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Customer Insight: Andreea Moyes

- SAF Reporting Is Central: SAF (Sustainable Aviation Fuel) reporting is the most important decarbonization initiative in aviation.
 - Multiple certification standards exist globally and even within the U.S.
 - Companies must certify their products under several schemes, incurring significant cost.
 - No tools currently exist to translate certifications between standards this creates an industry-wide gap.
- Early-Stage Analytics Needs: Aviation is in the *pioneer stage* of decarbonization.
 - There are **no standardized big data analytics tools** in use.
 - The industry urgently needs tools suited to this early maturity stage.
- Non-CO₂ Effects Are Overlooked: The industry is increasingly concerned about non-CO₂ impacts of jet aviation (e.g., contrails, NOx).
 - No existing tools help track or evaluate these emissions or their climate impact.

Customer Insight: Amy Webb

- Does your school currently work with Xcel Energy for electricity or natural gas? If not, which utility providers do you use?

 And in either case, do you face any challenges accessing or managing that utility data?
 - U-M does not use Xcel Energy. XCel's service area is in the Upper Peninsula. U-M's outside energy provider is DTE. U-M
 also generates much of their own energy. We don't have issues accessing the data and have a good handle on managing
 if
- Beyond utilities, what systems (Workday, SAP, QuickBooks, spreadsheets, etc.) do you use to collect ESG or energy-related data? And are there any challenges there in terms of manual work or cross-department coordination?
 - We have been using Insight and are transitioning to Desigo. This will enhance some capabilities but will limit others. For example with Insight we could gather runtime data on various HVAC components. Desigo will not offer this information.

Customer Insight: Joli Cardenas

1. In your experience, what are some of the most persistent or widespread challenges you've seen ESG professionals face in their work today?

- Sustained priority for ESG initiatives: What was important to one leader is not necessarily important to the next. ESG needs to be publicly published in order to have longevity.
- **Resource allocation for ESG:** When it comes to dynamic times like we are in now (ie tariffs, changing regulations), resources will go towards keeping the company profitable.
- Strategy and program management of ESG initiatives: Many managers and directors are told to add 'sustainability' as an additional task to their full time jobs.

2. Have you noticed any recurring gaps or limitations in the tools, data, or processes that are commonly used to address those challenges? \varnothing

• There are many great tools in the market that have been around for 5+ yrs. The issue is data collection. It's a big hurdle that many would rather not undergo as it's a time consuming, full time job to get good/clean data.

3. From your perspective, is there a clear willingness in the market to invest in better solutions if those gaps were addressed effectively? $_{\varnothing}$

• The market already crowded with ESG solutions. What I see now is US tools vs EU tools. Both are marketing to the same global company and I think the next stage will lead to acquisitions or partnerships for ESG tools to better cover geographically and functionally.

4. What features or capabilities do you think an ideal ESG solution would need in order to be truly useful and adopted broadly by teams in the space?

• I can only speak to the E portion as I don't work in Social or Governance. I go back to the earlier question that there are many tool providers that are fully functional and capable; however, there's a big gap in collection of the data.

Customer Insight: Sree Kancherla

Supplier Data Pain Points 🕖

- Human Rights Abuse
- Carbon Reduction and Water Usage Issues

It's difficult to identify the risks in a supply chain and she believes that skews the data, as well.

Customer Interview: Anonymous

Overview @

This page highlights the growing strategic urgency for ethical supply chains, actionable sustainability metrics, and accessible ESG tools. The customer underscored the importance of supplier diversity and data transparency, particularly as companies face pressure to meet evolving regulatory requirements and differentiate through sustainability leadership. There is a clear demand for AI-driven platforms like Bloom that can provide high-quality, measurable insights—especially around project identification, carbon reduction strategies, and financially informed ESG decisions. The ideal solution must bridge data complexity with ease of use, enabling informed action without relying on costly consultants or overwhelming internal teams.

Key Themes and Insights $_{\mathscr{D}}$

1. Supplier Diversity and Ethics @

- The customer **strongly emphasized the importance of ethical practices** and **supplier diversity** in large-scale supply chain management.
- There is a **recognized need to include diverse suppliers** in procurement processes, ensuring fairness, equity, and socially responsible sourcing across the supplier ecosystem.

2. Sustainability Metrics @

- The customer acknowledged that **key sustainability metrics vary significantly between companies**, especially in nature-focused domains.
- Metrics of particular relevance included:
 - Implementation of emission factors
 - Measurement of decarbonization efforts
 - Tracking of carbon footprint reduction initiatives

These metrics reflect the operational and environmental rigor companies aim to incorporate, despite inconsistencies in industry-wide standards.

3. AI Model Capabilities and Expectations @

- The customer noted that the current primary use case for AI models in this context is limited to:
 - o Data analysis
 - Quantitative insight generation
- He stressed the following critical needs:
 - $\circ \ \ \textbf{Data transparency from suppliers}$
 - High-quality input data
 - Measurable outputs in every iteration of the AI model's development process
- These factors are seen as essential to ensure the credibility, actionability, and evolution of AI-driven insights.

4. Drivers Behind Sustainability Reporting @

- Two core motivations for sustainability reporting were identified:
 - a. **Regulatory compliance** meeting emerging legal and governance standards.
 - b. Competitive differentiation using sustainability positioning as a market advantage or brand strength.

These reflect both external mandates and strategic internal positioning as companies navigate increasing ESG expectations.

5. Desired Outcomes from Bloom's Application ${\mathscr O}$

The customer outlined **three targeted outcomes** they would expect from using Bloom's platform:

1. Project Identification

• Discover potential future sustainability initiatives with clear impact and feasibility.

2. Carbon Footprint Reduction

• Use the tool to inform and implement **effective carbon reduction strategies** aligned with corporate ESG goals.

3. Data-Driven Budgeting for CFOs

• Support financial decision-makers with **insightful**, **budget-aware recommendations** that can influence capital allocation, especially with regard to sustainability investments.

Customer Interview: Adam Woodcock

Overview @

This page outlines candid feedback on the real-world challenges of ESG data management from an operator's perspective in oil and gas. Adam Woodcock confirmed that data fragmentation, manual collection, and lack of seamless integration remain major hurdles, especially in contexts involving multiple reporting requirements and systems. While he acknowledged the pain of compiling ESG data and the value of audit traceability, he questioned whether a standalone middleware platform like Bloom would be adopted widely unless it's bundled or paired with front-facing insights. Adam suggested Bloom may find more success either as a white-label backend for existing ESG platforms or as a tool aimed at vendors who must report under frameworks like CDP. His feedback was direct, constructive, and highly practical.

1. What Are the Biggest Pain Points You're Facing Right Now in Your ESG Work?

1A. Fragmented Data Across Systems @

Adam shared that ESG data lives in several disconnected places — including **Workday**, **SAP**, **health and safety platforms**, and **production databases**. Despite using multiple tools, the data is **not centralized** in a single system.

"We use several different software systems... and still rely on Excel."

He emphasized that Excel is still a core part of ESG workflows and that current ESG data sources are fragmented.

1B. Complexity in Emissions Software $\mathscr O$

Adam noted that there are many emissions software providers claiming to solve the problem, but all come with **difficult implementation processes** and **faults**.

"There's a ton of companies out there that claim they do the emissions, but all of them have their faults... it gets to the point that it's probably overcomplicated and requires a lot of effort from the operators to get that software right."

1C. Lack of Real-Time Visibility @

While not framed as his organization's top problem, Adam did acknowledge that **real-time feedback on emissions and sustainability metrics** would be valuable, particularly when tracking results from operational interventions (e.g., methane reduction projects).

2. What Has Your Team Tried So Far to Solve These Challenges?

Solutions Mentioned @

- Health & Safety Software: Already well-integrated and mature within their organization.
- Production Data Tracking: Not deeply discussed, but suggested to be in a decent state.
- Energy Emissions Modeling and Data Lab: Collaborating with EEMDL (Energy Emissions

Modeling and Data Lab) led by Dr. Dave Allen and Dr. Arvind Ravikumar at UT Austin to model and quantify methane emissions. He recommended this group for further research or partnership.

"We work closely with EEMDL... looking at emissions modeling — a lot of focus on methane."

Engineering Constraints @

Adam stated that while he's considered integrating all ESG data into a single tool, lack of internal budget has prevented
implementation.

3. Would You or Your Company Pay for a Solution That Solves This?

Yes — if connected to compliance or customer requirements $\mathscr Q$

Adam expressed that **companies would be willing to pay** if a tool directly helps with regulatory compliance or customer reporting obligations.

He used the example of **Schlumberger**, a large oilfield services firm headquartered in France, which **requires vendors to report Scope 3 emissions to CDP**.

"They require CDP reporting from all their vendors — and most of those vendors don't have the data consolidation that you're proposing."

If a vendor could use Bloom to meet CDP reporting requirements more easily, they would likely pay for it.

He estimated that something like \$20,000 per year could be justified in that context:

"In order to maintain compliance with Schlumberger... they would pay for it."

Reaction to the Bloom MVP Concept & Demo @

MVP Summary You Provided: @

- Middleware ESG data layer.
- Aggregates and normalizes ESG data from tools like SAP, Workday, QuickBooks, spreadsheets.
- Not focused on reporting only **pre-reporting readiness**.
- Real-time sync demonstrated via Zapier and Airtable MVP.

His Reactions @

- Understood the concept and liked the idea of real-time syncing.
- He was interested in the potential for audit traceability, especially if the system could flag incomplete or missing values.

"That raises flags... like, oh, this employee count looks like you're missing employees from Facility B... is that right or wrong?"

 However, he questioned whether ESG teams would adopt a standalone middleware without stronger value-add or bundled reporting functionality.

"Every platform... you need to be very careful on cost versus value added."

He indicated that your concept may be **more useful to platforms like Workiva or Watershed**, rather than as a standalone B2B product for ESG managers.

"Maybe your target customer isn't me... maybe it's the Workivas of the world."

Strategic Takeaways @

Pain Points Confirmed @

- ESG data fragmentation is real and recurring.
- Current emissions software is complex and burdensome to implement.
- Vendors reporting under frameworks like CDP are underserved and pain-sensitive.

Barriers to Adoption @

- Budget must be tied to ROI, compliance, or customer retention.
- ESG tooling must be simple and self-contained teams are too small to adopt multi-step systems.
- "Middleware" may be too abstract or low-visibility to earn budget directly.

Implications for Bloom @

- There is a clear data consolidation problem validated.
- However, as Adam noted, ESG teams are unlikely to pay for infrastructure alone.
- You may need to:
 - Add **audit traceability features** (e.g., flagging missing/incomplete data).
 - Reposition Bloom as a white-label backend or reporting partner to platforms like Workiva.
 - Target vendors who face top-down compliance pressure from large customers (e.g., CDP disclosure via Schlumberger, Total, etc.).

Final Notes @

Adam was clear, constructive, and helpful. He appreciated your humility and the MVP demonstration, but made it clear that ESG tooling must solve an **immediate**, **outcome-driven** problem — not just reduce backend friction.

"If you're solving the middle layer, that's great. But for me to use it, it has to feel like a complete solution — or I'll stick to my spreadsheets."

Customer Interview: Blake Jackson

Overview @

This interview provides deep insight into ESG challenges at a mid-sized architectural and design firm (~800 employees across 14 offices, global). The interviewee oversees sustainability reporting and strategy, having formerly worked at a 60,000+ person firm with dedicated ESG teams. At his current firm, he is largely alone in managing ESG, and he candidly discussed frustrations around ESG data fragmentation, cultural inertia, and the limited applicability of big-box ESG tools for knowledge firms. Despite lacking strong U.S. regulations, the firm faces increasing Scope 3 pressure from larger partners and must account for carbon emissions—especially from travel and procurement. The conversation revealed practical bottlenecks in workflows and strategy that Bloom could meaningfully address by becoming an ESG infrastructure layer rather than a flashy dashboard.

1. What Are the Biggest Pain Points in ESG Work?

1.1 Severe Fragmentation in Data Collection $\mathscr Q$

- Procurement and travel data are scattered across files, teams, and job codes.
- Emissions data often retroactively inferred from expenses low-quality, non-granular.
- "It's like archaeology within your own business... you're digging through rubble."

1.2 No Cultural Accountability Across Staff $\mathscr O$

- ESG seen as the director's job only; others disengage.
- 800 employees, but no incentive or mechanism to track their individual carbon contributions.
- "If I wanted better data quality, where would I even log it?"

1.3 Unsuitable ESG Software Models @

- Enterprise tools cost \$25K-80K/year and still require manual data entry.
- Price scales with employee count, punishing mid-sized companies despite limited usage.
- "We were being punished for our size."

1.4 Constant Time Lag and Retrospective Analysis $\mathscr O$

- Sustainability decisions are made reactively data is 6–12 months old.
- Internal systems are too slow to support real-time or proactive choices.
- "We're waiting for a heart attack to happen before acknowledging symptoms."

1.5 Knowledge Firms Are Underserved by ESG Tools ${\mathscr O}$

- Tools are optimized for manufacturers or asset-heavy firms.
- Architecture firms lease space and don't own assets; traditional metrics don't apply.
- "We make buildings, but really, the contractor makes them."

1.6 Carbon Literacy and Change Fatigue \mathscr{O}

- Teams resist sustainability innovation by citing past projects.
- "We did it this way before, why change it?"
- ESG is seen as a trend, not a core operational lever especially in the U.S.

2. What Has Been Tried So Far?

2.1 Manual Finance Folder Sorting

• Travel data manually pulled by job code and spreadsheet matching.

2.2 Attempted Use of Dashboards \mathscr{Q}

• Tried ESG dashboards but found they didn't reduce actual workload.

2.3 One-Off Consulting + Education $\mathscr O$

- Company is sometimes forced into ESG by Scope 3 pressure from partners.
- ESG efforts often devolve into education, not transformation.

3. Would You or Your Company Pay for a Solution?

3.1 Yes — If It Saves Time or Automates Real Work ${\mathscr O}$

• "If it saves me from digging through files or calculating miles manually — 100%."

3.2 No — If It's Just a Dashboard @

- Tools that don't connect upstream systems are not worth the spend.
- "Still had to pull data manually... I was just entering it into a different place."

3.3 Cost Models Must Reflect Usage @

- Should not charge per employee for tools used by <10 people.
- "We only need 10 licenses for 10 specialists not 800."

3.4 High Bar for Internal Buy-In 🖉

- Platform must integrate without hacking, preserve security, and require minimal disruption.
- "Are we putting people in charge of their carbon responsibility? If so, we need enforcement."

4. What Would the Ideal Solution Look Like?

4.1 Unified Data Collection from Core Systems $\mathscr Q$

• Platforms like Concur (travel), internal spreadsheets, procurement folders.

4.2 Modular + Role-Based Data Input @

- Every employee could log mileage or project-specific info in real time.
- "No close-out, no paycheck" enforcement if necessary.

4.3 Focused on Integration, Not Insight $\mathscr O$

• Just getting the data in one place would already be 80% of the value.

4.4 Affordable for Mid-Market 🔗

• Right-sized pricing model for 250–1000 person companies.

4.5 Carbon Accountability Infrastructure $\mathscr O$

• Treat sustainability metrics like finance: high trust, consistent definitions, audit trails.

Notable Quotes @

• "It's like archaeology within your business."

- "We're punished for our size we have to pay more per seat."
- "Everyone thinks the sustainability director is supposed to do everything."
- "We've just scratched the surface... clients think we've been there, done that."
- "My clients want nickel sustainability, and I'm trying to charge a buck."

Implications for Bloom @

- Strong validation for building an **ESG integration middleware**, not a full SaaS.
- Focus on getting the data into one place from Excel, procurement folders, Concur, etc.
- Emphasize lightweight, secure, role-based entry and usage-based pricing.
- Target the 250–1000 employee range large enough to care, small enough to lack internal tools.
- · A future product opportunity lies in carbon accountability infrastructure, not just reporting.

Final Notes @

The interviewee was thoughtful, candid, and highly experienced. He confirmed that the true bottleneck isn't just data entry — it's data access, structure, and responsibility diffusion. He also emphasized that selling into mid-sized firms will require tight ROI justification and a pricing model that respects lean teams. A follow-up call is recommended to test early prototypes and integration concepts.

Customer Interview: Brooke Akins

Overview @

This page outlines key strategic insights into the ESG reporting landscape for small and mid-sized enterprises. It emphasizes the need for a solution that is affordable, easy to implement, and tailored for businesses with little to no prior experience in sustainability disclosure. As regulatory pressure mounts across the U.S., EU, and state-level jurisdictions, both public and private companies are being pushed to track, forecast, and communicate their ESG performance. At the same time, investors and B2B customers are demanding greater transparency, turning ESG into a commercial and reputational priority. The opportunity lies in delivering a product that simplifies complexity, scales with company growth, and avoids the high cost and consultant-heavy burden of traditional platforms.

Key Insights by Theme *⊘*

1. Target Customer & Market Positioning @

- . SMEs Are the Priority
 - Customers are likely not experienced in ESG reporting.
 - Must price for SME budgets affordable, no-brainer pricing that still scales.
 - Price should be framed relative to traditional consulting-based ESG platforms that are prohibitively expensive.
 - Example: Microsoft's ESG solution can cost \$75,000 and take 3–4 months.

· Pricing Strategy

- Understand input costs vs. output price; keep strong margins.
- "This normally costs \$X and Y hours we're \$A and B hours."
- Offer financial forecasting to justify ROI to potential buyers.

Customer Journey

• "As you grow, we grow with you." Start with simpler frameworks, grow into more complex ones (e.g., GRI, SASB).

2. Regulatory Complexity (US, EU, Global) @

- Public vs. Private Customers
 - Both face increasing pressure from investors but with different regulations.
 - Private Markets: SFDR (EU), ESG due diligence from PE firms.
 - Public Markets: EU CSRD, US SEC disclosures, EU Taxonomy.

• US Regulations

- SEC climate rules now overlap with EU CSRD.
- Applies even to US companies generating EU revenue.

• EU Regulations

- Separate reporting paths for EU public vs. private entities.
- Financial impact disclosure, Scope 1/2 (and eventually Scope 3).

• Emerging US State-Level Regulations

- o California has its own set of disclosures.
- Expect US regulation to evolve toward EU-style mandates.
- **Key Pain Point**: Mapping ESG data across locations can cost \$100K+ per site using traditional methods. Bloom's solution must dramatically lower this barrier.

3. Reporting Needs & Product Features @

- Bloom Must Deliver:
 - Easy-to-Use Interface
 - Simple Implementation
 - o Affordable SaaS Pricing
 - Customizable to fit accounting rules & company-specific metrics.

• Critical Capabilities

- ESG footprint calculation
- · Predictive analytics and forecasting
- Benchmarking: year-over-year and against peers
- · Water/resource management
- Support for Scope 3 estimation (via invoicing, HR data, utilities, etc.)

• SME ESG Data Sources

- Utility bills, HR data (DEI, turnover, HCM), CapEx invoices
- Not all SMEs need full GRI/SASB frameworks, but should be compatible with them over time.

4. Stakeholder Expectations @

• Investor Pressure

- PE firms increasingly demand ESG due diligence questionnaires.
- Institutional investors like BlackRock expect ESG metrics from their portfolio (especially logistics, real estate, transportation).

• Customer Pressure

- B2B clients (e.g., logistics companies) face ESG demands from their own customers.
- $\circ~$ SME clients downstream must comply to stay in supply chains.

• Reputational Value

- Buyers want to work with value-aligned businesses.
- ESG reporting isn't just a compliance box it's a brand driver.

5. Competitive Landscape *⊘*

- Microsoft's ESG tool is pricey and incomplete (only one part of a larger suite).
- Many enterprise tools require expensive consultants to operate.
- Bloom must differentiate through simplicity, affordability, and transparency.
- Don't compete head-on with IBM, Microsoft compete where you can win: agility, pricing, and ease-of-use.

Actionable Recommendations from Brooke @

1. Conduct ROI-based Customer Research

- Build pricing that reflects Bloom's time/cost advantage.
- $\circ\;$ Quantify decision analysis for skeptical SME buyers.

2. Map SME Operating Costs

• Understand what's typical, then show how Bloom fits below that threshold.

3. Define Your Ideal Customer

- Industry vertical?
- o Public vs. private?
- · Geography?

4. Plan for Scalability

- $\circ~$ Support SMEs early; grow into enterprise-class needs as clients expand.
- $\circ~$ Modular architecture to layer in frameworks (GRI, SASB, SFDR) over time.

$5.\,\textbf{Monitor Regulatory Momentum}$

- Expect pressure to increase from:
 - Governments (SEC, EU, state disclosures)
 - Investors (due diligence)
 - Customers (downstream ESG expectations)

Customer Interview: Brynn Havern

Overview @

This page captures detailed insights from a U.S.-based ESG certification analyst working at the Austin office of a European sustainability consultancy. The firm specializes in helping real estate clients achieve green building certifications such as BREEAM. This individual is relatively new to the role but is actively executing certifications and navigating a company-wide transition toward AI-enhanced workflows. The conversation surfaced practical challenges around AI integration, data availability, and manual labor, particularly as U.S. certification workflows diverge from their European counterparts. A significant theme was the company's efforts to streamline ESG data consolidation via a newly launched (or soon-to-launch) internal portal. These insights provide strong validation for tools focused on streamlining data access, supporting AI integrations, and automating repetitive ESG certification tasks.

1. What Are the Biggest Pain Points You're Facing Right Now in Your ESG Work?

1.1 Growing Pains from AI Integration $\mathscr O$

The company is shifting toward AI-assisted workflows, particularly custom GPTs for BREEAM certification processes.

Current AI models are inaccurate and not fully adapted to U.S.-specific certification standards.

Quote: "Why would I want to rely on something inaccurate when I can just do the work myself?"

1.2 Lack of U.S.-Specific AI Support ∅

While the European offices have started training GPTs for the EU version of BREEAM, U.S. standards have lagged.

The analyst's team doesn't yet benefit from GPTs trained on relevant local certification criteria.

1.3 Fully Manual Certification Process @

Most certification steps — from checking equipment specs to mapping out property features — are still handled manually.

Quote: "Everything I'm doing is manual... looking up spec sheets, outlining properties on Google Earth."

2. What Has Your Team Tried So Far to Solve These Challenges?

2.1 Use of ChatGPT (Limited Effectiveness) @

ChatGPT is used for minor tasks or drafting basic comments, but it's not reliable for core certification work.

GPT training efforts are underway, but focused on EU processes; the U.S. team is still awaiting tailored support.

2.2 Team-Based GPT Training (Ongoing) *⊘*

European teams are training GPTs on standard workflows, feeding them data and responses from past certifications.

The U.S. analyst may soon be involved in training U.S.-specific GPTs using her own manually compiled documentation.

3. Would You or Your Company Pay for a Solution That Solves This?

3.1 Budget Sensitivity @

As a small company, they tend to be cautious about spending on new tools. Pricing and proof-of-value are key.

Quote: "We're a smaller company... they tend to be a little bit more frugal."

3.2 Willingness Exists If the Value Is Proven @

There's openness to adopting time-saving or efficiency-enhancing solutions — especially if already proven effective.

Quote: "If it's a tried and true and well-tested product... I'd like to think we're open."

4. What Would the Ideal Solution Look Like?

4.1 Real-Time Access to Centralized Data €

Company is rolling out a new portal to centralize client and certification data, moving away from fragmented file-sharing.

Not yet connected to GPTs — future utility will depend on whether AI tools are integrated effectively with the portal.

4.2 Tool That Connects AI to Live Data @

The analyst expressed strong interest in a tool that connects LLMs (e.g., GPTs) to a live database — enabling more accurate, dynamic answers without needing retraining.

Quote: "If [GPT] could access all real-time current data, that would be helpful."

Additional Observations & Implications for Bloom @

Signals of Strategic Alignment @

- The company is clearly aware of inefficiencies in its certification workflow and is actively investing in internal infrastructure.
- There is already executive-level intent to streamline certification processes evidence of real demand.

Opportunities for Bloom @

- Support LLMs with structured, real-time ESG data access becoming the backend layer that connects internal portals to AI.
- Position Bloom as the data foundation that complements (not replaces) tools like ChatGPT or internal portals.
- · Pilot partnerships with smaller ESG certification teams looking to scale their AI usage with minimal IT lift.

Recommended MVP Features @

- · AI-ready data aggregation for certifications
- Centralized repository compatible with internal portals
- Modular GPT integration for specific certification types (e.g., U.S. BREEAM)
- Minimal configuration, quick setup for small teams

Customer Interview: Daniel Kietzer

Meeting 1 ∂

Overview @

This page outlines a highly valuable strategy and validation interview with a seasoned ESG professional and startup-savvy advisor. The conversation spanned pain point validation, product-market fit, sector prioritization, and growth strategy for Bloom's ESG data infrastructure platform. While no formal structure was followed, the discussion touched on key themes of ESG software fragmentation, Scope 3 reporting complexities, AI-powered reporting, and early go-to-market planning. The tone was encouraging, enthusiastic, and deeply constructive.

Key Discussion Themes *⊘*

1. Pain Point Validation and Momentum $\mathscr O$

- The founder has completed 19+ interviews since June 1 and reached out to 503+ prospects, with a ~4% conversion rate to calls.
- Major pain point validated: **ESG data fragmentation** data is scattered across systems like SAP, QuickBooks, Workday, spreadsheets, etc.
- Insight: "ESG data isn't just emissions. It's governance, HR, procurement... everything. And none of it talks to each other."

2. Product Vision and Strategic Differentiation ${\mathscr O}$

- Bloom is intentionally not building a reporting tool (like Workiva or Watershed).
- The focus is on **middleware/infrastructure** consolidating, normalizing, and enabling the flow of ESG data from multiple sources.
- Inspired by Plaid, Segment, Zapier i.e., "Plaid for ESG."

3. Pilot Traction & Industry Focus @

- Early interest from two pilot users, both in the packaging sector (companies between 200-1000 employees).
- This sector is promising due to its vendor-facing position and growing pressure to disclose ESG data.

4. AI Integration Philosophy @

- Plan to offer optional LLM integration.
- Goal: Let customers query their ESG data layer through AI (e.g., ChatGPT-like assistant).
- Privacy-sensitive orgs can opt out; those who want AI-driven insight can opt in.

5. Feedback from Advisor @

- Affirmed Bloom's vision as valid and highly needed.
- Highlighted pain around **Scope 3 supplier data collection**, citing firsthand experience with inconsistent platforms and methodologies.
- Suggested strategic intros:
 - Campbell Weyland (Lowe's) has led scalable Scope 3 vendor engagement efforts.
 - Google's Sustainability Reporting Team already moving toward AI-based disclosures.

Notable Quotes @

"The way you're framing this — finding pain, validating, building — it's startup textbook. And you're doing it fast."

"Scope 3 vendor data is hell. We report the same info four times, slightly differently each time. That shouldn't happen."

"There's real value in what you're doing. I think you're on the right track."

"Retail with ambitious sustainability goals? Goldmine. Complex supply chains, lots of pressure, and no clean data backbone."

Implications for Bloom *⊘*

Strategic Direction @

- Strong validation to pursue infrastructure over analytics stay "invisible but essential."
- Push deeper into mid-sized supplier-facing sectors like packaging, retail, and logistics.
- Embrace being the "data normalization layer" rather than a dashboard or compliance app.

Partnerships & Intros @

- Follow up with:
 - Campbell Wayland (Scope 3 data, Lowe's)
 - Google Sustainability Reporting (AI-integrated workflows)
- Expand network through strategic referrals; this advisor offered warm intros.

Build Focus @

- Short term: nail data ingestion + normalization
- Medium term: support integration/export to reporting tools (e.g., Tableau, Workiva)
- Long term: AI query layer + regulatory tagging (CSRD, SEC, etc.)

Final Notes @

This conversation was energizing and affirming. The advisor was generous with validation, feedback, and offers to connect with leaders at Lowe's and Google. Bloom's fast iteration cycle — from insight to prototype to pilot in under 2 weeks — was seen as a key asset. There's clear excitement around solving the unsexy, yet fundamental challenge of ESG data plumbing.

This will be a cornerstone conversation to reference as Bloom enters MVP rollout and early pilot traction stages.

Meeting 2 ∂

Overview @

This follow-up dives deeper into ESG reporting challenges faced by an 800-person global architectural firm. The founder shared a live demo of Bloom's ESG ingestion MVP, including integrations with Google Sheets, Excel, QuickBooks, and manual uploads. The interview reinforced that while **data fragmentation remains a critical issue**, not all ESG reporting problems are created equal. The conversation shifted toward the complexity and opportunity in **Scope 3 emissions** reporting — currently underserved, misunderstood, and largely unsolved by both ESG professionals and platforms.

The interviewee advised ruthlessly narrowing the scope of the product: focus less on Scope 2 energy data (like Xcel Energy) and more on Scope 3 procurement, travel, and service-based emissions, where integration pain is sharpest and tooling is

1. What Are the Current Pain Points in ESG Data & Reporting?

1.1 Immaturity of Scope 3 Reporting Systems @

- Scope 3 is "the wild west" organizations don't even know where to begin.
- Fragmentation is most acute in procurement, travel, leased assets, and upstream vendor inputs.

1.2 Disconnect Between Pain and Prioritization \mathscr{O}

- People acknowledge the problem but don't prioritize solving it.
- ESG leads are in fire-fighting mode: "too busy with reporting season to talk" reinforces the pain.

1.3 Misaligned Tooling from ESG Vendors $\mathscr O$

- · Most existing tools either:
 - Only solve Scope 2 (energy data, utility bills).
 - Require full-platform adoption and are too expensive.
- "We don't need another dashboard. We just need the raw data faster."

1.4 Fragmentation Still Exists, but Value Must Be Obvious ${\mathscr O}$

- Even if fragmentation is real, users won't act unless the ROI is immediate or obvious.
- A functional MVP is not enough "people will only want it if they feel the pain acutely."

2. What Was Shown or Tested in the MVP Demo? @

2.1 Integrations Demonstrated @

- Google Sheets: OAuth, preview, import
- Manual Upload: CSV/XLSX ingestion
- QuickBooks: OAuth, JSON import, database record creation
- Excel: OAuth pending final bug fixes

2.2 Data Model Highlights 🖉

- Each ingestion tied to user_id, timestamp, and raw_data blob.
- Created a working ingestion pipeline for multiple systems with role-based traceability.

2.3 Reaction @

- Advisor was impressed by MVP velocity and suggested:
 - "Don't stop coding but start coding the right things."
 - "This is a great start, now go validate the real market."

3. Market Feedback and Traction Recap @

3.1 University of Wisconsin System @

- Expressed willingness to pilot test but relies heavily on Excel Energy.
- Excel Energy has weak API support; most data is manually downloaded.
- "Feels like a dead end unless more schools also use Excel Energy."

3.2 Other Schools Contacted (Michigan, Grand Valley, etc.) $\mathscr Q$

- Most claim they already have a "handle" on energy data.
- Many have their own power plants or internal tools.

• Suggests Scope 2 integration is not the universal pain point.

3.3 Current Hypothesis Stress-Tested *ℰ*

- "Is data fragmentation a real problem?" → Yes.
- "Is it painful enough that users will pay for it?" → Depends on the vertical and data type.
- "Is it urgent?" → Only when users are mid-reporting, and even then they may not engage.

4. Ideal Direction for Product Going Forward @

4.1 Narrow Focus on Scope 3 Integration Infrastructure ${\mathscr O}$

- Category 1: Purchased goods/services
- Category 2: Capital goods
- Category 4: Upstream transport/distribution
- Category 6: Business travel
- Category 7: Employee commuting

4.2 Build Infrastructure, Not a Reporting Tool ${\mathscr O}$

- Just get the raw inputs into one spot. Let users export or plug into PowerBI, Excel, Persefoni, etc.
- No need to own calculations or dashboards initially.

4.3 Start with Procurement and Travel Data @

- These areas are the messiest and least standardized.
- Matching invoices, PO systems, HR commuting policies this is where users need help.

4.4 Study Microsoft's Scope 3 Methodology €

- Offers a breakdown of how a large org approaches Scope 3 across key categories.
- Use their approach to design ingestion endpoints and data model for v2.

Notable Quotes @

- "Scope 3 is where everyone is struggling not Scope 2."
- "You're solving a problem that even the user doesn't fully understand yet."
- "I don't need a new ESG tool. I need a better way to get my hands on the data."
- "Reporting season is the biggest bottleneck and also the biggest validation."

Implications for Bloom *⊘*

- Stay in the ESG data space, but pivot from general ingestion \rightarrow targeted Scope 3 ingestion.
- Build integrations where no tools exist yet procurement folders, travel receipts, email workflows.
- Universities remain a promising beachhead. They lack budget but are under Scope 3 pressure.
- Price must reflect narrow use cases and early-stage value: affordable, flexible, data-first.

Final Notes @

The founder's reflections were honest and strategic. While the MVP proved technical ability, the conversation re-centered the mission: **solve real ESG pain, not just build integrations**. The next phase should focus on uncovering high-ROI use cases for Scope 3 integration and narrowing messaging accordingly. The interviewee remains highly supportive and offered to reconnect after the "Carbon Buffets" workshop next week to explore Scope 3 use cases further.

Customer Interview: Deepa Somasundari

Overview @

This page explores how Indeed navigates the evolving ESG landscape with a particular emphasis on the Social pillar. With over 3 million job seekers and more than 100,000 employees, Indeed embeds ESG directly into its core products, emphasizing DEI, responsible AI, and human rights due diligence (HRDD). Deepa shares both strategic insights and tactical pain points related to ESG data collection, regulatory compliance, and cross-functional coordination. She also outlines Indeed's challenges around global regulatory fragmentation, data governance gaps, and the limits of current tooling (Google Workspace, Workiva, Watershed). A key insight across both conversations is the need for a platform that delivers intelligent automation, cross-jurisdictional policy tracking, and seamless integration across internal systems.

Key Insights by Theme *⊘*

1. Current State of ESG Data Collection & Reporting @

Integrated but Fragmented:

- ESG at Indeed is not siloed; it's embedded across teams and products.
 - Responsible AI, HRDD, DEI, and ESG goals are tied to core product development.
- Despite this, ESG data tracking is currently dispersed and manual:
 - o Google Docs & Sheets remain the foundation for disclosures and reporting.
 - Environmental data is handled in **Jira**, **Tableau**, and vendor-specific tools.
 - Social and governance data are mostly tracked in Excel and docs, due to lack of clear frameworks.

Regulatory Volatility & Global Complexity:

- Indeed operates across multiple jurisdictions, each with its own ESG regulations:
 - U.S. (federal and state-level)
 - ∘ EU (e.g., CSRD)
 - APAC regions including Japan and India
- There's no current tooling that enables Indeed to track, sort, and prioritize global regulations efficiently.
 - Manually reviewing updates across jurisdictions is inefficient and unsustainable.
 - Indeed is actively seeking a tool (or AI platform) that can:
 - Track and surface only relevant policies
 - Flag jurisdictional differences
 - Help the company focus on what truly applies

Tooling Under Evaluation:

- Workiva and Watershed are being explored but have not been adopted:
 - Lacked a clear business case at the time.
 - Licensing and pricing are complex due to corporate structure (Recruit, Glassdoor, etc.)
 - Need for integration with Google Workspace was another hurdle.
 - o Current system relies on parent company (RECRUIT) sharing updates via Docs/Sheets.

2. Most Challenging Areas in ESG/Sustainability Action ${\mathscr O}$

Human Rights Due Diligence (HRDD) at Scale:

• One of Deepa's primary responsibilities is integrating HRDD into all tech and AI products.

- Challenges include:
 - Pace of product development features are released faster than traditional due diligence processes can handle.
 - The need for a hybrid system that uses automation to flag risk while allowing humans to review edge cases.
 - "These things are fine, these things need attention."

Siloed Due Diligence Across Teams:

- Different teams (e.g., Security & Privacy, HR, Environmental) perform their own assessments for vendors.
- This creates:
 - Redundancy and inefficiency
 - o Difficulty in maintaining a unified ESG assessment process
 - An interest in building a shared due diligence marketplace to reduce duplication and align standards.

CSRD Preparation & Data Governance Gaps:

- During CSRD data preparation across Indeed, Glassdoor, and RECRUIT:
 - Data was found in inconsistent locations and diverse formats.
 - There were conflicting definitions across regions:
 - Example: Gender pay gap definitions in Ireland vs. CSRD vs. Japan.
- Huge time investment was required to:
 - · Align definitions
 - Identify missing data governance layers
 - Manually organize data buckets to support CSRD metrics
- There's no current system to tag data points by ESG standard (e.g., "these are for CSRD").
 - This capability is partially available in Workiva and Watershed, but hasn't justified investment yet.

3. Would Bloom's Full ESG Platform Be a Must-Have?

It Depends on Problem Fit:

• A platform becomes a must-have only if it solves a **specific**, **validated pain point**.

"What problem is it going to solve?"

- Potential for high value if the platform:
 - Surfaces jurisdiction-specific regulations dynamically
 - Enables cross-functional due diligence workflows
 - Integrates ESG tracking into product cycles, especially for AI-related risk

AI Opportunity:

- With increasing pressure around AI governance and absence of regulation, companies need:
 - o Tools to help identify and enforce internal guidelines
 - Systems to embed HRDD during product development, not after

Reporting Alone Isn't Enough:

- Reporting is viewed as **a commodity**; real ROI comes from:
 - Operational insights
 - Cost analysis
 - $\circ~$ Profitability improvement tied to ESG metrics

4. Core Features Expected on Day One *⊘*

Still Under Consideration:

- Deepa noted that she couldn't yet provide a complete answer about day-one features.
- However, from both conversations, inferred needs include:
 - Policy tracking & alerting engine for global regulations
 - Tagging & governance structure for aligning data with frameworks like CSRD
 - Cross-team workflow integration (Security, Product, HR, etc.)
 - Hybrid automation/manual review interface for ESG due diligence
 - Tech-agnostic integration, especially with Google Workspace
 - Transparent pricing and licensing flexibility for complex org structures

Follow-Up Conversation: Regulatory Alignment & CSRD Preparation @

- Regulatory expectations vary significantly across geographies (U.S., EU, Japan, Ireland).
- Indeed sought to create an overarching policy framework that could satisfy multiple jurisdictions.
- A CSRD preparation round exposed major challenges:
 - $\circ~$ Mismatched definitions of metrics like gender pay gap across regions
 - Data silos across entities (Indeed, Glassdoor, RECRUIT)
 - No centralized tagging or governance layer to classify and align required data
- Manual prep was labor-intensive; teams want a smarter system to organize ESG data by requirement.
- Ideal future state would include:
 - Tagging capability by framework (e.g., CSRD, Japanese disclosure, etc.)
 - Seamless integration with Google Docs/Sheets, not disruption
 - Scalable pricing models that align with multi-entity orgs and usage tiers

Strategic Opportunity for Bloom @

Deepa's experience highlights a powerful opportunity for Bloom to:

- Build a platform that tracks, aligns, and contextualizes regulations across markets
- Enable data tagging and governance layers that support multiple reporting frameworks
- Integrate ESG due diligence into real-time product development and vendor onboarding
- Reduce redundancy across functions by centralizing assessment processes
- Avoid "nice-to-have" traps by delivering clear ROI and problem-resolution

If Bloom becomes the system that turns ESG data into **actionable policy, shared intelligence, and better outcomes**, it can move from optional to indispensable.

Customer Interview: Don Brooks

Overview @

This page outlines strategic insights into ESG challenges faced by sustainability leaders in the real estate sector. Core issues include fragmented operational data, difficulty accessing qualitative building information, and regulatory discrepancies across states. For occupied or aging properties, understanding what's "behind the walls" — equipment types, material composition, and utility usage — remains a major barrier to accurate carbon footprinting and ESG reporting.

Existing solutions, such as digital twins and predictive analytics, are promising but often lack the data trustworthiness required for real business decisions. ESG teams are forced to simplify, prioritize key data points, and work with consultants to fill gaps — slowing down decision-making. The opportunity lies in building a platform grounded in accurate data and robust energy modeling that enables scenario planning, forecasts ROI, and informs investment trade-offs. A trusted, science-driven tool would empower real estate firms to align ESG outcomes with financial performance.

1. What are the biggest pain points you're facing right now in your ESG work, either personally or across your team? $_{\varnothing}$

Accessing Reliable ESG Data: @

- The hardest challenge in real estate is obtaining accurate, high-quality data especially when buildings are already occupied.
- It's difficult to understand **qualitative building characteristics** (e.g., what's behind the walls, equipment types, materials), which are crucial for carbon footprint analysis.

Utility Data Challenges: @

- Operational data, such as utility usage, is also a major hurdle.
- In **certain states like Texas**, customer permission is required to access utility data, whereas other states may offer aggregated data more freely.

Data Communication & Value Translation: @

- Communicating ESG performance effectively particularly the **financial outcomes** (e.g., rent premiums, tenant satisfaction, building performance) remains a challenge.
- ESG outcomes must be framed in a way that resonates with the **end customer**, who in real estate is typically the **tenant or resident** (in apartments, industrial warehouses, etc.).

2. What have you or your team tried so far (tools, processes) to address those challenges? And I'm guessing since these are still your biggest pain points, those solutions haven't really worked — is that fair to say? \emptyset

Use of ESG Consultants: @

• The team actively works with consultants, focusing on **keeping the process as simple as possible** and identifying only the **most relevant ESG data points**.

Prioritization and Data Simplification:

• ESG transactions happen fast, so it's often necessary to **start with a reduced dataset** — e.g., cutting from 50–60 data points down to 10–15 — and **layer in the rest later**.

Predictive Analytics and Building Age Models: @

- They're beginning to leverage **predictive analytics** by correlating variables like the **age of the building** to estimate ESG performance.
- This helps model expected performance even when full data isn't available up front.

3. Would you/your company pay for a solution that solves this? Why or why not? $_{\varnothing}$

Yes — if the data is trustworthy and actionable: @

• Don confirmed that they would be willing to pay for a solution **only if the data is accurate, trustworthy, and useful enough to support real business decisions**.

Market Validation Already Exists: @

• He noted that several other groups and companies in the market are already attempting to solve this problem, often by creating "digital twins" of buildings to simulate performance and guide ESG strategy.

Trust and Accuracy Are the Differentiators: *⊘*

- However, many of these solutions **fall short on data trustworthiness and predictive accuracy**, which limits their ability to inform decision-making.
- His team is waiting for a solution where both the data and the analytics are strong enough to truly drive ESG investment decisions and operational strategies.

4. What would that ideal solution look like for you or your team?

- Energy Modeling as the Foundation: The ideal tool would begin with robust energy modeling using software algorithms to simulate building performance.
- Scenario Planning & ROI Forecasting: It would provide scenario planning for various energy and water efficiency measures, projecting capital expenditures (CapEx), savings, and return on investment (ROI).
- Scientific Modeling with Error Margins: Emphasis on scientific rigor the model should predict building performance within a reasonable error margin to be credible.
- **Decision-Making Enablement:** Ultimately, the platform should **enable strategic ESG decisions** by modeling investment trade-offs and forecasting long-term benefits.

Customer Interview: Erik Petrovskis

Overview @

This conversation provides critical insight into ESG operations at a regional retailer with a mature sustainability program. While the organization tracks Scope 1 and 2 emissions reliably using internal platforms linked to utility billing, Scope 3 remains an unsolved challenge. The director outlined how voluntary ESG initiatives function in the absence of regulatory or investor pressure and emphasized the need for centralized industry solutions to streamline supplier data collection. Key takeaways include confirmation of data fragmentation issues, limited internal bandwidth, and skepticism toward one-off supplier data tools. Bloom's MVP aligned partially with their current pain points, but ultimately did not offer sufficient differentiation from existing systems already in use.

1. Biggest Pain Points in ESG Work @

1.1 Scope 3 Supplier Emissions – Collection Burden $\mathscr O$

- Major challenge: Collecting Scope 3 emissions from a diverse set of suppliers
- Currently uses EPA-based revenue conversion factors, which are high-level and imprecise
- Internal sustainability team is not incentivized to go deeper, since external demand is low
- Difficulty stems from managing communication, standardization, and trust with a wide supplier base
- The task is perceived as unmanageable without a shared industry-wide data hub

"The data management aspects are very difficult... the logistics of working with such a wide range of suppliers just becomes a very unmanageable task."

"We use some fairly rudimentary tactics... there's not a huge driver for us to go beyond that."

1.2 Lack of External Pressure to Improve Scope 3 ∅

- Company is privately held, so there's no investor or regulatory pressure
- · ESG work is voluntary, focused on internal integrity, not compliance or stakeholder-driven metrics
- Without pressure from shareholders or laws (like those in the EU), the business case to go further is weak

"We're privately held... we don't have shareholders screaming at us about sustainability initiatives."

"Collecting that inventory is really table stakes for us... we don't have to go beyond that."

1.3 Limited Internal Resources @

- Resource allocation limits expansion of initiatives (e.g., sustainable packaging assessment)
- · Internal programs require significant lift to onboard new platforms, delaying execution
- Example: Their packaging sustainability program has been delayed due to lack of dedicated internal support, despite selecting a platform

"Managing internal resources to jump into that platform and establish our own packaging inventory... is quite needed before we can make improvements."

2. Current Solutions and Tools Tried @

2.1 Internal Platform - Scope 1 & 2 Tracking @

• Existing platform connects to utility billing systems

- · Automatically calculates metrics related to energy use, water consumption, and GHG emissions
- Data is ingested when utility bills are submitted and tracked for internal and external reporting

"It's tied into utility billing... so the data is integrated into this platform and we can access it as needed."

2.2 Scope 3 Estimation – Revenue-Based Proxy Factors ∂

- Uses standard EPA revenue-based emission factors to approximate supplier emissions
- · Acknowledged as gross estimations with wide error bars
- Not ideal, but deemed "good enough" given the current lack of drivers

2.3 Preparing to Onboard Sustainable Packaging Platform @

- Company has identified a platform to evaluate and track packaging footprint
- Delays caused by limited staff time and need to first build out an internal inventory
- No spreadsheet-based manual workaround has been attempted task is too complex

"We just haven't [put effort into it]. Without a platform, it's unmanageable to collect that data manually."

3. Willingness to Pay for Solutions @

3.1 No Appetite to Collect Scope 3 Independently @

- Not willing to take on the burden of supplier engagement alone
- Would not purchase a platform focused solely on aggregating supplier GHG data
- Strong preference for an industry-wide third-party clearinghouse, where suppliers submit once and data is shared across retailers

"I wouldn't start to chase supplier emissions data. You don't have to."

"Suppliers shouldn't have to respond to every single retailer that asks them the question."

3.2 Platform Adoption Depends on Clear ROI $\mathscr O$

- Would pay for platforms if they save time or reduce manual effort
- Example: willing to pay for Green Badger for LEED tracking because it saved 3-4 hours weekly
- Internal ESG tools are typically budgeted annually, so new tools must be considered in summer for next fiscal year

4. Ideal Solution Characteristics

4.1 Centralized Supplier Emissions Data Hub $\mathscr O$

- The #1 opportunity area in retail ESG is a shared platform for supplier emissions
- Needs to function like **UL's platform for chemical safety data**, which suppliers use to serve multiple retailers
- Would allow suppliers to enter data once, and retailers extract as needed

"Essentially a central clearinghouse... that's what the industry really needs."

"It's been done with UL for chemicals — emissions should be next."

4.2 No Need for Internal Integration Tool (Already Solved)

- Already using a functioning internal system for Scope 1 & 2
- Existing system is integrated with billing and emissions workflows

• No need for Bloom's MVP in current internal ESG stack

"We already have a platform that integrates all our sustainability metrics around energy, water, and GHG emissions."

5. MVP Feedback – Bloom ESG Data Integration Platform @

5.1 MVP Summary @

- Ruthvik presented an early-stage MVP that allows users to:
 - o Connect systems like SAP, Workday, QuickBooks, Excel
 - View normalized ESG-relevant data across systems
 - · Access data in a consistent format for reporting, forecasting, or compliance
 - Envisioned as a lightweight internal data hub for ESG teams

5.2 Response to MVP @

- Useful concept, but not applicable to their needs due to existing internal tooling
- Agreed that fragmented data is a common issue, particularly for smaller teams
- Strongly resonated with the need for simplicity and minimalism in UI
- Stressed importance of validating real user pain before expanding features

"This is useful — just not something we would use. We already have this in place."

"Go validate that this is something people would actually pay for."

6. Strategic Takeaways for Bloom @

6.1 Don't Build Standalone Supplier Tools €

- Most companies aren't willing to individually chase Scope 3 data
- Focus should be on an industry-level collaboration or clearinghouse, not custom solutions for each retailer
- Future-state idea: a supplier-side ESG API for emissions, human rights, and packaging

6.2 Internal ESG Integration May Be Saturated \mathscr{O}

- Mid-sized and large firms likely already have tools for Scope 1 &~2
- Avoid targeting firms that already use utility-integrated emissions platforms
- · Better fit: smaller orgs with minimal ESG tooling or those burdened by cross-departmental fragmentation

6.3 Focus on Time-Saving, Workflow-Reducing Value ∂

- Frame MVP as a time-saver, not just a data aggregator
- Case studies like Green Badger (LEED) show traction is driven by clear time savings per week

Customer Interview: Federico Sendel

Overview @

This page surfaces clear operational gaps and opportunities in ESG data collection, reporting, and automation. Drawing on years of experience, Federico highlights the contrast between outdated manual methods (emails, spreadsheets) and the emerging need for robust, auditable, and integrated ESG systems—especially in light of global regulatory changes like the CSRD. He emphasizes the critical role that traceability, ownership, and documentation play in streamlining ESG workflows and ensuring audit readiness. Platforms that simplify and automate these processes—while integrating with existing enterprise tools like SAP—have a real opportunity to become indispensable.

Key Insights by Theme *⊘*

Current State of ESG Data Collection & Reporting @

Fragmented and Manual Workflows:

- ESG data is still often collected through **primitive**, **manual processes**:
 - o Emailing spreadsheets
 - Instant messaging team members to chase GHG data
 - o Conducting employee interviews for ESG disclosure inputs

Need for Audit-Grade Systems:

- There's a growing demand for more accurate and traceable data.
- Companies are increasingly relying on third-party assurance (e.g., PwC) to verify ESG disclosures.
- To prepare for audits, businesses need platforms that:
 - Clearly identify ownership of each metric
 - Show where the data came from
 - Detail how it was calculated
 - Reference which third-party systems were used

Tool Landscape:

- Use of ESG tools varies significantly across companies.
 - Some still rely on emails and Excel, while others have adopted more robust systems.
- · Commonly mentioned tools:
 - Workiva: Widely adopted due to existing use for financial reporting, giving it an "in" with ESG teams.
 - NASDAQ OneReport (acquired OneReport)
 - o Diligent, Enablon, Metrio, Tracera

2. Most Challenging Areas in ESG/Sustainability Workflows $\mathscr D$

Manual Burden Remains High:

- ESG reporting still resembles what it looked like 15 years ago:
 - o Setting up employee interviews
 - Manually compiling data through emails
- Most of this could be automated without losing accuracy or traceability.

Key Challenges:

- Companies often only produce ESG reports annually, but ideally want to do so quarterly or more frequently.
- The disconnect between ESG tools and existing enterprise systems like SAP is a key blocker.
- There's an opportunity to:
 - Extract ESG data directly from operational systems
 - Integrate specialized software for carbon calculations (especially for manufacturing/factory contexts)
 - Ensure any new platform is compatible with tools like SAP

3. Would Bloom's Full ESG Platform Be a Must-Have?

Contextual Value Drivers:

- Right now, ESG is often treated as a "nice-to-have," unless driven by legal mandates.
- The EU CSRD (Corporate Sustainability Reporting Directive) is a major driver in shifting ESG from optional to mandatory.
- Although similar legislation may not be imminent in the U.S. under the current administration, international mandates are already forcing U.S. companies to adapt.

Platform Adoption Outlook:

- Platforms like Bloom will be most valuable where CSRD applies or similar pressures exist.
- SMEs are the likely early adopters—larger firms have already made heavy ESG tech investments.
- Bloom must target organizations at the right inflection point: needing ESG infrastructure but not yet fully built out.

4. Core Features Expected on Day One *⊘*

Non-Negotiable Capabilities:

- Auditability: Clear trail of how data was collected, calculated, and approved.
- Traceability: Ability to trace data sources and verify accuracy.
- Ownership & Approval Workflows:
 - Assign responsibility for each metric.
 - Document who calculated and approved each piece of data.
- Supporting Document Uploads:
 - $\circ~$ Ability to attach spreadsheets, calculations, and justification materials directly to reported metrics.

User Expectations:

- Platform should allow users to build a framework or templated system that defines:
 - · How metrics are calculated
 - What sources are used
 - Who is responsible for each stage
- Ideal experience:
 - o A tool that gathers, organizes, and contextualizes data
 - Enables both day-to-day operations and preparation for external audits
 - Helps build the foundational ESG reporting system from the ground up (e.g., like Federico did at Dell)

Strategic Opportunity for Bloom @

Federico's input reinforces the opportunity for Bloom to position itself as the **end-to-end ESG platform** for companies stuck between ad hoc processes and costly enterprise tools. The path forward includes building:

- · Audit-grade workflows
- Real-time traceability
- Integration with platforms like SAP

• Support for CSRD compliance and similar global standards

If Bloom can deliver on those fronts—especially for SMEs—it will no longer be seen as a "nice-to-have," but rather a strategic must-have in the ESG toolkit.

Customer Interview: Jim Walker

Overview @

Jim Walker, Director of Sustainability at UT Austin (a public academic institution), provided a deeply informed perspective on the institutional, political, and data challenges associated with ESG (Environmental, Social, and Governance) implementation. His experience reflects a broader pattern of constraints affecting public institutions, where ESG adoption is hindered not by lack of interest, but by systemic limitations.

What Are the Biggest Pain Points in ESG Work?

1.1 Political Headwinds in Public Institutions

- UT Austin currently lacks a formal ESG policy.
- ESG as a concept is politically contentious in Texas. Adoption is discouraged at the administrative level due to ideological divisions.
- · Despite strong faculty and mid-level management interest, the political environment makes forward momentum difficult.
- Quote: "Before you even get rules, you have the politics and the ideology... In Texas, there's debate over whether ESG should apply here."

1.2 Absence of ESG Monitoring Infrastructure

- There is no standardized tracking or reporting system in place.
- ESG-related initiatives are often informal, relying on student-led or volunteer efforts.

1.3 Fragmented and Siloed Data Systems

- ESG-relevant data lives across multiple, disconnected platforms (e.g., Workday, SAP, Excel, PDFs).
- Institutional resistance and access control complicate data sharing.
- Quote: "Putting all the data in one place is something everyone has tried and it doesn't work."

What Has Been Tried So Far?

2.1 Manual and Ad Hoc Coordination

- Efforts are typically bottom-up, led by students or individual staff.
- Shared files (Excel, PDFs) are used to compile ESG metrics manually.

2.2 Data Collation for Specific Reporting Goals

- Used for tasks like GHG inventories and STARS reports.
- Snapshots are compiled on an as-needed basis rather than maintained through live data pipelines.

2.3 Exploration of External Tools

- Familiarity with platforms like IBM's cube-based model.
- These systems often break down due to complexity and high fragility.
- Strong skepticism toward ESG software vendors due to oversaturation and lack of differentiation.
- Quote: "Everybody's inbox is flooded with ESG platform pitches."

Will Institutions Pay for ESG Solutions?

3.1 Value Must Support Decision-Making

- Solutions that simply generate compliance reports are insufficient.
- Tools must help drive real-world decisions (e.g., impact of DEI policy changes on Hispanic first-gen students).
- Quote: "Try to solve a decision that an institution might have. Not just generate a report."

3.2 Budgetary and Bureaucratic Constraints

- Budget cycles are long; procurement is slow.
- IT departments often resist any new systems that require data ingestion or security risk.
- Quote: "We don't want to pay to install your API. Show us value first."

3.3 Avoiding Redundant Tools

- Tools that overlap with Workiva, Persefoni, or Watershed are seen as unnecessary.
- Institutions prefer lightweight tools that extract value from what already exists.

What Would an Ideal Solution Look Like?

4.1 Insight-Driven, Not Infrastructure-Centric

- Solutions should produce higher-order insights across ESG domains.
- Example: "How do governance practices influence resilience to climate threats and student equity outcomes?"

4.2 API-Light Architecture

- Instead of deep integrations, tools should rely on query-based access or lightweight plug-ins.
- Minimize installation friction and security risks.

4.3 Crawl Public Datasets First

- Public institutions already publish ESG-relevant data.
- A tool that compiles these datasets into dashboards would provide immediate value.

4.4 Highlight Data Gaps

- Rather than demanding full data uploads, tools should identify missing pieces.
- This prompts users to selectively upload what matters most, saving effort and reducing pushback.

4.5 Modular, Role-Specific Features

- Integrate with systems like Excel, QuickBooks, and Workday through scoped permissions.
- Focus on showing insights rather than building full-scale ESG dashboards.

Implications for Bloom @

1. Build a Public ESG Dataset Aggregator:

• Use LLMs or traditional parsing to extract insights from reports already submitted to state or federal entities.

2. Avoid Full-Scale ESG UI Replication:

 $\circ~$ Don't compete with enterprise ESG software. Instead, position Bloom as middleware.

3. Prioritize Decision-Specific Use Cases:

• Think in terms of business intelligence, not compliance dashboards.

4. Minimize Integration Friction:

• Present clear value before asking users to connect APIs or install backend systems.

5. Capitalize on the Student Founder Narrative:

• Institutions are more likely to speak with you when you emphasize your academic background and passion for sustainability.

Notable Quotes for Product Inspiration \mathscr{D}

- "Putting all the data in one place is something everyone has tried and it doesn't work."
- "A tool that tells me how our governance model impacts our student success under ESG pressures now that would be helpful."
- "Everybody's inbox is flooded with ESG platform pitches."
- "We don't want to pay to install your API. Show us value first."

Important Links @

- https://data.utsystem.edu/
- https://www.utimco.org/reports/utimco-performance-summaries/
- https://comptroller.texas.gov/programs/seco/reporting/
- https://security.utexas.edu/
- https://d2i.utexas.edu/

Customer Interview: Lisa Hayles

Overview @

This page highlights two key ESG pain points from the perspective of a Director of Sustainability at a certified B Corp investment firm: fragmented internal data collection and the evolving challenge of sector-specific ESG analysis. Despite access to tools like Caliber, MSCI, and ISS, much of the firm's ESG reporting still depends on manual coordination across teams—making quarterly disclosures and B Corp updates burdensome and error-prone. As a registered investment advisor, the firm also faces strict constraints on software use, creating added friction in tool adoption. At the sector level, identifying emerging ESG risks (e.g., AI ethics, labor standards in supply chains) remains difficult due to evolving best practices and limited forward-looking data. A lightweight, secure dashboard that enables real-time ESG data tracking, reminders, and cross-team input—while integrating with existing platforms like Workday and Microsoft—could meaningfully reduce operational strain and improve strategic ESG insight.

1. What are the biggest pain points you're facing right now in your ESG work, either personally or across your team? $_{\varnothing}$

A. Organizational Pain Points (Internal Reporting)

- Role & Responsibility: Director of Sustainability, responsible for firmwide operations and quarterly impact reporting (external-facing sustainability reports, including B Corp requirements).
- Main Pain Point: Gathering ESG-related data across teams to complete quarterly surveys and reports is highly manual and fragmented.

· Context:

- Small firm: ~50 employees across 2 offices.
- o Most data resides across different teams/tools; data collection is informal and time-consuming.
- o Doesn't currently justify purchasing a full external platform due to data volume/firm size.
- Needs a lightweight dashboard or internal tool that:
 - Sends reminders to team members.
 - Centralizes simple ESG metrics.
 - Serves as a **year-round tracker** rather than end-of-quarter scramble.
 - Builds habits and internal alignment around ESG data flows.

B. Investment Analysis Pain Points (External ESG Evaluation) $\mathscr Q$

• Structure:

- Sector teams comprise a fundamental analyst, ESG analyst, advocacy lead, and client lead.
- Collaborate quarterly (or ad hoc) to evaluate material ESG and ethical concerns by sector (e.g., AI, labor rights, automation).

· Key Issues:

- Data sources: MSCI, ISS, proprietary sector-specific ESG materiality matrices.
- Challenges identifying emerging ESG risks and best practices, particularly:
 - Labor rights in high-risk supply chain countries.
 - AI ethics and automation impacts.
 - Evolving standards where no universal benchmark exists.
- Desire for "double materiality" analysis (i.e., both the impact of ESG issues on companies and the impact of companies on ESG issues).
- Lack of tools for evolving, forward-looking ESG indicators or context-sensitive insights.

2. What have you or your team tried so far (tools, processes) to address those challenges? And I'm guessing since these are still your biggest pain points, those solutions haven't really worked — is that fair to say? \emptyset

- Manual Collection: Most ESG data is gathered manually from across teams.
- Caliber Platform:
 - Used as an internal data repository for both financial and ESG info.
 - Provided post-acquisition by Perpetual (parent company).
 - Limitations:
 - Not automated users manually feed in data.
 - Doesn't offer strong analytics or dashboards more of a warehouse than a workflow tool.
 - Filtering, reporting, and interpretation still require significant effort.
- · Other Tools:
 - o MSCI, ISS, FactSet
 - ESGAIA for shareholder advocacy.
 - Workday for limited metrics (e.g., volunteering hours), but not ESG-focused.

3. Would you/your company pay for a solution that solves this? Why or why not? $_{\varnothing}$

Yes, but:

- Cost-sensitive would need to be lightweight and justifiable given firm size.
- Needs multi-purpose value (usable across different ESG processes).
- Already pay for multiple data vendors any new tool must offer to integrate all of those existing tools.
- Especially valuable if it reduces manual work and improves integration across tools.

4. What would that ideal solution look like for you or your team?

- Internal Reporting:
 - Central ESG dashboard that:
 - Tracks which data points are due, when, and from whom.
 - Lets colleagues submit data in real-time or on a cadence.
 - Sends automatic reminders to reduce end-of-quarter scramble.
 - Serves as a living repository of ESG inputs across the year.
- Firm Constraints:
 - As a Registered Investment Advisor (RIA):
 - Cannot download external apps or print outside the office.
 - Tools must be secure, approved, and likely browser-native or Microsoft-integrated.
- Integration Capabilities:
 - Should ideally work alongside or within:
 - Workday
 - Oracle
 - SAP
 - Microsoft suite (e.g., Edge, Excel, Teams)
 - ESGAIA
- Emerging Needs:

- $\circ~$ Help detect $\pmb{\mathsf{early}}$ $\pmb{\mathsf{ESG}}$ $\pmb{\mathsf{trends}}$ or $\pmb{\mathsf{best}}$ $\pmb{\mathsf{practices}}$ (e.g., in labor or tech ethics).
- $\circ~$ Fill in gaps not~yet~addressed by major players like MSCI.
- Streamline coordination across sector teams analyzing double materiality.

Customer Interview: Nathaniel Karp

Overview @

This customer interview provides a deep dive into ESG portfolio challenges from the perspective of a major financial institution—BBVA. The interviewee shared valuable insights on the practical difficulties of decarbonizing a lending portfolio, reliance on internal ESG scoring models, and the sector-specific complexities in ESG data usage. Key themes include data fragmentation, industry misclassification, slow policy enforcement (especially in the U.S.), and the need for adaptability as sectors evolve (e.g., green cement, green steel). BBVA's approach blends external data (e.g. EU emissions matrix) with internal methodologies and first-party company engagements. Notably, while BBVA's direct operational emissions are low, its *indirect* impact via its loan portfolio is substantial—positioning ESG data accuracy, traceability, and industry scoring as strategic necessities.

Key Pain Points $_{\mathscr{O}}$

• Portfolio Decarbonization vs. Reporting:

BBVA's biggest ESG challenge is not internal reporting, but aligning its lending portfolio with climate targets. Unlike high-emission industries, the bank's own operational footprint is minimal; however, the risk lies in its exposure to high-emitting clients.

• Sector Classification Mismatch:

Companies are often classified under outdated or overly broad industry codes (e.g., NAICS or SIC), which do not reflect current operations (e.g., hotel builders shifting into data centers). This results in inaccurate emissions attribution and ESG risk assessments.

• Slow Policy Momentum in the U.S.:

Compared to the EU, where ESG regulation is more standardized and enforced, U.S. implementation is fragmented and politically vulnerable. This affects the incentive for banks and borrowers to prioritize ESG strategy unless compelled by regulation.

• Data Fragmentation Across Systems:

ESG data is scattered across various systems (e.g., SAP, Oracle, Workday), complicating traceability, completeness, and comparability. For due diligence, BBVA's ESG teams still need to conduct manual interviews with clients to gather credible, structured data.

• Greenwashing & Superficial Targets:

Many companies publish ESG goals or sustainability reports that are either vague or disconnected from actual progress. BBVA needs ways to validate authenticity before assigning ESG scores or making lending decisions.

Notable Insights @

• ESG Scoring System:

BBVA uses a proprietary internal scoring model that blends:

- Industry-level emissions intensity (based on the EU matrix)
- o Company-specific data (certifications, targets, strategy)
- Third-party scores (e.g., S&P, Bloomberg ESG ratings)
- o Traditional financial metrics (e.g., revenue, debt ratios)

• Transition Strategy:

BBVA does not abruptly cut off lending to high-emission sectors. Instead, they reduce exposure gradually by capping renewals, refusing to increase exposure, and shifting capital to greener sectors (e.g., from Exxon to First Solar).

• Technology-Driven Flexibility:

BBVA continuously updates sectoral lending policies based on innovations (e.g., green aluminum, carbon capture). Sectors may move from "restricted" to "approved" as technology matures.

• Emerging Market Complexity:

Applying EU-based emission matrices to emerging markets is unreliable due to technological and operational differences. Local data is sparse, making risk assessment harder and increasing uncertainty.

Opportunities for Bloom @

1. ESG Data Aggregation Layer

• Create a middleware solution that pulls ESG-relevant data from systems like SAP, Workday, QuickBooks, etc., and unifies it into one schema for risk scoring and audit readiness.

2. Dynamic Industry Reclassification Tool

 Develop a tool to re-assess a company's actual industry exposure based on revenue segments and current operations, enabling more accurate portfolio emissions modeling.

3. ESG Goal Validation & Scoring Intelligence

• Provide automated analysis of ESG goals, timelines, and execution credibility using AI/ML to score and benchmark sustainability reports against industry norms.

4. Green Transition Monitoring Dashboard

• Build an internal-facing dashboard for banks to monitor sector-specific decarbonization progress, regulatory trends, and technology inflection points that would affect portfolio strategies.

Meeting 2 Objective *⊘*

To present the early-stage ESG data platform prototype built over a 3-day sprint, gather feedback from BBVA on market relevance, technical direction, and long-term strategic alignment—especially around supplier ESG compliance and data analytics.

Discussion Summary _@

1. Initial Context @

- Ruthvik reiterated appreciation for the meeting and acknowledged BBVA's upcoming unavailability due to travel.
- He clarified the meeting's purpose was not a procurement pitch but an honest product-market fit check.
- Recalled the previous discussion focused on how climate regulations intersect with financial services, and how that insight helped define pain points from over 12 conversations with senior ESG leaders.

2. Prototype Walkthrough (Built in 3 Days) @

- Ruthvik emphasized speed of execution: he built the MVP in 3 days to validate quickly.
- Authentication + Basic Interface: Simple login mechanism with minimal styling, focused on functionality.

• Data Aggregation Layer:

- Supports connectors for Workday, SAP, QuickBooks, Google Sheets, Excel.
- Handles various formats (JSON, CSV, XLSX); example files shown during demo.

• Data Normalization & Validation:

• Built-in utility to detect invalid/missing rows ("4 rows failed" example shown).

• Export & Integration Options:

- o Can export to PowerBI, Tableau, or external ESG platforms like Watershed, Persefoni.
- Future plan: support secure querying via LLMs (no training on user data; read-only access).
- Users can disconnect AI access at any time to retain data privacy.

3. Market Validation and Early Traction ${\mathscr O}$

• Ruthvik spoke to 12+ senior ESG leaders to identify actionable pain points.

- Two pilot users already identified in manufacturing and packaging sectors.
- Discovered large companies are often covered, while mid-sized firms:
 - o Are more cost-sensitive.
 - Often deal with indirect ESG compliance pressure from their enterprise clients.
 - Typically fall into the 250–1,000 employee range.

Key Feedback from BBVA @

A. Strategic Targeting @

- BBVA is not a viable short-term customer:
 - Too many compliance, security, and approval layers.
 - Relies heavily on vetted cloud vendors (e.g., AWS, Microsoft).
- Suggestion: focus on **BBVA's suppliers** or similar-sized companies instead:
 - Medium-sized vendors are increasingly being asked to provide ESG disclosures.

B. Supplier Use Case Opportunity @

- Larger firms (Amazon, Microsoft, Ford) push ESG requirements downstream.
- Opportunity lies in enabling **suppliers** to show compliance affordably.
 - Avoids high setup costs (\$50K-\$100K) from existing enterprise ESG platforms.
 - Can serve as a lightweight data warehouse/ESG enablement layer.

C. Analytics Layer: Critical Long-Term Differentiator @

- MVP currently only aggregates and normalizes data.
- BBVA emphasized that full-circle value comes from embedded analytics:
 - Basic dashboards or compliance-ready summaries would be a strong value-add.
 - Potential to offer reporting templates aligned to frameworks (e.g., CDP, CSRD).
- Insight: Even if integration/export is a short-term strategy, analytics will be a long-term moat.

Next Steps & Takeaways @

Action Item	Owner	Notes
Continue refining the front-end/UI	Ruthvik	Make the platform more intuitive and ready for pilot users
Explore embedding basic analytics capabilities	Ruthvik	Early dashboards, supply chain scoring, or ESG scorecards
Confirm pilot users and document feedback	Ruthvik	Prioritize packaging/manufacturing industries
Reconnect with BBVA for longer-term feedback	Ruthvik	After traction is gained and analytics capabilities are in development

Closing Remarks \mathscr{D}

• BBVA representative reiterated:

- BBVA is not a fit for near-term vendor integration.
- However, they are open to ongoing advisory support.
- Strongly encouraged Bloom to focus on:
 - Suppliers as the beachhead market.
 - Maintaining credibility through solid, trustworthy data handling.
 - Eventually building analytic capabilities to round out the offering.
- BBVA offered insight that speaking to larger firms may help refine the supplier-focused offering, as the "big guys" are the ones requiring reporting from their supply chain.

Final Notes @

- Ruthvik thanked the BBVA rep for their time and insights.
- Shared that Bloom would continue building based on this feedback, aiming to re-engage after launching a more complete pilot-ready platform.
- The BBVA rep wished him well and encouraged follow-up after the next phase.

Customer Interview: Niloufar Molavi

Overview @

This page reveals the evolving landscape of ESG reporting and data strategy among large enterprises, particularly in oil & gas and other capital-intensive sectors. Niloufar draws on experience supporting Fortune 1000 clients at PwC, emphasizing that ESG data capture historically lacked standardization, was voluntary in nature, and is now rapidly shifting toward legal necessity due to frameworks like CSRD in the EU and SEC mandates in the U.S. She stresses that ESG platforms must not only support compliance—but more critically, drive strategic insight, operational integration, and business profitability. The opportunity lies in creating flexible, tech-agnostic systems that offer intelligence, not just reporting.

Key Insights by Theme *⊘*

Current State of ESG Data Collection & Reporting @

Shift from Voluntary to Mandated Reporting:

- For many years, companies lacked clear regulations or standards around ESG—especially environmental metrics.
- Reporting was voluntary and surface-level, based on existing internal data, not built for regulatory rigor.
- Over the last 5 years, this has radically shifted:
 - EU CSRD and SEC reporting in the U.S. have made ESG disclosure mandatory.
 - State-level regulations (e.g., California) are adding further layers of compliance.

Tool Ecosystem:

- Workiva is actively being built out for ESG purposes (PwC is involved in helping develop it).
- Other players in the ecosystem include SAP and Oracle, which are integrating ESG functionality into their ERP systems.
- Clients are undergoing large-scale digital transformations using SAP/Oracle—and are using this opportunity to re-evaluate:
 - What data to collect
 - How to capture it
 - How to ensure traceability

Forward-Looking Use Cases Beyond Compliance:

- In sectors like oil & gas, businesses are beginning to **embed sustainability into products** (e.g., labeling product sustainability like a nutrition label).
- This isn't just about regulations—it's about **business strategy and customer-facing transparency**.
- Companies are asking: How do I gather that sustainability data and confidently place a stamp on our product?

2. Most Challenging Areas in ESG/Sustainability Workflows @

Environmental (E):

- The energy transition has moved from idealistic to pragmatic.
 - Initial enthusiasm for renewables has hit resource, capital, and tech bottlenecks.
 - There's now a need to balance sustainability goals with energy and capital realities.
- There's an abundance of data and decisions still needed:
 - Where to invest
 - How to achieve profitability while being sustainable
 - How to ensure adaptability as reporting expectations evolve

Social (S):

- The U.S. is struggling with standardizing the "S."
- Much of the S-related data comes from HR systems, but strategic challenges persist:
 - Example: A goal like "50% of our workforce should be women" raises complex issues:
 - Are there enough qualified women in the field?
 - Does the company need to invest in developing that talent pipeline?
 - These are **strategic equity challenges**, not just data problems.

Governance (G):

- G is relatively mature—most companies have long-established governance processes.
- No immediate pain points, though there is ongoing evolution.

3. Would Bloom's Full ESG Platform Be a Must-Have? @

One-Stop Shop Caution:

- Niloufar warns against trying to be everything to everyone:
 - "Anytime you try to do a lot of different things, you're compromising one side."
 - SAP tried to create an all-in-one ESG + ERP solution but failed to deliver, resulting in sunk costs for clients.
 - Clients often **scrap these attempts** and revert to traditional players.

What Makes a Platform Worth Paying For:

- Not regulatory compliance alone profitability is the key:
 - o Can the ESG platform help identify what's dragging down margins?
 - · Can it show how sustainable products interact with operational systems (e.g., does it slow production down)?
- Platforms must reveal:
 - Underlying data connections, not just surface-level reports
 - · How ESG metrics affect profitability
 - o Cost-reduction opportunities and margin improvement levers

Reporting Is a Commodity:

- ESG reporting tools are widely available and commoditized.
- Value lies not in the report, but in the intelligence and business optimization that the platform provides.

4. Core Features Expected on Day One @

- 1. System Integrations & Tech Agnosticism:
- Must connect to and pull/push data from any operational platform (ERP, HR, finance, etc.).
- Needs to be **tech-agnostic** SAP, Oracle, etc.
- Should allow flexible ingestion and federation of data across sources.

2. AI & Analytics:

- Platform should not just store data it must:
 - Use AI to evaluate, sort, and accelerate workflows
 - $\circ~$ Deliver insights~and~recommendations~ based on captured data
 - o Go beyond automated reporting to **add business intelligence**

3. Security:

- ESG data is confidential and high-risk.
- Strong data security, access control, and compliance protocols are essential.

Strategic Opportunity for Bloom @

Niloufar's input underlines that **ESG data platforms must evolve beyond compliance and into business value**. The real opportunity lies in:

- Connecting ESG insights with cost structures and operational systems
- Offering clarity into how sustainable changes affect downstream operations and margins
- Helping companies respond to both regulatory mandates and shareholder pressure

To succeed long-term, Bloom must:

- Be best-in-class at a core capability
- Offer additional, modular insights that connect ESG metrics to ROI
- Avoid overreach while delivering high integration, high adaptability, and strong security

If Bloom can help businesses understand how sustainability links to profitability, it will be not just useful—but indispensable.

Customer Interview: Nurit Katz

Overview @

This page outlines the unique ESG challenges faced by public-sector sustainability leaders managing aging infrastructure under tight funding constraints. A core tension lies in balancing complex reporting requirements with limited physical and digital infrastructure — especially in the absence of smart meters and other real-time data tools. Despite efforts to leverage capital and asset management programs, teams are often forced to rely on fragmented, manual processes to fulfill ESG commitments. The opportunity lies in a low-cost, Excel-compatible platform with role-based access that streamlines data entry, supports decentralized teams, and integrates energy and water data across systems — enabling more actionable ESG decision-making within constrained budgets.

1. What are the biggest pain points you're facing right now in your ESG work, either personally or across your team? $_{\varnothing}$

- Aging Infrastructure & Limited Funding: Our biggest challenge is dealing with outdated physical infrastructure and a lack of sufficient funding, especially under the current federal support structure.
- **Data Overload & Reporting Complexity:** ESG reporting involves tracking a large volume of diverse data, which can be overwhelming and difficult to manage across teams.
- Data Availability Issues: Some key data isn't collected annually due to limitations in our physical infrastructure. For example, we lack smart meters in many facilities, which makes automated and frequent data collection difficult.

2. What have you or your team tried so far (tools, processes) to address those challenges? And I'm guessing since these are still your biggest pain points, those solutions haven't really worked — is that fair to say?

- **Deferred Maintenance Funding:** We've secured some funding from the state to address deferred maintenance, but it hasn't been enough to solve the systemic issues.
- Capital & Asset Management Programs: We've used a capital/asset management program that includes surveys to assess the backlog of deferred maintenance needs.
- Tackling Electrification & Decarbonization: We're trying to address the broader challenges of electrification and decarbonization, but they remain difficult due to resource constraints.

3. What would that ideal solution look like for you or your team? $_{\mathscr{D}}$

- **Budget-Conscious Design:** Given our limited budget, any solution must be low-cost or easily implementable without heavy software licensing fees.
- Role-Based Access Controls: The platform should support different user permission levels—so that data collection and management can be delegated appropriately across teams.
- Excel Compatibility: Importing and exporting data to and from Excel is essential. We manage a mix of energy purchasing data, water use data, and other ESG inputs that currently live in internal Excel systems.
- Simple, Flexible Interface: A user-friendly system that can centralize various ESG data types and allow for seamless Excel integration would significantly improve our workflows.

Customer Interview: Patricia Lloyd

Overview @

This page provides a deep, candid perspective into ESG data and reporting challenges from the perspective of a general contractor working across 200+ active construction projects per year. The interviewee oversees ESG strategy and disclosures, often reporting quarterly. Although her firm is not inclined to spend heavily on ESG tools, she was transparent about major pain points related to fragmented data, cross-department collaboration, and client-driven ESG requests. She also highlighted operational roadblocks — like internal accounting changes and lack of platform access — that significantly disrupted her ability to report Scope 1 and Scope 3 emissions accurately. Her insights reinforce the need for a backend ESG data infrastructure layer that connects disparate systems and simplifies cross-functional workflows.

1. What Are the Biggest Pain Points You're Facing Right Now in Your ESG Work?

1.1 Fragmented Data from Internal Departments

- ESG data comes from multiple departments: HR, Accounting, Shop Supervisor.
- · She does not have access to these internal systems and must repeatedly request data manually.
- Example: "We changed the way we expensed our fuel... and now I can't get how much gas we purchased this year."
- Airplane miles are also unavailable due to data silos in accounting.

1.2 Constantly Varying Client Platforms

- Clients like Southwest Airlines, United Airlines, and Publicis require ESG data submission through platforms like CDP, EcoVadis, GRMS
- Each client uses a different platform with different question formats, often based on regional standards (e.g., European metrics).
- Quote: "Everybody's asking their questions slightly differently for a slightly different type of answer... there's been no boilerplating."

1.3 Lack of Platform Access + Manual Labor

- Most platforms only allow a single user license. She must send out Excel files with columns for each stakeholder to respond.
- Stakeholders send the completed file back, and she manually compiles the master.
- Quote: "They're not going to let my eight people go in and answer their questions."

1.4 Operational Changes Breaking Existing Systems

- Company changes (like new credit card policies) disrupted her data availability for GHG inventory.
- Example: the switch in fuel expense tracking made historic comparisons and emissions reporting difficult or impossible.

1.5 ESG as a Checkbox, Not a Strategic Initiative

- Internally, ESG is treated as a non-revenue-generating cost.
- The firm publishes ESG reports as PDFs for transparency but does not see them as a lever for business transformation.

1.6 Social & Governance Data Challenges

- Governance data is vague and unchanged annually.
- Social metrics are difficult to extract from HR.
- Quote: "I have to bug HR so much... they all have their own platforms."

2. What Has Your Team Tried So Far to Solve These Challenges?

2.1 Manual Excel Workflows

- Custom Excel templates are circulated to 8+ internal stakeholders per ESG questionnaire.
- She collates answers and then re-submits them into ESG platforms like ISNetworld.

2.2 In-House Viewpoint System + Engineers in India

- Viewpoint is the company's project management system.
- Their engineers developed a reporting matrix that sends some data to a family-linked offshore team in India for reporting.
- But much of the ESG data still must be manually processed or copied from stakeholders.

2.3 Outside Consulting Firm to Assess Tools

- The company brought in a consulting firm (Wipfli) during a tech systems transition to help assess all internal platforms and data systems.
- ESG was one of the categories evaluated, highlighting the fragmented tech stack.

2.4 Use of Green Badger

- Green Badger is used for LEED tracking on construction sites.
- It's a paid platform, justified because it saves 3-4 hours of her time per week.
- Quote: "We pay for Green Badger because it saves me 3-4 hours a week that's money."

3. Would You or Your Company Pay for a Solution?

3.1 Current Attitude: ESG Must Be Free

- "Their attitude from the beginning was trying to not make it cost any money."
- ESG is seen as an obligation, not a value creator.

3.2 Willingness Exists IF Clear ROI

- Example: Green Badger was adopted because time savings were obvious.
- "If it saves money or time, it's easier to make those decisions."

3.3 Budgeting Barrier

- ESG tools must be requested during the summer to be considered for next fiscal year's budget.
- Quote: "You have to do your budgets in the summer for the whole following year."

3.4 Concern About Security & Access

- A backend system would need security approvals and buy-in from IT.
- Quote: "Are people going to let you in the hen house? There's a lot of sensitive data there."

4. What Would the Ideal Solution Look Like?

4.1 Aggregates ESG-Relevant Data Across Tools

- Connects platforms like SAP, Workday, Excel, QuickBooks, and Viewpoint.
- Ideally works across internal tools used by HR, Accounting, Fleet Management, and Ops.

4.2 Enables Multi-User Collaboration

- Gives multiple internal users access, instead of relying on a single ESG lead to compile answers manually.
- Quote: "They only give one user per company that's me."

4.3 Reduces Redundancy in Client Questionnaires

- Normalizes and reuses answers across multiple ESG platforms.
- Especially helpful when clients use CDP, EcoVadis, ISNetworld, GRMS, etc.

4.4 Auditability and Traceability

- The system should log who provided what data, when, and from what source.
- Quote: "Companies want to know where the data came from, who entered it, how it was calculated."

4.5 Real-Time Updates & Static vs. Live Data

• Many ESG reports use static data. She expressed interest in something that could update as new data came in.

4.6 Minimalism and Focus

- Emphasis on solving one core problem not a bloated all-in-one ESG SaaS tool.
- "Don't try to compete with Watershed or Workiva. Just fix the data problem."

Notable Quotes @

- "My LinkedIn is a dumpster fire of ESG platforms."
- "I have to bug HR, Accounting, our Shop Supervisor everyone uses different tools, and none of them talk to each other."
- "We publish a PDF of a report on our website just so we can say yes to the ESG questions."
- "We brought in a consultant to figure out all our internal systems that's how messy this is."

Implications for Bloom @

- Strong validation for a **middleware/infrastructure layer** that bridges fragmented data sources.
- MVP should focus on one or two systems, like QuickBooks or Workday, and pull data like fuel purchases or employee hours.
- Ensure security, access controls, and traceability are part of V1.
- Future customers should be larger firms with real ESG scrutiny (e.g., publicly held, client-facing, or EU-regulated).
- Avoid building a full ESG SaaS. Instead, enable better usage of existing tools like Workiva, Persefoni, Green Badger, etc.
- Consider the budget cycle of ESG teams align MVP pilot timing to their fiscal planning windows.

Final Notes @

- The interviewee was direct, realistic, and supportive. She acknowledged that Bloom's vision could be meaningful if targeted toward the right buyers and pain points.
- She recommended attending ESG conferences like Greenbuild to expand network and validate future features.
- This interview will serve as a cornerstone reference for security, budgeting, access, and reporting realities within ESG workflows.

Customer Interview: Simone Wren

Overview @

This page surfaces clear and recurring operational challenges in ESG data management, particularly for smaller sustainability teams at mid-sized companies. The Director emphasized the inefficiencies of fragmented data systems, the burden of manual reporting processes, and the lack of real-time carbon tracking. Although data fragmentation was validated as a pain point, the MVP's standalone value as a middleware layer was questioned — with recommendations to instead pursue bundling or platform partnerships. The Director provided honest and thoughtful feedback, clarifying what makes ESG tooling budget-worthy, what barriers sustainability teams face, and how Bloom might better frame or position its value.

1. What Are the Biggest Pain Points You're Facing Right Now in Your ESG Work?

1A. ESG-Wide: Fragmented, Manual Data Collection $\mathscr O$

- The Director described ESG data as living in many different places systems like SAP, Workday, spreadsheets, and even "people's brains."
- Only greenhouse gas data has a dedicated solution (Watershed); everything else is scattered or collected manually.

"The data we use to respond to regulatory bodies, customers, and industry groups comes from all these different business systems — or from people's brains."

• There's no internal data warehouse or middleware layer due to lack of budget and bandwidth.

"I've thought about bringing it all together, having a tool that keeps everything up to date and verified by internal SMEs... but I haven't secured the internal budget."

1B. Sustainability-Specific: No Real-Time Feedback €

- GHG data is measured **only once per year**, which makes it impossible to know if decarbonization actions are working in real time
- The Director explained this slows down impact tracking and leads to decision paralysis.

"We could do something in March and have to wait until the next March to figure out if it worked."

 A semiannual measurement attempt failed due to data burden and limited team capacity (30+ people involved in gathering data).

2. What Has Your Team Tried So Far to Solve These Challenges?

Attempted Solutions @

• Watershed: Used for annual GHG measurement. Attempted to use it for semiannual reporting, but the process was too demanding.

"It just takes too much work for everyone. Unless it's for an audited external report, we can't justify the effort."

• Workiva: Evaluated for broader ESG data warehousing, but price point was too high to be feasible.

"I tried doing it for Workiva... but the price point was so high that it was never going to happen."

• Manual Dashboards:

- Built a dashboard for travel emissions by pulling from the company's travel booking system to generate quarterly insights.
- Lacked traction for behavior change despite better frequency.

• Internal Cloud Emissions Tracking:

- · Collaborated with engineering to pull emissions data from cloud providers for short-term feedback loops.
- Progress was slow due to lack of dedicated technical resources.

"Any engineering work is volunteer-led. I don't have anyone on staff full-time who can do it."

3. Would You or Your Company Pay for a Solution?

- Short Answer: Yes if the value is clear and directly tied to time/labor savings.
- Caveat: Timing matters; currently in the middle of a reporting cycle.

"Theoretical next week? Sure. Right now, no — it's reporting season."

• Budget approval is ROI-driven, especially if she can justify it as a labor-saving investment:

"If I can pitch internally that we're going to save X number of hours by spending this money, that's one way I can make the case."

• Workiva was considered, but ultimately rejected due to cost — reinforcing that tools must be *critical*, *simple*, and *justifiable* to get budget.

Reaction to Bloom's MVP Concept & Demo @

MVP Pitch Recap: @

You pitched a middleware-layer ESG infrastructure platform — a real-time aggregation and normalization engine that:

- Pulls ESG data from systems like SAP, Workday, spreadsheets, QuickBooks
- Normalizes disparate formats and unifies into a single structured schema
- Integrates into downstream platforms (e.g., Watershed, Persefoni) or enables internal use/export
- Does not attempt reporting, only readiness solving the "pre-reporting" data problem

Initial Reaction: Confusion + Value Skepticism ∅

"I don't know why I would get a second solution that integrates with the integrators."

- She questioned the need for a second integration layer if platforms like Workiva or Watershed are already perceived to provide integration (even if partial).
- She also doubted whether ESG teams (especially small ones) would pay for a standalone middleware tool.

Strategic Advice: @

"Maybe your target customer isn't me... maybe it's the Workivas of the world."

- Suggested that Bloom pursue a **bundling or partnership** model with reporting platforms that already serve as system-of-record tools.
- Alternatively, focus on a reporting layer or insight engine something more outcome-based.

Feedback on the MVP Demo (Zapier \rightarrow Airtable Pipeline) $\mathscr Q$

- Understood the simplicity and value of what you built.
- Was impressed by the concept of real-time sync and normalization from fragmented sources.

"Sounds like you've solved one piece of my problem..."

- But emphasized that she's more likely to pay for a complete solution one that includes:
 - Traceability
 - o Opinionated insights
 - · Readiness scoring
 - · Reporting guidance

"I'd be looking for something that turns it into something for me... something useful."

Strategic Takeaways @

Pain Points Confirmed @

- Data fragmentation is very real.
- Manual ESG data gathering is a burden.
- Teams want faster insights, not just cleaner inputs.
- · Real-time decarbonization tracking is desired but currently infeasible due to tooling and headcount limits.

Barriers to Adoption @

- Budget constraints for "non-mandatory" tools
- No engineering resources → need for **push-button simplicity**
- Sustainability teams are often 1-2 people max
- Tooling must tie to regulatory compliance, ROI, or urgent deliverables

Implications for Bloom @

- The MVP solves a real backend problem, but the **front-facing value isn't compelling enough (yet)** to drive adoption from sustainability directors.
- You may need to:
 - Add insights, flags, or traceability features to help with audit prep and reporting
 - Reposition as a backend partner or white-labeled engine to ESG platforms
 - Emphasize implementation ease (zero-engineering setup, ETL drag-and-drop, no-code flows)

Final Notes @

The interviewee was kind, open, and encouraging throughout. She validated your discovery-driven approach and respected your clarity, humility, and drive. Her parting feedback was clear:

"If you're solving the middle layer, that's great. But for me to use it, it has to feel like a complete solution — or I'll stick to my spreadsheets."

Customer Interview: Tina Baselice

Overview @

This page offers a deep-dive into the expectations, current frustrations, and opportunities surrounding ESG platforms—particularly for companies involved in federal contracting and sustainability consulting. Tina shares detailed feedback on industry-standard tools like Workiva, MSCI, and FactSet, and emphasizes the growing demand for benchmarking, AI-driven analysis, and better UI/UX. She also reinforces the need for platforms that combine internal tracking with external landscape insights.

Key Insights by Theme *⊘*

1. Current State of ESG Data Collection & Reporting @

Tool Usage & Sentiment:

- Workiva: Widely used but poorly loved.
 - Pros: Centralizes client data; allows linking data (e.g., Scope 1 emissions) to specific stakeholders and generates automatic
 updates in reports.
 - Cons: Interface is clunky and inefficient; editing within the platform is frustrating (people prefer editing in Word); limited functionality.
- MSCI: Premium risk and resilience dashboard.
 - Pros: Beautifully interactive; strong backend support from analysts; deeply measures how companies manage material risks (e.g., talent, railroads).
 - Cons: Extremely expensive; not open-source; limited to measurement, not operations.

• FactSet (Radar & Breaker):

- Strength lies in **AI-powered data aggregation** and **insight generation** (e.g., percentage of Fortune 500s mentioning DEI in earnings calls).
- o Offers a unique combination of stock price overlays with ESG narrative trends and media monitoring.

2. Pain Points in ESG & Sustainability Action @

Challenges Highlighted:

- Benchmarking peers is incredibly time-consuming and fragmented.
- Landscape/peer analysis (e.g., Unilever vs. others) often requires manual scrubbing of public disclosures.
- Companies make quiet changes to sustainability goals/commitments that are hard to track unless you're closely monitoring public documents for language shifts.
- Clients (especially federal contractors) are under pressure to meet evolving DEI executive orders and need comparative ESG performance data.
- Transparency trends evolve rapidly ("tit for tat for transparency"), but tools lack the agility to reflect these subtle shifts.

3. Would Bloom's Full ESG Platform Be a Must-Have?

High Potential, with Clear Requirements:

Tina emphasized that a platform combining the strengths of **Workiva** (internal ESG data tracking/reporting) and **MSCI** (external benchmarking, risk resilience) would be extremely compelling.

For it to become a must-have:

Bloom must offer dual value:

- Internally: Track and report on a company's ESG footprint (carbon, DEI, governance, etc.)
- Externally: Benchmark against competitors and peers in real-time
- AI should assist in capturing goal changes, scrubbing public disclosures, and identifying evolving language across sustainability reports.
- Needs to support **ongoing tracking**, not just one-off reporting.

4. Expected Core Features on Day One @

Non-Negotiables:

- · Pivot table functionality for comparison and visualization
- Drag-and-drop competitor set builder
- Visualized tables across ESG domains:
 - DEI commitments
 - Executive compensation
 - Board structure (gender diversity, skillsets)

Desired Experience:

- Make ESG data visual, concise, and instantly comparable
- Include goal/deadline tracking from public-facing documents
- Support landscape analysis and trend spotting across sectors
- AI-powered insights like:
 - "This federal executive order went out on X date, and companies started using Y language after."

Strategic Opportunity for Bloom @

Tina made it clear: **The value is in synthesis.** No existing tool combines internal ESG management with external benchmarking effectively. If Bloom can serve as a **customer-centric**, **dual-purpose platform**, it will not only simplify ESG efforts—it could become indispensable.

Pilot Interview: Eric Corey Freed

Overview @

This conversation with Eric Corey Freed underscored that ESG is highly contextual—most companies aren't doing full ESG, but rather focused sustainability reporting centered on carbon accounting. Political pushback has made "ESG" a loaded term, prompting rebranding as "Impact" or "Sustainability" reports. Still, regulatory forces like California's laws and the EU's CSRD are pushing disclosures forward. Pain points vary widely, especially in collecting utility data across decentralized systems. The core insight: "If it gets measured, it gets managed." For Bloom, the opportunity lies in starting with carbon data workflows as a wedge, then expanding into broader ESG infrastructure by solving real, operational data challenges.

ESG Is Not One-Size-Fits-All

- ESG varies by company and industry.
 - For architecture: Scope 3 (indirect value chain emissions) is most relevant.
 - o For manufacturing: Scope 1 (direct emissions) and Scope 2 (indirect energy emissions) take precedence.
- The term "ESG" itself may be misleading. Many companies say they're doing ESG but are really just focused on:
 - Sustainability reports (not full ESG frameworks).
 - Specifically: carbon emissions tracking and reporting.

"We don't do full ESG. We really just do sustainability reports, mostly focused on carbon accounting."

- Tools being used include Persefoni, carbon accounting platforms, and evaluation of tools like Watershed.
- It's a **crowded space**, especially on the carbon side.

Market & Political Headwinds @

- U.S. political backlash against ESG is real:
 - o Conservative states are pushing anti-ESG legislation.
 - Clients are getting spooked—some are:
 - Avoiding ESG entirely.
 - Rebranding reports as "Impact Reports" or "Sustainability Reports."
- However, ESG reporting isn't going away:
 - New York and California are driving state-level requirements for emissions disclosures.
 - The EU's CSRD (Corporate Sustainability Reporting Directive) has a global impact—even on U.S. companies with EU
 operations.
 - Regardless of a potential Trump administration, companies will still be required to report.

"Even with political headwinds, the studies show companies will still report."

Strategic Insight: ESG Pain Points Are Fragmented @

- No two companies have the same ESG challenges.
 - "10 companies = 10 different pain points."
- Example: Utility data collection.
 - For some, it's simple ("just ask accounting").
 - For others, it's a nightmare (18 separate offices with different utility providers and logins).

o Challenge: Gaining decentralized access (e.g., login to the Chicago office vs. waiting on them to scan PDFs).

Data Access Barriers @

- Utility companies often refuse to share data, citing confidentiality concerns (e.g., protecting customer info).
- Suggested idea: Anonymized, block-level utility data that preserves privacy but enables:
 - o Targeted incentives.
 - Program prioritization.
 - Area-specific impact measurement.

"If It Gets Measured, It Gets Managed"

- Big theme: Companies don't improve what they can't see.
- Key opportunity: Enable consistent measurement of ESG indicators, starting simple and layering complexity later.

Research Tactic: Reverse Interview via ESG Reports @

- Instead of conducting more interviews:
 - **Download 10–12 ESG reports** from a single industry (e.g., financial services).
 - Map what's reported, where it differs, and where it aligns.
- Then:
 - Expand across dozens of reports and industries.
 - Identify patterns and insights that suggest universal and unique pain points.
 - Extrapolate needs and workflow bottlenecks.

Industry Trends _@

- Companies are increasingly:
 - Avoiding the word "ESG" due to political risk.
 - Reframing under broader terms like "Sustainability," "Impact," or "Decarbonization."
- Reporting needs are being driven by:
 - Regulatory pressure (EU CSRD, California, NY).
 - Customer pressure (supply chain compliance).
 - Internal sustainability goals (e.g., net-zero, DEI, green buildings).

Implications for Bloom @

- Bloom doesn't need to do full ESG from day one.
 - Start with carbon accounting and sustainability workflows.
- Use that as a wedge into broader ESG data infrastructure.
- Focus on:
 - Making ESG data measurable, traceable, and usable.
 - Solving fragmented data collection and utility integration.
- Avoid "boil-the-ocean" syndrome.
 - Begin with tactical use cases and expand organically.

Pilot Interview: Hayden Henderson

Overview @

This interview reveals a **massive opportunity** in the sustainability data aggregation space, particularly for university systems. The customer's pain points align perfectly with recurring themes from other ESG professionals: fragmented data sources, manual downloading processes, and time-intensive data normalization challenges.

Key Finding: The customer spends **hundreds of hours** manually downloading and cleaning data from utility providers - a process that could be largely automated.

Critical Pain Points Identified

1. Massive Manual Data Collection Burden $\mathscr O$

- 60+ files from Xcel Energy alone (2+ hours of clicking)
- 114+ files from WPS (Wisconsin Public Service)
- 28 categories of data across 13 campuses
- Thousands of utility accounts requiring individual downloads
- Process takes several hours per utility provider

2. Inconsistent Data Formats Across Utilities @

- Each utility exports data in different formats
- Headers, summary rows, and data structure vary significantly
- Requires custom Power Query solutions for each utility
- Data normalization is extremely time-intensive

3. Lack of Technical Knowledge Among Sustainability Professionals $\mathscr Q$

- Most sustainability professionals have "never heard of Power Query"
- They clean 116 files by hand instead of using automation
- No standardized approach to data cleaning across the industry

4. State-Level Scale of the Problem @

- Wisconsin Public Service Commission faces same issue at state level
- They hire people specifically to click download on thousands of accounts
- This validates the problem exists beyond just universities

Market Validation Insights @

Strong Product-Market Fit Indicators @

- 1. Immediate Recognition: Customer immediately recognized their exact problem
- 2. Quantified Pain: Specific examples with time estimates (hours per utility)
- 3. Willingness to Collaborate: Eager to work together on solution development
- 4. Network Effects: Has contacts across university sustainability departments

Customer Profile Validation @

• University of Wisconsin System: 13 campuses, centralized sustainability reporting

- Role: Greenhouse gas reporting coordinator for entire system
- Technical Level: Advanced (uses Power Query) but represents minority of market
- . Budget Authority: Public institution with procurement processes

Strategic Pivot Recommendations @

Immediate Focus: Data Aggregation Foundation $\mathscr O$

Based on this interview, recommend pivoting away from insights/analytics toward pure data infrastructure:

- 1. Primary Value Proposition: Eliminate manual downloading burden
- 2. Secondary Value: Automated data normalization and cleaning
- 3. Tertiary Value: Standardized export formats (Excel, Power BI ready)

Technical Architecture Priorities $\mathscr O$

Phase 1: Utility Provider Integrations \mathscr{O}

- Xcel Energy
- Wisconsin Public Service (WPS)
- Alliant Energy
- WE Energy
- Focus on automated bulk downloads with account filtering

Phase 2: Data Normalization Engine $\mathscr O$

- Handle varying file formats automatically
- Remove header rows, summary sections
- Standardize column naming (campus, account, date, measure, units)
- Export to customer-specified templates (Power BI, SIMAP)

Phase 3: Scalability Considerations

- Start with Wisconsin utilities (validated customer base)
- Expand to regional utility providers
- Build integration request system for new utilities

Business Model Implications @

Pilot Partnership Opportunity @

- Free development partnership with UW System
- Use as reference customer for other university systems
- Validates solution before scaling to paid customers

Procurement Challenges @

- Universities require 5+ years experience for paid contracts
- Must go through competitive bidding process
- Recommendation: Build track record through free partnerships first

Market Expansion Strategy *∂*

1. Universities: Start with Wisconsin, expand to other state systems

- 2. State Agencies: Wisconsin PSC already identified as potential customer
- 3. Private Companies: Many use same utility providers

Competitive Landscape Insights @

Why This Market Remains Underserved ∅

- 1. High Barriers to Entry: Each utility integration is custom work
- 2. Fragmented Customer Base: Different utilities per region
- 3. Low Willingness to Pay: Until problem reaches critical scale

Competitive Advantages @

- 1. Deep Specialization: Focus on data aggregation vs. full ESG platform
- 2. Utility-Specific Expertise: Understanding exact download processes
- 3. Customer Co-Development: Building with actual users vs. assumptions

Next Steps & Action Items @

Immediate (This Week) @

- 1. Map Utility Providers: Get complete list from customer
- 2. Technical Research: Analyze utility portal structures for API possibilities
- 3. Customer Network: Schedule interviews with other university sustainability directors
- 4. Competitive Research: Investigate if any companies are solving this specific problem

Short Term (2-4 Weeks) ∅

- 1. MVP Development: Build Energy integration prototype
- 2. Data Normalization: Create universal schema for utility data
- 3. Customer Feedback Loop: Weekly check-ins with UW System contact

Medium Term (1-3 Months) ∂

- 1. Multi-Utility Support: Add WPS and Wi Energies integrations
- 2. Export Functionality: Power BI and SIMAP template exports
- 3. Beta Testing: Expand to 2-3 additional university systems

Key Quotes Supporting Product Direction *⊘*

"I have to sit there and download 60 things... that's like two hours just for one utility and we have so many utilities."

"The state is trying to get thousands of accounts and thousands of downloads per thousands of accounts and literally has to hire someone to just sit there and press download."

"Most sustainability professionals... have never heard of Power Query. They have no idea how to use Power Query... So they are doing all like 116 files by hand."

"No one should ever be doing anything manually anymore. I truly believe that."

Risk Assessment @

Technical Risks @

- Utility Portal Changes: Websites may update, breaking integrations
- Authentication Complexity: May require customer credentials
- Data Format Variations: New formats may emerge

Business Risks @

- Limited Scalability: Each utility requires custom integration
- Low Switching Costs: Customers could build internal solutions
- Regulatory Changes: Utility reporting requirements may shift

Mitigation Strategies $\mathscr O$

- Modular Architecture: Easy to update individual integrations
- Customer Partnerships: Shared development reduces individual risk
- Service Model: Offer integration maintenance as ongoing service

Conclusion @

This interview provides **exceptional validation** for a data aggregation platform focused on utility providers. The customer's pain points are severe, quantified, and representative of a broader market need. The technical solution is clearly scoped and achievable.

Recommendation: Proceed with aggressive development timeline, maintaining close customer collaboration to ensure product-market fit.

Pilot Interview: Karin Witton

Overview @

This interview was part of Bloom Technologies' effort to validate assumptions and refine the direction of our ESG Data Infrastructure Platform. The interviewee is a seasoned ESG director at a mid-sized, globally operating company with complex sustainability and compliance needs. The discussion covers data fragmentation, pain points with current ESG tools, and the interviewee's assessment of Bloom's MVP and vision for a centralized ESG data lake.

1. ESG Pain Points and Observations @

1.1 Fragmented ESG Data Systems @

- Data lives across systems: SAP, Workday, QuickBooks, spreadsheets.
- Manually pulling data is time-consuming and expensive.
- "We have to create APIs from SAP, NetSuite, D365 each is expensive and complicated."

1.2 Lack of Integration and Traceability $\mathscr O$

- ESG systems are modular but disconnected.
- Auditability and traceability of ESG data is weak or non-existent.
- ESG professionals "just want data in one spot with a push-button experience."

1.3 High Costs of Current Tools @

- Ecometrica, Persefoni, FigBytes, Watershed all cost \$100K+ to set up.
- Annual fees range from \$50K-\$70K.
- "We were like, how much? Excuse me?"

1.4 Scope and Quality Issues in Reporting $\mathscr O$

- Focus is primarily on greenhouse gas (GHG) emissions, especially electricity.
- Other areas like **propane**, **waste**, **water** lack reliable data.
- Emission factor creation for facilities is largely manual and based on outdated data sets.
- CDP and CSRD reporting is a "massive manual burden."

2. What Has the Team Tried Already? @

- Considered building an internal data lake but lacked IT bandwidth.
- Chose an off-the-shelf ESG tool despite limitations.
- "We decided not to go the data lake route because IT didn't have bandwidth."

3. Budget Sensitivity and ROI Considerations @

- ESG tools must be cost-justified to senior leadership.
- High setup and maintenance costs create switching friction.
- There's openness to free pilot testing if it enables internal development and cost savings.

4. Ideal Solution According to the Interviewee @

4.1 Core Features Desired @

- Centralized ESG Data Lake: One API in, many APIs out.
- Simple Interface: Non-technical teams should manage easily.
- Data Mapping Flexibility: Only import what's relevant.
- Export Compatibility: Power BI, Tableau, CDP, CSRD, etc.
- AI/LLM Integration (optional): For insight generation.

4.2 Specific Functionalities $\mathscr O$

- Pre-populate CDP and other frameworks based on existing structured data.
- Manage missing data and suggest fixes.
- Integrate disparate formats (SAP, spreadsheets, Workday, etc.).
- Allow custom emission factor creation.
- Enable cross-module reporting (e.g., HR + Safety + Emissions).

5. Feedback on Bloom Technologies MVP @

5.1 Positives €

- "If this works, people will be kissing your feet."
- "A centralized data lake cost-effective, easy to manage is exactly what we need."
- "You've explained it better now: this isn't a reporting tool. It's about getting the data in."

5.2 Suggestions for Messaging @

- Reframe as a "data lake infrastructure" vs ESG tool.
- Highlight time savings, cost effectiveness, and data control.
- Emphasize value to IT teams and modular data integration.

6. Implications for Bloom @

6.1 Product Validation @

- Data fragmentation and management is a must-solve pain point.
- Bloom should double down on the data layer/infrastructure angle.
- Position the platform as **vendor-neutral** and **complementary** to existing ESG tools.

6.2 Market Strategy €

- Target mid-sized firms with compliance pressure but no existing mature ESG stack.
- Avoid early-stage SMEs with no regulatory urgency.
- Prioritize pilot programs with ESG teams actively exploring system upgrades.

7. Tone and General Impression $_{\mathscr{D}}$

- Interviewee was candid, collaborative, and clearly wants a solution like this to exist.
- Offered to explore internal pilot testing and referrals to associations (e.g., Reusable Packaging Association).
- Encouraged reframing the pitch and refining how the product is communicated to stakeholders.

Pilot Interview: Rida Ahmed

Overview @

This conversation took place as part of Bloom Technologies' pilot partner outreach for its MVP. The interviewee represents a large multinational firm currently using a platform from AMCS Sustainability Group. They expressed clear frustration with current ESG data practices, citing inefficiencies, integration limitations, and ongoing data entry challenges. This call validated the core thesis around data fragmentation and also explored next steps toward either file-based or API-based integration testing with Bloom.

1. ESG Pain Points and Observations

1.1 Data Fragmentation and Integration Issues $\mathscr O$

- Data resides across disconnected systems Workday, SAP, QuickBooks, spreadsheets, and sustainability tools.
- Internal platforms do not talk to each other, creating repeated manual data entry burdens.
- Example: "You have to enter data again and again across systems... it's not integrated, so people stop entering data."

1.2 Manual Effort and Repetition $\mathscr O$

- Constant effort required to chase departments for data.
- ESG data collection often seen as duplicative work, deterring engagement from business units.
- "Every time we need data, we go department by department it's painful."

1.3 Cost and Vendor Fatigue @

- Current platform charges extra for each API integration.
- Resistance from internal teams: "Every time you want integration, you have to pay more. No one wants that."
- "We're already paying so much and we're still doing manual work."

2. Tools Currently in Use @

- · AMCS Sustainability Group: Used for ESG data reporting.
- Other internal systems: Unnamed systems for energy, water, and waste data collection.

3. Reaction to Bloom MVP Demo @

3.1 Positive Reception *𝒞*

- Strong alignment with problem statement: data lives in silos and integration is costly.
- Interest in the centralized approach: "Yes, this is different from other tools. Let's talk."
- Appreciation for no-pressure pilot: "We don't want to pay until we see this works."

3.2 Value Proposition Resonated \mathscr{O}

- Liked the "data layer" framing not another full ESG SaaS.
- Agreed that auditability, traceability, and push-button simplicity were key.
- "Yes, if I can just click on Workday or SAP and get clean, normalized data that would be a game-changer."

4. Desired Workflow and Preferences @

4.1 API Integration Ideal, but File Upload Likely First $\mathscr O$

- API integration considered more scalable and seamless, but initial file upload (CSV/Excel) would be easier to implement
 internally.
- "Let's start with redacted sample files if it works, then we go API."

4.2 Data Selection Is Critical @

- ESG teams want control over what data is extracted, especially to avoid pulling sensitive information (e.g., names, SSNs).
- Ideal product lets users map and exclude irrelevant columns before export.

5. Feedback on Next Steps @

5.1 File-Based MVP Testing ∅

- Interviewee agreed to share redacted files for early testing.
- This phase would test Bloom's ability to ingest, normalize, and display data correctly in a user-friendly format.

5.2 Follow-Up Plan 🖉

- Interviewee will speak with their manager and IT team to explore API access and data file sharing.
- Suggested timeline: get back by Friday with a go/no-go decision.

6. Implications for Bloom @

6.1 Product Direction @

- Confirmed that a centralized, system-agnostic ESG data layer addresses real, painful needs.
- Validated Bloom's focus on integration simplicity, low setup cost, and modular architecture.

6.2 MVP Priorities *⊘*

- Develop and polish CSV/XLS upload feature for initial testing.
- Build toward Workday and QuickBooks integrations as common entry points.
- Highlight audit trails, data validation flags, and traceability logs in UI/UX.

6.3 Positioning Strategy €

• Avoid "all-in-one ESG suite" pitch — instead lead with:

"We connect and normalize your ESG data so you can export it anywhere — Tableau, Power BI, or even an LLM."

7. Tone and General Impression @

- Interviewee was supportive, realistic, and engaged.
- Emphasized cost-consciousness and integration fatigue as key pain points.
- Encouraged further development and willing to serve as a first pilot partner, contingent on internal alignment.