

CarbonOpsTM Environmental Intelligence Pipeline

1 - EO + GNSS + IoT Data Capture [Data Ingestion]

CarbonOpsTM ingests multi-source environmental data across landscapes.

- Satellite EO imagery
- GNSS positioning data
- IoT sensors and field measurements
- Operational and programme data streams

2 - Land-Use Classification & Baselines [Baselines]

Baseline environmental conditions are mapped and classified.

- Forest, agriculture, wetlands, water bodies
- High-risk zones identified
- Spatial baselines established for monitoring

3 - Diagnostics & Indicators [Diagnostics]

CarbonOpsTM generates environmental diagnostics from baseline data.

- Vegetation health
- Water stress
- Canopy cover
- Flood risk
- Soil moisture indicators

4 - Risk Insights & Alerts [Risk Insights]

Early-warning signals highlight climate and ecosystem stress.

- Climate risk indicators
- Water system vulnerabilities
- Landscape degradation signals
- Automated alerts for programme teams

5 - Performance Verification [Verification]

Environmental performance is validated for high-integrity reporting.

- Programme impact verification
- NbS performance checks
- Climate-resilience metrics
- UN-SDG alignment review

6 - Environmental Intelligence Report [Final Output]

CarbonOpsTM delivers a complete intelligence report for decision-makers.

- Actionable recommendations
- Baselines + diagnostics + risk insights
- Programme-ready intelligence
- Designed for NGOs, councils, ministries, estates