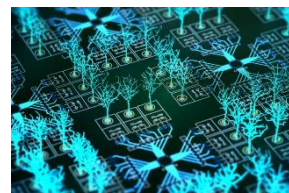


How “Smart” Systems Can Power Our Decarbonized Future A LightWorks at Arizona State University 2020 Webinar Series

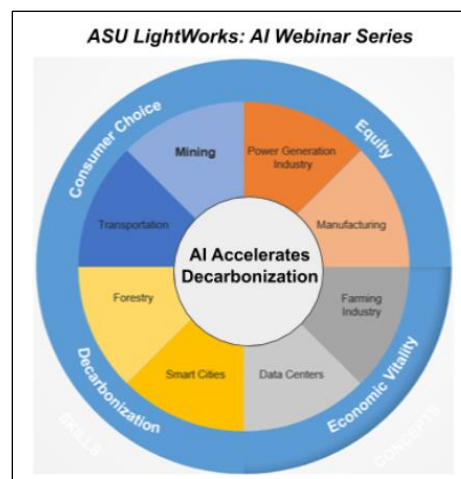
Smart Systems and Artificial Intelligence

Smart Systems enabled by block chain and powered by Artificial Intelligence (AI) can help us make better planetary stewardship decisions. Advances in machine learning and deep learning can tap the predictive powers of AI to make better data-driven models of industrial and environmental processes, improve our ability to study current and future earth system trends and lead society toward business decision that enhance environmental protection. Accordingly, advances in artificial intelligence (AI) can be one of the solutions to solving major global environmental crises--from climate change to animal endangerment to ecosystem wellbeing to ecosystem wellbeing to disease containment. Realizing the potential of AI to improve environmental sustainability and meet social challenges can be key to making progress toward the United Nations’ Sustainable Development Goal in the tight race with irreversible changes in our planet. Industries which steer major technological innovation can help by understanding the computational needs for informing sustainability issues, identifying gaps and opportunities in current AI methods, and prioritizing AI work that lead to lower impacts on the planet as well as better business practices.



The LightWorks AI and Decarbonization Webinar Series

In addition to technology development, the success of AI will depend on engaging and connecting stakeholders along industry sector supply chains. AI is unlike most other technologies in that it is often less transparent and can indirectly influence the attitudes and decision making of the producers and consumers. While challenges in methods, data privacy, trust and fairness are universal to the broader AI endeavor, these considerations take on particular urgency when associated with needs as fundamental as food, water, energy, public health, mobility, climate impacts and creating the workforce needed for an AI-powered future.



The ability to solve major world issues with AI depends on our ability to gather large data sources on these problems and many valuable data sources on environmental issues currently reside within businesses and governments. At the end of the day, good environmental stewardship is good business, and good data builds good AI.

Join [LightWorks at Arizona State University](#) and the [Security and Sustainability Forum](#) in a new webinar series on **How “Smart Systems” Can Power Our Decarbonized Future**. The series focuses on the potential for industry to use artificial intelligence to reduce GHG emissions while improving productivity, maintaining, or increasing profitability and identifying the technological, business, policy, and social challenges in its application in a decarbonized future. The series starts with a framing webinar followed by deeper dives into AI and decarbonization and other environmental and social benefits in several business sectors. The series is cohosted by [Skytop Strategies](#) and the [National Council for Science and the Environment](#).

Thursday June 4th – Webinar 1: Using Design Thinking to Employ Smart Systems to Decarbonize Our Future - Design thinking uses customer input and transdisciplinary collaboration to erase silos and reimagine archaic processes, opening opportunities to build smart system tools for decarbonization of operations and supply chains. To kick off the webinar series we pose the question to design thinking leaders from IBM and ASU - *How can design be used to transform the culture and operations of an organization to embrace AI, blockchain and other smart tools and thrive in the New Carbon Economy?* Learn the principals of design thinking, its incredible power to free your creative thinking and hear how companies can use it to transform their carbon footprint and impact on the planet. [Watch the recording here.](#)

Thursday June 25 – Webinar 2: How Companies and Municipalities are Using Digital Technologies to Meet Their Carbon Reduction Commitments - The second webinar in the series explores how to bring systems thinking into the design of programs to decarbonize industrial processes and systems. The discussion will demonstrate how to look at a company from end to end and go beyond incrementalism to scale solutions that can make a climate difference. Several case examples from Siemens' industrial and municipal customer base and from Novartis will demonstrate the approaches to use smart systems to advance decarbonization commitments in operations and supply chains and address the role of carbon credits in that commitment.

Coming in August – Webinar 3: Decarbonization Using Natural Capital Solutions - Smart systems can link agricultural stakeholders with farmers, ranchers, and foresters. Traditional agriculture negatively affects biodiversity and emits about 26% of global greenhouse gases that contribute to climate change. The agriculture ecosystem comprises land use, crop production, livestock and fisheries, and the food supply chain. In this system lies meaningful, measurable, and sustainable regenerative applications that can greatly reduce the impact of agriculture on the planet. Farming data and smart technology solutions can combine to enable customers to make choices through market signals that can drive the industry to regenerative practices that both reduce atmospheric carbon, increase resilience and biodiversity in our food systems, and help improve farming profitability. Panelist from John Deere, Land O'Lakes and the Farmers Business Network explore opportunities to lower carbon emissions, improve biodiversity, and increase the resilience of foods systems world-wide by digitally connecting it from soil to fork.

Coming in August – Webinar 4: Can I trust Alexa? What is a Trustworthy Smart System?– As AI becomes more pervasive, so too has the concern over how we can trust that it reflects human values. Misconceptions about what AI can and cannot do abound, eroding trust in the abilities they do possess. And, perhaps most significantly, a lack of clarity over which jobs AI might impact breeds an additional level of distrust in the technology. AI thought leaders universally agree that it is mission critical to educate people about where disruptions might occur and to teach the skills that will be needed to perform new jobs AI will create in the future. Developing and deploying the technology in a responsible manner requires an effort of equal proportion, which means one or even a handful of organizations working toward that end is not enough. A significant collaboration within and across academia, industry and government is required to meet the challenge and ultimately build trust among consumers and stakeholders that their best interests are truly at heart. Join Microsoft and ASU thought leaders exploring the technology – human interface and how to get the most out of that ecosystem.