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AI use in corporate sustainability:

Adoption trends, use cases, and sentiments

NOVEMBER 2025

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FOREWORD

Exploring the use of AI in corporate sustainability work

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Over the past few years, it's been impossible to ignore the rise of artificial intelligence. It is transforming knowledge work and creating dramatic efficiencies and growth opportunities across our economy. From the proliferation of AI-powered tools to conversations about responsible use, AI is becoming part of the everyday conversation across business functions, including sustainability.

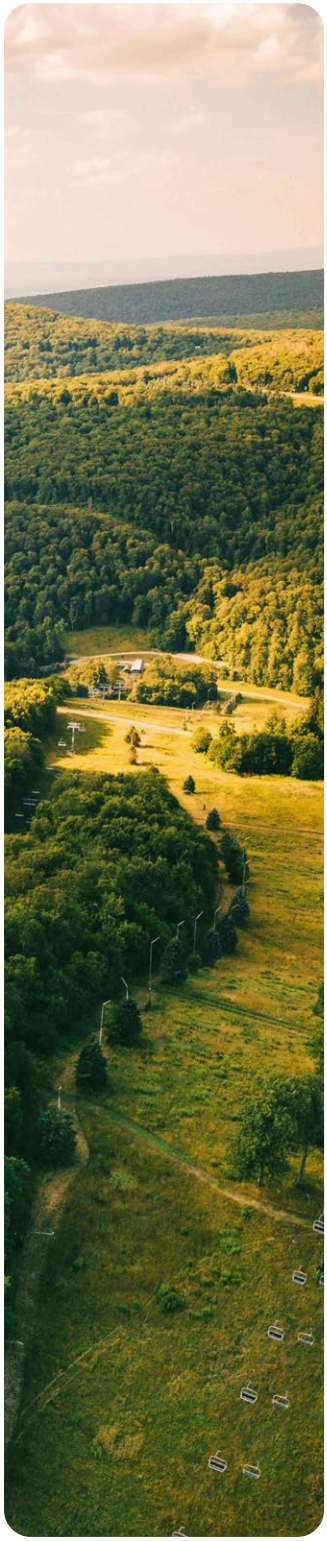
At Optera, we have always been deeply interested in how AI can support climate work by empowering practitioners to do more and drive greater results for their company. That curiosity led us to ask a simple question: **how are sustainability professionals actually thinking about and using AI today and in the future?**

To find out, we surveyed practitioners and spoke directly with our clients. What we heard was a mix of optimism and caution. Sustainability leaders see potential in using AI to save time on research, data collection, and reporting. But they're also asking smart questions about trust, transparency, and the climate cost of using AI itself.

This report shares what we learned, including how AI is being used today, where sustainability teams want to go next, and what concerns are shaping adoption.

Thanks for reading,
Tim Weiss
CEO and Co-Founder, Optera

Adoption trends: AI use among sustainability professionals



AI is quickly evolving from an experimental technology to a daily tool across business functions. Whether it is used to speed up content creation, improve data analysis, or streamline operations, AI is rapidly reshaping how teams work.

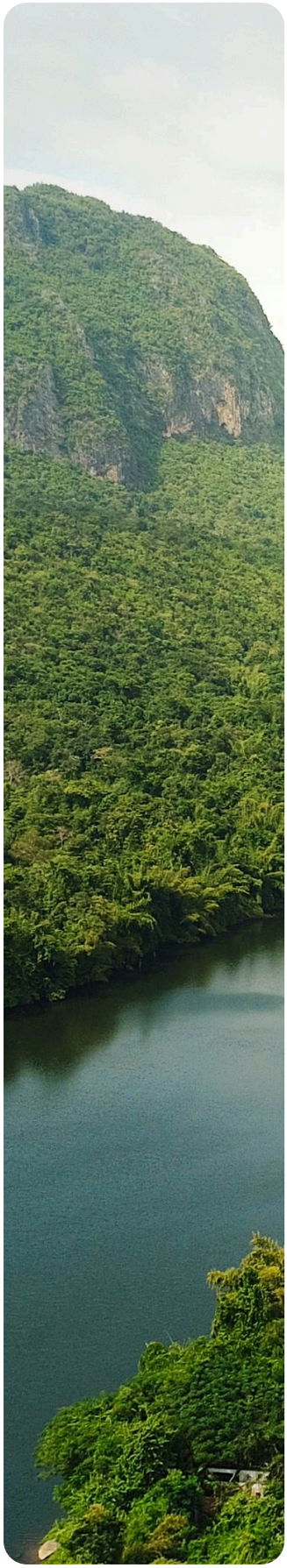
But how does AI play a role in sustainability workflows?

In our recent survey of corporate sustainability professionals, we asked respondents to describe their current approach to using AI in their work.

The response options included:

1. We are actively using AI across sustainability workflows
2. We are experimenting with AI in small ways
3. We've discussed it, but haven't started using it
4. We are not using AI and have no plans to
5. We are prohibited from using AI internally due to company policy

What we found was notable: **not a single respondent selected option 4 or 5**. Every participant indicated that they are either already using AI or are seriously considering using it in the future.



Just under half of respondents said they are already using AI in some capacity, either through full integration or small-scale experimentation. The remaining respondents have at least begun internal conversations about how it might fit into their work. In short, no one we spoke to is ignoring AI.

Respondent use of AI for sustainability work

- Actively using AI across workflows
- Experimenting with AI in small ways
- Discussed using AI, but haven't started yet

This level of engagement aligns with broader trends across corporate functions. In fact, a recent Gallup poll found that 44 percent of white-collar workers report using AI on the job, suggesting that sustainability teams are neither lagging adopters nor early outliers. Instead, they are exploring AI in step with the wider business world.

AI use cases: Current and future applications

Understanding adoption is only part of the picture. To get a clearer view of how AI is actually shaping sustainability work, we asked professionals how their teams are using AI today and which use cases they are most interested in exploring next.

How AI is being used today

For respondents who already use AI in some capacity, we asked how they are applying it in their day-to-day work. Their responses pointed to a consistent theme: AI is being used as a general-purpose tool that lightens the load of repetitive tasks and supports exploratory thinking.

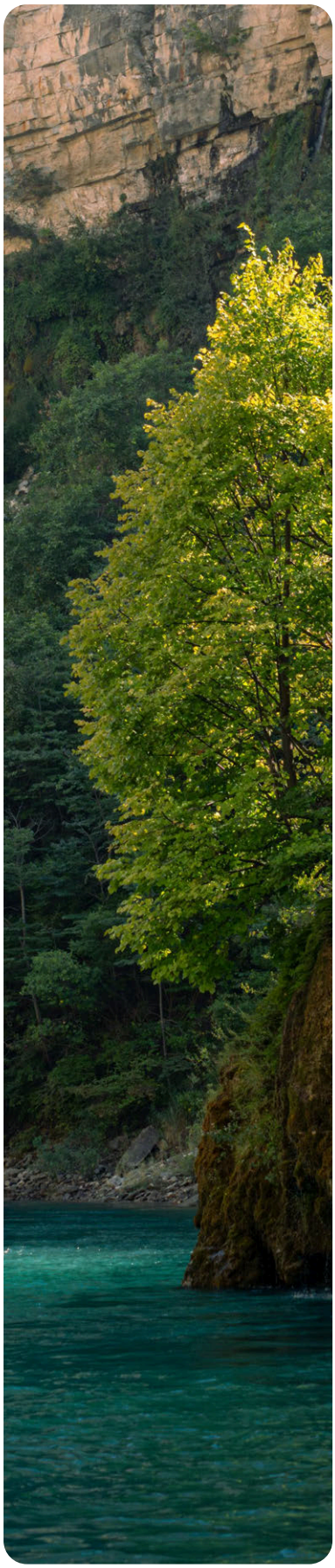
A few of the most common use cases included:

1 Research and discovery

Research was by far the most frequently mentioned AI use case. Teams are using AI to sift through large amounts of information, summarize documents, or answer questions about climate policy or disclosure requirements

> *"AI is used as an alternative to conventional search engines like Google."*

> *"I use ChatGPT for policy questions mostly."*



2 Writing and content generation

AI is also helping users draft internal memos and external communications, including summarizing climate-related project updates.

> *"We use AI as an LLM for content generation."*

3 Brainstorming and strategy support

Some respondents use AI to generate ideas, clarify thinking, or fine-tune early approaches to new projects.

> *"AI is used for research, brainstorming, discovery, and fine-tuning."*

Notably, these use cases are not unique to sustainability roles. Sustainability professionals are using AI to streamline general tasks, not to execute complex climate work. AI is serving more as a helpful assistant than a specialized solution.

According to the same Gallup study, the top uses of AI among white-collar workers are generating ideas, consolidating information, and automating basic tasks. Sustainability professionals appear to be following a similar path — integrating AI into everyday workflows in much the same way as other business functions.

However, when we asked respondents to select the future use cases they were most interested in, the tone shifted a bit.

What sustainability teams want from AI next

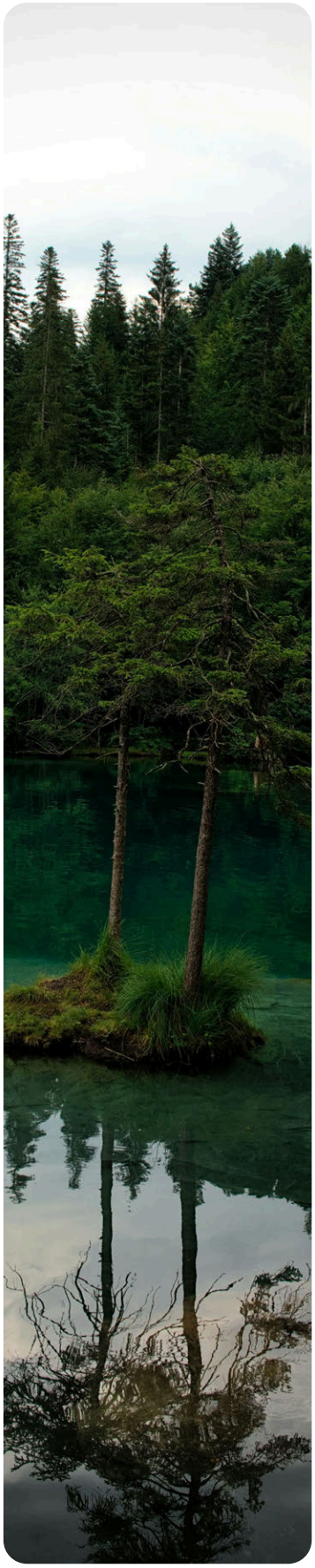
While current usage skews toward general-purpose tasks, respondents showed interest in applying AI more directly to sustainability-specific workflows in the future.

We asked participants to select the use cases they were most interested in exploring next. The top three selections were:

- **Gathering and extracting utility and consumption data**
- **Automating reporting by mapping data to frameworks and drafting disclosures**
- **Estimating supplier emissions when primary data is missing**

These top choices share a clear theme: reducing the burden of manual, time-intensive work. Tasks like gathering utility data, estimating supplier emissions, and preparing disclosures are essential, but they require significant effort and repetition.

Offloading that work to AI could free up time for sustainability teams and allow them to redirect their energy toward the strategic levers that actually drive decarbonization, like supporting supplier-level emissions reductions and advancing renewable energy initiatives.



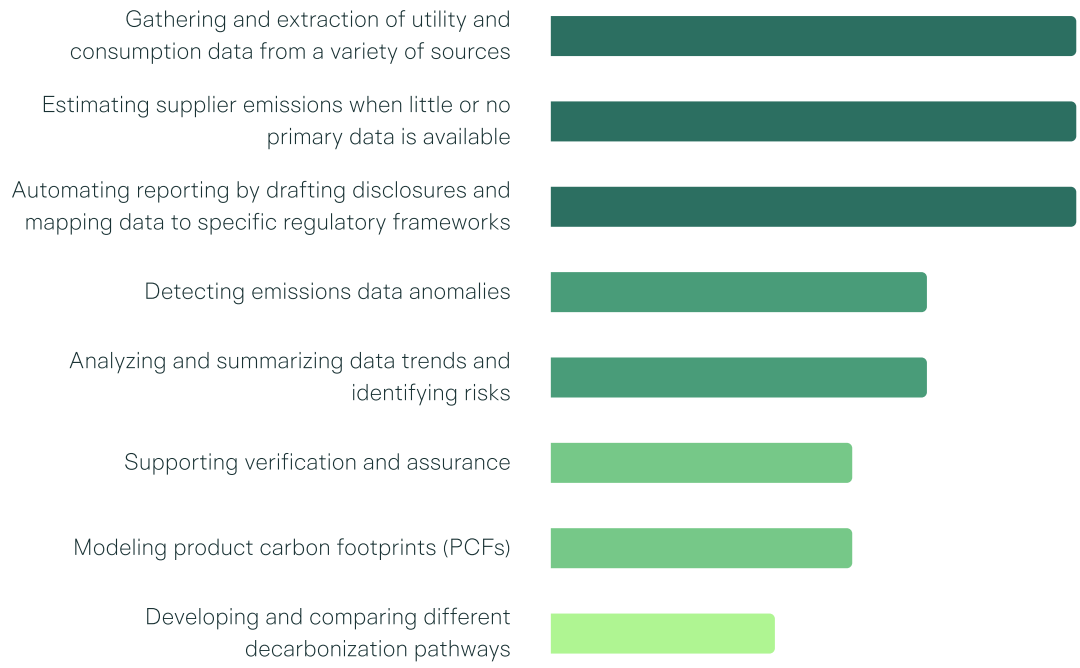
At the other end of the spectrum, the least-selected use cases were:

- Supporting verification and assurance
- Modeling product carbon footprints (PCFs)
- Developing and comparing different decarbonization pathways

These use cases all involve critical decisions or complex calculations where sustainability leaders are not yet ready to hand over the reins. Many still want human oversight to ensure the data is sound, the outputs are explainable, and the risks are fully understood.

Taken together, the highest- and lowest-ranked use cases tell a clear story: sustainability practitioners want AI to help them get to the starting line faster, not to cross the finish line for them.

Respondent interest levels in different AI use cases



Hesitations and concerns: What's slowing AI adoption?

While many sustainability professionals are already using AI and others are eager to explore new use cases, adoption does not come without hesitation. In particular, respondents are concerned about environmental impact and data trust, which is shaping how, and at what rate, AI is being integrated into sustainability workflows.

Is AI worth the environmental tradeoff?

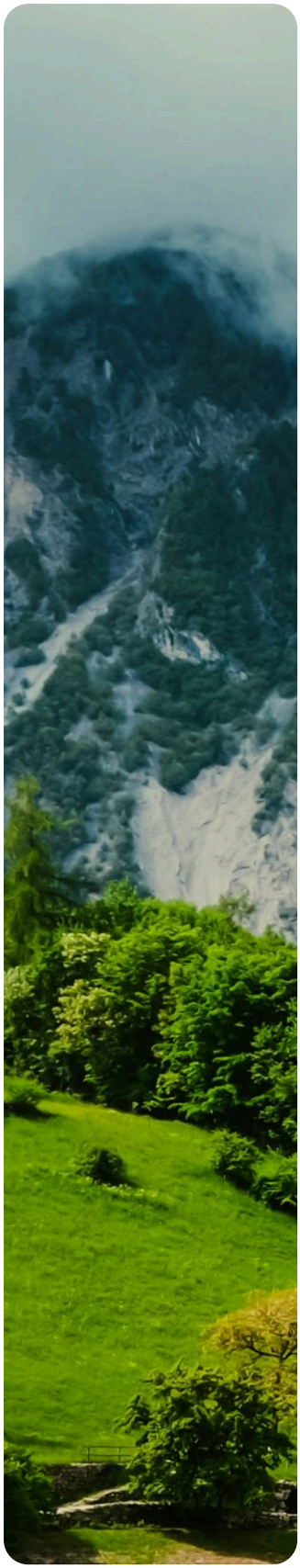
AI does not come without a climate cost. Running large language models requires meaningful amounts of electricity and water, two resources that sustainability professionals already closely monitor.

Given these impacts, we asked sustainability professionals how they feel about the trade-offs between using AI to accelerate their work and the potential environmental cost of doing so.

Responses were nearly evenly divided between those who believe the benefits outweigh the costs, those who do not, and those who are still unsure.

Respondent views on whether the benefits of AI use outweigh its environmental impacts

Benefits outweigh the costs | Unsure | Benefits don't outweigh the costs



These responses point to an emerging conflict. AI may offer meaningful efficiency gains, but sustainability teams also feel a responsibility to ensure those gains are worth the resources consumed.

Trust in data remains a barrier to broader AI use

Beyond environmental impact, the most frequently cited concerns were all rooted in trust around data. The top three concerns cited were:

Data security

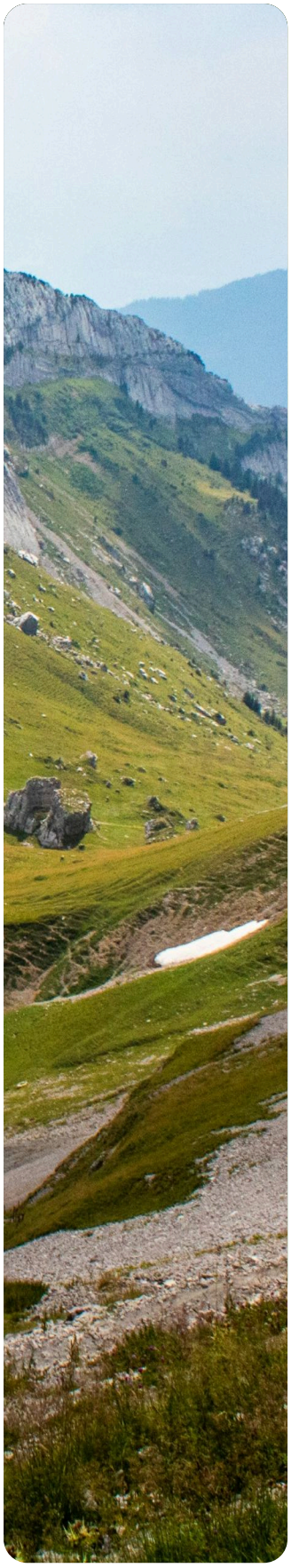
Respondents expressed hesitancy to feed financial, proprietary, or supplier data into AI tools due to risks around privacy, IP protection, and unintended data exposure.

Data accuracy

Respondents noted concerns about AI generating unreliable or misleading outputs, especially when used to inform public disclosures or strategic decisions.

Data transparency and auditability

Sustainability teams flagged challenges in understanding how AI arrives at certain conclusions, which could make it difficult to comply with regulatory requirements or explain results to stakeholders.



These concerns may help explain why most current AI use is limited to early-stage or general-purpose tasks like research, summarization, and brainstorming, rather than advanced sustainability modeling or emissions forecasting.

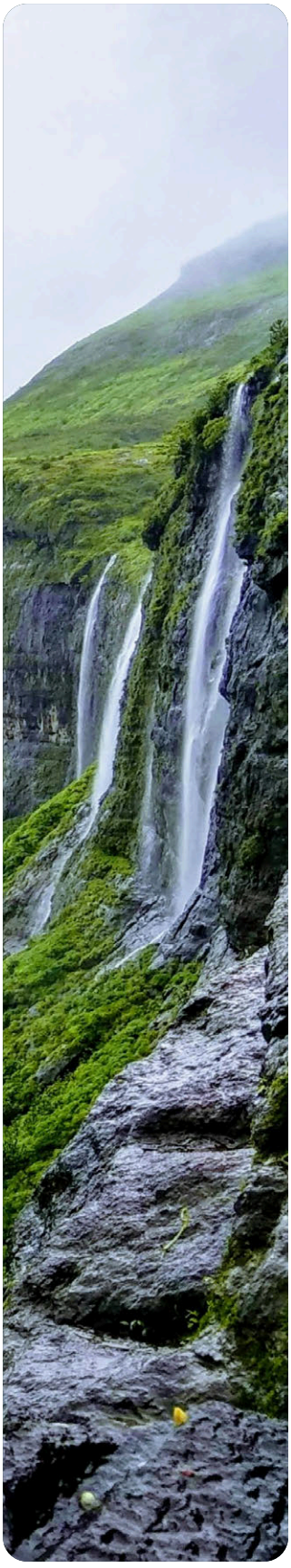
Together, the data trust concerns and the environmental considerations raise an important question: **how can sustainability professionals harness the speed and efficiency of AI without compromising the principles that guide their work?**

One respondent articulated the tension across both fronts:

> *"AI's environmental impact extends beyond emissions to real effects on communities, from rising energy demand and water use to higher local utility costs. And ethically, the pace of AI development often outpaces the checks for accuracy and truth.*
>
> *The challenge is balancing speed with integrity, and ensuring progress does not come at the expense of people or the planet."*

As AI tools become more embedded in sustainability workflows, organizations may need to revisit how they validate AI-generated insights, set clear policies for sensitive data handling, and establish internal thresholds for when human review is required.

Looking ahead: Building responsible AI for climate action



While AI adoption is still in early stages, there is a cautious, yet growing desire to apply it more directly to climate-specific workflows. As the next chapter of adoption unfolds, new AI applications for sustainability teams will need to prove they are built and deployed with intention. That means:

- ➜ **Building in auditability and safeguards** so outputs can be traced, verified, and reviewed by internal teams, external auditors, or regulators.
- ➜ **Including a human checkpoint** so professionals can apply their judgment, context, and ethical oversight before any output is shared or used for decision-making.
- ➜ **Delivering meaningful value** so the environmental cost of using AI is justified by clear benefits, such as significant time saved, improved accuracy, or faster progress toward decarbonization.

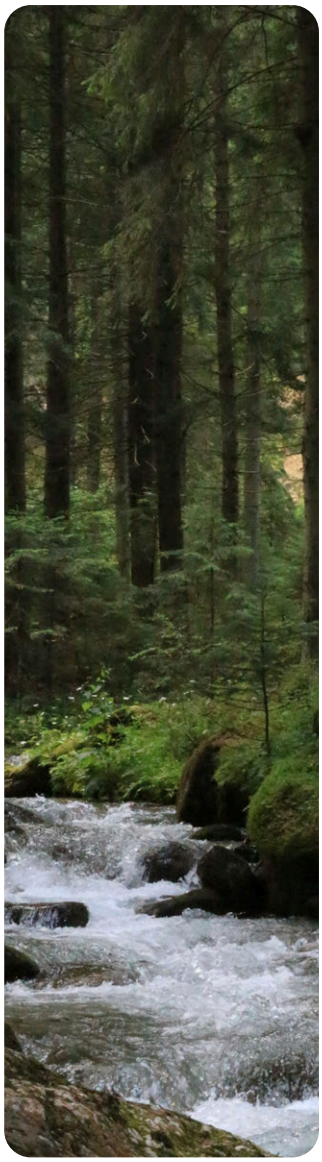
Moving forward, the question is not just how AI can make sustainability work easier, but how it can do so in ways that align with the values, priorities, and impact goals of the people leading that work.

How we're responsibly bringing AI into climate work

At Optera, we're committed to applying AI in ways that are thoughtful, meaningful, and rooted in the realities of climate work. We're focused on using AI to help sustainability teams reduce manual workloads, streamline complex processes, and unlock more time for strategic decarbonization efforts.

That means building features where every AI-driven result is transparent, auditable, and designed to support human decision-making. Our goal is to make sustainability work easier, without compromising the rigor it requires.

Want to hear more about how we think about AI's role in climate work? **Read about CEO Tim Weiss's perspective on AI's climate potential.**



About Optera

Built from decades of sustainability expertise, Optera helps corporations worldwide reduce climate risk and transition to a clean-energy future. Optera's software enables credible carbon accounting for Scope 1, 2, and 3 emissions, actionable insights and forecasts, and tools to collaborate with supply chain and downstream partners – all with a dedicated team of experts providing support and guidance. Our clients lead many of the world's most established and ambitious corporate sustainability programs, from Cisco and HPE to Saks and Target.

Learn more about Optera ➜