U.S. – Asia Pacific Comprehensive Energy Partnership



Deputy Assistant Secretary Julia Nesheiwat Bureau of Energy Resources Asia Pacific Business Outlook Conference April 8, 2013

Bureau of Energy Resources (ENR)

Sustainable, Affordable, Reliable, Access to Diverse Energy Supplies

Managing the Geopolitics of Energy

- > Wealth/Power/Influence
- Market Dynamics
- Energy Frontiers

Spare Capacity



Stimulate Markets for Energy Transformation

Private and Donor Finance
 Innovation & Investment
 Access to Electricity/
 Regional Interconnection
 Tariffs and Regulations
 Renewable/Efficient/Clean
 Technology



<u>Transparency</u>, <u>Governance</u>, <u>and Access to Energy</u>

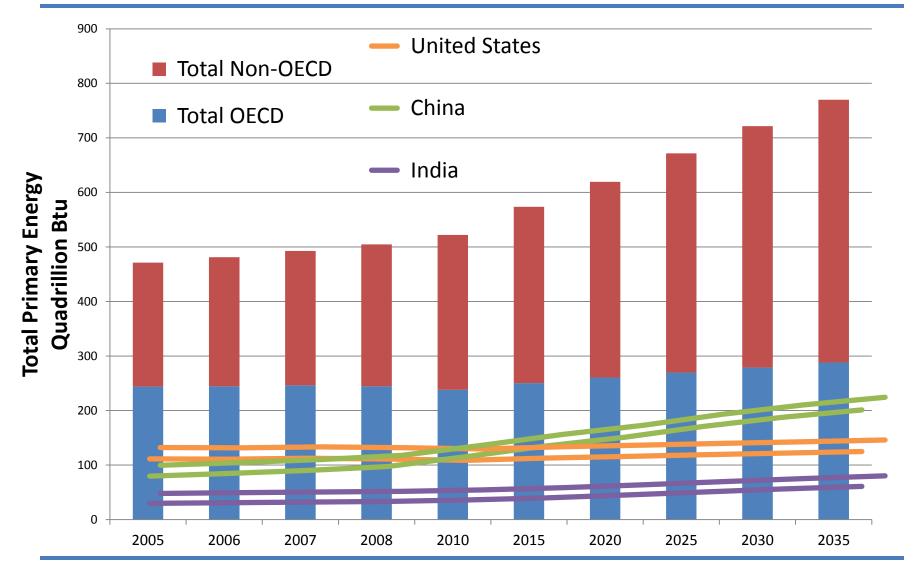
- Resources: Budgets/People
- Energy Poverty
- Markets Amid Poverty
- > Entrepreneurship/Innovation



Production and Consumption Trends

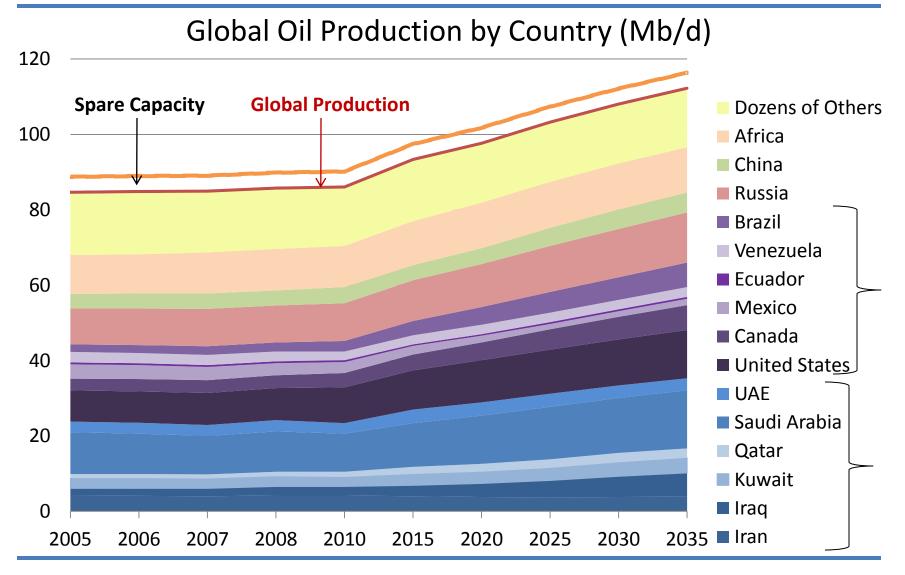


World Energy Consumption, 1990-2035



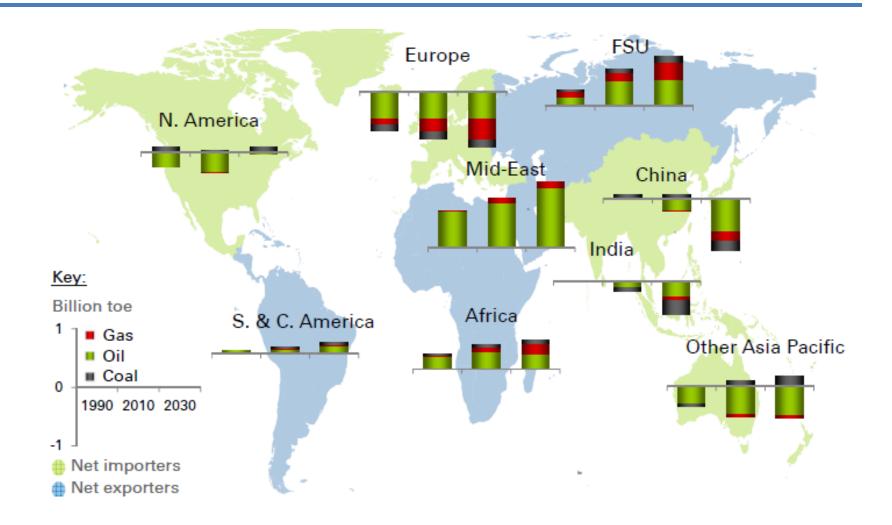
Source: U.S. Energy Information Administration, AEO 2011

Challenges to Oil Market Stability

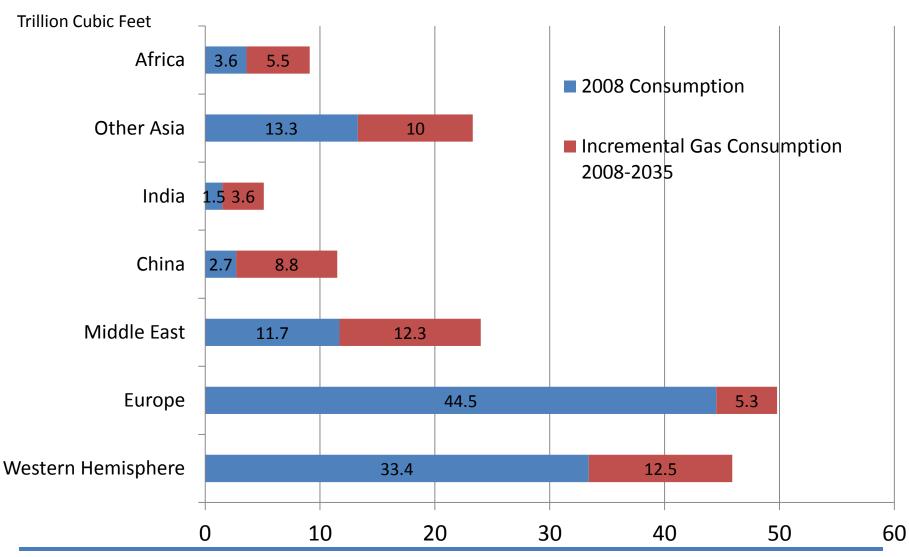


Source: EIA, IEO 2011

Regional Energy Balances in 2030



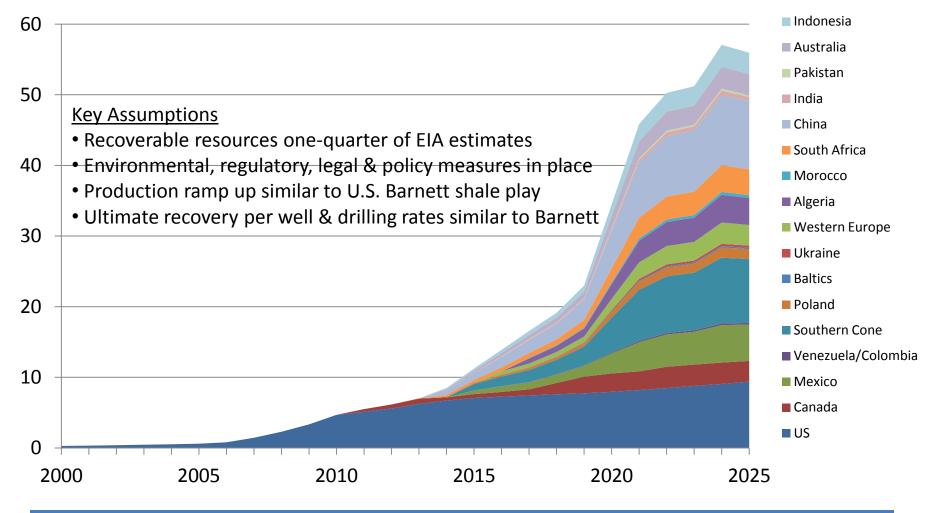
Global Natural Gas Demand and Incremental Growth



Source: U.S. Energy Information Administration, IEO 2011

Possible Impact on Global Gas Market

Trillion cubic feet



Global Gas Markets

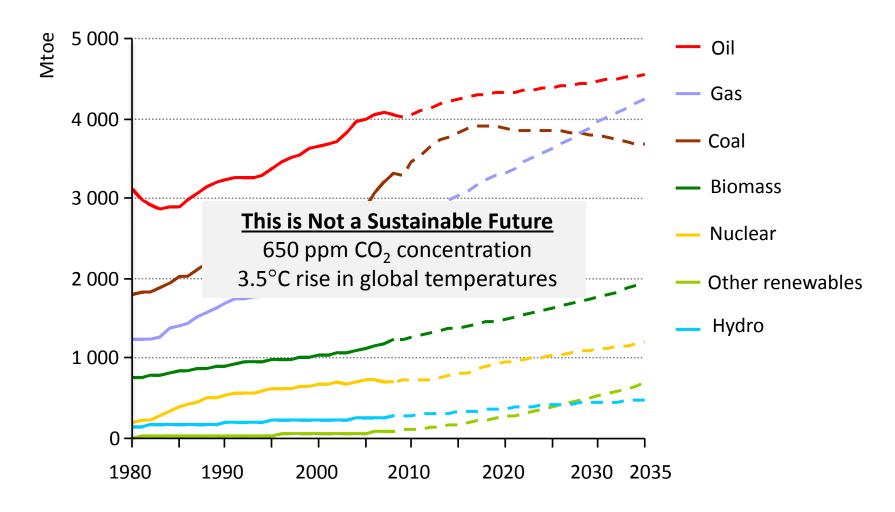
World LNG Estimated November 2012 Landed Prices (\$US/mmbtu)

	Production (bcm)	
	2008	2035
Russia	662	881
Iran	130	279
Turkmenistan	71	136
Canada	175	192
United States	575	779
Norway	102	127
Australia	45	155
Qatar	78	260
Indonesia	74	119
Nigeria	32	119
Algeria	82	168
Latin America Total	148	292



Source: IEA, FERC, media and industry estimates.

World Primary Energy Demand by Fuel in the IEA's GAS Scenario



Energy Access and Interconnection



Electricity Access

Number of people without electricity access (millions)

Latin America: 29

Asia: 628

Africa: 590

Middle East: 18

Global Power Sector Investments, Cumulative 2012-2035

32%
57%
57%
Distribution

Power: \$16.9 trillion

➢ More than 40% of global investment in the power sector goes to transmission and distribution.

Nearly two-thirds of investment is in the non-OECD to meet growing demand. New Investment in Electricity Generation, 2012-2035 (\$ billion)

OECD	Non-OECD	World
451	1,157	1,608
436	605	1,041
16	59	75
<i>903</i>	1,821	2,724
360	<i>583</i>	943
368	280	648
418	1,130	1,548
1,145	984	2,129
717	542	1,259
226	208	434
2,874	3,144	6,018
4,137	5,548	9,685
	451 436 16 903 360 368 418 1,145 717 226 2,874	4511,15743660516599031,8213605833682804181,1301,1459847175422262082,8743,144

Source: IEA, WEO 2012, New Policies Scenario

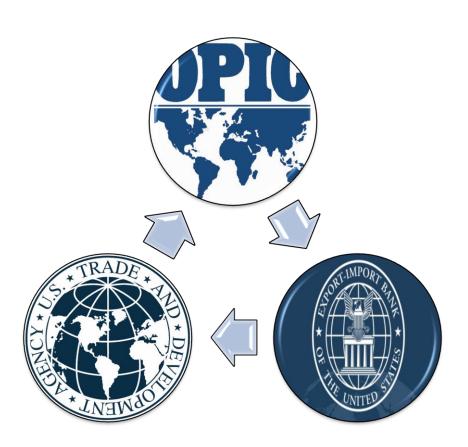
* Includes geothermal, concentrated solar, and marine

- Power Markets and Interconnectivity
- The Emerging Role of Natural Gas
- Renewable and Greener Energy
- Sustainable Development (Rural Electrification)
- Promoting and seeking deals that can benefit from U.S. Government funding

USACEP Regional Programs

- Smart Grid Reverse Trade Mission
- LMI Power Sector Integration Technical Assistance
- Smart Grid Interconnections Initiative
- Public Private Partnership Conference
- Energy Smart Communities Initiative (ESCI)
- Regional Natural Gas Event
- LMI Gas Infrastructure and Policy Assessment
- U.S.-Indonesia Unconventional Gas Technical Engagement Program (UGTEP)

Project Finance



- Overseas Private Investment Corporation (OPIC)
 - \$1 billion available in political risk insurance, project financing, investment funds
- Export-Import Bank (EX-IM)
 - \$5 billion in export credit financing
- U.S. Trade and Development Agency (USTDA)
 - International Business
 Partnership Program, Project
 Development Program
- State Department
 - Sponsored training of Foreign and Commercial Service Officers on financing mechanisms and regulations



For further information or questions please contact us at <u>energyinasia@state.gov</u>.