emissions.AI

Operate your assets with the lowest achievable emissions.

AN AI-DRIVEN EMISSIONS REDUCTION SOLUTION FOR OIL, GAS & ENERGY.

OPEX

WE MAKE AI WORK
FOR COMPLEX ASSETS

emissions.AI

AI-driven emissions reduction for oil, gas & energy

emissions.AI is a cloud-based artificial intelligence (AI) solution for complex assets to monitor, reduce and control operational emissions, optimise energy use and minimise environmental impact.

In a fast-changing landscape, emissions reduction is now a key and urgent priority for the oil, gas and energy industries globally.

Alongside medium-term investments being made in capital projects, such as electrification, wind, hydrogen and CCS, reducing emissions through operational improvement offers the quickest and lowest cost pathway to decarbonise operations and minimise environmental impact.

Making use of existing data sources and infrastructure, emissions.AI measures and displays in real time the emissions output and intensity from your assets. A powerful AI engine also dynamically calculates the lowest achievable emissions from your asset at any moment, taking into account the current operating conditions and constraints.

emissions.AI helps you to answer typical questions such as:

- What is my asset currently emitting, and where are these emissions coming from - down to individual source or emitter?

- My operations are dynamic with changing constraints, how much lower could our emissions be right now?

- How do we automate this to allow us to see reduction opportunities as they occur?

- How can we reduce the burden of emissions calculations, reporting and forecasting?

MONITOR EMISSIONS
Measure, monitor and visualise comprehensive emissions data down to individual source or emitter.

PREDICT EMISSIONS
Automatically calculate the lowest achievable emissions (each minute) for any operating mode, configuration or constraint.

REDUCE, CONTROL & OPTIMISE
Auto-detect and discover excess emissions as they occur in real time, pinpoint causes and take action to reduce emissions and dynamically control and optimise energy use.

DEMONSTRATE COMPLIANCE
Establish workflows to manage emissions, demonstrate regulatory compliance, achieve stakeholder targets and drive cultural change.

REAL TIME REPORTING
Save time and supercharge team productivity with automated analysis, reporting calculations and forecasting capabilities.

REDUCE CARBON COSTS
Reduce carbon (ETS), energy and fuel costs (without CAPEX modifications) while maintaining output targets.

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Pre-built modules

emissions.AI has a number of pre-built modules with codified domain expertise gained from years of related experience across multiple assets.

Any combination of these modules can be selected and configured for each specific asset or scope of application.

ENERGY EFFICIENCY

Reduce energy consumption and optimise energy efficiency, start-ups and process systems.

OIL IN WATER TOOL ⊕

Manage and reduce the levels of oil in produced water.

FLARING & VENTING

Reduce and minimise excess emissions from flaring and venting.

METHANE (IN DEVELOPMENT)

Quantify, understand and reduce primary fugitive sources of methane.

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emissions.AI is a modular software application with comprehensive setup, maintenance, support and an optional range of services.

Features data sheet

MULTIPLE DATA SOURCES
Leverage multiple data sources (process, equipment, historian, OEM design data, metering data, gas composition, etc.)

INTUITIVE INTERFACE
Integrate with existing digital architecture or operate stand-alone with access at anytime, anywhere through an intuitive web-based interface.

IN-BUILT WORKFLOWS
Share and track insights, opportunities, recommendations and operational actions across the organisation with in-built workflows.

VISUALISE
Visualise aggregated, multi-level data across process, systems, equipment, ancillaries, including performance and costs.

DRILL DOWN
Drill down in granular detail to all energy and emissions sources, individual components and energy consumers.

OPTIMISE
Optimise for changes in output targets, fluid rates, degradation, configuration and emerging constraints.

AUTO DETECT
Automatically detect excess emissions and contextualise by source or emitter using AI and machine learning.

PRIORITISE
Proactively prioritise and raise actions to avoid, manage and control excess emissions and optimise energy use.

UNDERSTAND
Perform detailed analysis to understand, calculate and track emissions profiles by operational scenarios, events and modes.

OVERCOME GAPS
Overcome missing instrumentation, metering and data gaps using physics guided work arounds.

SIMPLIFY REPORTING
Simplify and streamline regulatory and stakeholder emissions reporting; take advantage of carbon trading market dynamics.

COMPARE
Benchmark emissions performance by asset, compare emissions by intensity, volume and composition contextualised to plant configurations.

Included

- Module setup, configuration and customisation
- Data integration and pre-processing
- Data cloud hosting and consumption charges
- Onboarding and training

- Solution maintenance to reflect asset changes
- AI models build, maintenance and management
- Online access 24 x 7
- Technical support

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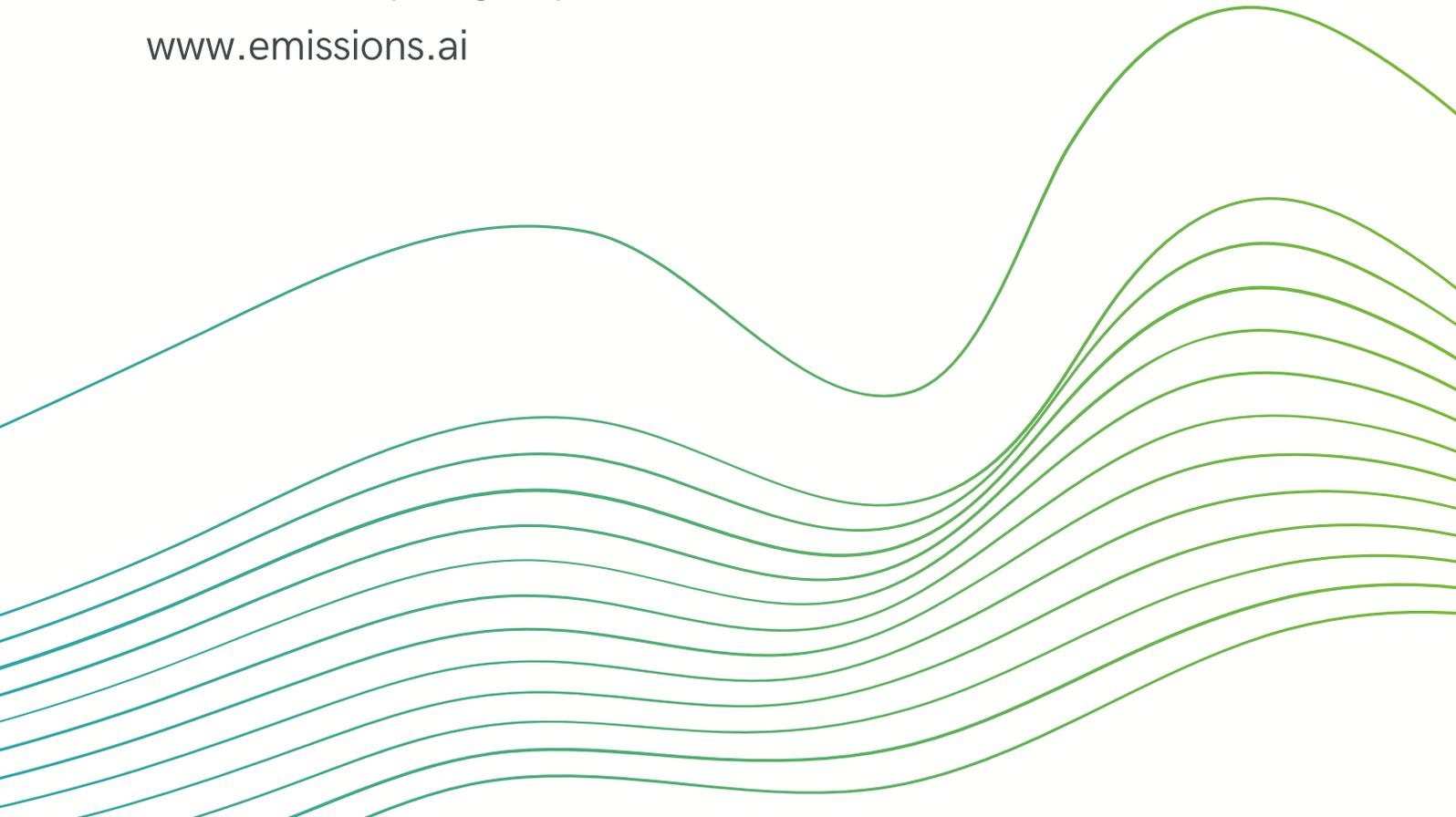FOR COMPLEX ASSETS

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BOOK A DEMO

emissions.AI can be fully customised and live on your assets within 8 weeks. Book a demo or contact us to learn how emissions.AI is helping our customers to operate their assets with the lowest achievable emissions and save on carbon costs.

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