DATAB X

Introducing your world of decarbonisation in one place

Energy Transition Databox

End-to-end emissions management

An engineering and technology partnership

Vysus Group | **SICCAR**®

Simplifying everyday complexity

Energy Transition Databox helps streamline the low-carbon journey of the oil and gas business and renewables sector.

Track and share secure, accountable emissions data

Reduce business risk and costs associated with ESG compliance

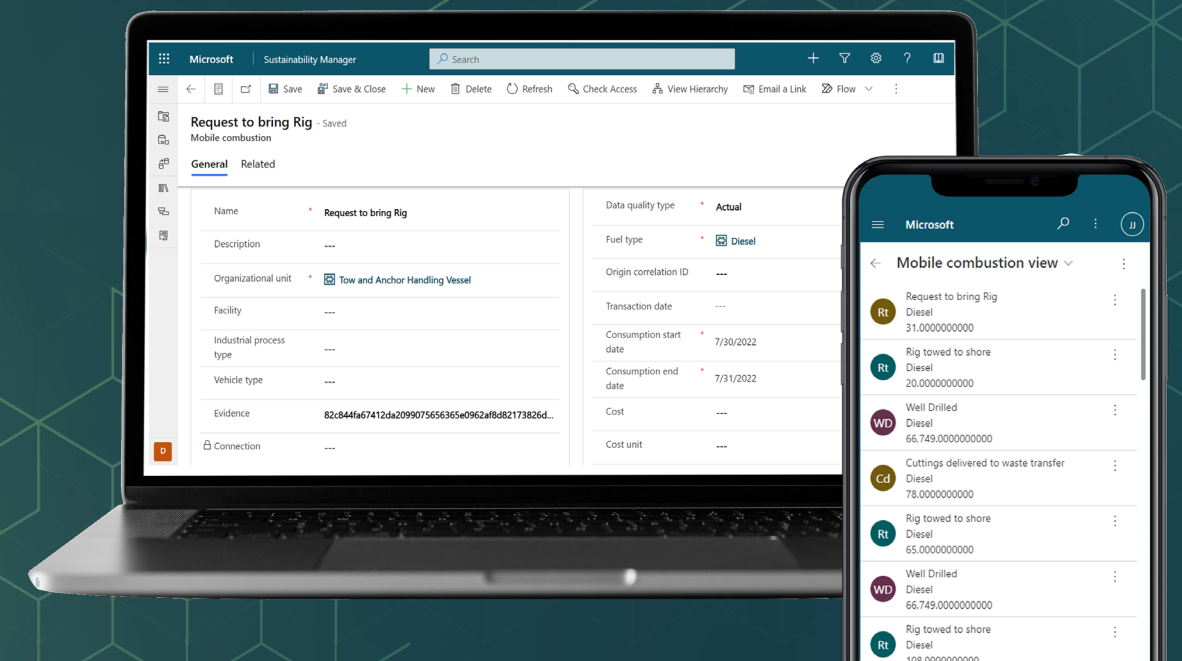Scope 1, 2 & 3 requirements efficiently

Optimise operations and capitalise on new opportunities

Be in control of your role in the energy transition

Energy Transition Databox brings together all the skills, tools and data on your direct and indirect greenhouse gas (GHG) emissions for an unprecedented level of accuracy and ultimate efficiency and security.

Now, you can calculate, report and verifiably demonstrate GHG emissions based on trusted internal and external data, and use analytics and insights to shape your future business.

Avoid the risk of relying on multiple vulnerable systems and practices. Use tamperproof data-sharing technology instead, supported by world-class engineering capabilities and environmental management expertise.

Energy Transition Databox

End-to-end emissions management

Our Energy Transition Databox solves multiple challenges

Asset owners and operators need modern technology combined with real world experience to help meet targets to decarbonise and avoid regulatory non-compliance. Business can win its race to net-zero with a unique partnership and a single trusted solution: Energy Transition Databox, powered by SICCAR.

Assuring the integrity of ESG reporting

ESG performance is central to meeting regulations, accessing capital investment, entering emerging markets and securing tax incentives. In contrast, non-compliance is costly, resulting in financial penalties, loss of permits and certification, revoked operational licences and reputational damage.

Current technology solutions are unable to provide the quality of emissions reporting now demanded across the energy supply chain. Process-optimisation packages fail to quantify data. Environmental reporting software lacks the in-depth understanding to support emissions management.

Energy Transition Databox is your robust solution

Our technology builds on decades of hands-on environmental management consulting and world-class engineering capabilities. Fully supported by Vysus Group's technical specialists, we'll help assure the integrity of your emissions reporting, with true insights to optimise operations and investment.

Managing complex emissions data securely

Emissions data is vulnerable to being lost, corrupted, deleted, duplicated and altered. This is particularly challenging with Scope 3 reporting of an organisation's wider indirect emissions.

Scope 3 accounts for up to 95% of a major oil and gas operator's emissions, but is proving problematic to capture. Reporting encompasses 15 categories across upstream and downstream activities. It involves complex supply chains through to the end use of sold products. It is currently based on disparate data sources and manual processes, making it impossible to control versions and verify emissions information. There is little proof of where data came from, how it was calculated and by whom, and inadequate security when sharing information. In short, it is difficult for industry to accurately measure emissions and decarbonise, but increasingly easier to be penalised by regulators.

This challenge will only grow as emissions management gets ever-more demanding and complex, such as when reporting emissions associated with new markets – including carbon capture, utilisation and storage – and trading products, including LNG and crude oil.

Energy Transition Databox is your secure solution

Using SICCAR's distributed ledger technology, encrypted end-to-end emissions data is added as tamperproof transactions, creating a single source of truth and a verifiable chain of custody, to enable change at industry scale. Data is available to authorised users with the right access permissions and can be shared safely with enforced security by design.

Summary of emissions profiles

These are split into three Scopes: 1, 2 and 3.

Scope 1

Direct emissions from combustion in owned or controlled boilers, furnaces, turbines and engines, and from flaring and venting.

Scope 2

Indirect emissions from the consumption of purchased electricity, heat, steam and cooling.

Scope 3

Other indirect, upstream emissions sources (categories 1–8), neither owned nor controlled by the reporting company.

Indirect, downstream emissions (categories 9–15), which are related to sold goods and services (sale and use of product).
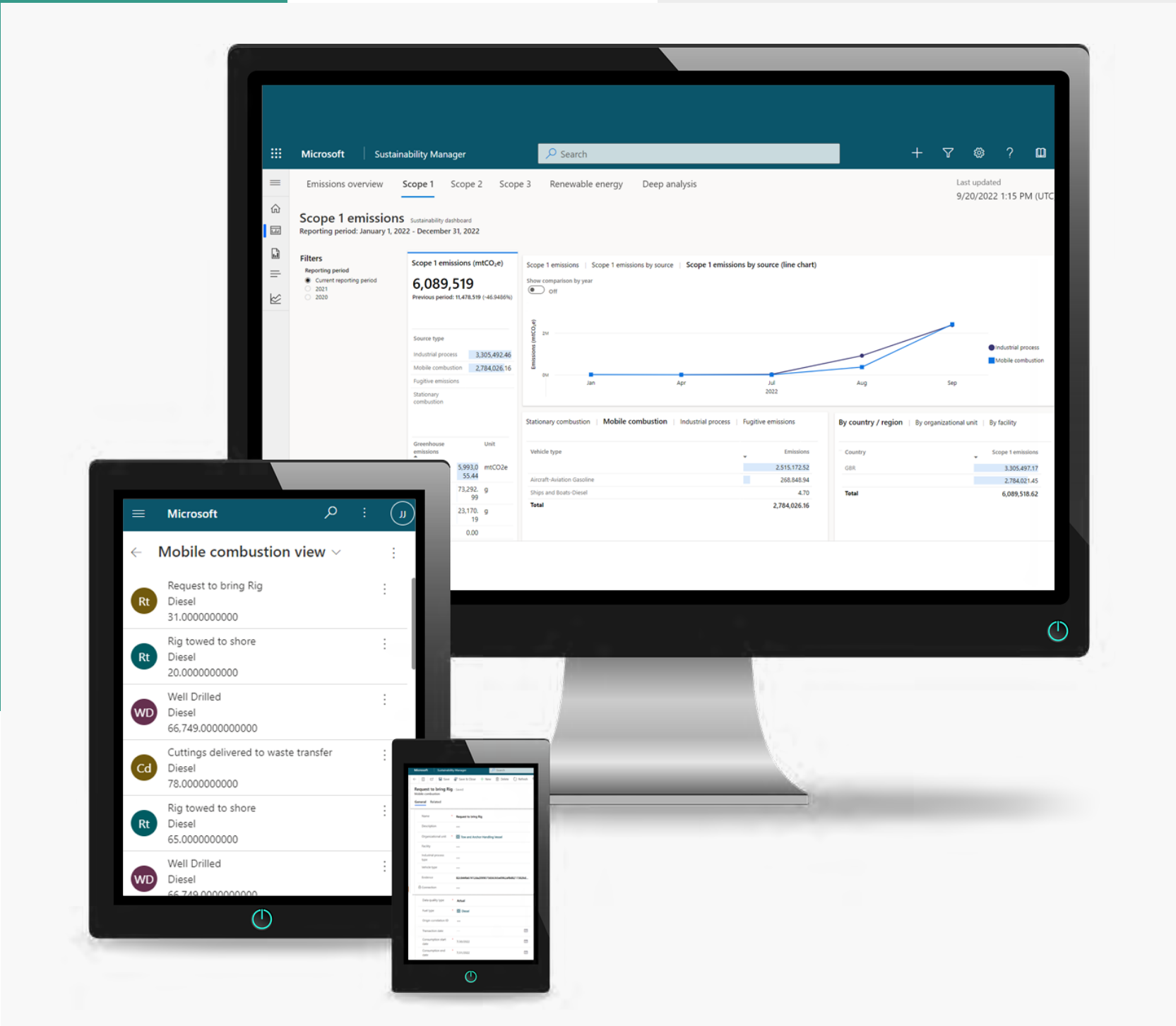
Key benefits

Your Energy Transition Databox is the definitive solution to measure, report and reduce end-to-end GHG emissions, based on reliable data.

1. Be in control of emissions data, inside and outside of your organisation

2. Visualise your emissions activity and stay on track to reach sustainability goals

3. Lower your carbon footprint more effectively

4. Provide traceable, accurate ESG reports to investors, partners, stakeholders and regulators

5. Avoid regulatory fines and associated penalties

6. Optimise your processes, operations and investments

7. Capitalise on new opportunities for renewables and carbon capture and storage

8. Gain access to capital for future assets and infrastructure

Leading features

Robust data management inside and outside of your organisation Energy Transition Databox gives you the secure infrastructure for trusted emissions tracking and data sharing. Our technology plugs into your data sources and existing systems for visualisation, analytics and reporting.

Automated data sharing across supply chains, reducing manual processing costs and errors

Single source of truth, accurate and automatically enforced to promote transparency

Tamperproof transactions and a clear chain of custody

Data protected using industry standard encryption

Enforced security by design, mitigating the cyber risks of sharing data and building system resilience

Available to authorised users any time, with granular access permissions for full control

Plugs into existing or off-the-shelf software for emissions management and reporting dashboards

Analytics and insights based on reliable data to better inform decision-making

World-class services

Databox clients benefit from the engineering and environmental management experience of Vysus Group, specialists in asset performance and risk management across your sector.

We can support you in

Developing your energy management (EnMS) system

Consistent with the benchmark energy management standard, ISO 50001, and covering Scope 1, 2 and 3 emissions

Quantifying the integrity of your GHG emissions data

From establishing a baseline emissions inventory to calculating carbon and preparing reports

Independently verifying GHG emissions reports

As well as non-financial disclosures and public sustainability statements

Decarbonising your operations

Using probabilistic modelling and other solutions, and through asset management consulting

Reducing your carbon footprint further

Our engineering and technical expertise also includes:

· full lifecycle assessment
· concept selection, optioneering and design appraisal
· environmental impact assessments (EIAs) and comparative assessments
· best available techniques (BAT) assessments for environmental permits
· journey planning and logistics, including optimising ship energy efficiency management plans (SEEMPs)
· continuous improvement plans, identifying priority areas and setting objectives and KPIs.

We use best-practice tools and build on industry codes and standards to cover all aspects of your emissions management obligations. Our strategic approach to emissions reduction covers:

· data acquisition
· energy management systems (ISO 50001)
· emission sources and focus areas for improvement
· non-financial reporting and disclosure (ESG/GHG emissions)
· data verification and assurance (AA1000 and related schemes).

Running your Databox

Step 1: Scoping

Analysing emission sources and defining your data structure

We work with you to quantify the integrity of your GHG emissions data, providing all the specialist help and assurance needed to move forward with confidence (see page 8). This is supported by a governance workflow, known as a blueprint, setting out when and where in a process data can be inputted and who can access this information, avoiding errors and fugitive data. SICCAR is the only platform that enables enterprise to extend rules on shared data to networking organisations.

Step 2: Integrating

Linking our platform with your data sources and preferred interface

All data added is protected and securely stored in the underlying distributed ledger. You now have a verifiable chain of custody for every emission captured. The infrastructure can be plugged into your existing software or a third-party solution for dashboards, analytics and reporting.

Step 3: Monitoring

Feeding in data securely across the supply chain

Users with access permissions can log into your interface to feed in emissions data automatically – always based on the approved workflow – with data validation also carried out automatically.

Step 4: Reviewing

Viewing your emissions data, managing it, reporting it and learning from it

Operators can drill down into the data to verify its provenance, perform calculations, create reports, and carry out deep analysis. For example, you can look up data by Scope profile or source to probe into the composition of emissions and identify the biggest contributors. Based on insights from your Databox, we can support you in optimising operations and further decarbonising, as well to access investments.

Our joint credentials

90 years

Vysus Group (formerly Lloyd's Register Energy) brings extensive engineering, technical and environmental management expertise to your Databox solution.

25+ years

in renewable energy

20 years

in emissions management

25+ years of innovating in information technology

SICCAR's leadership team brings extensive IT experience to your Energy Transition Databox. Its data-sharing platform, built with distributed ledger technology, has been trusted by national governments and businesses alike.

AA1000 Licensed Assurance Provider 000-534

CYBER ESSENTIALS

About Vysus Group and SICCAR

Vysus Group is a leading, independent provider of engineering and technical consulting. Specialising in asset performance and risk management, expert teams support owners and developers of energy, power and complex industrial assets.

SICCAR technology gives organisations full control over how data is shared and used across their business world. The company's innovative platform takes a unique approach to security, ensuring business has built-in protection as data is created.

See your Databox in action

Find out how our technology will support
your energy transition journey.

For further information and a Databox
demo, get in touch today.

+44 1224 057 777
info@vysusgroup.com
vysusgroup.com

Energy Transition Databox
End-to-end emissions tracking

An engineering and technology partnership

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