

# Coalition for Sustainable AI

**Launched at the Paris AI Action Summit, the Coalition for Sustainable AI is a collaborative hub to give visibility to concrete initiatives for making AI beneficial to our environmental goals.**

## **THE NEED FOR A COALITION**

Sustainable AI faces dual challenges: unlocking and leveraging its capabilities to address global ecological crises, while better understanding and mitigating its environmental footprint. **With the momentum of the AI Action Summit, a number of companies, international organizations, research institutes, and NGOs have initiated impactful efforts to address the intersection of AI and sustainability.** These efforts underscore the critical importance of ensuring that AI development and applications both align with and accelerate the reach of our global environmental objectives.

However, there is a **risk of fragmented and redundant initiatives that dilute impact and fail to ensure that the benefits of AI for the environment be deployed at scale.**

The Coalition for Sustainable AI emerges as a solution to this challenge, offering a **flexible, inclusive platform that increases visibility, fosters collaboration, avoids duplication, and amplifies the reach of existing and future initiatives.** By uniting stakeholders with a shared vision, the Coalition can accelerate progress in leveraging AI to achieve environmental goals on a global scale.

## **LEADERSHIP AND STRUCTURE**

The Coalition for Sustainable AI, **initiated by the French government in collaboration with the UN Environmental Program (UNEP) and the International Telecommunications Union (ITU)**, is a global community of stakeholders willing to contribute to initiatives for aligning AI development with global sustainability goals and fostering responsible AI that supports the ecological transition.

Coalition participants fall into two categories:

- **Members:** Companies, associations, and research institutions, that wish to be informed of initiatives related to AI & Environment to gauge potential contributions on their end or wish to give visibility to a collaborative, open and international initiative around the environmental sustainability of AI;
- **Supporters:** Governments and international organizations that can contribute to the international momentum, lead initiatives, give visibility to them and make sure the topic is present at international events (future AI summits, COPs, etc.).

**The Coalition has no-binding nor financial commitment attached to it. It is akin to a global community of stakeholders willing to discuss, share and advance initiatives for the benefit of a sustainable AI.** The Coalition aims to create a momentum to rally players around collaborative multi-stakeholder voluntary actions. It derives its coherence and momentum from the shared will of its participants to voluntarily advance sustainable AI practices and initiatives. By endorsing the “shared vision” of the Coalition for Sustainable AI (Appendix 1), members and supporters of the Coalition signal their will to take part in international conversations and initiatives advancing “Sustainable AI”.

While in the short term, the French government is building the foundations for this Coalition with the support of UNEP and ITU, a secretariat based in international organizations and country governments will keep fostering collaboration within this multistakeholder coalition, through listing international collaborative open-ended initiatives, identifying opportunities to showcase those at international gatherings and ensuring that initiatives are integrated into international discussions, including the upcoming AI Summits.

## **PURPOSE & ACTIVITIES**

The Sustainable AI Coalition will serve as:

- **A Platform for Engagement:** Identifying and connecting stakeholders committed to sustainable AI;
- **An Initiatives Hub:** Promoting open-ended, collaborative, and international initiatives aimed at advancing science, standards, and solutions for aligning AI with environmental goals.

The initiatives identified as part of the coalition are brought forward by its members and supporters and listed in an “Initiatives Hub”. **Members and supporters of the Coalition do not endorse the listed initiatives and this is clearly stated in the “Initiatives Hub”.** However, they can endorse them at their discretion by participating or providing support to the listed initiatives. The first listed initiatives are the deliverables prepared as part of the AI Action Summit, with consultations of various stakeholders (See Appendix 2). As a result, the coalition does not intend to create working groups or start initiatives of its own. Open-ended, collaborative, multi-stakeholders Initiatives displayed on the platform are started or spurred by members who can leverage the platform to find new partners, join forces with similar initiatives, or get visibility.

## **BENEFITS OF JOINING**

By endorsing the Coalition’s Shared Vision, your organization or government will:

- **Demonstrate Leadership:** Showcase your commitment to leveraging AI for environmental resilience and sustainability.
- **Join a Global Network:** Collaborate with a diverse community dedicated to embedding sustainability into AI practices.
- **Amplify Impact:** Ensure the efficiency and effectiveness of global efforts in advancing sustainable AI.

## **JOINING**

To join, prospective members or supporters can fill the online form available at <https://www.sustainableaicoalition.org> or send an email to [sustainability-ai-summit@developpement-durable.gouv.fr](mailto:sustainability-ai-summit@developpement-durable.gouv.fr). Once registered, logos of members and supporters will be featured on the Coalition’s website. By working together in this collaborative multi-stakeholder coalition, we can harness the power of AI to drive meaningful progress toward a sustainable future

## **Appendix 1: Shared vision for the Coalition for Sustainable AI**

“We, the members and supporters of the Coalition for sustainable AI, affirm our collective commitment to leverage the development and use of artificial intelligence (AI) to progress towards the UN Agenda 2030 and the Sustainable Development Goals (UN SDGs), focusing in this Coalition on those related to climate action and protection of our environment.

The transformative potential of AI in tackling the climate and environmental crisis is already unfolding. For example, AI-driven technologies can optimize energy grids, enable precision agriculture, monitor deforestation, and accelerate the transition to low carbon energy systems. These capabilities can significantly contribute to reaching net zero greenhouse gas emissions, preserving biodiversity and protecting our oceans.

At the same time, the environmental footprint of AI itself is already growing and is expected to increase. The processes associated with AI—from its hardware and its software cycle—pose significant environmental challenges. Therefore, it is imperative to ensure that AI is developed and deployed respecting the ecological limits of our planet.

To ensure AI contributes positively to environmental and climate objectives and can be deployed at scale, we:

- 1. Encourage AI Initiatives for the Planet:** We commend inclusive and collaborative efforts to harness AI for the benefit of the local and global environment, including its role in decarbonizing economies, reducing pollution, preserving biodiversity, protecting the oceans, and ensuring humanity operates within planetary boundaries.
- 2. Wish to continue our work for an AI Respectful of our Planetary Boundaries:** To this end, we understand the need to focus on the following:
  - **Standardized methods and metrics for measuring AI’s environmental impacts:** We advocate for the development of consistent methods to better assess AI’s environmental impacts, notably on energy consumption.
  - **Comprehensive Life Cycle Analysis:** AI systems should be evaluated across their entire life cycle through multi-criteria analysis. For software, this includes data collection, model development, training, deployment, and maintenance. For hardware, this involves mining and extraction practices, transportation, energy and water use, and waste management, including e-waste generation.
  - **Frameworks for Reporting and Disclosure:** Mechanisms should be established for companies to transparently report the environmental impact of their AI products and services.
  - **Prioritization of Research on Sustainable AI:** The private sector and research community should prioritize developing AI technologies with optimized algorithms to reduce computational complexity and minimize data usage.
  - **Efforts** that ensure AI infrastructure and software are built and maintained in line with global environmental commitments.
- 3. Support Collaborative Efforts:** We recognize the essential role of multi-stakeholder collaboration—bringing together governments, academia, civil society, and the private sector—to advance these objectives. By pooling our knowledge and resources, we can ensure AI becomes a force for sustainability and a cornerstone of the global response to the triple planetary crisis of climate change, biodiversity loss and pollution.

We stand united in our vision for a sustainable AI to support our collective efforts to address environmental challenges, while securing a sustainable legacy for future generations.”

## **Appendix 2: Tentative list of deliverables for the AI Action Summit on environmental sustainability of AI**

- Publication of a “position paper” on the challenges to improve the environmental performance of AI, in terms of hardware and software, benefiting from contributions from multinational companies and scientists around the world: <https://www.sustainableaicoalition.org/key-challenges/> ;
- Launch of an “AI, Datacenters and Energy” Observatory by the International Energy Agency, consulted by companies and researchers [link incoming];
- Publication of an inventory of research initiatives on the environmental impact of AI and AI for the ecological transition for international decision makers and companies, by the non-profit Climate Change AI [link incoming];
- Publication of a global approach to AI environmental sustainability standardization, co-constructed with experts from ISO, IEEE, ITU and several companies: <https://www.sustainableaicoalition.org/roadmap-of-standardization/> ;
- Inventory of AI use cases for the ecological transition, based on the various calls for projects launched as part of the Summit: <https://www.sustainableaicoalition.org/inventory-of-use-cases/> ;
- Hackathon organized by Hugging Face and Data for Good on developing the most energy-efficient models for tasks useful in the global fight against the climate crisis: <https://frugalaichallenge.org/>;
- Launch of a working group with UNEP, IPBES and various research laboratories on the use of generative AI for better accessibility of environmental knowledge in large public reports: <https://www.sustainableaicoalition.org/working-group-on-access-to-environmental-knowledge-through-gen-ai/>

## **Appendix 3: Sustainable AI Coalition – Questions & Answers**

### **What are the links between AI and sustainability at the AI Action Summit?**

The AI Action Summit aims at maximizing AI’s contribution to progress. For this we need a global mobilization to build AI systems that contribute to the Sustainable Development Goals. Depending on the goal, the mobilization may take different forms: a call to action, a community delivering and sharing science, solutions and standards, or practical commitments where consensus is more robust.

- On environmental impact (meaning climate change, energy consumption, water consumption and biodiversity), the Summit will launch a Coalition for sustainable AI which is not a new organization but rather a community of stakeholders committed to working on this topic.
- On social responsibility, the Summit will welcome the commitment of a group of companies in favor of trustworthy AI in the world of work based on existing frameworks discussed in previous international gatherings.

### **What are the main missions and ambitions of the Coalition?**

AI has a huge potential in helping to reach climate commitments and have great impact on sustainability of our societies. However, the rapid deployment of artificial intelligence technology entails growing needs, in terms of energy, water and material resources. In its current form of development, AI may exert an overall negative impact on the environment, jeopardizing the shared UN Sustainable Development Goals and the deployment at scale of AI itself, when energy or natural resources are limited.

In this context, decision-makers, engineers, investors, consumers first need to share scientific facts, data, standards, and possible solutions. Bringing together a wide range of actors (researchers, industry leaders, international decision makers, non-governmental organizations, general public...), the Coalition is a worldwide attempt to gather a global community committed to deliver and share science, solutions and standards guiding AI development and deployment in alignment with climate commitments and sustainability goals.

The Coalition embodies both a collective commitment, as expressed by the signatories of its shared vision, and a practical approach to increasing knowledge and visibility of existing and emerging international initiatives in this domain. With regards to the practical approach, the Coalition operates through two core actions:

- Platform of Engagement: A space to identify stakeholders who, by adopting the shared vision, have expressed an interest in working on initiatives addressing the environmental impact of AI and leveraging AI to advance environmental goals.
- Initiative Hub: A gateway to access various open, collaborative, multi-stakeholder international initiatives focused on these topics.

By serving as a catalyst, the Coalition amplifies the visibility of these efforts, achieves economies of scale, and improves efficiency while reducing duplication.

### **Who can join the Coalition?**

All types of organizations, including national authorities, can join the Coalition. By joining the Coalition, an organization indicates that it endorses this momentum, that it values those discussions and contributes or stands ready to contribute to them in the perspective of future international gatherings. As part of the preparation for the launch of the Coalition at the AI Action Summit, national authorities are encouraged to signal large-scale initiative that could fit into this, especially regarding investment in greener AI infrastructure.

### **Is the Coalition legally binding or entail financial commitment?**

The Coalition does not rely international law; hence it is not binding. It does however signal a strong will to participate in a global commitment towards a more sustainable AI.

### **How is it different from an International Organization?**

The topic of Sustainable AI touches upon the whole AI value chain, going even to the benefits that AI may bring to the environmental transition. Many organizations have their part to play for a more sustainable AI. This Coalition is not a new organization but a community that ensures the collaboration of existing organizations, rather than duplicating existing structures. This Coalition will be animated through a light Secretariat which will: 1) list collaborative international initiatives 2) make them visible to members (to encourage joining, avoid duplication...) 3) make the topic of sustainable AI and/or relevant initiatives visible in the international events of interest (COPs, AI Summits, etc.). Each initiative listed on the platform is independent from the Coalition.

### **What is the role of France in this Coalition?**

The French Government has helped put in place or support different deliverables as part of the preparatory work for the AI Action Summit. It is therefore with other stakeholders one of the first supporters of this Coalition.

### **What is the link with other initiatives on the environmental sustainability of the digital sector?**

In coordination with initiatives already launched on digital environmental sustainability, this Coalition is articulated with the Coalition for Digital Environmental Sustainability (CODES), led by several UN organizations. The Secretariat of this Coalition (listing of initiatives and stakeholders) will be co-organized with the French government and UN organizations in coherence with the CODES framework.

### **After the Summit, what's next for the coalition?**

Key events in the future will make sure that efforts are continued: Conference of the Parties on Climate or Biodiversity, future AI summits or other international events. Building upon this network and the different initiatives listed and in accordance with the leadership of those independent initiatives, further international actions will be envisioned at these later events.