



RENEWABLE FUELS 2009 AND BEYOND

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The New Energy Reality

Energy Security is central to our national and economic security

- Demand to increase 50% by 2030
 - 70% in developing world
- Electricity demand to increase 100%
- 1.6 billion people without electricity
- \$20 trillion of new investment by 2030 to meet rising demand
- Environmental Sustainability - over 70% of the current GHG emissions are energy related



The New Energy Reality

Energy Security is central to our national and economic security

- Access to hydrocarbon reserves is limited
 - 2/3 of world's reserves becoming inaccessible
- Rising importance of NOCs
 - Own 80% of reserves
- Lack of investment in exploration
- Significant rise in project costs
- Resource Nationalism
- Lack of qualified engineers/skilled labor
- BANANA Syndrome



Global Challenges

China

- China relies on coal for 70% of their energy needs, building approximately one coal-fired plant a week
- By 2025, they could have 300 million cars on the road, compared to 30 million today
- By 2030, energy-related CO₂ emissions from China are projected to account for 26% of the world total and 48% of total coal-related emissions worldwide

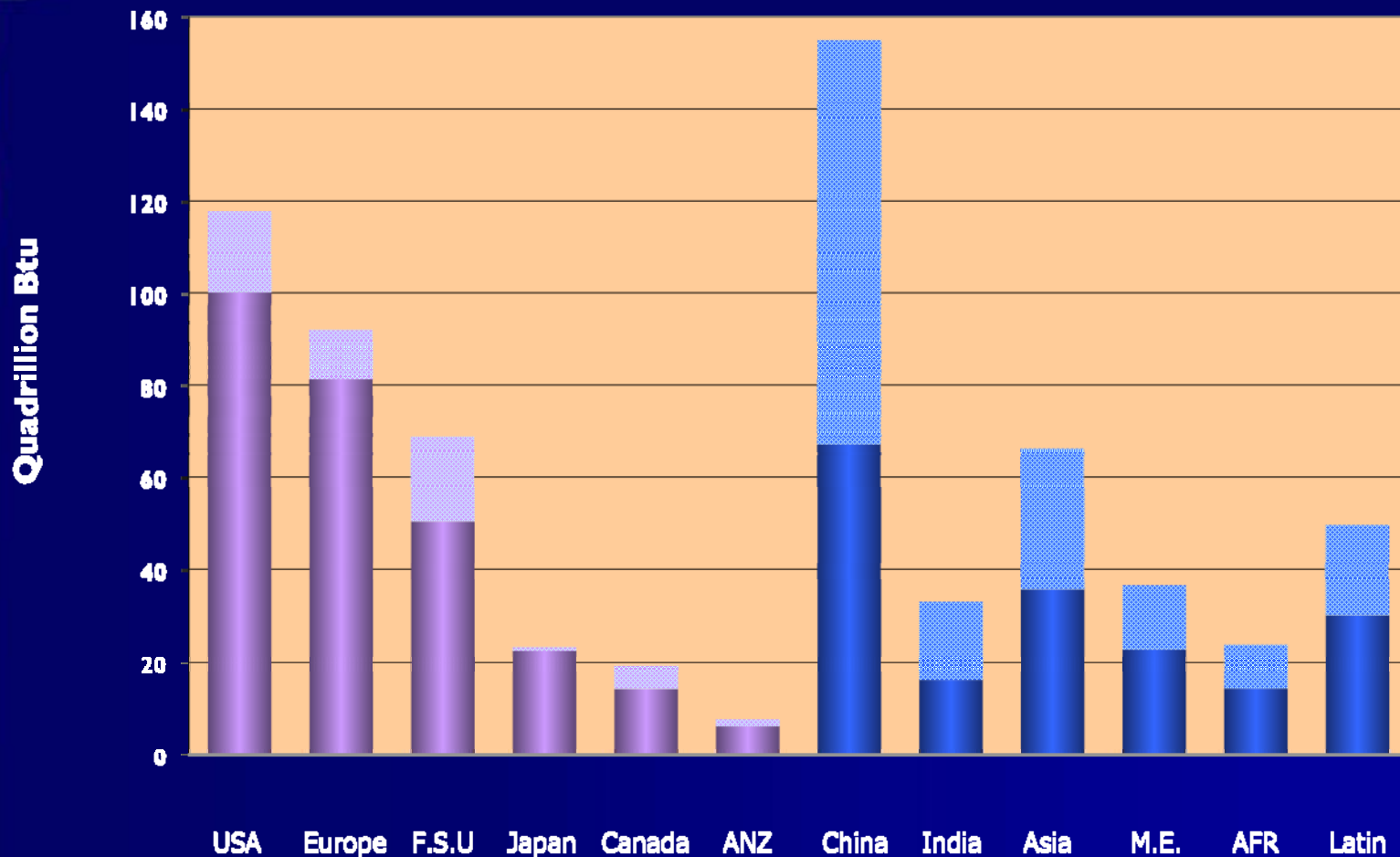
India

- Oil consumption has increased sixfold over the past 25 years



GLOBAL ENERGY DEMAND

Global Energy Demand by Region: 2005 & 2030





Market Situation

- Market fundamentals
 - Economic growth boosting non-US demand
 - OPEC production decisions
 - Low OPEC spare capacity
 - Moderating non-OPEC production –growth
 - Falling inventories
 - Refining bottlenecks
- Financial Crisis
- Geopolitical risks
- Hurricanes
- Decline of Dollar leads to investing in commodities

PRICE VOLATILITY

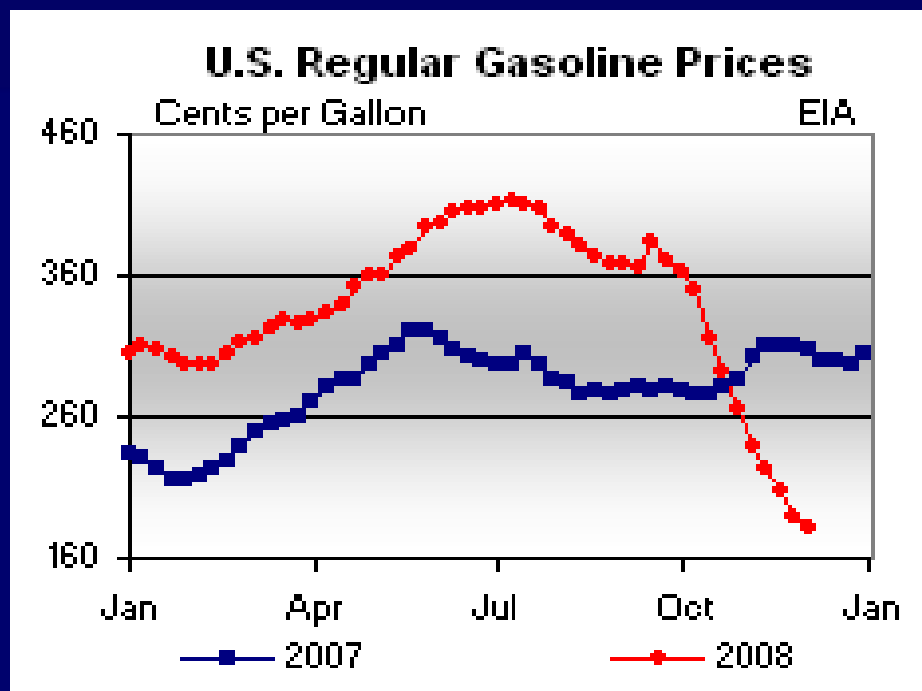


ENERGY INDEPENDENCE?

- Petroleum supplies 96% of the energy used in the transportation sector.
- Transportation sector accounts for 70% of all petroleum used in U.S.
- In 2030 EIA projects petroleum to account for 93% of energy in the transportation sector (assuming EISA RFS mandate).



Policy Conundrum



- \$4.11 per gallon gasoline (7/7/08)
- \$1.81 per gallon gasoline (12/1/08)
- 56% decrease in 5 months
- Out of sight....out of mind



Public ahead of Policymakers

- 75% support increased exploration to reduce our dependence on foreign oil; 77% of independents and 66% of Democrats (Fox News Poll)
- 73% favor more exploration (CNN)
- 68% (LA Times)
- 67% (Rasmussen)



Where should we be going on a new U.S. Energy Strategy?

“NO SILVER BULLET APPROACH”

- Increase and Diversify Supply
- Increase Suppliers
- Improve Energy Efficiency
- Accelerate Technology Development and Deployment
- Increase use of alternative and renewable sources of energy
- Improve Environmental Stewardship
- Modernize and protect critical infrastructure



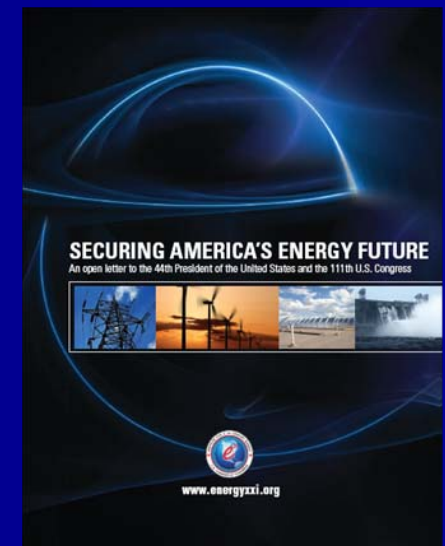
U.S. Energy Strategy-More Realism

- Use existing sources more efficiently
- Increase domestic oil and gas
- Recognize role for nuclear and clean coal
- New alternative transportation fuels that do not conflict with rising food demands
- Sustainable policy on renewables
- Exert authority to get beyond NOPE syndrome
- Invest in our technology solutions and our intellectual foundation for innovation



Open Letter

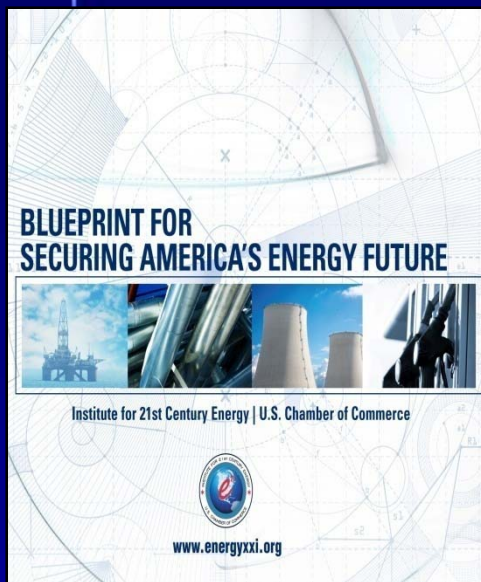
- July 16, 2008 – Release of “Open Letter” to next president and Congress on “Securing America’s Energy Future”
- Signed by bipartisan group of 27 opinion leaders, former high-ranking government officials, and respected energy experts
- Outlines 13 energy principles:
 1. Aggressively Promote Energy Efficiency
 2. Reduce the Environmental Impact of Energy Consumption and Production
 3. Invest in Climate Science to Guide Energy, Economic, and Environmental Policy
 4. Significantly Increase the Funding for RD&D of Advanced Clean Energy Technologies
 5. Immediately Expand Domestic Oil and Gas Exploration and Production
 6. Commit to and Expand Nuclear Energy Use
 7. Commit to the Use of Clean Coal
 8. Increase Renewable Sources of Electricity
 9. Transform our Transportation Sector
 10. Modernize and Protect U.S. Energy Infrastructure
 11. Address Critical Shortages of Qualified Energy Professionals
 12. Reduce Overly Burdensome Regulations and Opportunities for Frivolous Litigation
 13. Demonstrate Global Leadership on Energy Security and Climate Change





Blueprint for Securing America's Energy Future

- Builds on 13 pillars of "Open Letter"
- Provides a comprehensive energy strategy
 - Over 75 actionable recommendations - not a menu of recommendations; all the pieces have to be in place!
 - Thinking comprehensively opens up possibilities and creates opportunities
- Blueprint will be followed by a "transition plan" that we will provide the next president and Congress a detailed roadmap to a balanced energy strategy
- Four broad themes:
 - Promote greater energy efficiency
 - Increase and diversify our energy supplies
 - Modernize and protect our nation's energy infrastructure
 - Improve environmental stewardship



<http://www.energyxxi.org>



Transition Plan for Securing America's Energy Future

- 3rd of 3 in the series
- Creates the road map to enact and implement truly comprehensive, long-term energy policy
- 88 actionable recommendations with implementing authority and recommended timeline.
- This is not a menu, but a serious action plan.
- Defines the government's role as a limited enabler, not a creator of growth or energy security.
- This plan IS an economic recovery and jobs creation plan.





Road Ahead

- Huge Public Expectations for President-elect Obama
 - Public is ahead of policymakers
 - Vague Energy Policy Platforms
 - Energy is a political issue not an economic issue for Washington
 - Growing desire to capitalize on American resources, create American jobs
 - Need better informed debate
 - No silver bullets
 - There will be a robust investment in technology and innovation
 - Challenges will grow internationally - Opportunity for American Global Leadership



What to Expect from the Obama Administration

- Energy is co-#1 issue
- Bush Admin Regulation Repeals
- Energy-investment = jobs? Maybe
- CO₂ Regulation - Admin vs Congress
- "I support drilling and clean coal."