

$Low\ Carbon-A\ US\ Perspective$

- The Game changed 20 January 2009
- President Obama, Secretary of Energy Steven Chu, Science Advisor John Holdren, and others
- A new emphasis on science-based analysis and policy
 - Energy and Greenhouse Gases
 - 80% reduction in CO₂ by 2050
 - Cap and Trade
 - o Clean Coal
 - Fuel efficiency standards
 - O ...

Specific Steps

Obama stimulus package

- Energy savings
- Improvement of energy efficiency (smart grid technologies)
- Development of renewable and clean alternative
- Investment in new energy and clean energy technology R&D (\$2B this year)
- Large investments in research teams

What Might US Policy Look Like?

Consider: "Lighting the Way: Toward a Sustainable Energy Future" Funded by Brazil and China, chaired by Steven Chu

CONCLUSION 1. Meeting the basic energy needs of the poorest people on this planet is a moral and social imperative that can and must be pursued in concert with sustainability objectives.

CONCLUSION 2. Concerted efforts must be made to improve energy efficiency and <u>reduce the carbon intensity of the world economy</u>.

CONCLUSION 3. <u>Technologies for capturing and sequestering carbon from fossil</u> fuels, particularly coal, can play a major role in the cost-effective <u>management of global carbon dioxide emissions.</u>

More Conclusions

- CONCLUSION 4. Competition for oil and natural gas supplies has the potential to become a source of growing geopolitical tension and economic vulnerability for many nations in the decades ahead.
- CONCLUSION 5. As a low-carbon resource, nuclear power can continue to make a significant contribution ...
- CONCLUSION 6. Renewable energy in its many forms offers immense opportunities
- CONCLUSION 7. Biofuels hold great promise for simultaneously addressing climate-change and energy-security concerns.
- CONCLUSION 8. The development of cost-effective energy storage technologies, new energy carriers, and improved transmission infrastructure could substantially reduce costs ...
- CONCLUSION 9. The S&T community—together with the general public—has a critical role...