

# EcoChain

## AI-Driven Sustainability Insights for Ethical Supply Chains

Predict Risk. Source Responsibly.

Tableau Next Virtual Hackathon 2025 | Sudarshanam Yessasvini



# Sustainability Risks Are Hidden in Plain Sight



- **Reputational Damage**

A single ethical violation can cause lasting brand damage and consumer distrust, eroding years of goodwill.

- **Financial Penalties**

Non-compliance with evolving ESG regulations results in massive fines and legal repercussions.

- **Reactive, Not Proactive**

Current tools only report on past issues; they fail to predict future risks, leaving businesses vulnerable.

# From Reactive Analytics to Proactive Intelligence



## Predictive Power

EcoChain predicts sustainability risks before they escalate into costly crises, enabling timely intervention.

## Unified Data

We unify disconnected data from IoT, audits, and CRM into a single, comprehensive source of truth.

## Confident Sourcing

Empower your business to make ethical and responsible sourcing decisions with unparalleled confidence.

# One Integrated Platform, End-to-End



## INGEST

Pull data from Salesforce CRM, IoT sensors, and 3rd-party audits into Salesforce Data Cloud.



## ANALYZE

Our LSTM model in Google Colab processes the data to detect anomaly patterns and generate predictive scores.



## VISUALIZE

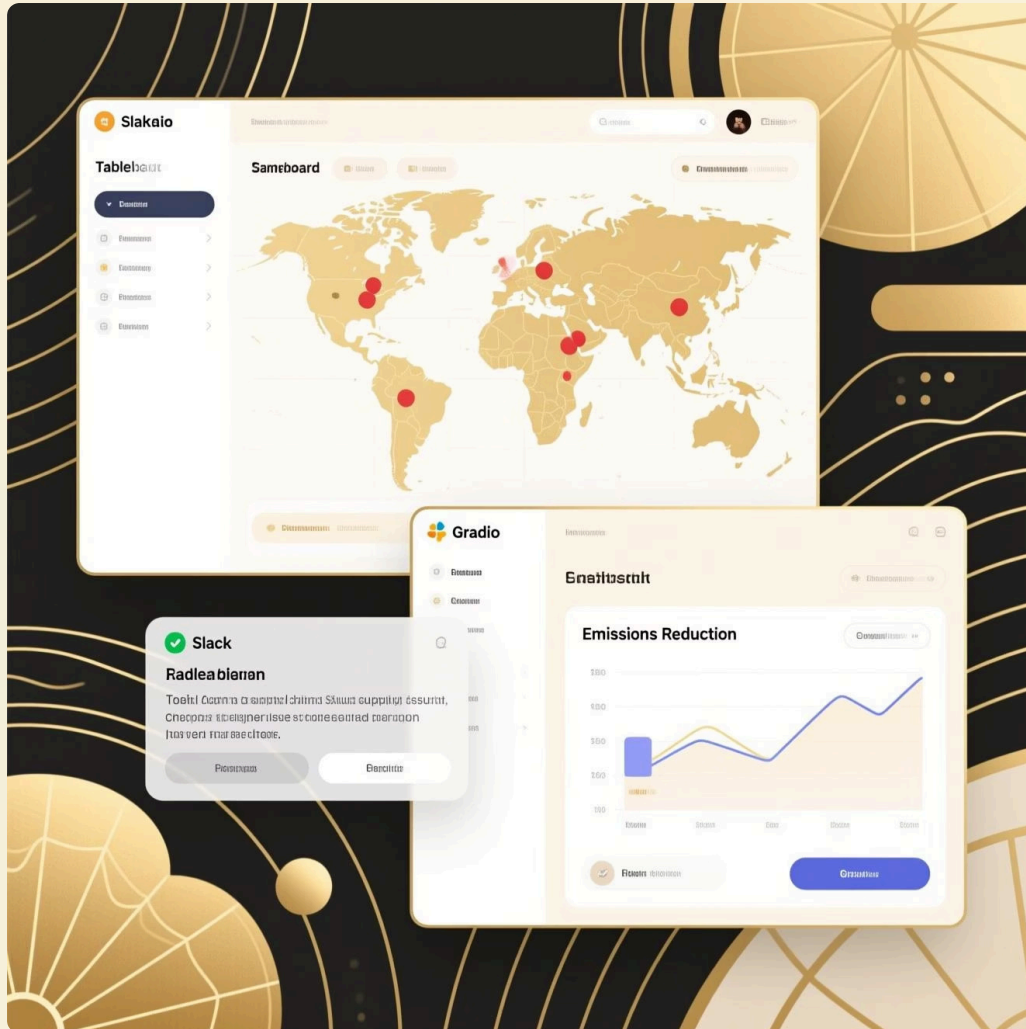
Tableau Next dashboards display intuitive risk scores, dynamic supplier maps, and Einstein AI insights.



## ACT

Receive instant Slack alerts for critical issues and run simulations in our Gradio app for proactive planning.

# See the Future of Your Supply Chain



## Key Demo Highlights:

- **Tableau Next Dashboard:** Interactive map for visualizing supplier risk hotspots.
- **Einstein AI Narrative:** Natural language explanation of predicted anomalies for quick understanding.
- **Slack Alert:** Real-world example of an automated notification for urgent issues.
- **Gradio Simulation:** "What if we switch Supplier X from air to rail freight?" Demonstrates a 22% projected emissions reduction.



# Built on a Foundation of Innovation

**Data & AI Layer:** Google Colab | Python | TensorFlow | LSTM Networks for advanced predictive analytics.

**Platform Layer:** Salesforce Data Cloud | Tableau Next | Einstein AI for scalable, secure, and insightful operations.

**Integration & UI Layer:** Slack API | Gradio | Apex for seamless communication and intuitive user experiences.



# More Than a Dashboard—A Game Changer



## Real-World Impact

Directly addresses the massive (\$15.4B) and growing ESG market, offering tangible solutions.



## Platform Showcase

Demonstrates the deep capabilities and seamless integration of Tableau Next, Data Cloud, and Einstein AI.



## Technical Innovation

Uniquely combines cutting-edge AI (Colab) with enterprise UX (Gradio) on the robust Salesforce Platform.

# Building the Future of Ethical Sourcing

## Phase 1 (Now)

### Predictive Risk Analytics

Our Hackathon MVP, providing real-time foresight into supply chain risks.

1

## Phase 3 (Future)

### Integrated Carbon Credit Marketplace

Enabling seamless offsetting of unavoidable emissions towards a truly circular economy.

3

2

## Phase 2 (Next)

### Blockchain Audit Trails & Supplier Portal

Enhancing transparency with immutable records and fostering direct supplier collaboration.





# Let's Build a Future Where Analytics Drives Ethics.

Connect with Us:

[|Demo Vedio|Github Repo|](#)Contact Us : yessasvini.s@gmail.com

# Key Takeaways:

- EcoChain provides **proactive** sustainability risk prediction, moving beyond reactive reporting.
- It unifies disparate data on the **Salesforce Platform** for comprehensive insights.
- Our solution leverages **cutting-edge AI** and user-friendly interfaces to drive action.
- EcoChain is a **strategic tool** for ethical sourcing and compliance in a globalized market.