



Second Annual Global Sustainability Forum: AI for Climate and Nature

Chatham House Recaps
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Background

Building on the success of the inaugural Global Sustainability Forum held on the sidelines of COP28 in 2023, the second edition of the Forum brought together multi-sectoral stakeholders to delve into the nexus between AI and sustainability, focusing on its role in preserving nature and enabling climate action. Hosted in partnership with ADNOC, the New York Stock Exchange (part of Intercontinental Exchange), and the CSO Network, the Forum saw remarkable growth, with over 400 guests attending compared to just 85 in 2023. This growth underscores the increasing global recognition of the critical role that advanced technologies play in addressing climate challenges.

The CSO Network witnessed similar growth patterns, featuring over 85 regional and global entities across various sectors, including energy, retail, technology, transportation, food and beverage, and more. This expansion reflects a broader commitment from diverse industries to integrate sustainability into their core operations and strategies.

The Forum delved into a wide array of topics and themes under the AI for sustainability umbrella. These included the adoption of advanced technologies to achieve sustainability goals, leveraging big data to quantify climate risks, the role of AI in driving social impact, and the necessity of stimulating the tech start-up space for sustainability. To provide comprehensive insights into each of these themes, the Forum featured speakers from diverse sectors, including public, private, and third sectors, as well as the start-up and venture capital landscape and global non-governmental organizations. This ensured a holistic and multifaceted discussion, fostering innovative solutions and collaborative efforts across various fields.

Overall, the second edition of the Global Sustainability Forum not only highlighted the transformative potential of AI in addressing environmental challenges but also reinforced the importance of cross-sector collaboration in driving meaningful and sustainable change.

Major takeaways learned from the Forum include:

1. Integrating AI technologies across operations can significantly reduce carbon emissions, but robust regulatory frameworks are critical

Integrating AI technologies across operations has demonstrated significant potential to reduce carbon emissions by optimizing processes from the field to corporate decision-making. However, to harness this potential fully, it is crucial to establish robust regulatory frameworks. These frameworks should ensure that AI deployment is guided by ethical considerations, protecting both people and the environment. As AI becomes more embedded in daily operations, such frameworks should be vital in making wiser, more informed decisions that align with sustainability objectives.

2. *Optimizing energy usage in AI infrastructure is essential to mitigate environmental impact while enhancing sustainability outcomes*

The pivotal role of data in training AI models highlights a paradoxical relationship between the energy consumption required to support AI infrastructure and the potential for these technologies to enhance sustainability outcomes. This underscores the importance of optimizing energy usage in AI operations to balance the environmental impact. Careful management of energy systems, and integrating alternative low-carbon energy sources, is crucial in leveraging AI for sustainable development.

3. *Integrating technology and AI into the carbon credit ecosystem and energy projects is essential for effective decarbonization and achieving net zero goals*

Integrating technology and AI into the carbon credit ecosystem and energy projects is essential for effective decarbonization and achieving net zero goals. The comprehensive approach spans from accurately counting emissions to leveraging regional geological assets for substantial carbon removals. The shift from analogue to digital in carbon credit manufacturing creates a digital superhighway, enhancing transparency, integrity, and scalability. This digital transformation is also crucial for channeling vital climate finance to meet sustainability objectives.

4. *Upskilling and reskilling workforces for AI is critical for ensuring a sustainable and equitable transition*

Upskilling and reskilling workforces for AI is crucial to fully harness the potential of AI technologies and ensure a sustainable transition. As AI becomes increasingly integrated into various sectors, equipping employees with the necessary skills is essential for maintaining competitiveness and fostering innovation. Training programs focused on AI competencies can bridge the skills gap, enabling workers to adapt to evolving job requirements and new roles created by technological advancements. Additionally, a well-prepared workforce can drive ethical and effective AI implementation, promoting inclusive economic growth and minimizing the risk of job displacement. Investing in continuous learning and development is vital for a resilient and future-ready workforce in the AI-driven landscape.

5. *A strict AI governance policy is essential for ensuring that AI-driven investment decisions align with a company's mission and ethical considerations*

While big data and AI offer significant potential for making informed investment decisions, a strict AI governance policy is necessary to ensure these decisions align with the company's mission and ethical considerations. Despite the availability of vast amounts of data and off-the-shelf models, a well-defined governance framework is crucial to guide the purpose and output of AI efforts. This alignment should ensure that the implementation of AI technologies supports sustainable and ethical business practices, minimizing potential risks and maximizing benefits.

6. *Increased investment in research and development is necessary for effective technology integration in sustainability*

Investing more in research and development is crucial for advancing the integration of technology in sustainability efforts. Innovative solutions require continuous exploration and experimentation to address complex environmental challenges. Enhanced funding for R&D can drive breakthroughs in AI, renewable energy, and other sustainable technologies, making them more efficient and accessible.

7. *Engaging the wider community, academia, and youth in nature-focused initiatives through technology support is essential for sustainable development*

Engaging the wider community, academia, and youth in nature-focused initiatives is vital for fostering a collective approach to sustainability. Technology can play a significant role in this engagement by providing platforms for education, collaboration, and innovation. Encouraging academic institutions to participate in sustainability research and involving youth in practical environmental projects can inspire a new generation of eco-conscious leaders. Community-driven initiatives supported by technology can enhance awareness and participation in sustainability efforts.

8. *Top-down support from the government is crucial for developing technological advancements to achieve sustainability goals*

Government support is essential for advancing technological innovations aimed at achieving sustainability goals. Policies and funding from the top-down can create an enabling environment for research, development, and deployment of sustainable technologies. This support can drive large-scale initiatives and provide the necessary resources for technological integration. Government-led initiatives can also set standards and regulations that help ensure the ethical and effective use of technology.

9. *Leveraging subject matter experts to contribute to large data pools is essential for AI to make informed sustainability decisions.*

Incorporating insights from subject matter experts into large data pools is critical for AI to make accurate and informed sustainability decisions. Experts can provide valuable knowledge and context that enhance the quality and relevance of data used in AI models. This collaborative approach should ensure that AI-driven sustainability initiatives are well-informed and effective.

10. *The private sector plays a key role in mobilizing funding for solution development, market access, and support for startups.*

The private sector's involvement is crucial for driving innovation and sustainability through financial support and market access. By mobilizing funding, private companies can support the development of new solutions and technologies. This investment can help startups scale their operations and bring innovative products to market. Additionally, private sector engagement can facilitate partnerships and collaborations that enhance the impact of sustainability initiatives.