Sustainability Decision Intelligence

The Global Problem of the ESG Professional

The job of ESG in 2025 is getting too hard to do effectively. We're seeing the measurable consequences in stalled corporate action and a visible lack of deployed solutions. Global emissions went up by 2.4% in 2024 despite 86% of the global economy committed to NetZero by 2050 under legal or regulatory frameworks. If you speak to anyone in a corporate ESG function today, in particular those under the CSRD framework, they will tell you they have no available budget until June 2026.

Reporting obligations are so resource intensive (CSRD) that practitioners are left with no budget to actually do the innovative job of decarbonising their organisations. They have insufficient support from C-suites, they have no tools that help them make a compelling financial case for investing in decarbonisation solutions. And yet they will be obligated to show progress against 2024 emissions reductions targets in next year's ESG report.

Almost everyone in sustainability roles use ChatGPT, Claude, Gemini to do the "rest" of their jobs. Despite many enterprises forbidding the use of AI, people are using their privately paid AI subscriptions to help them do their jobs.

But the *generic AI platforms can't do the specialised and complex work of sustainability* - writing, research, scenario modelling, ROI calculations, solutions investment analysis. These AI tools make up numbers. They hallucinate, they forget the work you were doing last week. They also use so much energy they stand in contrast to the actual mission of decarbonisation.

Many of the reporting platforms are introducing chatbots/AI tools for their customer base. But these are not flexible tools like a ChatGPT that can read, write, research, create models, do all the things that make ChatGPT so useful. They are also only accessible to their existing customers and locked into the reporting function.

The Solution

ESG practitioners - in enterprise and the public sector alike, need an easily affordable AI tool that works like a ChatGPT, but **deeply understands the sustainability domain** and the work they do on a daily basis. An AI that is underpinned by a sophisticated and constantly growing knowledge graph of the sustainability domain. An AI with the ability to interact and generate content like a ChatGPT, but without the hallucinations that come from AI trained on ALL the data of the world, with all of the biases of our existing economic system baked in - with no specific domain expertise.

Planetary Intelligence - Overview

Planetary Intelligence (Pi) is a platform for sustainability decision-making — designed to help teams move from ideas to actionable, defensible plans. It combines structured domain knowledge, analytical reasoning, and guided methods to turn complex environmental and social challenges into clear, evidence-based strategies.

The Offer - Pi Studio

Pi Studio is the primary user interface for interacting with this expert system. It gives users an environment to explore, test, and document sustainability decisions — from broad transition plans to focused technical choices. At its core, Pi fuses two living knowledge systems: an organisation's private context and Pi's growing domain graph of sustainability data, methods, and solutions.

The result is a tool that helps users frame better questions, explore options, define interdependencies and ecosystem actors; and produce more rigorous answers — faster, and with traceable evidence.

What Pi Studio Does Today

Pi Studio currently provides an intelligent workspace for developing and testing sustainability actions and plans. Users can ask questions, pin insights and their relationships, and connect relevant documents, data, and evidence into a coherent body of reasoning that learns as you interact with it.

Early capabilities include:

- **Knowledge ingestion and organisation:** Upload and annotate reports, plans, and data. Pi enables you to structure and link them within a private organisational context.
- **Search and synthesis:** Query both your own materials and Pi's curated knowledge graph of sustainability references and thousands of actions.

- **Scenario exploration:** Start from questions ("How can we decarbonise our logistics?") or guided frameworks like the Causal Decision Diagram (CDD) to map options and trade-offs.
- **Ecosystem mapping:** Be able to define the key actors relevant to your initiatives and how they relate to each other and the decisions to be made
- **Knowledge re-use:** As insights accumulate, Pi helps to make connections between related questions and past analyses, building a persistent organisational memory.
- **Knowledge sharing:** As early adopter users add their knowledge to Pi, they are able to share what they want with the wider Pi knowledge graph
- **Outputs / exports:** Allows you to get your thinking out of Pi and back into your own world - this will be doc export initially

These features are currently being finalised and refined for early adopters, focusing on practical utility and credible results. *Request access here*: [beta @fpi.earth](mailto:beta@fpi.earth)
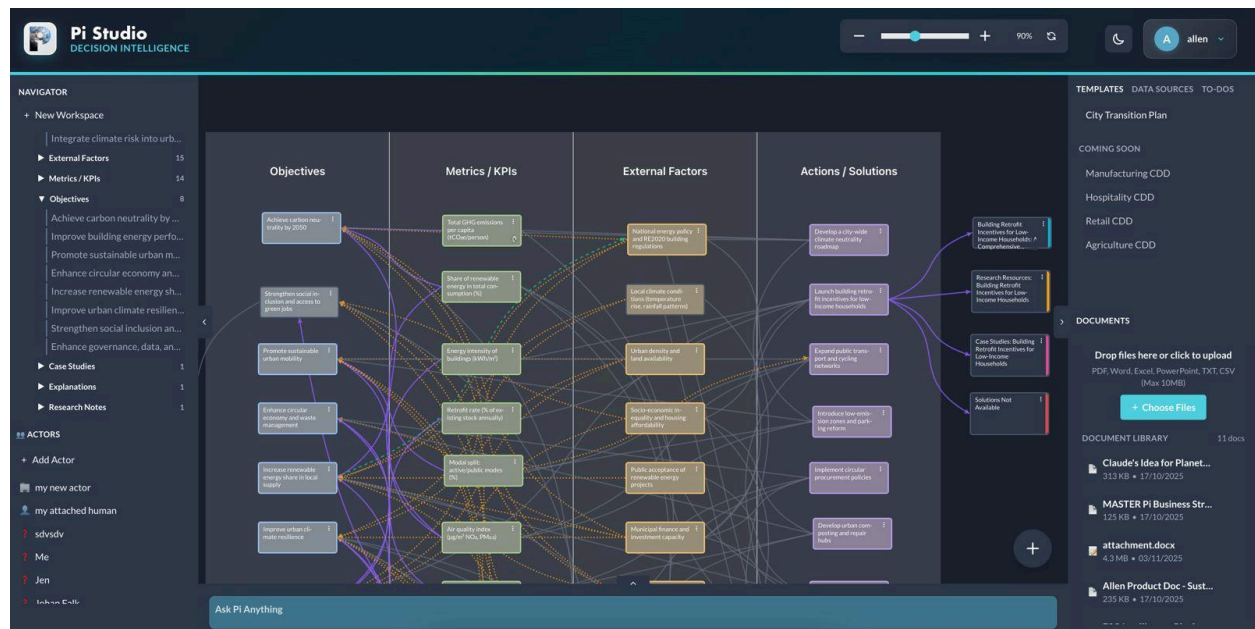

Positioning

Planetary Intelligence (Pi) sits at the intersection of decision support, knowledge management, and applied sustainability practice. It is not a chatbot, not another reporting tool, and not a consultant in a box. Pi provides a decision workspace where sustainability choices can be posed, evidenced, compared, and defended. It empowers and enables sustainability practitioners and teams to do more, more quickly, at higher quality.

Where most tools optimise for one slice — document storage, carbon accounting, or generic AI assistance — **Pi is designed for the whole arc of decision-making:** framing objectives and constraints, gathering and judging evidence, exploring scenarios (quantitative and qualitative), and turning analysis into action - and will continue to grow and learn with use.

What makes Pi different

- **Dual knowledge graph:** private organisational context + Pi's curated domain graph used together in every step.
- **Opinionated but flexible decision scaffolding** (CDD): a clear mental model (Objectives · KPIs · Externals · Actions) that guides, not constrains.
- **Transparent evidence chain:** every claim can point to sources, passages, and retrieval rationale — traceable by default.
- **Scenario modelling beyond carbon:** quant in where defensible, qualitative trade-offs where needed — comparable across planetary boundary themes.
- **Human-centred agentic workflows:** agents that ask for missing context, propose next steps, and document reasoning — always with the user in control.
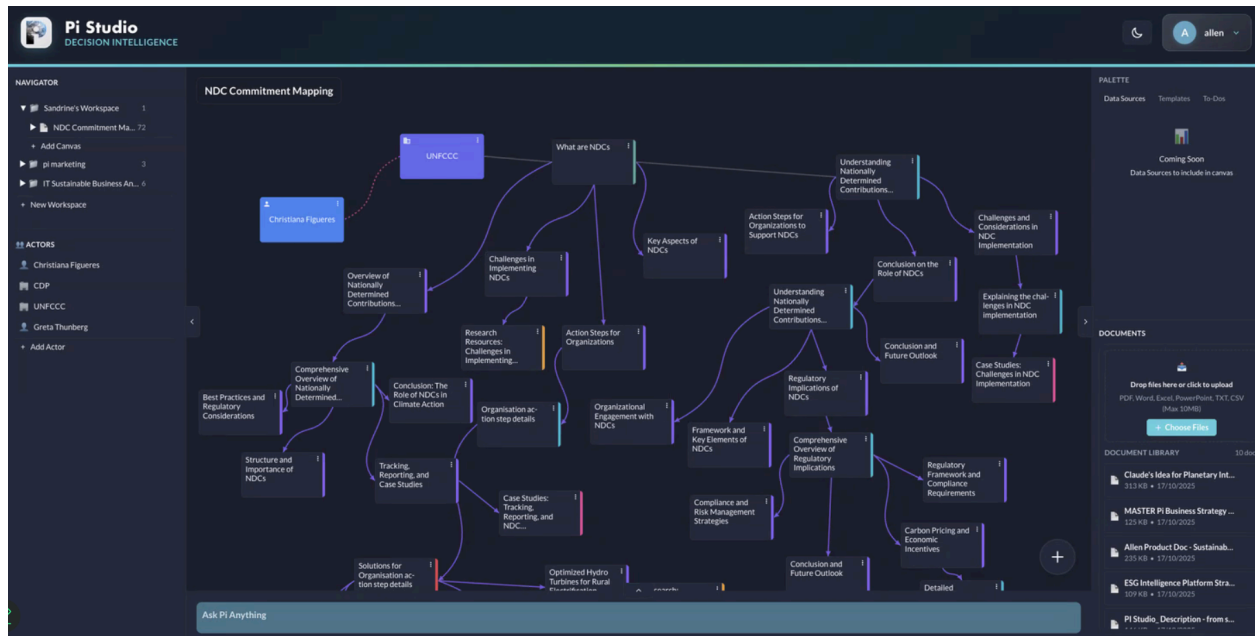
Who It's For

Pi is built for practitioners who need to make and defend sustainability decisions — often with incomplete data, fragmented systems, and limited time.

First wave: knowledge and influence holders - 2025/Early 2026

Climate Leaders / Experts / Scientists /Researchers

- Already deep experts — want AI that *adapts to them*, not instructs them.
- Use PI to build their own knowledge graph, in their tone and with their data.
- Need: personal RAGs, style consistency, data upload, and "thinking partner" capabilities

e.g. Scientific and organisational innovators and researchers, economic and transition pathways methodology thought leaders

Organizational Users

- Want to organize and activate existing institutional data/knowledge.
- Use PI for: grant applications, total addressable market modeling, ROI justifications, and investment impact forecasting.
- Need: team workspaces, export and collaboration, CDD templates, data ingestion, and multi-context comparison (e.g. CFO vs. ESG leader).

e.g. Chief sustainability officers, research bodies, university teams

System Connectors / Network Builders

- Build ecosystem maps of projects, capital, and missions.
- Use PI to connect funding to projects, find collaborations, and visualize flows.
- Need: organizational relationship maps, data harmonization, and collaborative canvases.

e.g. solutions database integrators, angel (impact) investors communities, investable opportunities mapping

Second wave: Additional categories of knowledge and influence holders - January 2026

Cities & Public Sector Actors

- Use PI to draft or evaluate transition plans, identify funding, and benchmark progress.
- Need: localized data, policy context, and solution matching.

e.g. City sustainability officers, municipal planners, university sustainability managers

Academic / Knowledge Contributors

- Contribute verified data and research; use PI to apply it in decision contexts.
- Important for credibility and ongoing enrichment of the "planetary brain."

E.g. Universities, research orgs

Expert Solution Providers

- Use Pi to understand their market, gauge size, identify market entry approaches, prospects
- Need: Detailed, local knowledge
- Contribution: rich, detailed solutions knowledge

Third wave: Organisational Decision Makers (mass market) - April 2026

Sustainability Leaders (often in NGOs, consultancies)

- Challenges: Have knowledge they want to organise and share, contributing back to the wider sustainability community is core to their personal or organisational mission
- Pi enables: A single canvas to organise their thinking, how their knowledge relates and providing tools to manage (and allow control of) dissemination of knowledge into the Pi knowledge graph

Sustainability Lead / Head of ESG (Mid–Large Enterprise)

- Challenges: Cross-functional data locked in silos; competing frameworks; "show me the proof" demands from finance and operations; limited time for deep research.
- Pi enables: A single canvas to frame objectives, compare scenarios, attach defensible evidence, and publish explainable plans, that will learn as you interact with it.

Corporate Sustainability / Impact Consultant

- Challenges: Rebuilding baselines client-to-client; manual synthesis; pressure to quantify without over-promising; auditability concerns.
- Pi enables: Faster, evidence-backed deliverables; client-specific private graphs; traceable chains of logic and sourcing.

Operations / Facility Manager (Manufacturing, Real Estate)

- Challenges: Tactical investment choices (water, energy, waste); ROI vs. compliance trade-offs; vendor overload.
- Pi enables: Side-by-side action comparisons (quantified where possible), contextual guidance, and accessible business cases.

Public-Sector Programme Owner / City Sustainability Team

- Challenges: Policy vs. local realities; fragmented procurement evidence; stakeholder accountability.
- Pi enables: Scenario packs balancing social, environmental, and economic metrics; source-backed justifications; institutional continuity.

Secondary personas

Finance Partner / CFO-Adjacent Stakeholder

- Challenges: Skepticism of soft claims; need for comparables and sensitivity; risk oversight.
- Pi enables: Clear assumptions, ranges, and confidence levels — an analytical bridge between sustainability and finance.

Domain Specialists (Water, Materials, Biodiversity)

- Challenges: Technical evidence often gets lost in communication layers.
- Pi enables: Keep domain knowledge active and discoverable within the organisation's reasoning graph.

What Comes Next - Product Development

Pi is evolving rapidly, guided by user testing and early partner feedback. The near-term roadmap focuses on four areas that deepen its practical value.

1. Scenario Modelling

Pi will enable teams to test combinations of actions, targets, and assumptions — and see their implications across carbon, social, and economic dimensions. Users will be able to model outcomes such as emissions reduction, cost efficiency, or local value creation using both internal data and verified public reference values.

This bridges qualitative reasoning and quantitative validation, while recognising that not all sustainability trade-offs can or should be reduced to a single number. For broad transition plans ("Where do we invest €10M to maximise impact?") Pi supports structured, multi-criteria exploration; for focused decisions ("Rainwater harvesting or greywater reuse?") it drives toward quantified comparables with qualitative benefits captured alongside.

Underlying this is a semi-structured data store — a living scratchpad that captures the numbers and parameters that matter to each team. It learns as people work, reuses known values transparently, and reduces repetitive data requests, while avoiding the heavy lift of ERP or carbon-system integrations.

2. Evidence, Research, and Provenance

Pi strengthens evidence-based work by automatically sourcing relevant datasets, linking to authoritative studies, and documenting the origin of every claim — down to the page and paragraph. Each AI-generated response carries an analytical payload showing which documents, data, and semantic chunks were used. Users can trace any conclusion back to its origin, extract the underlying text, and view confidence and relevance scores explained in plain language.

Pi's curated authority lists — maintained with partners and aligned with reputable sources (e.g. WRI, ADEME, GRI) — ensure that search and retrieval prioritise credible, context-appropriate material. The result is traceability by design, giving users the ability to produce watertight, reference-backed business cases without breaking their workflow.

3. Collaborative Working and Organisational Memory

As Pi grows into team environments, it will support shared workspaces, authorship tracking, and version history. The design goal is to preserve institutional continuity — the accumulated reasoning of an organisation — while allowing individuals to experiment freely.

Each asset in Pi (note, source, scenario, decision) has clear ownership and provenance. Teams will be able to review who contributed what, when, and why — maintaining accountability while fostering collective intelligence. This ensures that knowledge survives staff turnover and that the organisation's sustainability expertise strengthens over time.

4. Evolving Intelligence and System Architecture

As each organisation builds depth in its dataset and interactions, Pi's reasoning quality improves. More context means better answers, tighter linkages, and more relevant recommendations.

Pi's own domain knowledge graph also expands continually, integrating verified data, methodologies, and solution libraries curated from partners and open sources. This dual evolution — user-side and system-side — underpins the platform's unique value.

Under the hood, Pi combines:

- Hybrid retrieval methods (semantic + symbolic) for more accurate sourcing.
- Source reliability weighting and feedback-driven re-ranking for higher quality outputs.
- Domain-tuned sustainability language models built on open foundation LLMs.
- Multi-agent reasoning architecture handling tasks like context gathering, validation, synthesis, and fact-checking in parallel — coordinated to deliver reliable, explainable responses.
- Continuous learning loops that update retrieval logic and analytical heuristics based on real-world user feedback.

This architecture ensures that Pi evolves alongside advances in AI and data science, remaining credible, transparent, and human-guided — never a black box.

Planetary Intelligence - Data Stack

Expert knowledge, the science, the sectoral transition pathways, solutions libraries, ROI/impact calculations, best practices case studies
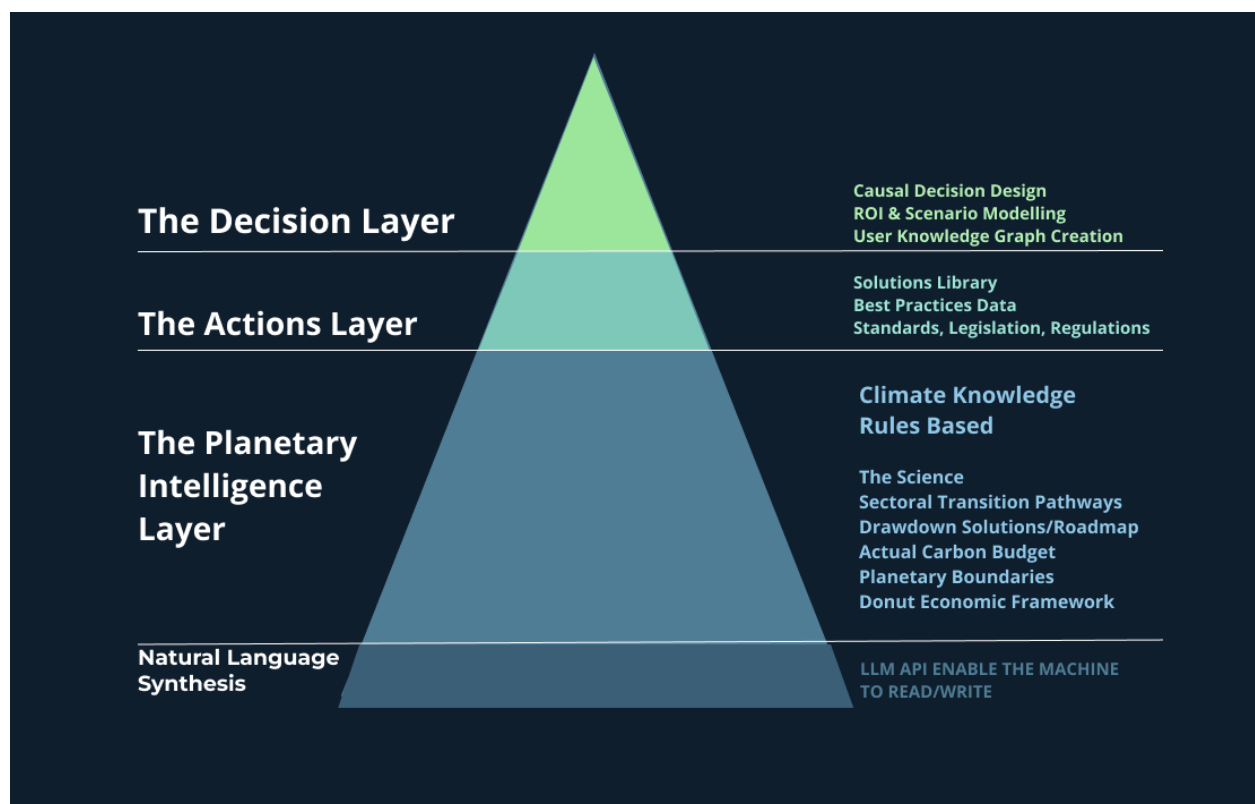
Looking Ahead

Pi will continue to grow through collaboration with early partners: sustainability leaders, researchers, and practitioners who bring domain expertise and real-world data to test and refine the system.

Our aim is not to automate judgment, but to amplify human capability — giving experts the means to reason faster, with greater confidence, and to share that reasoning transparently. Every improvement in Pi's shared infrastructure strengthens the collective ability to act intelligently for the planet.

Summary

Planetary Intelligence represents a new category of tool:

A reasoning platform that combines the best of organisational knowledge management, sustainability expertise, and modern AI. It is designed to make sustainability work actionable — where evidence is clear, reasoning is transparent, and decisions can be acted upon with confidence.

Pi is NOT another ESG Tool - PI is the bridge from awareness to action, transforming rising demand for sustainability insight into data-driven, system thinkers + AI enabled decision intelligence that powers real deployment and impact, including for cost/benefit analysis & impact modelling.