Biomethane Auditing, Verification and Assessment Services





ISCC EU Certification Carbon Intensity Assessment (pre-commissioning) **Methane Slip Assessment Renewable Fuel Transport** Obligation **Renewable Heat Incentive** (RHI) Why EnviroSense osens envi

Introduction to EnviroSense



Since 2010 we have been working with organisations to improve their environmental and sustainability performance. Based in the UK with personnel in the United Kingdom, Singapore, Indonesia, Malaysia, the United States and Spain, we have worldwide reach.

Our team has extensive experience in the biomethane sector, providing a variety of services including ISCC certification, Carbon Intensity Assessments (pre-build or postbuild), Renewable Transport Fuel Obligation Auditing (RTFO), Renewable Heat Incentive Auditing (RHI) and Methane Slip Assessments and Quantification.

Our track record of professional services, responsiveness and accessibility has ensured we have built longstanding business relationships with our clients.



Meet the Team



Jack Symonds

Renewables & GHG Director

MSc Sustainable Finance Jack directs the ISCC (International Sustainability & Carbon Certification) verification team. Jack leads renewable energy and greenhouse gas (GHG) projects with renewable developers, investment and asset management companies.



Adam Grant

Carbon & Forestry Specialist

MSc Forestry

Adam has extensive experience in the carbon market, having worked on a jurisdictional-level international carbon credit programme. He is a qualified and practising forester who works on projects using natural resources and is an ISCC auditor.



Robin Askey

BSc (Hons) Applied Science Robin has been working with energy regulators since 2014. He has extensive experience in renewable asset sustainable finance and environmental obligations. He is also an ISCC auditor.



Jack Boyle

Renewables and Sustainability Verifier

BSc (Hons) Environmental Biology Jack has a strong understanding and experience with greenhouse gas assessments. He is an ISCC Lead Auditor, including CORSIA, and an ISCC GHG Expert.



Richard watkins

BA (Hons)

Richard has significant on-the-ground experience assessing supply chains and biomass origins to determine whether biomass or biofuels comply with the sustainability requirements of legalisation or voluntary schemes.



Rogelio Gonzales-Tato

Sustainability Verifier

MSc Forestry Rogelio has a background in due diligence, particularly in the biomass sector. He is a qualified ISCC GHG Expert and ISCC auditor.



Emma Hughes

Sustainability Verifier

MSc Environmental Management Emma is an ISCC GHG Expert with a background in due diligence and an extensive understanding of biomass; crops, wood or biogenic residues and direct and indirect land use change risks.



1 ISCC EU Certification



EnviroSense conducts ISCC (International Sustainability and Carbon Certifications) audits under our accredited partnership, DoubleHelix Tracking Technologies

ISCC EU is the most well-known and regarded RED II (Renewable Energy Directive) compliant independent certification scheme in the world. It is a 'must have' for the majority of offtake agreements for biofuels.





ISCC EU Certification – Bioenergy



ISCC ensures credible, sustainable, traceable, and deforestation-free biomass products, wastes and residues, non-biological renewable materials (RFNBOs), and recycled carbonbased materials.



The 'EU' aspect applies to biomass and biofuels and the ISCC standards that meet and comply with key article of EU renewable energy legislation – the Renewable Energy Directive (RED II).



Achieving ISSC EU certification demonstrates voluntarily implementation of sustainability criteria and compliance with the RED II. In doing so, the supply chain and feedstocks used to create biofuel (biomethane, biopropane, bioLNG, bioLPG etc.) and the heat and power generated can be claimed as ISCC certified.



Benefits of ISCC EU Certification

We work with a large number of biomethane sites in the UK, North America and Europe to achieve ISCC Certification.

What are the benefits of achieving ISCC Certification?

- Greater access to international markets that require biomass and biofuel traceability and assurances for offtake agreements.
- Acceptance of your feedstock or fuel into EU markets that require RED II and Fuel Quality Directive compliance to be demonstrated.
- Evidence of sustainability compliance for national regulators.
- Accessibility to financial incentives on Renewable Energy Certifications (REC's) that require certification and evidence that your outputs are contributing towards meeting biofuel targets through compliance with sustainability criteria.
- Alignment with feedstocks sourcing requirements of the EU Taxonomy.





2 Carbon Intensity Assessment

EnviroSense extensively work with asset managers and AD plant portfolio mangers to conduct carbon intensity assessments for new build Anaerobic Digestion plants, in order to assesses the carbon intensity values for the overall biomethane and fertilizer production on a feedstock specific basis, under numerous different operating scenarios.

The carbon intensity calculation will be aligned with the methodology set out in Annex V of the Renewable Energy Directive, as outlined below. intensity calculation will be aligned with the methodology set out in Annex V of the Renewable Energy Directive, as outlined below.

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The carbon intensity calculation will be based upon the prospective functionality of the anaerobic digestion facility, with estimates being provided by the counterparty to facilitate this.



Benefits of undergoing a Carbon Intensity Assessment

What are the benefits of a Carbon Intensity Assessment?

- Provide gas certificate offtakers and stakeholders with expected carbon intensity values for the biomethane or bio-LNG output from the AD plant.
- Demonstrate that biomethane production will be within RED II emissions thresholds, for example at least 80% emissions savings for installations starting operations from 1 January 2026.
- Provide offtakers with guarantees of RED II alignment for the biomethane production across the whole supply chain.
- Understand how different operating scenarios and energy/electrichhyity supply to the plant will affect the carbon intensity of the output product.





3 Methane Slip Assessments

Understanding methane slip:

- **Processing loss**: essential for fulfilling the potential of biogas and biomethane production and identifying production & financial losses.
- Environmental impact: methane is a potent greenhouse gas; even minor leaks can negate the benefits of biomethane.



General methane leakage factors:

- Feedstock storage and feeding process
- Gas storage, pipe connections & upgrading equipment
- Inadequate design
- Digestate storage practices
- Final use (CHP, grid injection)



Our Methane Slip Assessment Service

Why measure methane slip?

- GHG savings: ensures genuine GHG reductions.
- **Regulatory compliance**: aligns with ISCC and upcoming RED III requirements.
- **Operational efficiency**: identifies leaks, reduces financial losses and improves efficiency.
- **Best practices**: demonstrates adherence to environmental standards, crucial for transparency and reporting. Conducting methane slip assessments is a requirement under the UK Environment Agency for new builds.

Our capabilities:

- **Expertise:** Our partners, OSS Enviro, have 12 years of experience with Optical Gas Imaging cameras, specialising in leak detection.
- **Technology:** Using EyeCGas 2.0 cameras and EyeCSite software for precise, ATEX-certified leak detection.
- **Reporting**: Providing detailed reports with videos, images and data for targeted mitigative actions.



(4) Renewable Transport Fuel Obligation

Introduction to RTFO Service Offering (specific to the UK and Ireland):

- **Objective**: reduce GHG emissions by increasing the supply of renewable fuels, including biomethane, in road transport and non-road mobile machinery.
- Alignment with RED II: supports the UK's compliance with the EU Renewable Energy Directive biofuel targets.
- **Legal requirements**: establishes mandatory renewable fuel percentages for road fuels.



RTFO Compliance:

- **GHG saving thresholds**: as defined by legislation to be met to be eligible.
- **Sustainability criteria**: Biofuel feedstock and land use standards must be met for eligibility.
- **Renewable Transport Fuel Certificates (RTFC)**: Issued to complaint fuel suppliers where duty payments have been made.



Our RTFO Service Offering

Verification & Assurance Services

- **Regular assessments**: monthly, quarterly, or annually based on planned claims and sales.
- **Comprehensive reporting**: detailed verification reports to support RTFO compliance and RTFC claims.
- **Expert support:** overseeing the entire verification process to ensure smooth, transparent, and accurate compliance.



Benefits to Your Biomethane Operations:

- Eligibility for RTFCs: meet criteria and obtain certificates, avoiding buyout fees.
- **Regulatory compliance**: assurance of compliance with stringent RTFO standards.
- **Sustainability leadership**: demonstrate commitment to renewable energy and sustainability goals.



5 Ofgem Renewable Heat Incentive



Introduction to RHI Service Offering (specific to the UK):

- **Objective:** ensure compliance with Ofgem's RHI scheme for renewable heat production.
- **Sustainability criteria**: includes GHG emission threshold verification and land use standards.

Our Expertise:

- **Experienced auditors**: we have been conducting ISAE 3000 assurance engagements since 2012. Auditors are trained GHG auditors.
- **Comprehensive verification**: ensures compliance with GHG and land criteria.
- **Ofgem approved**: Our assurance reports are recognised and accepted.



Ofgem Renewable Heat Incentive Service Offering



Service Highlights:

- **Continuity & management**: we work with clients to deliver work to compliance deadlines.
- Detailed analysis: to identify errors that could result in repeated problems and compliance and subsidy issues.

Benefits:

- **Subsidy eligibility**: secure RHI incentives through effective compliance and reporting with EnviroSense.
- **Regulatory confidence**: through experienced and accurate auditing and reporting by EnviroSense for offtakers and stakeholders.



Why EnviroSense?

- EnviroSense are currently the chosen service provider for over 200 global anaerobic digestion facilities, hydrogen plants and biofuel producers. We work with a range of asset managers, portfolio managers and individual plants.
- As a small-to-medium sized enterprise, each customer is valued and greatly appreciated, with a designated employee from the start to the end of engagement who will be readily available to respond to any questions or queries.
- EnviroSense have a team of trusted professionals with a breadth of experience in the biomethane, gaseous and RFNBO sector.
- EnviroSense have a team of fully trained GHG and ISCC auditors who are well versed with the certification requirements with extensive experience in the industry to verify GHG calculations and sustainability criteria for national regulators and international standards



Contact Details

For more information, please contact:



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ABOUT ENVIROSENSE

Since 2010 we have been working with organisations to improve their environmental and sustainability performance. With personnel based in Asia, Europe, West Africa and North America we have world wide reach.

OUR VALUES

As a small-medium enterprise. Each customer is valued and greatly appreciated. We have existing customers from the first few months of business We value all clients and deliver work on time to the best of our abilities.

OUR EXPERTISE

With experienced personnel in forestry, ecology, environmental science and engineering, we can ensure we have the ability and skills to support your project achieve its intended outcome.

