

June 17, 2022

World Materials Forum, Nancy

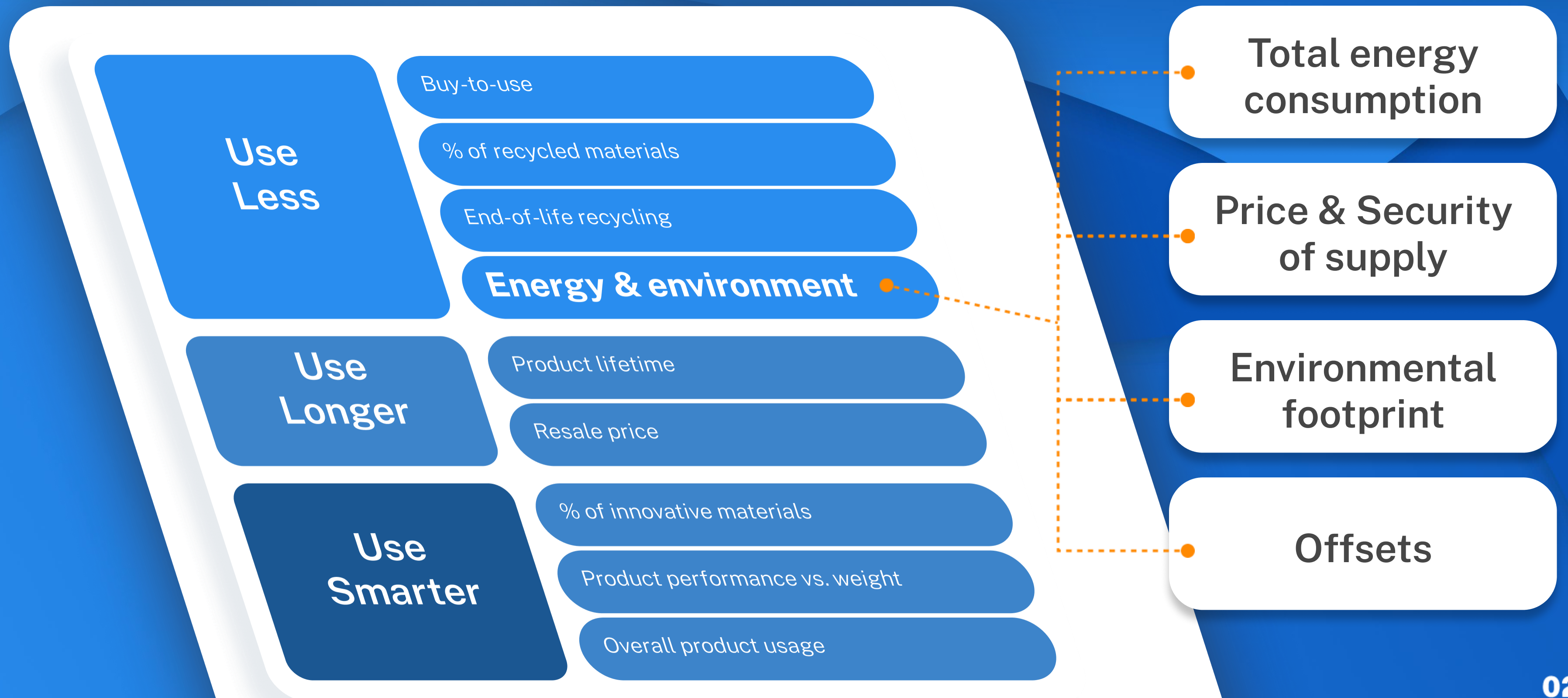
KPI #4 Energy **Transparency 4.0**



Kayrros is the leading advanced energy & environmental geo-analytics company that helps traders, investors, operators and governments make better decisions. Kayrros extracts value from the integration of alternative and market data into unique solutions and customer-specific product offerings while measuring environmental impact and delivering insight into climate and energy-transition risk.

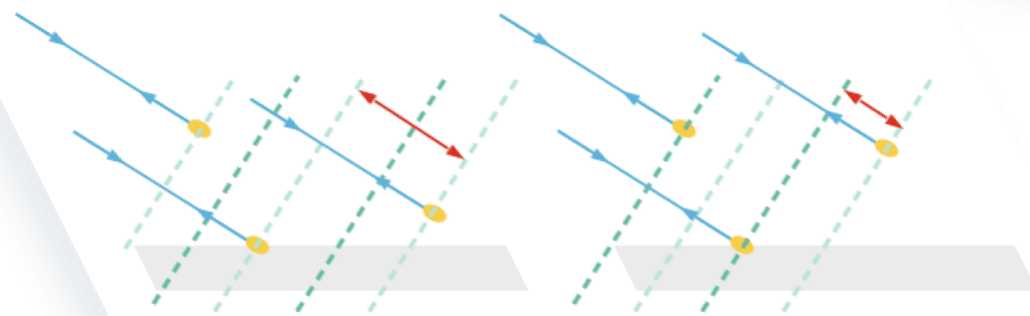
Kayrros: transparency on KPI # 4

Source: WMF & Arthur D. Little analysis

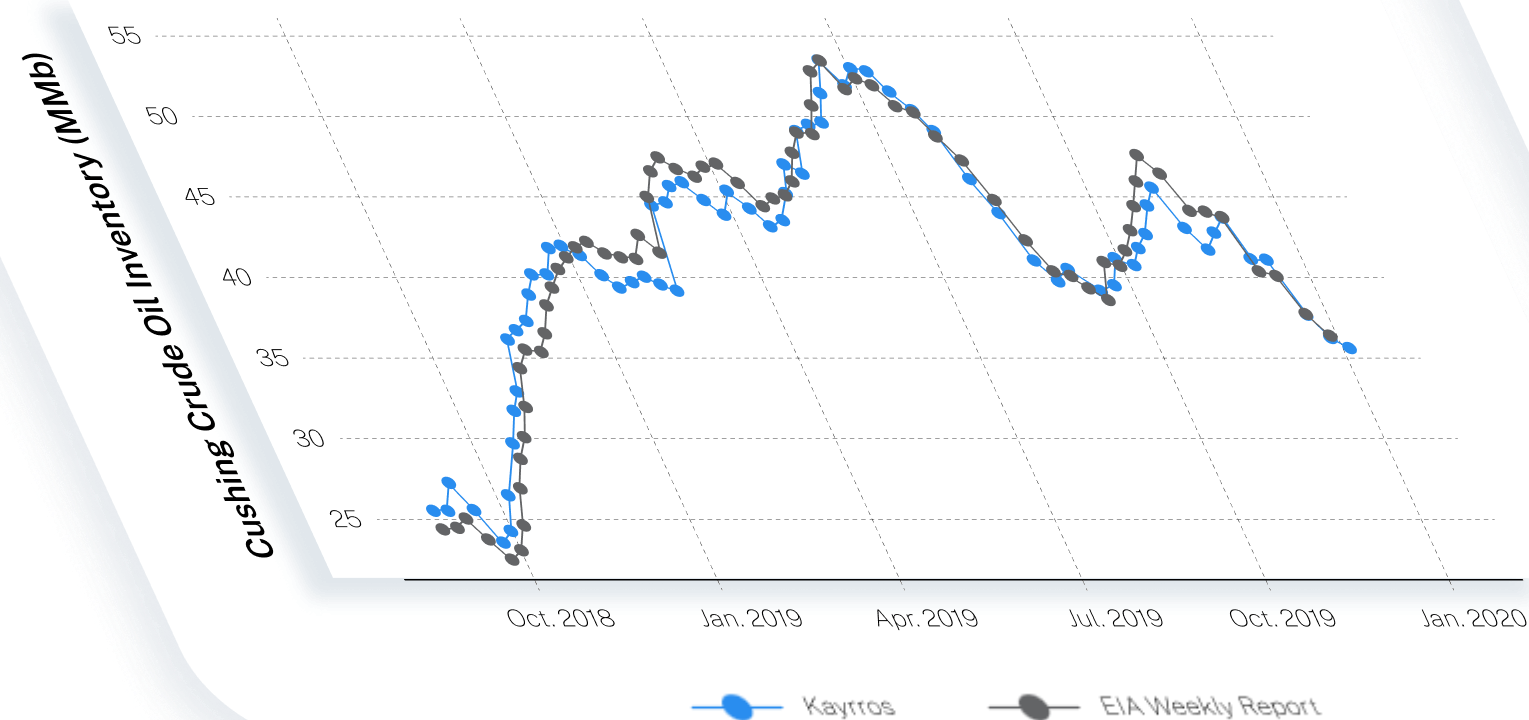


Oil traders use satellite inventory monitoring to predict prices

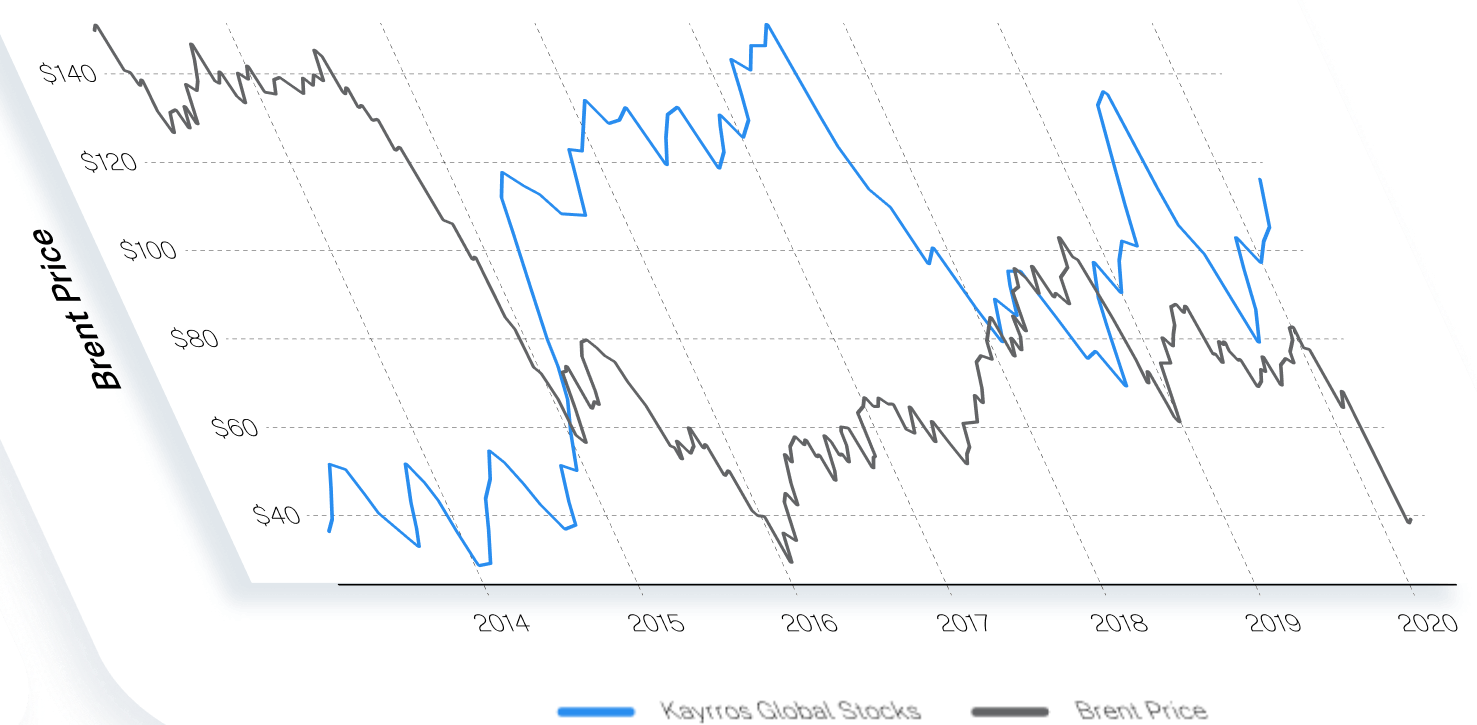
98.4%
of Accuracy



Kayros Crude Oil Inventory Report
Cushing Barrels, 2019 YTD

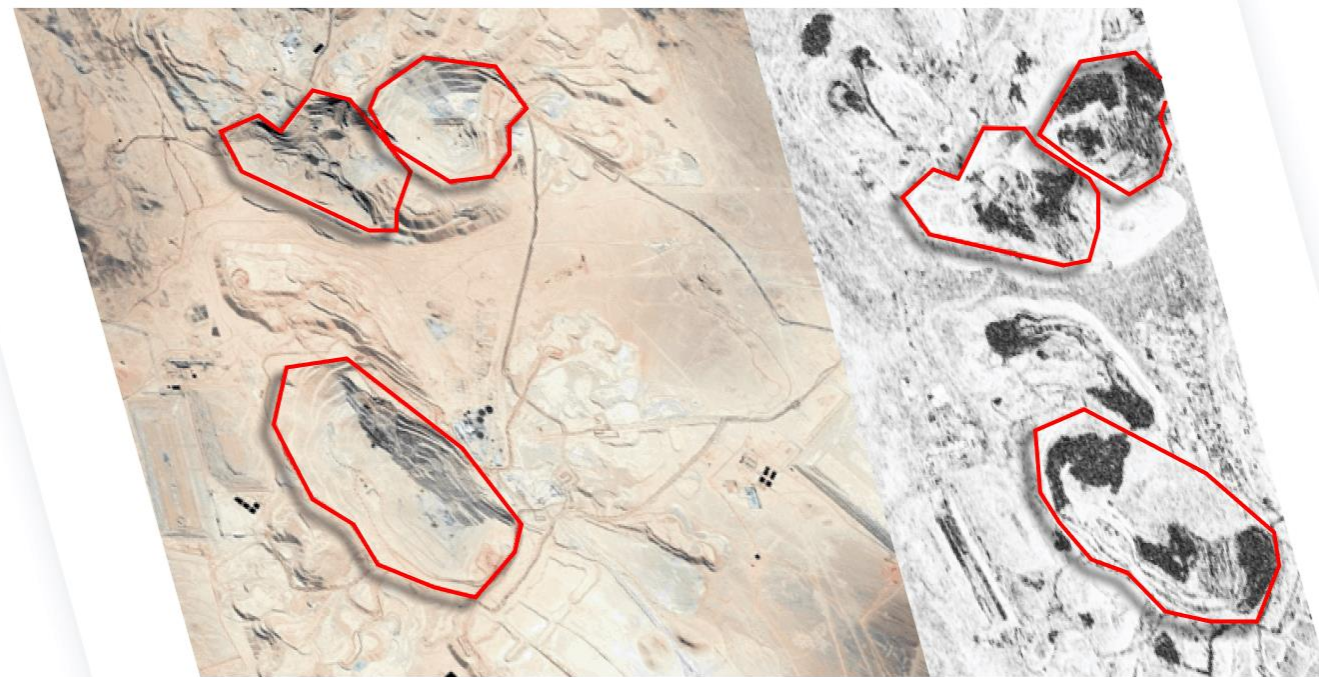


Global crude oil inventories* v. Brent prices



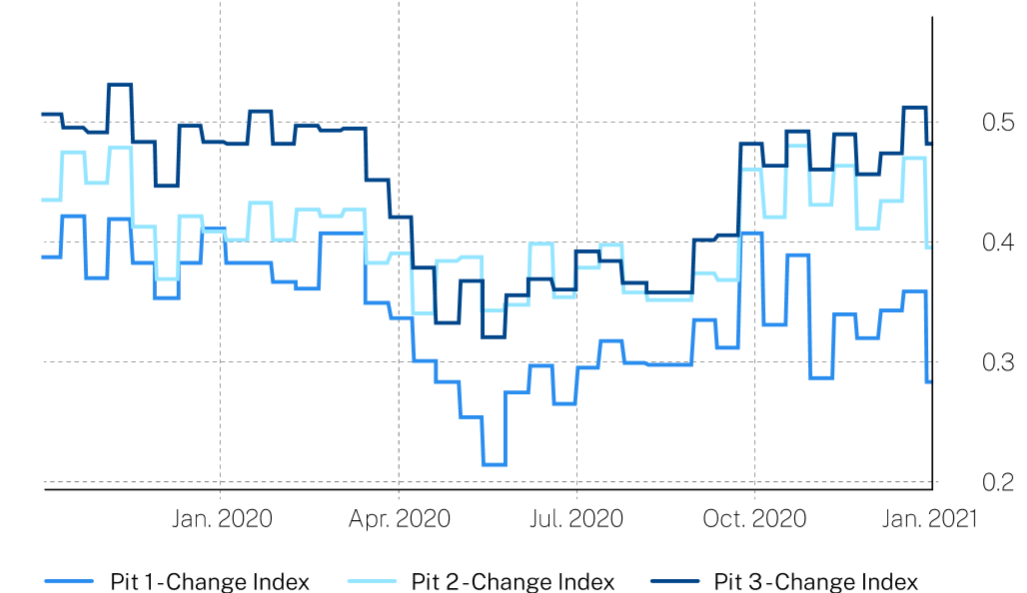
Prices of key materials can be better managed with satellite data - production

Activity detection



Copper mine, South America

Activity Index per pit



Prices of key materials can be better managed with satellite data – stockpiles

>90%
of Accuracy



Comparison Kayrros stockpiles data vs. reported data
Coal Export Terminal



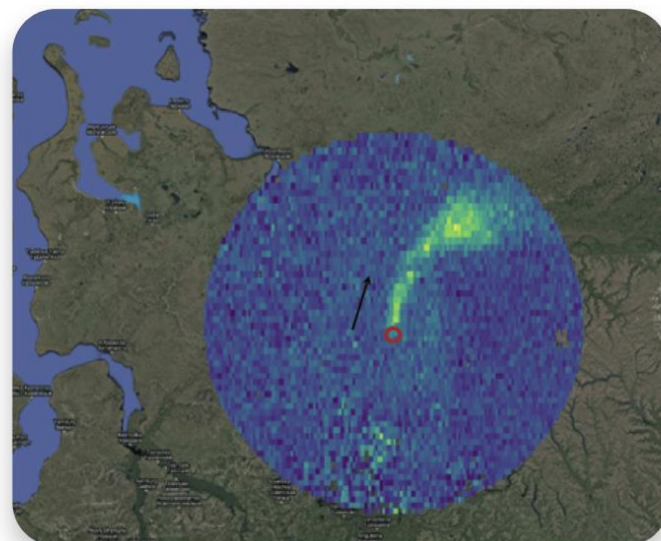
Prices of key materials can be better managed with satellite data – processing

Cement Watch - Monitoring cement plant activity worldwide

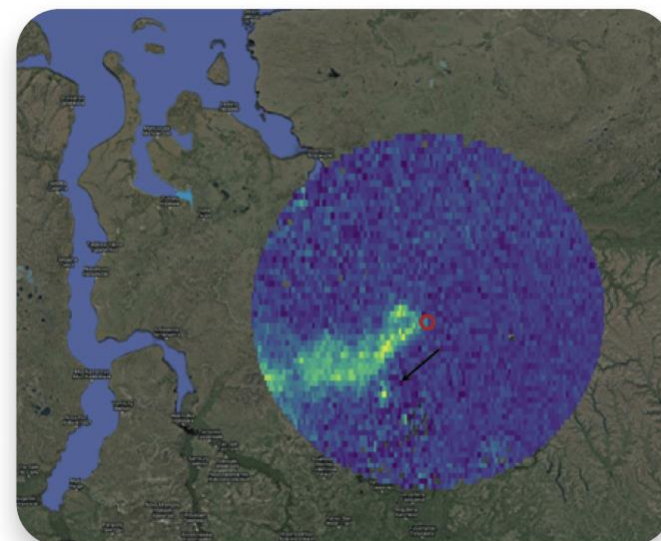


CH₄, NO₂, SO₂ emissions can now be measured independently

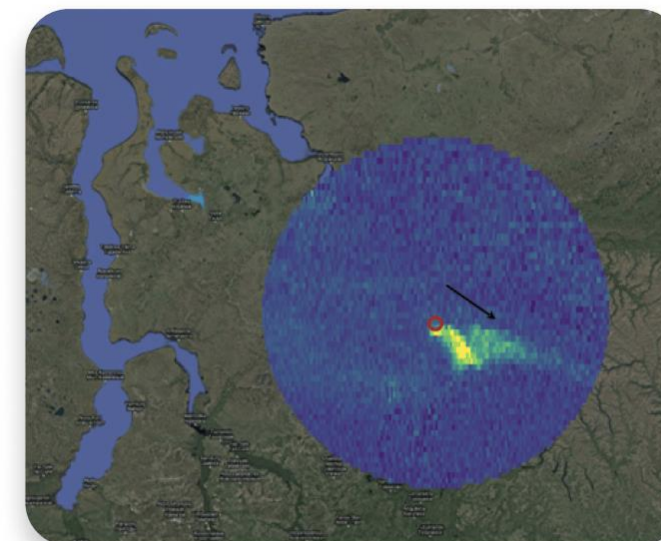
Sentinel 5 [2019.03.15]



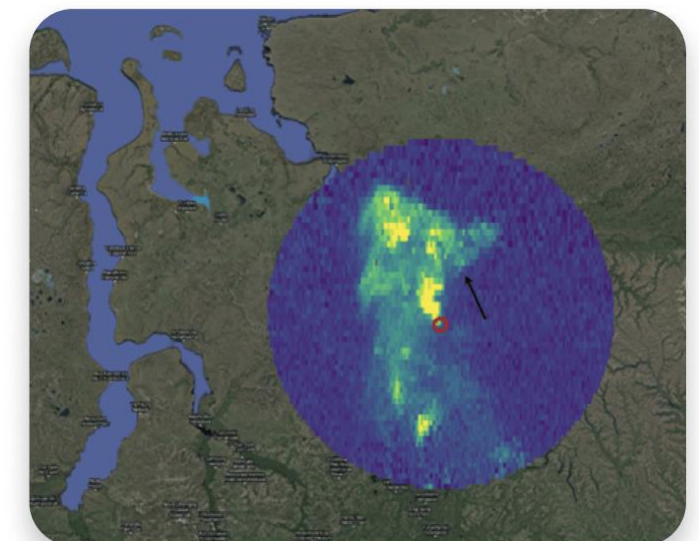
Sentinel 5 [2019.03.17]



Sentinel 5 [2019.03.22]



Sentinel 5 [2019.03.23]



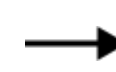
11 DU -3 DU



SO₂ Concentration
(in Dobson Unit)



Norilsk



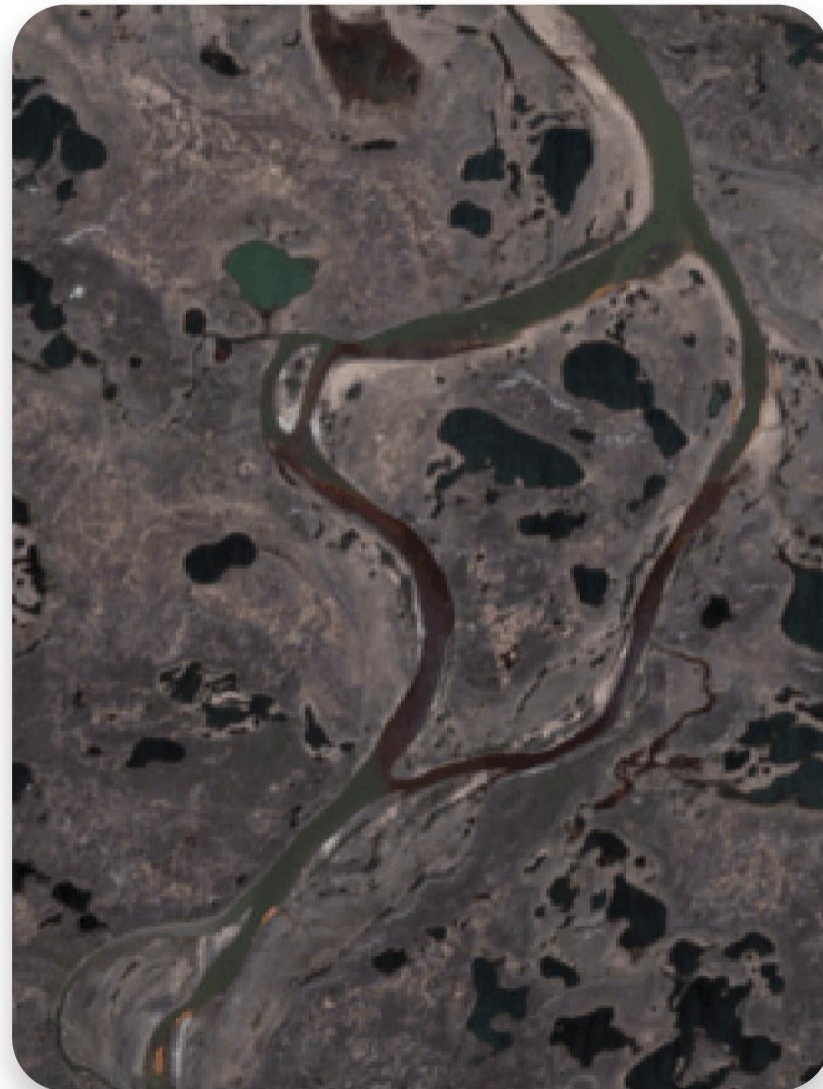
Wind Direction

A colorful, abstract map of the world, tilted at an angle. The map features various regions in red, yellow, green, and blue. A dashed orange line with a dot at the start indicates a path or location.



Water Pollution can be independently detected

Sentinel 2 [2020.05.31]



Sentinel 2 [2020.06.01]

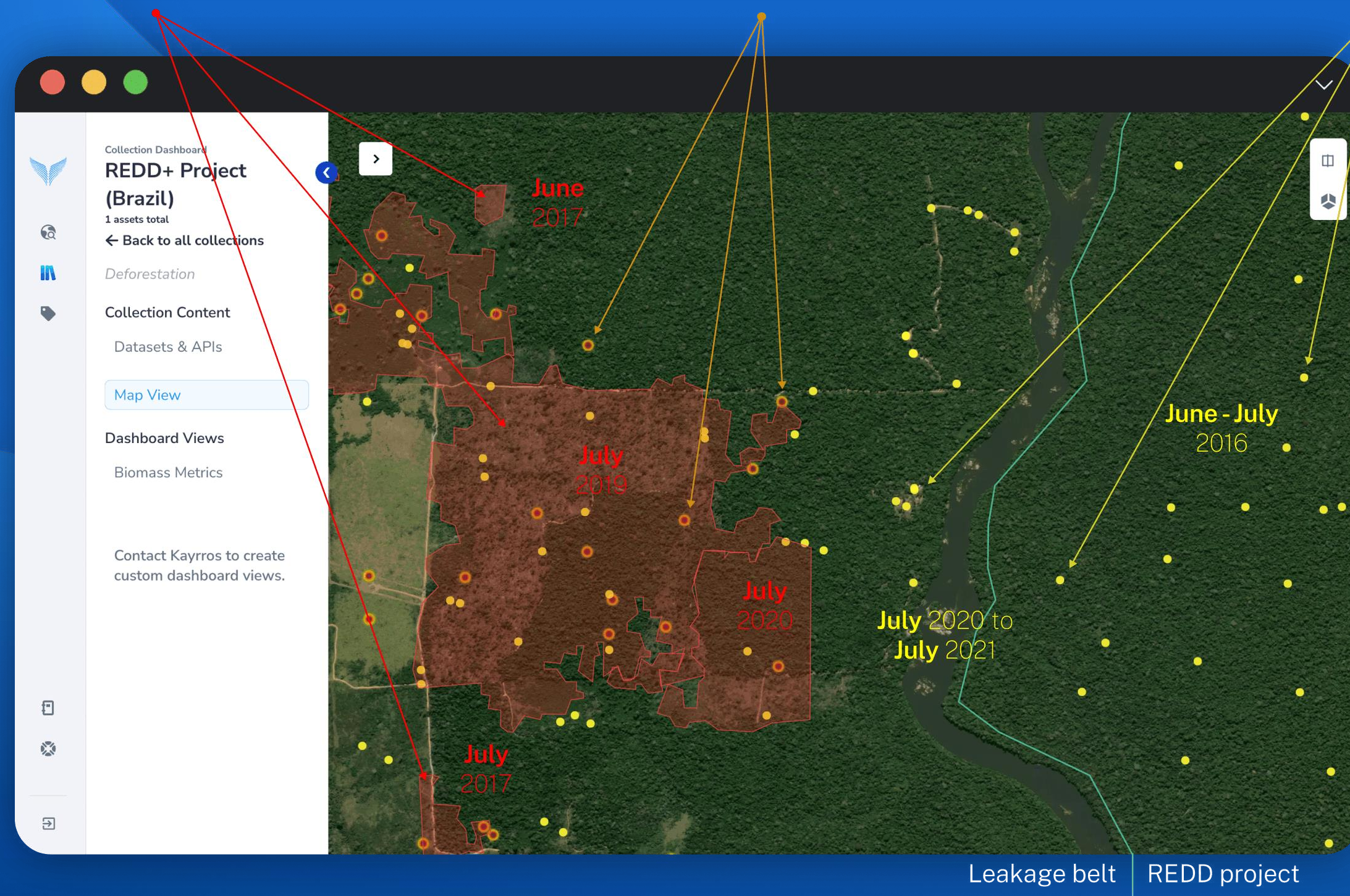


Net zero goals require quality offsets that can now be verified by satellite

Deforested areas
w/ date of detection

Fires
indicator of land clearing

Selective logging
driver of forest degradation



Regulators will be using satellite to independently measure GHG emissions



“C'est avec **Kayrros** que nous avons pu détecter des émissions de GES que d'autres puissances ne souhaitaient pas révéler.”

Emmanuel Macron



“The European Commission will propose legislation to make measuring, reporting and verification of methane emissions mandatory for companies.”

Kadri Simson – EU Energy Commissioner showing **Kayrros map**



“The Washington Post had a terrific story with the methane pinpointed in Russia and the whole [**Kayrros**] map of methane.”

John Kerry – US Special Presidential Envoy for Climate

Disclaimer

This report has been provided by Kayrros SAS (“Kayrros”) pursuant to the following terms and conditions:

- Energy industry data and reports published by Kayrros (“Kayrros Reports”) and made available to paid subscribers and/or other recipients (collectively “Recipients”) are creative works of the mind achieved through algorithmic analysis of publicly available data and the information therein is proprietary to Kayrros and protected by copyright. Any copying, distribution or reproduction without the prior permission of Kayrros is strictly prohibited.
- Kayrros Reports are for informational, educational or evaluation purposes only. Any information contained in Kayrros Reports constitutes the opinion or forward-looking statement of individuals and is provided without any representation or warranty of any kind. Neither Kayrros nor its directors, officers, employees, agents or representative shall have any responsibility to you or any third party for the accuracy or completeness of any information provided in any Kayrros Report.
- Kayrros Reports are not intended to constitute investment advice. Kayrros is not an investment adviser within the meaning of Section 202(a)(11) of the U.S. Investment Advisers Act of 1940, as amended, and is not a commodity trading adviser within the meaning of Section 1(a)(12) of the U.S. Commodity Exchange Act. Kayrros does not provide investment advisory, portfolio management or financial planning services. The analyses, forecasts, metrics, samples, estimated figures, trends, figures, tables, graphs, projections and other forms of data that may be contained in Kayrros Reports do not represent or contain any recommendations to buy or sell neither any security nor any financial products and should not be relied upon as the basis for any transactions in securities.
- Kayrros and its owners, affiliates and representatives are not (1) investment advisers, commodity trading advisers, broker-dealers, financial analysts, financial planners, or banks, (2) compensated for providing investment advice, (3) registered or licensed with any regulatory body in any jurisdiction as investment advisers, commodity trading advisers, financial planners, broker-dealers, or in any other capacity (including, without limitation, the U.S. Securities & Exchange Commission (the “SEC”), the U.S. Commodity Futures Trading Commission (the “CFTC”), the U.S. Financial Regulatory Authority (“FINRA”) or their equivalents in non-U.S. jurisdictions), and do not trade in or recommend the sale or purchase of securities or commodity interests, or (4) licensed or able to provide investment advice or respond to individual requests for recommendations to purchase or sell any securities or commodity interests. No regulatory body in any jurisdiction (including the SEC, CFTC, FINRA, or a regulatory body of any state or any non-U.S. jurisdiction) has endorsed Kayrros or the contents of Kayrros Reports or the accuracy, adequacy, safety, reliability, usefulness, quality or legitimacy of any information provided to subscribers in Kayrros Reports.
- Kayrros Reports are based only upon its algorithmic analysis of publicly available data and do not use or rely upon any material non-public information (“MNPI”). The insights included in Kayrros Reports do not constitute MNPI or inside information and Kayrros is not an insider. Kayrros Reports (1) may contain opinions based on third party sources that are not independently verified for accuracy or completeness, (2) may contain forward-looking statements, which are identified by words such as “expects,” “anticipates,” “believes,” or “estimates,” and similar expressions, and (3) are current as of the date of publication but may contain information or statements that are subject to change without notice. Kayrros has no obligation to, and will not, update any information contained in Kayrros Reports. Actual outcomes could differ materially from those anticipated in Kayrros Reports. As a result, the use of Kayrros Reports is at Recipients’ own risk.
- Kayrros Reports are confidential and nothing therein may be disclosed, reproduced, transmitted, distributed, sold, licensed, or altered, in whole or in part, without Kayrros’s prior written consent. Kayrros reserves the right to release to the public at any time the data and reports provided to Recipients. No rights in Kayrros Reports or any of the information contained therein are transferred to Recipients. Any misappropriation or misuse of the information in Kayrros reports will cause serious damage to Kayrros and money damages may not constitute sufficient compensation to Kayrros; consequently, Recipients agree that in the event of any misappropriation or misuse, Kayrros shall have the right to obtain injunctive relief in addition to any other legal or financial remedies to which Kayrros may be entitled.



Data for a sustainable future.

● **NEW YORK**
300 Park Avenue
NY 10022

● **PARIS**
33 Rue La Fayette
FR 75009

● **LONDON**
3 Waterhouse Square
London EC1N 2SW

● **HOUSTON**
708 Main Street
Houston TX 77002

● **BANGALORE**
100 Feet Road Second
Block KA 560034

● **SINGAPORE**
Level 2, 15 Beach Road
Singapore 189677

www.kayrros.com

