

The GHG emissions landscape

Glossary of key terms



In the era of Assurance 4.0, where businesses face complex environmental, social, and governance (ESG) demands, managing greenhouse gas (GHG) emissions is more critical than ever.

LRQA combines decades of sector-specific expertise, on-the-ground presence and data-driven insights to help organisations manage their GHG impact.

This glossary defines over 50 key terms central to GHG verification and decarbonisation, shedding light on LRQA's comprehensive approach to achieving environmental compliance and transparency.



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Key terms

- 1. Additionality: A condition ensuring that emissions reductions from projects are above what would have happened under normal circumstances.
- 2. Analytics: The process of collecting, analysing, and interpreting data related to GHG emissions and environmental impact. Through advanced analytics, organisations gain insights into their emissions patterns, identify areas for improvement, and make informed decisions to optimise carbon reduction strategies and meet regulatory requirements.
- **3. Baseline emissions:** The starting point for measuring reductions in emissions over time, typically set based on historical data.
- **4. Biogenic emissions:** Emissions from natural sources like plant and animal decay, distinct from fossil fuel emissions.
- **5. Carbon accounting:** The process of measuring and tracking GHG emissions from an organisation's activities.
- **6. Carbon Border Adjustment Mechanism (CBAM):** An EU measure that imposes carbon pricing on imports based on their carbon footprint to prevent carbon leakage.
- 7. Carbon budget: The maximum amount of GHGs that can be emitted while keeping global warming below a certain threshold, such as 1.5°C.
- **8.** Carbon Capture and Storage (CCS): Technologies that capture CO₂ emissions from sources like factories and store them underground.
- **9. Carbon credit:** A permit that allows the holder to emit a specific amount of GHGs, which can be traded in carbon markets.

- 10. Carbon Dioxide Equivalent (CO₂e): A metric that standardises the impact of different GHGs based on their global warming potential.
- **11. Carbon footprint:** The total amount of GHG emissions directly and indirectly associated with an entity, product or service.
- **12. Carbon intensity:** The amount of GHGs emitted per unit of output, often used to measure energy efficiency.
- **13. Carbon neutrality:** Achieving net-zero emissions by balancing emissions with removals or offsets.
- **14. Carbon offset:** A reduction in emissions elsewhere, used to compensate for emissions made by an organisation.
- **15. Carbon sequestration:** The process of capturing and storing CO₂, either through natural processes like reforestation or technology.
- **16. CDP reporting:** A global disclosure system where organisations report environmental data, including GHG emissions, verified by LRQA.
- **17. Circular economy:** An economic system aimed at eliminating waste through the continual reuse of resources.
- **18. Climate Disclosure Standards Board (CDSB):** A framework that guides companies in disclosing climate-related financial data.
- **19. Corporate Sustainability Reporting Directive (CSRD):** An EU regulation mandating extensive reporting on sustainability, including GHG emissions.

- **20. Data quality assessment:** Ensuring emissions data is accurate, complete, and reliable for verification purposes.
- **21. Decarbonisation strategy:** A plan to reduce an organisation's carbon footprint, including actions like energy efficiency and renewable energy use.
- **22. Direct emissions:** Emissions from sources owned or controlled by the organisation (also known as Scope 1).
- 23. EIQ: The world's first end-to-end supply chain due diligence software. LRQA's supply chain management software EiQ helps you monitor and manage your supply chain ESG risks in real-time, enhances your responsible sourcing programme, and supports due diligence regulatory compliance.
- **24. Emission factor:** A coefficient used to calculate GHG emissions from a given activity, such as fuel combustion.
- **25. Environmental, Social and Governance (ESG):** A set of standards evaluating a company's ethical and sustainability practices.
- **26. External reporting:** Reporting GHG emissions to external stakeholders or regulatory bodies, such as CDP.
- **27. Fugitive emissions:** Unintentional emissions from leaks in equipment like pipelines and valves.
- **28. GHG Protocol:** A widely used international framework for measuring and reporting GHG emissions.



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- **29. Global Warming Potential (GWP):** A measure of how much heat a GHG traps in the atmosphere over a specific time, relative to CO₂.
- **30.** Greenhouse Gas (GHG): Gases like CO₂, methane (CH₄) and nitrous oxide (N₂O) that contribute to global warming.
- **31. Higg FEM:** The Higg Facility Environmental Module, a tool for measuring environmental sustainability in manufacturing, including GHG emissions.
- **32. Indirect emissions:** Emissions resulting from an organisation's activities but occurring outside its direct control (also known as Scope 2 and Scope 3).
- **33. ISO 14064:** An international standard for quantifying and verifying GHG emissions at an organisational level.
- **34. ISO 14067:** A standard focused on product carbon footprint verification, helping organisations assess lifecycle emissions.
- **35. ISO 14068:** An upcoming standard providing guidance for organisations aiming to achieve carbon neutrality.
- **36. Lifecycle Assessment (LCA):** A method of evaluating environmental impacts across a product's lifecycle, essential for product carbon footprinting.
- **37. Limited assurance:** A type of verification engagement where the verifier provides a moderate level of confidence in the accuracy of the reported GHG emissions data. Limited assurance involves fewer detailed procedures compared to reasonable assurance and is typically used for initial reporting or when the organisation seeks a lower level of scrutiny. (Also see 'Reasonable assurance')
- **38. Materiality:** A concept to identify which emissions data are significant and should be prioritised in reporting.

- **39. Mitigation:** Actions taken to reduce or prevent GHG emissions to limit climate change.
- **40. Net zero:** Reducing GHG emissions as close to zero as possible, with remaining emissions offset to balance the impact.
- **41. Organisational GHG and Carbon Verification:** Verification of an organisation's GHG emissions data for compliance with standards like ISO 14064-1.
- **42. PAS 2050:** A standard for assessing the lifecycle GHG emissions of products and services.
- **43. PAS 2060:** A standard that sets requirements for achieving and demonstrating carbon neutrality.
- **44. PAS 2080 (Sustainable Infrastructure):** A standard for managing carbon in infrastructure, aimed at reducing GHG emissions in construction.
- **45. Pre-verification:** Services that assess the readiness of an organisation's data and processes for GHG verification.
- **46. Product carbon footprint:** The total greenhouse gas (GHG) emissions produced throughout a product's lifecycle, from raw material extraction and manufacturing to distribution, use and disposal.
- **47. Reasonable assurance:** The highest level of verification confidence, ensuring GHG data has been thoroughly examined (also see 'Limited assurance').
- **48. Renewable Energy Certificates (RECs):** Certificates representing the environmental benefits of generating energy from renewable sources.
- **49. Residual emissions:** Emissions that remain after all feasible reduction efforts have been implemented.

50. Science-Based Targets: Emissions reduction targets aligned with climate science to help limit global warming.

51. Scope 1, 2, and 3 emissions:

- Scope 1: Direct emissions from sources controlled by the organisation.
- Scope 2: Indirect emissions from purchased electricity, heat or steam.
- Scope 3: Indirect emissions across the entire value chain, including suppliers and consumers.
- **52. TCFD (Task Force on Climate-related Financial Disclosures):** A framework for disclosing climate-related financial risks, verified by LRQA.
- **53. Verification:** The independent assessment of GHG data to confirm its accuracy and compliance with standards, enhancing reporting credibility.



Why partner with LRQA?





On-the-ground expertise

With over 800 ESG specialists worldwide, our expertise enables us to guide organisations through the nuances of GHG verification and decarbonisation, supporting complex challenges in over 150 countries.



Continuous assurance

By continuously tracking and reporting on emissions, energy use, and sustainability initiatives, LRQA helps organisations adjust their strategies to meet their environmental goals and comply with evolving regulations. We're proud to be cited within the public Sustainability reports of over 30 global brands, who all reference insights derived from our EiQ platform.



Solution-based partnerships

LRQA works hand in hand with clients, offering solutions that go beyond compliance to drive sustainable growth. We are committed to delivering the right outcomes for our clients and our global teams work closely with businesses across the world to do so.



Data-driven decision making

Our advanced analytics platform, EiQ, powers data-driven insights that inform GHG management. Leveraging proprietary data, EiQ enables clients to track, analyse and mitigate GHG risks across the supply chain, ensuring informed, effective decision-making aligned with business goals and regulatory standards.

LRQA offers a comprehensive range of services to support organisations in every stage of their GHG emissions management journey.

Find out more \rightarrow





About LRQA:

LRQA is the leading global assurance partner, bringing together decades of unrivalled expertise in assessment, advisory, inspection and cybersecurity services. Our solutions-based partnerships are supported by data-driven insights that help our clients solve their biggest business challenges.

Operating in more than 150 countries with a team of more than 5,000 people, LRQA's award-winning compliance, supply chain, cybersecurity and ESG specialists help more than 61,000 clients across almost every sector to anticipate, mitigate and manage risk wherever they operate.

In everything we do, we are committed to shaping a better future for our people, our clients, our communities and our planet.

Get in touch

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