correct GHG or PoS will need
cancelling

Defaulting on offtake agreements are
not an option



European Renewable Gas Registry

ERGaR aisbl

Green Gas Certification Scheme 14 May 2026



Visit Our Website

www.ergar.org



Presentation by



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Agenda

- ❖ Who are we
- ❖ RED IV revision
- ❖ Union Database
- ❖ Status of CoO Scheme
- ❖ GHG Protocol revision
- ❖ FuelEU Maritime & IMO Net Zero Framework
- ❖ European Commission responses on national support schemes
- ❖ Conclusions

Who are we?



International non-profit,
(BE law) established in September
2016. Founded by **established
biomethane registries.**



ERGaR facilitates the **cross-
border exchange of renewable
gas certificates.**



ERGaR provides a **forum for the
collaboration of renewable gas
registries and market
participants** in Europe.

Our Members



What You Gain as a Member



1. Being up-to-date on relevant developments

- Monthly **technical working group** meetings.
- Quarterly **policy working group** meetings.
- Access to the **Country Library & Statistical Report**.
- Monthly policy **newsletter**.
- Members-only **training sessions & webinars** (e.g., FuelEU maritime, ETS, blending obligation).

What You Gain as a Member

2. Support shaping rules & regulations on renewable gases

- Contribute to **EU decision-making** (RED III, ETS)
- Provide **input to international platforms** (e.g., SBTi, ISO, GHG Protocol, ISCC).
- Join **new projects** (e.g., Biogenic CO₂ certification).



What You Gain as a Member

3. Meet other experts in the industry

- **Networking events** at General Assembly and others (E-world, REC MM).
- Participate in key debates.



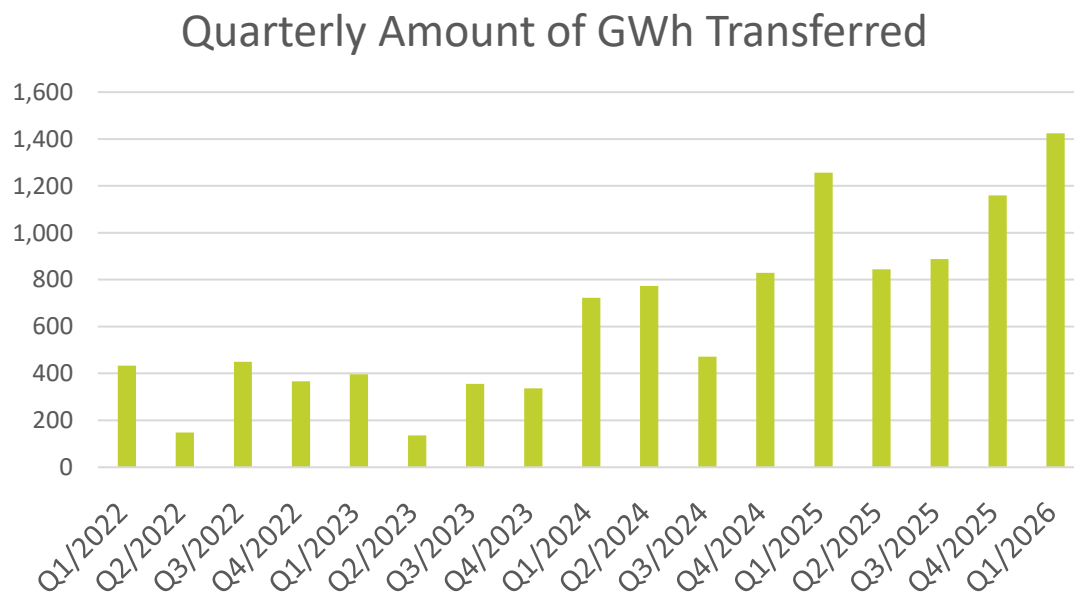
RED IV revision

- Ongoing public consultation to revise post-2030 renewable energy framework
- ERGaR already submitted input in the Call for Evidence
- Key requests:
 - A harmonized and simple single market for renewable gases, particularly for biomethane
 - A single certificate, combining the best elements of GO & PoS
 - Single certificate to be tracked via the UDB
 - Creation of national production registries and connection to UDB
 - Trade with third countries must be possible
 - Rules on lifespan of certificates, mass balance & imports/exports must align with market practice
 - Allow producers to have flexibility regarding rules on co-digestion
- ERGaR will submit further input during the public consultation

Union Database

- In recent discussions with the Commission, it was made clear that:
 - Delegated Act on traceability of raw materials will be published soon for public consultation and will have the date of mandatory operation of UDB
 - Implementing Act (2022/996) will be published for public consultation in July/August 2026 – has provisions on how UDB will interact with third countries
 - Liquid biofuels is the priority for Commission
 - UDB is in discussions with national databases (Nabisy, Carbure) to ensure smooth connection – only one PoS (for fuel) should be issued per consignment
 - For countries without a GO registry, Member States are encouraged to on-board operators
 - UDB team appears optimistic on discussions with UK government; we expect more updates soon on when UK can have a mutual agreement with EU on UDB
 - Any progress on these discussions will affect Ireland as well

Status of CoO Scheme

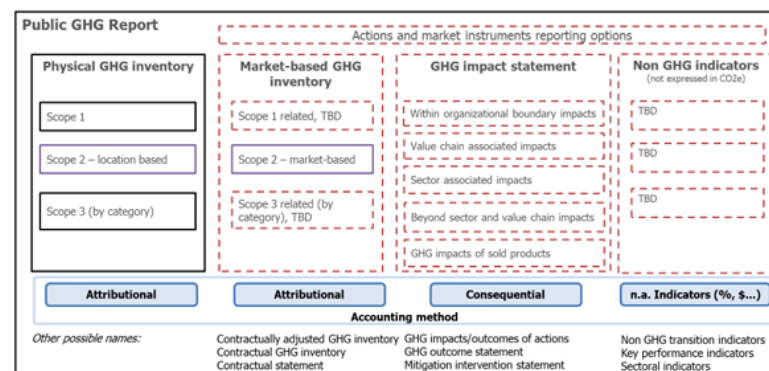


Status of CoO Scheme

- **VertiCer** (Netherlands) is leaving the CoO Scheme by July 2026
- **Amber Grid** (GO registry – Lithuania) is the newest member of the CoO Scheme
- **Gas Networks Ireland** has been officially appointed as the GO registry in Ireland
- They declared their intention to connect to both ERGaR and AIB
- **TGE** (Polish Power Exchange) will most likely be **the GO registry in Poland**
 - They are already a ERGaR member
- We see a tendency of more registries having double membership (ERGaR & AIB)
 - **Example:** Amber Grid is issuing different GOs depending on which trading hub they will be traded

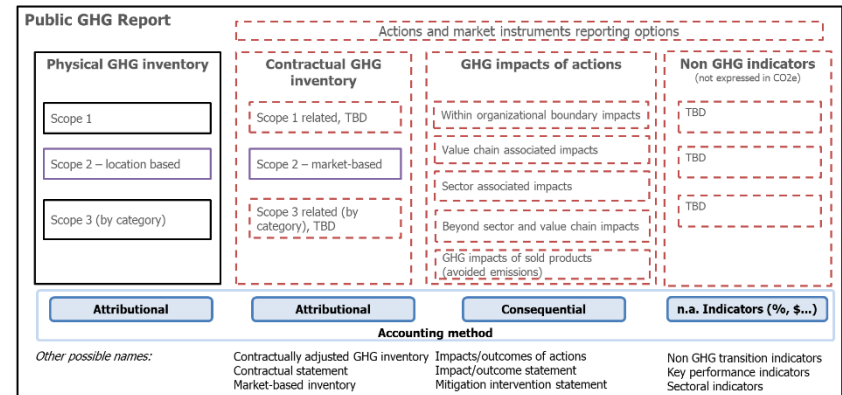
GHG Protocol revision

- [White paper](#) proposal
 - Consultation open until end of May
- Physical inventory
 - Existing emission inventory
 - Key open question: Will mass balanced biomethane (i.e. with PoS) be considered part of physical inventory?
- Market-based GHG inventory
 - Market-based instruments to be included
 - Details rules to be developed
 - Key open questions:
 - Will book and claim certificates such as Guarantee of Origin be allowed?
 - What will be the requirements for such certificates? Location, duration, third-party verification etc.



GHG Protocol revision

- Draft input consultation circulated
- Key points:
 - Support for market-based instrument and GHG impact statement
 - GHG impact statement should become simpler with merging certain aspects
 - Request for interim statement
- Work in AMI working group focusing on quality criteria (e.g. additionality, third-party verification)
 - Uncertainty if GO only/uncertified biomethane is sufficient.
 - No third-party verification of GHG values



FuelEU Maritime

- Obliges vessels >5000 GT calling at European ports to reduce the GHG intensity of the energy used on boards:
 - 6% by 2030
 - 14,5% by 2035
 - 31% by 2040
 - 62% by 2045
 - 80% by 2050
- Certified biofuels & RFNBOs are used to ensure compliance with FuelEU Maritime
- Documentation for compliance:
 - Bunker Delivery Note (BDN)
 - Proof of Sustainability (PoS) or Proof of Compliance (PoC)
- Flexibility mechanisms:
 - Borrow in advance compliance surplus from the next year
 - Include the ship's compliance balance in a pool of ships

FuelEU Maritime

What should we expect:

- **FuelEU Database:** FuelEU database builds upon existing IT systems in the European Maritime Safety Agency, mainly THETIS-MRV
- **Union Database:** Shipping companies will be able to view the relevant transactions through the EMSA THETIS-MRV system, which will be connected to the UDB - Late 2026
- **Revision:** Upcoming revision of FuelEU Maritime planned for 2028
- Opportunity to further support the scaling of renewable fuels post-2030

IMO Net Zero Framework

- MEPC 84: Discussions over the feasibility of adopting the NZF
- Discussions will continue to find a compromise at two intersessional working groups on GHG (ISWG-GHG) ahead of MEPC 85
- MEPC 85 will most likely take place beginning of December 2026
- US has submitted a motion to call for a mandatory withdrawal of the EU ETS from any alternative proposal to NZF
- A growing number of countries are opposing NZF
- Pivotal countries for its adoption are India, China, South Korea

EC responses on national support schemes

- The Commission initiated an infringement procedure against France for the **CPBs** (Certificats de Production de Biogaz)
- **Reminder:** Suppliers can buy these certificates from biomethane producers located in mainland France
- Biomethane producers in other MS will not be recognised for traceability under this scheme
- Commission believes that such measures are violating internal market rules
- France has 2 months to rectify the issue – if not then this process can lead to the European Court of Justice

EC responses on national support schemes

- The Commission issued a Detailed Opinion on the Renewable Heat Obligation scheme for Irish Biomethane
- **Reminder:** Under the RHO scheme, a certificate “multiplier” (1,5x) would apply to each biomethane unit produced domestically and certified under RHO
- Commission claims that multiplier is incompatible with internal market rules
- Ireland has 6 months to provide an alternative solution; otherwise, the RHO scheme will not be adopted

EC responses on national support schemes

- If Ireland fails to resolve this issue, then infringement procedures will be initiated against Ireland
- Another item of concern based on EC's Detailed Opinion:
 - Based on the Opinion text: *"However, as long as UK legislation does not adhere to the conditions in the Union Data Base (see Art. 31a of RED III) or the related sustainability requirements, no pipeline-based biomethane from the UK or continental Europe can be imported to Ireland nor it can eligibly count towards the Irish contribution to the RED target."*
- In essence, Ireland, even though a MS, is not considered as part of the EU gas grid.
- Serious challenge for cross-border trade
- ERGaR in a joint effort with other European associations to request clarifications from the Commission

Conclusions

- Next 2 years will be pivotal for biomethane market including for post-2030 market framework
- Rising demand for bio-LNG particularly if the IMO NZF is adopted
- The expected revision of the GHG Protocol will be instrumental in the use biomethane certificates for voluntary purposes
- Commission starts following a more restrictive approach towards national support schemes for biomethane
- Under RED IV certification market has the opportunity to be harmonized – this is our main priority as ERGaR

THANK YOU & STAY IN TOUCH WITH US!



<https://www.ergar.org/>



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REA policy Briefing

Ciaran Burns

14 May 2026

Green Gas Certification Scheme Oversight Panel Meeting



Future Policy Framework for Biomethane Production

- Since the last meeting DESNZ announced an extension to the GGSS until March 2028.
- This is an extension for the commissioning period for plants that cannot commission before end March 2028.
- The 15 year period of support will start in March 2028 even if the plant has not yet completed commissioning.
- Consultation which was originally expected at *end of 2025* was pushed to the *end of the 2025 financial year* (March 2026), but again it was pushed to *Spring 2026*.
- Last week DESNZ officials told us that due to significant cost savings at DESNZ the biomethane team is being greatly reduced so they don't know when the consultation will happen.
- The biomethane team is being moved under the umbrella of industry which is a positive signal.
- Likely that they will wait until any ministerial reshuffles have taken place before any further announcements.



Green Gas Taskforce published reports



This is a study looking at Gross Value Added (GVA) of a highly developed biomethane sector (120TWh) to the UK economy with a particular focus on jobs.

- Estimated the potential for up to 56,000 jobs in the sector by 2050.
- Contribute up to £5.6 billion per year in 2050 (compared to £0.5 billion today)
- Cumulative GVA of up to £70 billion by 2050.
- Estimated that up to 80% of investment into biomethane sector remains within the UK. (Solar PV is 10%, offshore wind is 45%, large scale nuclear is 75%).

Download from here: <https://greengastaskforce.co.uk/key-reports/>



Green Gas Taskforce published reports



This study looked at hybrid heating systems, where a small heat pump is installed alongside the existing heating system.

Principle is that HP delivers significant proportion of heating through the year using low carbon electricity and then uses biomethane in the gas boiler for times of high demand, delivering 90-95% GHG savings.

Makes comparison with other European countries e.g. Italy and Netherlands where hybrid HP systems make up 40% and 50% of HP market.

Focus should be on UK properties that are difficult to renovate/insulate.

Download from here: <https://greengastaskforce.co.uk/key-reports/>



- Launched the **On-Farm AD (OFAD)** working group which is focusing on supporting small scale AD on farms utilising animal manures.
 - Generally CHP of around 50-500 kWe.
 - Trying to get value for the benefits such as the baseload power; flexible with solar and wind; avoided methane emissions; low GHG fertiliser.
- Organising a LCAW event with Diageo for the Refresh Alliance – renewable energy initiative for the drinks industry. Will introduce the concept of green gas and GPAs.
- Have a ‘Friends of Bioenergy’ dinner for Conservative Party members in May
- Organising site visits for MPs to biomethane plants (DS Smith Paper in March; Malaby Biogas in July) – **Looking for more sites to volunteer.**
- UK Green Gas Day 2026 scheduled for **8 October** at National Motorcycle Museum
- Will be looking at engagement with new ministers in the devolved administrations following local elections





THE ASSOCIATION
FOR RENEWABLE ENERGY
& CLEAN TECHNOLOGY

Thanks for
listening.

If you have
any
questions,
please reach
out.

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GGCS Policy Updates

- GHGP
- UK ETS



GHG Protocol – Scope 2

GGCS submitted a response to the GHGP consultation on the **Updated Scope 2 Guidance** (the consultation ran from October 20 2025 to January 31 2026). The guidance remains focused on electricity issues.

Our responses to this very significant consultation were limited to:

- Highlighting the need for the GHGP to include consideration **of grid delivered biomethane within Scope 2 reporting**
- Broadly supporting the GHGP proposals in this update **for greater precision around reporting of emissions in terms of location and timing**
- Emissions reductions secured through the use of biomethane **should be classed as a Scope 1 emission reduction.**

Scope 2 - Latest

March 2026 update: GHGP are currently evaluating feedback – they will share summaries and the full set of responses in the coming months.

- GHG Protocol received **~1,400 responses** across the two consultations issued (in addition to the Scope 2 paper, there was a second consultation on Electricity Sector Consequential Accounting)
- Industry concerns are being raised over GHGP Scope 2 proposed changes. Two formal complaints have been raised with GHGP
- “The GHGP should not allow a vocal minority to impose a rigid, theoretically elegant but practically flawed mandate. **The guidance of those investing billions, building projects, managing grid reliability, and delivering emissions reductions must inform this process.**”
- Also the RECS Energy Certificate Association submitted a complaint about **complexity of consultation and time to respond**

Scope 2 – Industry Concerns

On April 22 2026 Open Letter from a number of major energy users to GHG Protocol

- *"we urge the Secretariat, Independent Standards Board, and Steering Committee to make hourly- and strict-deliverability-matching in the Market Based Method (MBM) optional, **but not mandatory, by following a “may” rather than a required “shall” approach...**"*
- *"...we are extremely concerned that the proposed revisions to market-based accounting which would require voluntary buyers to match CFE purchases to individual company load on an hourly and physically deliverable basis could:*
 - *Result in limited benefits to carbon accounting accuracy*
 - *Drive inefficiencies in private-sector action slowing system-wide decarbonization*
 - *Discourage voluntary clean energy procurement, potentially dramatically*
 - *Increase electricity prices for individuals and companies*
- *They conclude:" The revised guidance must encourage more clean energy procurement and enable more impactful corporate action, not unintentionally discourage it."*

66 signatories (Amazon, Mars, Apple, FedEx, GM++) representing 33,500+ organizations, with \$4.7+ Trillion in annual revenues facilitating, and/or producing over 300 GW of carbon-free electricity projects.

GHGP – so where is biomethane?

- GHG Protocol developing a **new Actions and Market Instruments (AMI) Standard**
- GHGP state this AMI Standard *“will help unlock the investments required for decarbonization...in hard-to-abate sectors...”*
- GHGP state that consideration on the use of biomethane certificates to be examined in this new AMI Standard
- An **AMI White Paper V3** released March 2026 alongside a survey (open from March 31st, 2026 - May 31st, 2026) – at the moment **there appears to be very little on of biomethane/green gas certificates in the AMI White Paper...**
- **GGCS currently examining options to respond to survey**
- A formal public consultation on this new AMI draft standard is not planned for **Q3 2027**
- **Will there be no clear position on biomethane in the GHGP until...2028?**

Other policy areas

- Consideration of the use of RGGOs in the UKETS – UK Government's ambition for closer alignment with the EUETS provides an opportunity
- Review of REGOs/green tariffs – unclear
- Above and other key areas related to biomethane/RGGOs will be set out in the Government's 'Future Policy Framework for Biomethane' consultation...

Date of next events/meeting

- BREA awards – June 11th - [British Renewable Energy Awards 2026 – REA](#)
- World Biogas Expo – 8th and 9th July - [The World Biogas Expo 2026 hosted by ADBA and WBA | 8-9 July](#)
- Green Gas Day – Oct 8th - [UK Green Gas Day - REA](#)
- GGCS Oversight Panel – Nov 2026 – Date TBC – online