Can Interacting with Computers Help People Choose Better Scenarios?

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Scenarios provide a ubiquitous and advantageous tool for energy, climate, and environmental analysis and decision-making. At their best, scenarios can effectively represent deep uncertainty; integrate over multiple domains; and enable parties with different expectation and values to expand the range of futures they consider, as well as to see the world from different points of view, and to grapple seriously with the potential implications of surprising or inconvenient futures. Traditionally, people have chosen scenarios using largely *qualitative* methods. While scenario practitioners have long assembled data to help inform the judgment and creativity of those developing scenarios and have used exemplar runs of computer simulation models to flesh out scenario logics, the fundamental steps of scenario choice and design have long rested on unaided human judgment. In recent years, however, new technology has enabled *quantitative* tools, which when used in appropriate decision support processes, can complement human judgment in the choice of scenarios. These new methods offer the promise of making scenarios even more effective in addressing complicated, difficult, and often contentious policy debates. This talk will survey this emerging field of computer-assisted scenario design and its promise to improve and expand scenarios' role in managing our energy, climate, and environmental challenges.