

Role of Technology to Address the Current and Future Energy Challenges

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IEEJ 50th and APERC 20th Anniversary Joint
Symposium 2016
Hotel Chinzanso Tokyo
Tokyo, Japan
May 26-27, 2016



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Role of Technology to Address the Current and Future Energy Challenges

- ▶ Technology challenge
- ▶ View from the United States of technology and energy challenges
- ▶ Challenges for Japan in linking technology to energy futures



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Technology challenges cut across energy supply and demand

- ▶ Unleash the full demand-side potential
- ▶ Continue smart grid development linking advance information flows to all aspects of energy supply and demand
- ▶ Maintaining and expanding energy R&D
- ▶ Increase energy technology innovation



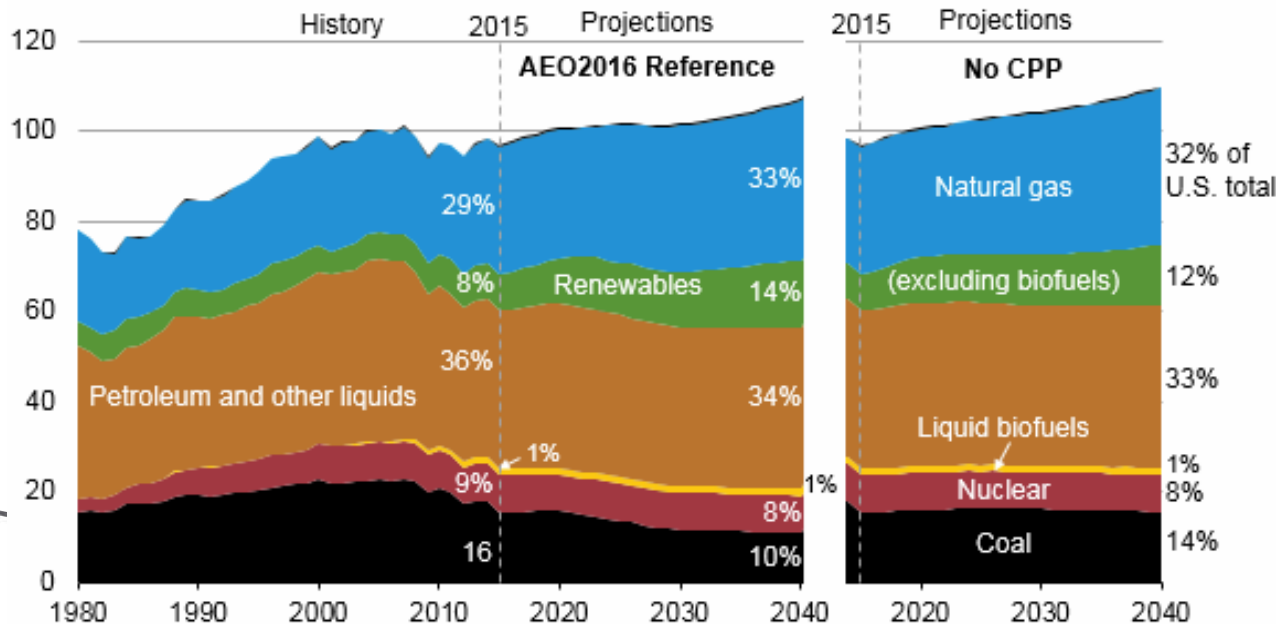
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View from the United States of technology and energy challenges

“We can’t have an energy strategy for the last century that traps us in the past. We need an energy strategy for the future – an all-of-the-above strategy for the 21st century that develops every source of American-made energy.” – President Barack Obama, March 15, 2012

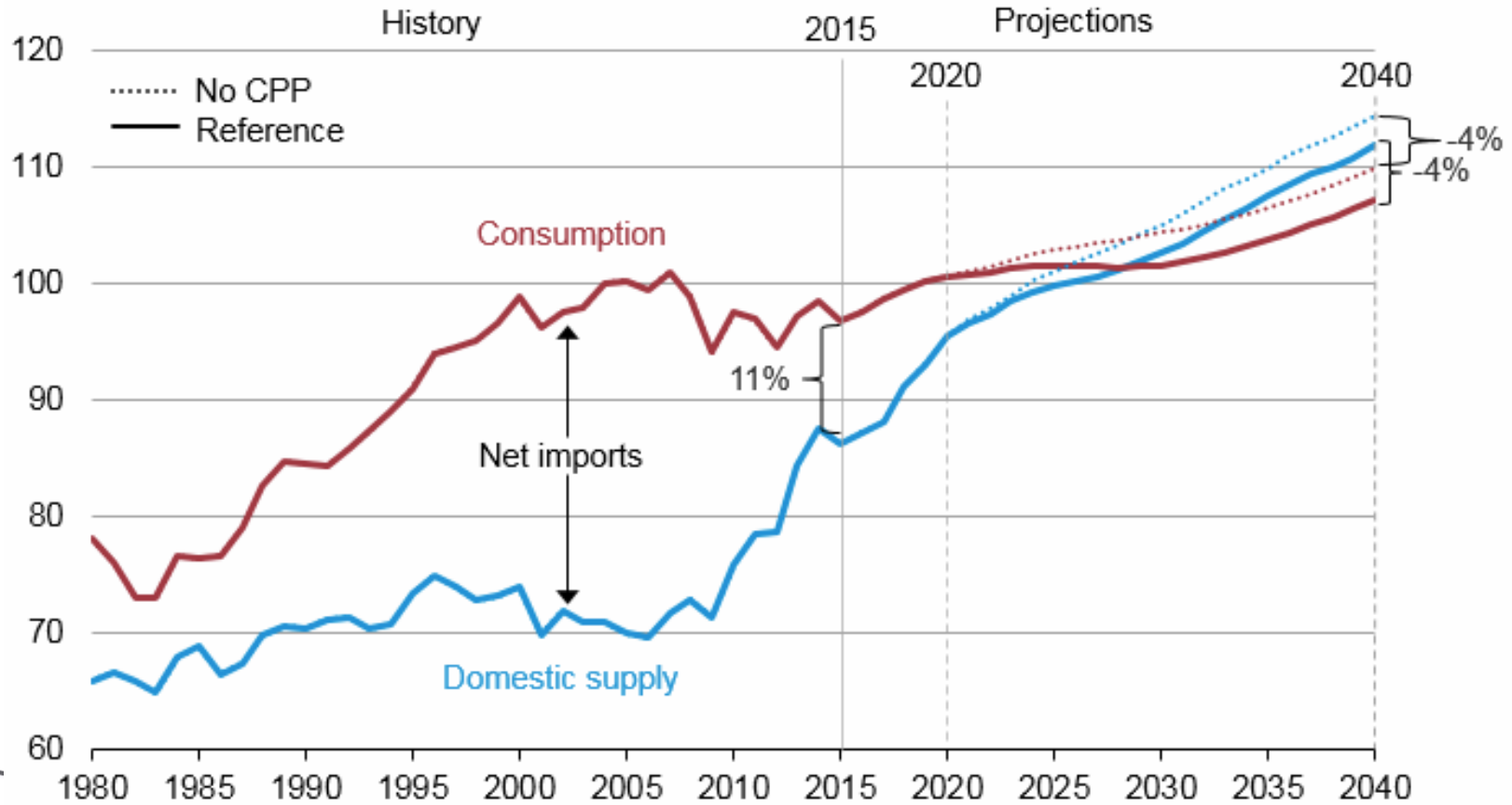
U.S. primary energy consumption
quadrillion Btu



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The U.S. is expected to become a net energy exporter

U.S. energy production and consumption quadrillion Btu



Source: EIA, Annual Energy Outlook 2016



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Challenge for Japan in linking technology to energy futures

▶ Getting the cost right

- Cost to the individual
- Cost to the firm
- Cost to the community
- Cost to the country

