

Are you sure it is actually **green**?

Reyal™ **In-Fuel Marking**

Product Authentication
Track & Trace
Supply Chain Integrity

Illuminating & Safeguarding What Matters



Reyal™ Sustainable In-Fuel Marking

Empowering, modular, enforceable.

Reyal is a complete product authentication & assurance platform. Built for brands & governments, who want unquestionable physical confidence in their products & supply chains.



- Designed for different fuel types & blends
- Only trace amounts of marker are required
- Conforms to global carbon reporting (GHG & ISO 14064) standards
- No impact to engine or fuel performance

The Reyal™ Solution

Designed for broad types of environments & form factors, the only in-fuel end-to-end verification solution in the market that quantifies emerging fuel blends with no change to the fuel's appearance or performance. Empower your organization to control your supply chain integrity, secured by product authentication & material tracing.

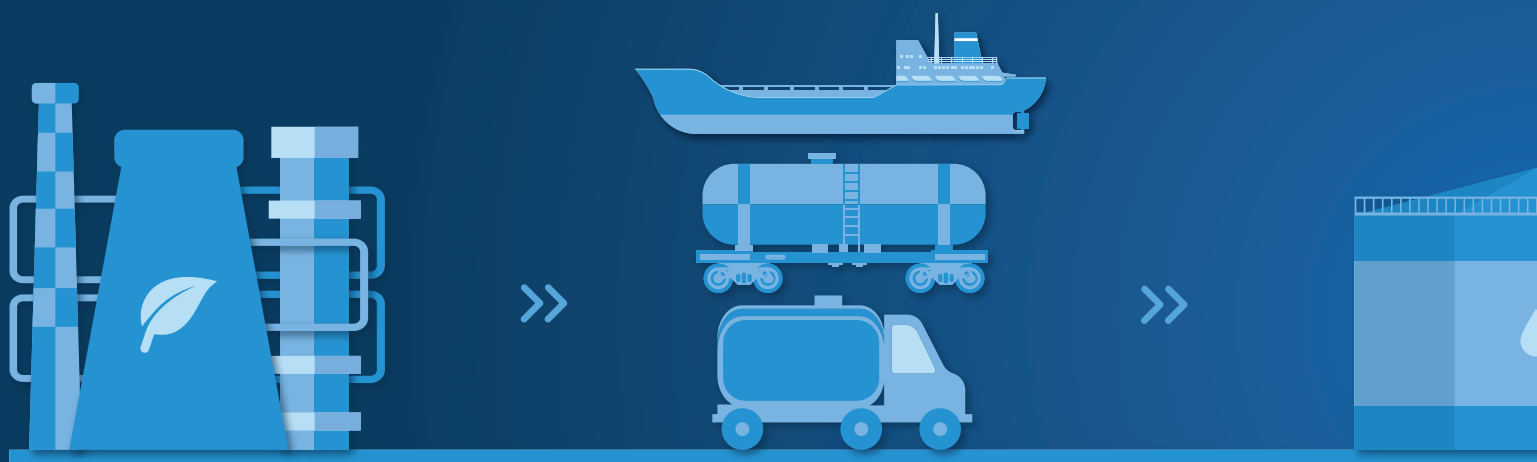


R1F Reader

Field-deployable high-definition optical reader, unbound by limitations of a central laboratory.

- **Portable & lightweight.** Easy to deploy over a wide territory.
- **Easy to operate.** Fast to train & deploy inspection teams into the field.
- **Robust reader with yearly calibration.** Easy & low maintenance cost.

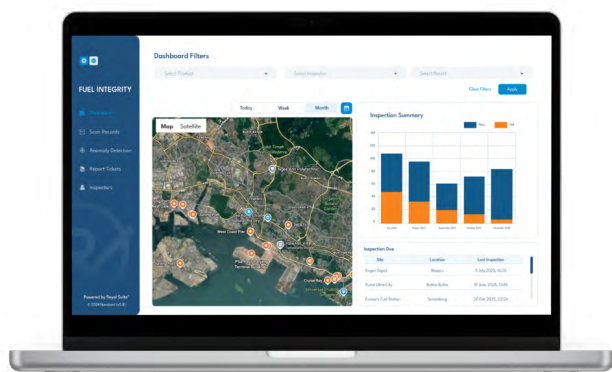
Addressing Vulnerabilities, End to End



Reyal Signature™ Markers

Proprietary library of quantifiable, harmless covert markers.

- **Metal & halogen-free (CHON-based).** Green fuel stays green, by not introducing any metal or halogen.
- **High solubility & homogeneity.** Doses & blends well in green fuel. No additional or special technique is required.
- **Measure fuel-blend percentage.** With the addition of the Reyal marker, fuel blend percentage & any adulteration can be determined.



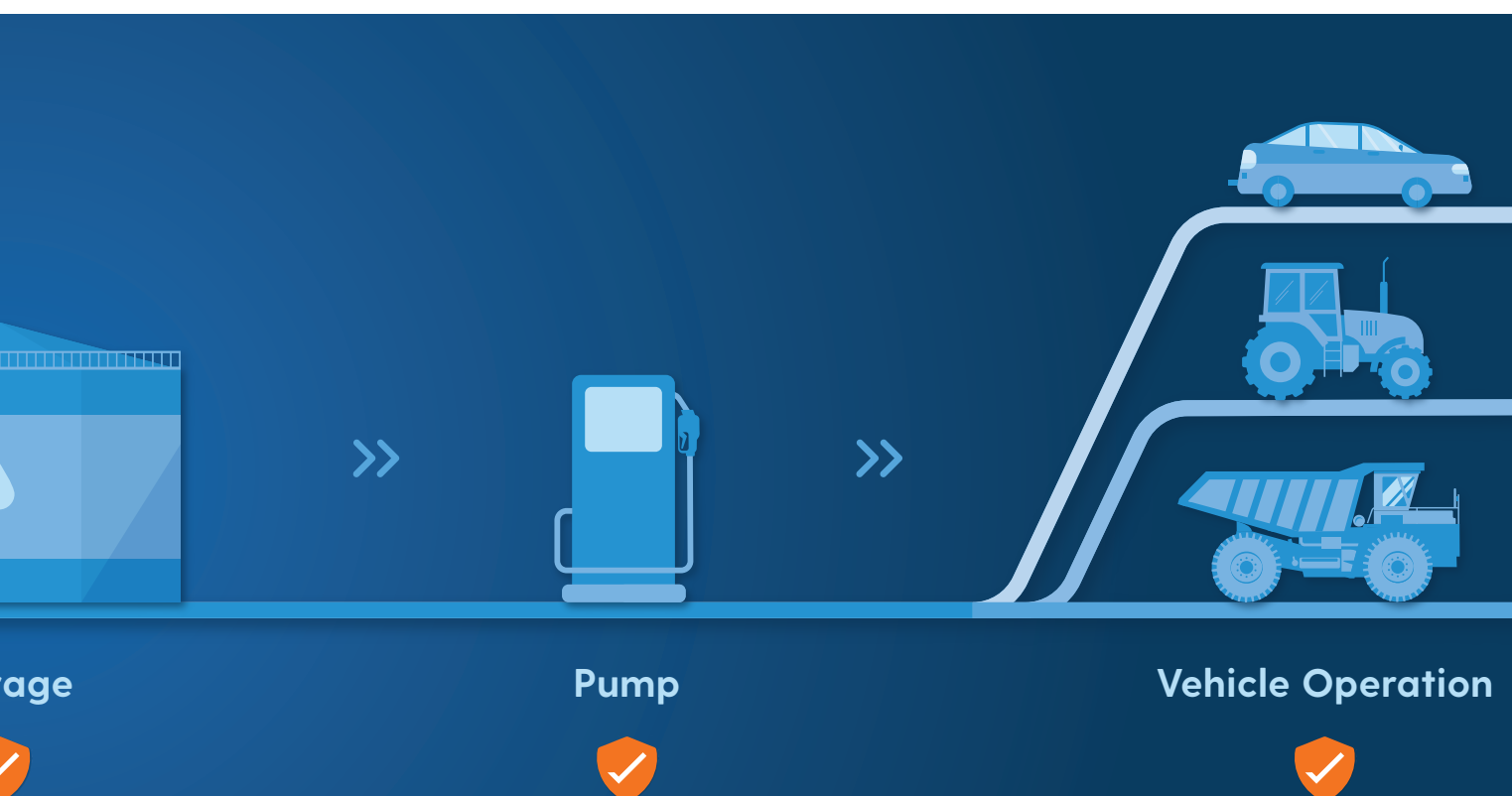
Reyal Data Suite

Monitors live data from all registered readers, with no geographical limitations—track data across areas, regions, and even countries seamlessly.

- **Wireless connectivity & live reporting.** Fuel authentication across the supply chain, is near real time reported visually on Reyal suite.

Streamlined workflow achievable with:

- a) Customizable dashboards & reporting;
- b) Secure cloud storage with role-based access.



SOLUTION HIGHLIGHTS

- ✓ **Confidently assure green-fuel procurement.**
Safeguard green fuel integrity & precise blend ratios from production to pump.
- ✓ **Fast & facile system implementation.**
Simple operation, easy to train, minimal asset investment.
- ✓ **On-site, real-time verification.**
Less than 20-sec detection & analysis with our portable reader.
- ✓ **Credible carbon reporting.**
Verify carbon-reporting COAs via physical product authentication.
- ✓ **Streamlined carbon reporting.**
Carbon reporting made easy with customizable, secure, cloud-based data management.

CASE HIGHLIGHTS

Green-Fuel Market, EU 2025

- 50% of POME-based fuel
- 20% of UCO-based fuel consumed are fraudulent.

An operator paying for fraudulent fuel without environmental benefit.

Fleet	Fuel		Annual Premium
	Type	Weekly consumption	
bus (50 ea)	hydrotreated vegetable oil	500 L / bus	€800K*

*Estimated €0.35 / L premium for fraudulent fuel.

Outside the sustainability market, one country that implemented the Reyal in-fuel marking solution saw a 34% increase in tax compliance.

Reyal authenticated green fuel solution

- Authenticate the blend percentage.
- Justify green fuel premium.
- Eliminate risk of green-washing accusations.
- Enhance corporate brand journey.

Agriculture



Mining



Logistics



Coaches





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