

July 2021



PROJECT  
**CANARY**

Accelerate the  
Pathway to Net-Zero



# Project Canary provides trusted & independent ESG data.

## **Trusted, independent data—** with a mission to reduce emissions to net-zero

- Independent, 3<sup>rd</sup> party that is not party to gas transactions beyond providing data
- Data-enabled performance assessments and improvements
- Market leader for Certified, Responsibly Sourced Gas (RSG)
- Experts in using certification and continuous emissions monitoring to identify best-in-class suppliers
- Incorporated as a public benefit or B-corporation – mission driven



# New Energy Paradigm

The understanding, technology, science and data analysis to enable operators to mitigate the **considerable risks** presented by the new energy paradigm.

## Enabling the Path to Net-Zero

01

New climate regulations pose risk to slow adopters of ESG priorities.

02

European and Asian markets considering change in carbon tax.

03

Investors consider ESG metrics in assessing investment risk.

04

Companies are already differentiating with ESG ratings. PUCs actively participating.

BUSINESS

## Activist Likely to Gain Third Seat on Exxon Board

Hedge fund Engine No. 1 challenged Exxon's strategy amid climate-change concerns

BUSINESS

## Shell Ordered by Dutch Court to Cut Carbon Emissions

Lawyers say the ruling, which Shell can appeal, could set a precedent in other Western jurisdictions

## New Mexico proposes more rules to curb oil and gas emissions

By SUSAN MONTOYA BRYAN May 6, 2021

## *Here Are America's Top Methane Emitters. Some Will Surprise You.*

Oil and gas giants are selling off their most-polluting operations to small private companies. Most manage to escape public scrutiny.

## MARKETS

ExxonMobil faces 'winds of change' as climate battle reaches boardroom

Activist shareholders will try to green a titan of the oil industry in the most-watched proxy battle in years

Sustainable Business

## BlackRock goes against BP board in climate resolution vote

“Energy groups must stop new oil and gas projects to reach net zero by 2050, IEA says”

‘Don’t decarbonise or we will divest’ US states warn banks and asset managers

Letter comes as lawmakers introduce ESG rules for financial advisors and workplace pensions

## Biden Order Calls for Disclosure of Financial Risks of Climate Change

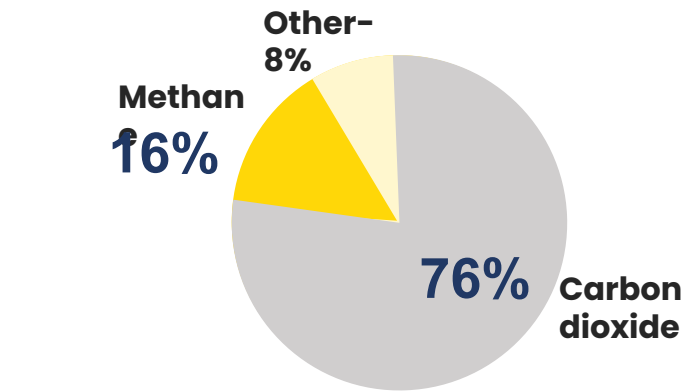
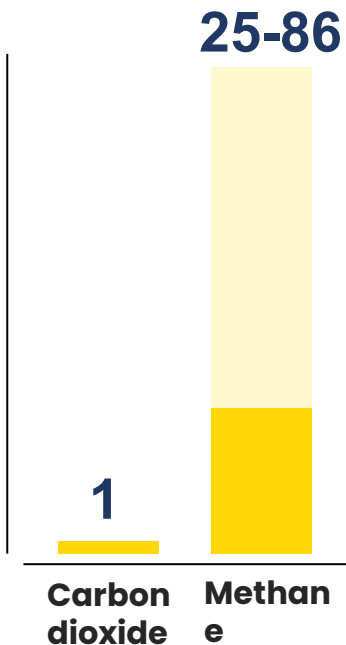
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The impact of methane on climate is significant: 25-86 times worse than carbon dioxide.

## Global Warming Potential



How much each human-caused gas contributes to climate change



# Preventable leaks occur in the gas supply chain, with wide variability between operators and basins.

Methane emissions under-reported using static and outdated estimation formulas

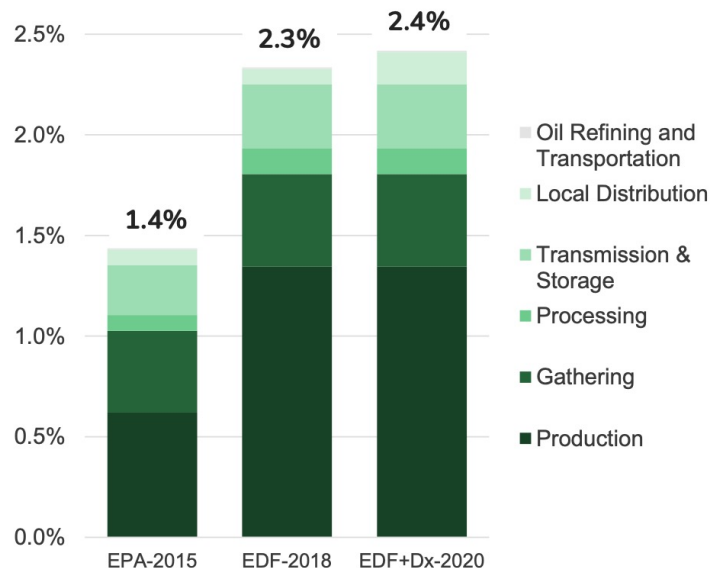
Most methane leaks are intermittent

Methane leaks are preventable

Biggest impact starts with gas production

Real-time data and quantification needed to drive improvement

**Methane leakage rate**  
(as % of gross annual production)



Source: Alvarez, Ramón A., Daniel Zavala-Araiza, David R. Lyon, David T. Allen, Zachary R. Barkley, Adam R. Brandt, Kenneth J. Davis et al. "Assessment of methane emissions from the US oil and gas supply chain." Science 361, no. 6398 (2018): 186-188.



# TrustWell certification identifies best-in-class wellpads.

TrustWell evaluates an operator's approach to responsibility across four primary categories:



**Air:** Reduce GHG emissions



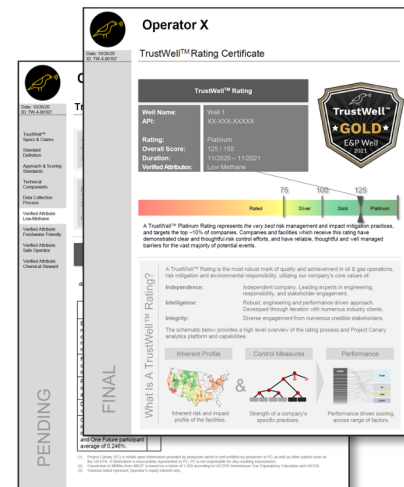
**Water:** Responsible water stewardship



**Land:** Mitigate operational risk impacts



**Community:** Understand the local community's needs and interests





# TrustWell by Project Canary.

## The Badge of High Standards.

| TrustWell™ by Project Canary<br>Technical Components Overview |        |  |        |      |
|---|--------|--|--------|------|
| Certification Minimum Requirements:                           |        |  |        |      |
|   | Rating |  | Silver | Gold |
| TrustWell™<br>Scope & Claims                                  |        | The operator has completed the TrustWell certification process   | 75     | 100  |
| Standard<br>Definition  |        | Minimum 80% of certified wells covered during any well performance rating above  | ✓      | ✓    |
| Approach &<br>Scoring Standards                               |        | The operator clearly demonstrates a commitment to environmental stewardship for documented L2&3 emissions monitoring plan in accordance with EPA (Gold) requirements | ✓      | ✓    |
| Technical<br>Components                                       |        | The operator has a direct line of communication for local community members to voice concerns, comments, or complaints   | ✓      | ✓    |
| Data Collection<br>Process                                    |        | Assessments/commitments to reducing methane emissions and proper tracking/measuring metrics outlined   | ✓      | ✓    |
| Verified Attribute:<br>Low-Methane                            |        | Methane emissions to reduce gas-powered compressors (or reduced emissions equivalent)  | ✓      | ✓    |
| Verified Attribute:<br>Freshwater<br>Friendly                 |        | The company recycles/reuses some portion of produced/flowback water for operations   | ✓      | ✓    |
| Verified Attribute:<br>Safe Operator                          |        | Company tracks the source and quantity of freshwater withdrawn used for operations   | ✓      | ✓    |
| Verified Attribute:<br>Chemical Steward                       |        | The operator has qualified for the low methane verified attribute (Effective 01/01/2023)   | ✓      | ✓    |
|   |        | Methane intensity below established thresholds   | ✓      | ✓    |
|   |        | L2&3 emissions monitoring plan above EPA (Gold) requirements   | ✓      | ✓    |
|   |        | Reduction of methane emissions with 10-year proven track record  | ✓      | ✓    |
|   |        | The operator has qualified for the freshwater friendly verified attribute (Effective 01/01/2023)   | ✓      | ✓    |
|   |        | Operator tracks the percentage of water sourced for operations pulled from freshwater sources  | ✓      | ✓    |
|   |        | Operator tracks the percentage of produced water that's recycled for reuse   | ✓      | ✓    |
|   |        | Completion of at least 1 baseline study or community impact study pertaining to water usage  | ✓      | ✓    |
| Spill<br>Prevention   |        | Documented spill prevention/response program containing  | ✓      | ✓    |
|   |        | Spill prevention plan, trained EPA and necessary training in response and spill type of spill  | ✓      | ✓    |
|   |        | Contamination protocols and personnel clearly established in the spill response plan   | ✓      | ✓    |
|   |        | Predefined response locations containing appropriate spill response equipment  | ✓      | ✓    |
| Waste<br>Management   |        | Waste management program   | ✓      | ✓    |
|   |        | Contains criteria for types of waste and requirements for separation of wastes   | ✓      | ✓    |
|   |        | Lists approved disposal facilities for each type of waste  | ✓      | ✓    |
|   |        | Reviewed on an annual basis  | ✓      | ✓    |
|   |        | Documents where waste is generated from and the quantities produced  | ✓      | ✓    |
| Emergency<br>Response   |        | The operator has provided an emergency response plan (or equivalent) that  | ✓      | ✓    |
|   |        | Addresses any potential emergency situations the operator may encounter (operations, weather, etc.)  | ✓      | ✓    |
|   |        | Incorporates emergency drills, required capabilities, risk assessments, and business impact scenarios into the plan  | ✓      | ✓    |
|   |        | Addresses mandatory training for executive leadership  | ✓      | ✓    |
|   |        | Updated internally or earlier  | ✓      | ✓    |
|   |        | The addition of annual (biennial) or more drills involving executive leadership, community stakeholders, and local emergency responders                              | ✓      | ✓    |
|   |        | Updated annually   | ✓      | ✓    |
|   |        | Contains competency testing of emergency training  | ✓      | ✓    |
| Well<br>Integrity   |        | The operator successfully addresses well integrity issues for  | ✓      | ✓    |
|   |        | Conducts and documents AVO checks at routine wellhead inspections  | ✓      | ✓    |
|   |        | Installation of SCADA monitoring at the wellhead   | ✓      | ✓    |
|   |        | Installation of SCADA monitoring with remote shut-in capability  | ✓      | ✓    |
|   |        | Wellheads and valves are in satisfactory condition and all subcomponents are accessible  | ✓      | ✓    |

The *only* full lifecycle certification program and ESG-data platform spanning well-construction through reclamation planning.

01

### Multi-tiered approach addressing:

- Policy: addresses the entire base of operations including all wells
- Execution: is well-specific and validates that best practices are utilized and followed
- Plan: is specific to the region of operation and well pad

02

### Developed and run by engineers and industry experts:

- Originated from a Cooperating Stakeholder program of engineers, industry expertise, regulators, and NGOs
- TrustWell certifications only performed by engineers with field experience and technical expertise.
- Comprehensive solution includes interviews with personnel and subject matter experts, site visits and a document review of ~1,000 pages per well
- Established categories and criteria based on best-practices by API, ISO, NORSOK, +



## Our continuous monitoring provides real-time data

### Canary Unit

Modular & affordable, can use 12+ pollutant sensors, cellular connection, 6+ days of backup battery power, 1 year of data storage

### Anemometer

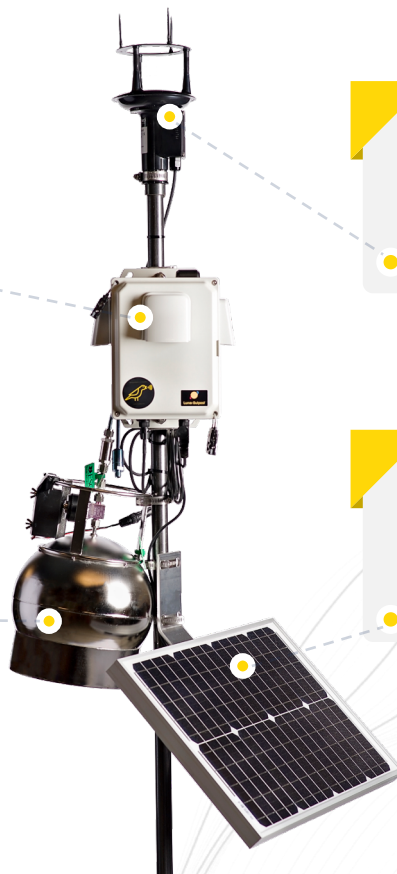
Precise wind speed & direction. Key to mass quantification and source attribution

### Summa Canister

Patented approach to automated “grab” air samples. Allows for parts per trillion clarity about a plume’s composition

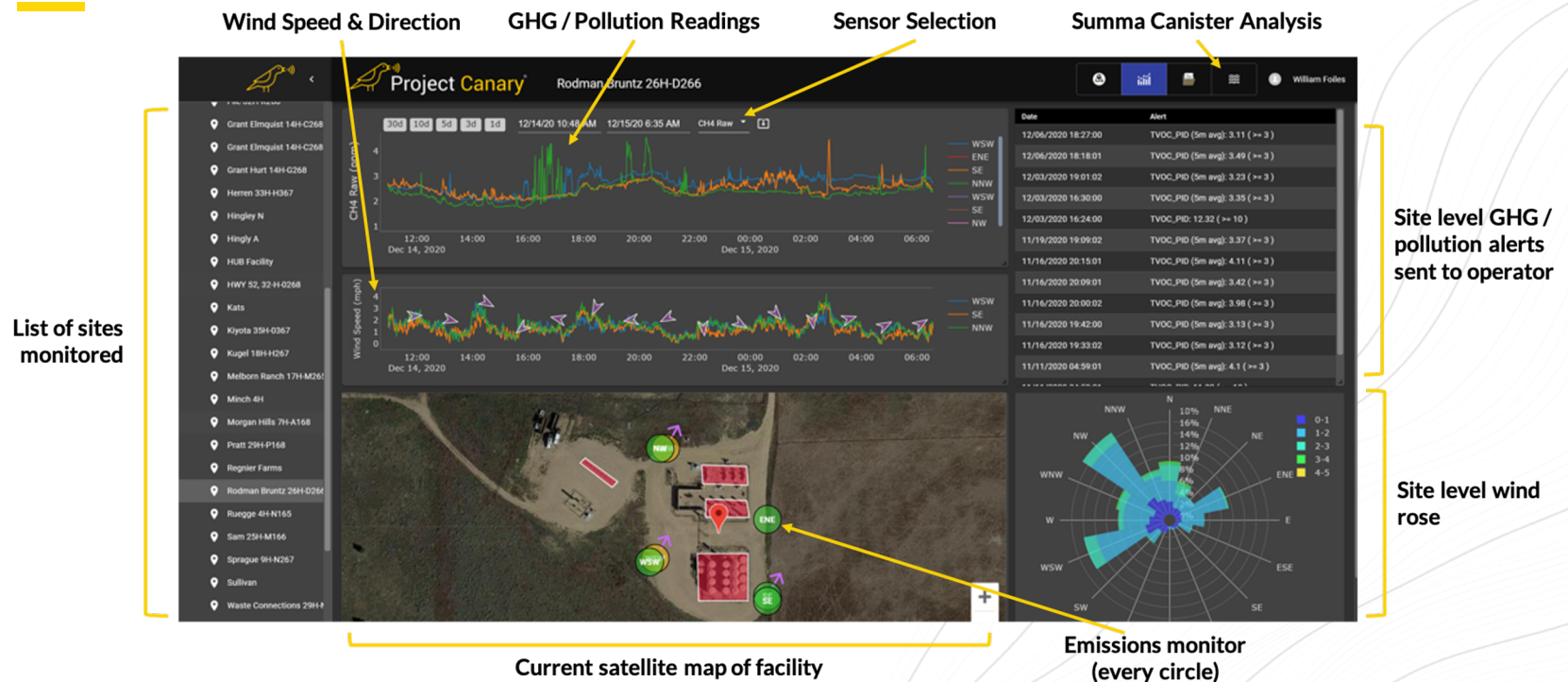
### Solar Power

20W – 30W solar panels





# Real-Time Actionable Data available 24/7 through our ESG Dashboard





# Certified Gas provides transparency, lowers emissions, and drives continued improvements in the supply chain.

## Responsibly Sourced Gas

Geologic natural gas certified by an independent third party to achieve low-emissions and highest standards of ESG factors :

Environmental Ratings of individual well pads or facilities to a minimum criteria using a robust and standardized scoring system

Continuously Monitoring of each facility to ensure that high standards are met and methane leaks are stopped promptly

## Typical

- Supply chain risk on water, safety, community
- High leak rate



## Certified

- Water, safety, community risk assessed
- Continuous monitoring
- Independently verified low-emissions



## Certified, net-zero

- Water, safety, community risk assessed
- Continuous monitoring
- Net-zero methane emissions



18% difference

Notes: up to 18% reduction as a result of moving from total supply chain leak rate of 2.3% to 1.27%. Actual reduction dependent on current gas supply and certified transaction details.





# Client Study: Crestone Peak Resources

01.

Over 181 continuous monitors deployed

02.

Partnering on regulatory petition to reduce LDAR monitoring frequency for continuously monitored wells

03.

Connected to Xcel for Responsibly Sourced Gas pilot

04.

News coverage picked up by Colorado Public Radio, Reuters, Natural Gas Intel, and others





# Customer studies



## Major West Coast IOU

### Utility Engagements

01

- First certified gas transaction in 2018.
- Utility commission allowed the transaction

02

- Publicly announced deal in 2021
- Environmental leadership recognized of using the buying power to reduce emissions

03

- Tip-to-tip traceable transaction winter 2021 linking production, processing, and transport
- First municipal utility to commit to RSG

04

- Purchased through a gas marketer
- IOU commitment to reduce gas footprint immediately

# PROJECT CANARY

Learn more about  
TrustWell by Project Canary



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