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Science for Sustainable Energy: Recommendations of the 2010 BESAC Report

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In August 2010, DOE's Basic Energy Sciences Advisory Committee issued a major report on Science for Energy Technology. The report identified opportunities for science to help overcome roadblocks to progress in emerging clean energy technologies and thus to have much needed near-term impact on our energy infrastructure. The report covered diverse areas including solar electricity from photovoltaics, advanced nuclear energy, carbon sequestration, electrochemical energy storage, power grid technologies including power electronics and superconductors, solid state lighting, biofuels, building efficiency, fuel cells and wind power. In addition, mechanisms were suggested to facilitate progress, in particular, by strengthening the link between basic research and industry. The talk will review the highlights of this report.