

# Catalyst Analytics R

Reproducible Sustainability Modeling — Transparent, Inspectable, Institution-Ready

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## Overview

Catalyst Analytics R is the computational modeling layer of Sustainable Catalyst. It provides reproducible workflows for sustainability indicators, scenario modeling, and structured analysis — ensuring that every output can be traced to explicit inputs and documented assumptions.

## The Modeling Discipline

Too often, analytical work lives in fragile spreadsheets or opaque dashboards. Catalyst Analytics R enforces computational discipline: clear data ingestion, explicit transformations, version-controlled scripts, and export-ready outputs that stand up to scrutiny.

## Core Capabilities

- Scenario modeling with documented parameters and sensitivity checks.
- Time-series indicator analysis with reproducible workflows.
- Inclusive-wealth and sustainability metric calculations.
- Automated export pipelines for reporting and institutional review.

## Reproducibility & Governance

- No hidden spreadsheet logic or undocumented formula chains.
- All assumptions and transformations are inspectable.
- Outputs preserve provenance (sources, dates, version context).
- Designed for audit-friendly review across teams and institutions.

## Ecosystem Integration

Catalyst Analytics R operates on structured data from Catalyst Data, feeds scenario outputs into Global Impact Catalyst, and supports interpretive layers such as Narrative Risk. It is the computational engine behind transparent sustainability strategy.

## **Outputs**

- CSV and PDF summaries.
- Reproducible R scripts.
- Minimal, honest visualizations.
- Documented modeling notes suitable for institutional review.