

## TARGETING OIL & GAS INDUSTRY'S HIGHEST – AND LOWEST – METHANE EMITTERS

### WHAT IS METHANESCAN?

A rating tool for assessing and comparing methane intensity of energy companies, based on live satellite data analytics.

### HOW DOES IT WORK?

MethaneScan® detects elevated methane emissions from space. It then applies algorithms to best attribute these emissions in aggregate to asset owners.

### WHY METHANE?

Methane emissions are a material risk for the energy sector. Controlling methane emissions is key to maintaining license to operate given regulatory and societal pressures. Unreported and uncontrolled methane emissions are indicators of poor operational management and proxies for lack of transparency in governance. Methane emissions also are beginning to drive differentiated underwriting and pricing of gas products, assets, and insurance.

### TRUSTED SOURCE

Geofinancial Analytics is an independent science- and data-driven company with a singular focus – increase transparency on GHG emissions with high-quality objective facts. Such data can improve risk levels, asset allocation, sustainability, and overall profitability.

## METHANE EMISSION INTENSITY RATINGS OF TOP 100 GLOBAL PRODUCERS

### SCIENTIFIC SATELLITE-BASED ANALYTICS FOR SYSTEMATIC USE IN INVESTMENT MANAGEMENT

PARENT COMPANY	METHANE LEAK RATING	TREND %
APA Corporation	BB	10
ARC Resources Ltd.	BB	185
Amplify Energy Corporation	CCC	16
Antero Resources Corporation	C	135
BP p.l.c.	B	31
Baytex Energy Corp.	BB	15
Berry Corporation	D	4
Birchcliff Energy Ltd.	BBB	79
Bonterra Energy Corp.	A	79

**MethaneScan® Lite Ratings Sample** – Methane Leak Ratings and Emissions Trends are based on independent direct satellite observations of methane emissions intensity of onshore wells of the Top 100 Listed Energy Producers Worldwide. "Leak Ratings" refer to methane emissions intensity of production – ratio of methane emissions to gas produced. Last 12 Months as of September 30, 2022.

**MethaneScan® Lite** rates the top 100 global energy producers on the single most material environmental performance metric – methane emission intensity. The resulting Methane Leak Ratings and Trends reveal elevated levels of risk including liability for erroneous disclosures and greenwashing.

Satellite-based sensors detect elevated concentrations of methane in the atmosphere and associate those concentration anomalies with operators on the ground. By looking at thousands of sites operated by the top 100 listed global producers, **MethaneScan®** builds *company-wide assessments* of methane emissions for each producer rather than attempting to *pinpoint* the source of any given leak. It features a 35x increase in precision over native 7x5 km satellite feed (up to 1 km resolution).

These company-level Methane Leak Ratings can be used by asset managers, fund managers, asset owners and others to manage risk, inform portfolio and index construction, and align with climate targets.

### ALIGNED WITH FINANCIAL DISCLOSURE RECOMMENDATIONS

**MethaneScan®** provides the only available rating for easy comparison of a company's methane footprint with peers. MethaneScan® aligns with state-of-the art financial disclosure recommendations such as GRI 305:1-5, TCFD, GHG Protocol and EU's SFDR. Energy market players can present their ratings as objective evidence of sustainability leadership to various stakeholders, including regulators and asset managers.

ALIGNED WITH FINANCIAL  
DISCLOSURE RECOMMENDATIONS



TCFD



TARGETING OIL & GAS INDUSTRY'S HIGHEST – AND LOWEST – METHANE EMITTERS



TRANSPARENCY



SCIENTIFIC OBSERVATIONS



GLOBAL COVERAGE



NORMALIZED SCORES



TRUSTED SOURCE

**DATASET TYPE**

Satellite, ESG

**DATA FREQUENCY**

Annual Updates

**DATA HISTORY**

April 2018 –

**DATA FORMAT**

CSV

**ENTITY MAPPING**

Yes – mapped to tickers

**APPLICATIONS**

Public Equity, Private Equity, Fixed Income, M&A, Insurance, Commodities (Energy)

**REGIONS**

Global

**COVERAGE UNIVERSE**

- Top 100 upstream E&P companies (by market cap) in Russell 3000, S&P Global Platts
- Over 6 million onshore wellheads observed on weekly basis at up to 1km resolution
- Wellhead-level data for North America, Brazil, Australia and Europe

**SECTORS**

Energy

**INDICATORS TRACKED**

- Observed methane emissions intensity by company (direct satellite observation)
- 12-month change in observed emissions (Trend %)
- Uncertainty quantification

**LEGEND**

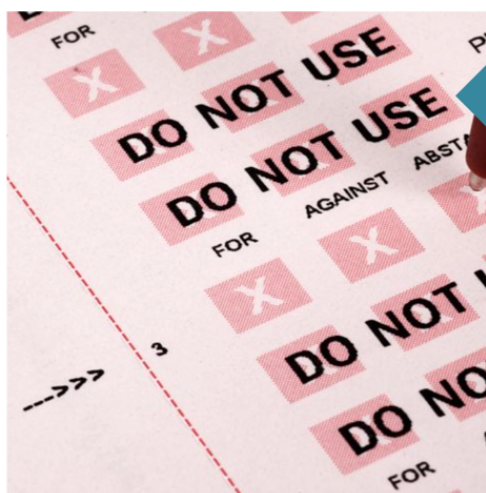
LEADER	AA
	A
	BBB
AVERAGE	BB
	B
	CCC
LAGGARD	CC
	C
	D

**Methane Leak Rating** = 0-100 scale of methane emissions intensity observed via satellite, normalized against global background methane. Scores > 0 represent net contribution to mean background level of atmospheric methane. (0 = best) "Methane Leak" is methane intensity of production, or ratio of emissions to natural gas produced.

**Change** = % change last 12 months in Methane Leak Rating.

**NORMALIZED SCORES FOR EASY PEER-TO-PEER COMPARISONS**

MethaneScan® Lite features normalized scores with letter rankings for easy peer-to-peer comparisons. These robust comparisons allow a strategic assessment of methane-related risk exposures across asset classes from a trusted independent and objective source. The dataset can be used to: a) develop sophisticated investment screens; b) avoid the worst actors based on scientific evidence; c) leverage shareholder power to effect change; d) inform merger & acquisition valuations; and e) assess compliance with new regulatory standards such as SFDR and TCFD.




**INVESTMENT MANAGERS & BANKERS**

- Develop more sophisticated investment screens
- Avoid worst actors based on scientific evidence
- Leverage shareholder power to effect change
- Inform merger & acquisition valuations

AVAILABLE FROM



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