



Leveraging AI to Accelerate Sustainable Development Goals and Beyond

Eva Lerner-Lam, NAE, Dist.M.ASCE Presented at United Nations 2025 Science, Technology and Innovation Forum World Federation of Engineering Organizations Side Event

13:15-14:45 Eastern US Time

May 6, 2025





Situational Awareness

- High rates of hallucinatory results are hampering successful AI outcomes.
- AI Technology has outpaced the progress needed for Knowledge Bases to be "Verified and Validated" by domain experts [Garbage In=Garbage Out].
- Knowledge must be properly packaged into "Intelligence Tokens" for Agentic AI and Reasoning Models to be able to operate optimally (-> "3V" fuel ("Verified, Validated = Valuable").
- Application Programming Interfaces (APIs), Agent-to-Agent (A2A) Protocols, and Model Context Protocols (MCPs) must be developed by AI engineers working together with domain experts in every field.
- WITHOUT THE ABOVE, AI TOOLS WILL CONTINUE TO FAIL TO SUCCESSFULLY DELIVER ON SDG GOALS.

Mission-Critical Actions

- Domain experts in each of the United Nations' SDG areas must commit to:
 - Packaging "V&V" knowledge into AI-readable Intelligence Tokens
 - Developing APIs so the domain-specific Intelligence Tokens can be located and ingested by AI tools for use in Agentic AI and Reasoning
- The AI/Reasoning Ecosystem must compensate creators/authors of original work so that knowledge can be "Verified, Validated, and Valuable."
- Domain experts must work together with AI computer programmers to build the properly formatted Intelligence Tokens, APIs, A2A, and MCP elements of the AI/Reasoning Model Ecosystem.

APPENDIX: The Agentic Al/Reasoning Ecosystem

