

Floodlight Emissions Methodology One-Pager

Asset-Level Emissions and Climate Risk Intelligence

Hybrid Bottom-Up & Top-Down Approach

1. BOTTOM-UP EMISSIONS ESTIMATION

- Asset-level data from multiple sources
- Facility characteristics, production metrics, fuel types
- Emission factors from regulatory databases

2. TOP-DOWN SATELLITE VERIFICATION

- Multi-sensor satellite data integration
- NO₂, SO₂, CH₄, CO₂ detection and quantification
- Cloud-gap filling algorithms

3. PORTFOLIO ROLL-UP

- Asset to parent company attribution
- Ownership chain mapping
- Scope 1, 2, and 3 aggregation

4. UNCERTAINTY QUANTIFICATION

- Confidence intervals for all estimates
- Data quality scoring
- Transparent methodology documentation

5. REGULATORY ALIGNMENT

- PCAF Standard
- EU Taxonomy
- SFDR
- TCFD
- GHG Protocol
- SBTi

6. KEY DIFFERENTIATORS

- Asset-level granularity
- Independent satellite verification
- Real-time anomaly detection
- Transparent confidence scores

For more: floodlight.io/knowledge/emissions-methodology

Contact: info@floodlight.io