

Artificial Intelligence for Sustainability (AI4S 2026)

Call for Contribution

Artificial Intelligence (AI) has a potential to help humans even empower them in many ways. However, AI and especially generative AI produces also some negative effects.

Sustainability is a complex topic that requires first deep understanding before applying the adequate techniques. Often solving complex problems involves using hybrid AI architecture.

Knowledge and experience are also important for “smart and green” problem solving.

Today we have to face and try to fix the environmental challenges in the growing cities, industry, agriculture, energy, water and other resource management.

Energy life cycle, optimization, and combination of renewable energies for sustainable powering and heating can be improved applying also Knowledge Management principles. Raising prices of natural gas drives growth in renewable energies. Industries like steel, glass, chemical manufacturing sites are they are looking for AI based control systems for the Grid connected micro-grids. Circular energy explores the heat generated by data centers and the waste steam for a sustainable environment as like creating fish farms or agricultural sites, or recreating cooling water, which are additional processes that demand AI-based scheduling using meteorological data. Clean energy solutions require evolution of manufacturing processes and holistic approach supported by rigorous analytics, high quality data and the recognition of infrastructure dependencies.

In order to increase sustainability in agriculture, it is vital to incorporate green technologies into farming, e.g., renewable generation. However, there are significant challenges associated with enhancing the sustainability of agriculture.

Related to technology itself the challenge is to invent and produce smarter and greener hardware, software and applications.

This workshop follows the previously organized AI for Knowledge Management (AI4KM) on IJCAI15 to 19. It has evolved to AI4KMES on IJCAI 20 and 21 and to AI4S held on ECAI23 and IJCAI25. It will focus on various ways of using AI smartly to address effectively the sustainability issues including among others 17 UN SD goals.

TOPICS

The workshop topics include (but are not limited to):

- Complex problem solving
- Neuro-symbolic AI
- Agentic AI
- Conceptual modelling

- Knowledge discovery in multimodal data
- Decision support systems
- Optimisation of various resources
- Managing the best practice
- Risk management
- Learning systems attractive for students
- Human-AI collaboration
- Sustainable Business
- Distributed knowledge
- Knowledge management applied to ecodesign
- Creativity enhancing systems
- Support of innovation and eco-innovation process
- Intelligent assistants
- Automation in renewable energy generation and distribution
- Decision modelling in agriculture, and agent-based and multi-agent systems in sustainability
- AI for agriculture and agroecology.
- Innovation in teaching AI.

List of related workshops held within the last few years

This workshop follows the previously organized AI for Knowledge Management (AI4KM) on IJCAI15 to 19. It has evolved to AI4KMES (AI for Knowledge Management, Energy and Sustainability) on IJCAI 20 and 21 and to AI4S (AI for Sustainability) held on ECAI23 in collaboration with the University of Galway. The last workshop AI4S took place on IJCAI2025 in Montreal in connection with AI for Global Security and AI for Knowledge Management working groups of IFIP Technical committee 12 Artificial intelligence.

We invite authors to submit unpublished papers to this workshop, to be presented at Oral/Poster session after acceptance. All papers must be written in English, and the workshop will consider full-length papers. Selected papers will be published in Springer AICT serie.

- Full-length papers. Page limit – 7 pages (6 + 1 for references).

Springer format <https://www.springer.com/gp/computer-science/lncs/conference-proceedingsguidelines>

- Papers should be submitted electronically as a single PDF file via the web page <https://chairingtool.com/conferences/IJCAIECAI2026/workshops?role=author>.
- Deadline May 9, 2026.

Notification

Organizing members

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