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The future of energy security in the 21st Century

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Energy is essential for modern life and is a critical resource that we take for granted. Economies and security of nations depend on reliable and cost-effective access. As the world transitions from conventional oil and natural gas to nuclear, renewables, and unconventional sources we are increasingly confronted by many unsettling questions. Will there be enough cheap oil and gas for preserve the standard of living in the developed world and allow the industrializing world to develop? Will renewable sources provide a significant fraction of our energy needs in the near future? Is global warming already happening as a result of our consumption of fossil fuels? If there is a resource crunch before new sources come on line, will there be conflict or global cooperation? This talk will attempt to answer these questions by examining the global oil and gas resources, geopolitics, and key science and technology issues that need to be addressed by the global community with cooperation and a sense of urgency.