

THE AMERICAN CHAMBER OF COMMERCE IN SPAIN PRESENTS  
2ND EU-US BUSINESS ROUNDTABLE ON ENERGY & TECHNOLOGY

**POWERING THE GREEN REVOLUTION**  
*Our Options for the Future*

September 29-30, 2008  
Hotel Ritz  
MADRID



American Chamber  
of Commerce in Spain  
Founded in 1917

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## 2nd EU-US Business Roundtable on Energy & Technology

### **POWERING THE GREEN REVOLUTION :** **Our options for the future**

Madrid, Ritz Hotel  
September 29-30, 2008

#### **Monday, September 29**

9:00 Registration and Welcome

9:30 Inauguration

- **Jaime Malet**, Chairman, American Chamber of Commerce in Spain
- **Miguel Sebastián**, Minister of Industry, Tourism and Commerce, Spain
- **Hon. Eduardo Aguirre**, US Ambassador to Spain
- **Gustavo Suárez Pertierra**, President, Real Instituto Elcano



10:00 -11:15 **The World's Changing Energy Needs**

*The International Energy Agency forecasts that global energy consumption will surge by 50% by 2030, and that non-OECD countries will account for 75% of the rise in demand. Fossil fuels are expected to cover 83% of this increase in demand. In 2005, Asia surpassed North America as the first continent in terms of energy consumption, although consumption levels on a per capita basis in developing countries remain much lower (20 barrels of oil per capita in the US, 10 in Europe, 1 in India). By 2050 China and India are expected to import 70-80% of their energy supplies, and on current trends EU reliance on foreign energy will also jump from 50% today to 70% in 2030.*

*In the US, fossil fuels currently provide 86% of the energy supply, and due to the increase in population, by 2030 the US will consume 1/3 more energy than it does today and continue to depend on fossil fuels to meet 86% of its energy needs.*

- **Moderator: Dan O'Brien**, Senior Editor, **Economist Intelligence Unit**
- **Francis Baily**, Director for European Affairs, **General Electric**
- **Pieter Boot**, Director, Long-term Cooperation and Policy Analysis, **International Energy Agency** - **Corrado Clini**, Director General, **Ministry of the Environment, Land and Sea Protection, Italy** - **Michael Eckhart**, President, **American Council on Renewable Energy**
- **Luis Imaz Monforte**, Network Development Director, **Red Eléctrica**
- **José Luis del Valle**, Director of Strategy and Development, **Iberdrola**

11:15 -11:30

**Contact Break**



**11:30 -12:45 The End of the Oil & Gas Age? Wait a Minute ....: The True Picture on How Much Oil & Gas is Left**

*On current price and consumption, U.S. reliance on fossil fuels is projected to rise from the present level of 85% to 90% by 2020, while its use to generate electricity is forecast to rise by almost 10%. At the same time, China's and India's oil demand are supposed to double over the next 20 years.*

*Oil production has been falling since 2005 despite skyrocketing prices and soaring demand. Oil is becoming harder to find and more expensive to produce. These developments have spurred efforts by the US, the EU and other big consumers to lessen their dependency on foreign oil by investing in renewables and greater efficiency, shifting to natural gas to produce electricity and revisiting nuclear power. Will these trends be maintained? How can oil companies access and exploit existing reserves at reasonable prices?*

- **Moderator: Manel Pérez**, Deputy Director for Economics and Foreign Affairs, **La Vanguardia**
- **Robert Amsterdam**, Partner, **Amsterdam & Peroff**
- **Antonio Llardén**, President, **ENAGAS**
- **Mariano Marzo**, Professor, **Energy Resources, University of Barcelona** - **Frank Møllerop**, VP for Oil & Gas, **SAS Institute**



12:45 -14:00 **Renewable Sources of Energy: What is their real potential?**

*Renewable energies account for only 13% of the world's primary energy production. Within that amount, biomass makes up the biggest share, with hydroelectric, wind and solar supplying very small shares. How can renewables make up a bigger share of the energy mix and what sectors (industry, transport) should they power? Countries like the US, Germany, Denmark and Spain are pioneers in renewable energy. What lessons can be drawn in terms of the models for promoting renewable energy they have employed? How can the international competitiveness of renewable energies be fostered?*

- Moderator: **Ángel Laso D'Lom**, Chief Economics Editor, **ABC**
- **Juan Camilo Echeverri**, President, **Ibersolar**
- **Alfonso González-Finat**, Principal Advisor, **Directorate-General of Transport and Energy, EU Commission**
- **José María González Vélez**, President, **Spanish Association of Renewable Energy Producers (APPA)**
- **Winfried Hoffmann**, Vice President and CTO Energy and Environmental Solutions, **Applied Materials**
- **Harry Lehmann**, General Director, Environmental Planning & Sustainable Energies, **German Federal Environment Agency**
- **Xabier Viteri**, CEO, **Iberdrola Renovables**
- **Ken Westrick**, Chief Executive Officer, **3TIER**

14:15 **Lunch**

Keynote speaker: **Hon. Tim Pawlenty, Governor of the State of Minnesota**



**15:45 -17:00 Fueling the Next Generation & Technologies towards New Breakthroughs**

*What are the breakthrough technologies that will help us to promote sustainable development and what is stimulating this innovation? What are the ultra-high-efficiency energy technologies with near-zero emissions that are being developed at a fraction of current costs? Can nano-technologies, superconductors, biotechnology, wide-band gap semiconductors and other advanced materials help guide us to achieve our goal? Much research is being carried out on the viability of hydrogen fuel, nuclear fusion and bioelectricity as additional potentially exploitable sources of “clean” energy. Do they have a realistic chance of some day becoming a viable source of alternative energy?*

- **Moderator: Victor Mallet**, Madrid Chief Correspondent, **Financial Times**
- **Carlos Alejandre**, Deputy Director General for the EU, **ITER Project**
- **Sam McConnell**, Senior Vice President of Business Development, **BioEnergy LLC**  
**Frans L. Plantenga**, Technical Director, Alternative Fuel Technologies, **Albemarle**
- **Juan Antonio Rubio**, Director General, **Research Centre for Energy Environment and Technology**, **Ministry of Education and Science of Spain**



**17:00 -18:00 Energy Efficiency: The gains to be made and the implications at national and corporate levels**

*Today, our devices are unable to harvest the full potential of the energy that fuels them. For example, two decades ago a car used only 25-30% of the potential energy generated by its fuel, today it is at 30-40%. However, technological advances are allowing us to make strides in energy efficiency, and the next generation may reach 50%. What are the trends and how are technological advances helping to increase energy efficiency and sustainability? How will technological change impact the demand for and the dependence on existing energy sources? What are the implications of these trends on business and government?*

**Moderator: Commissioner, Comisión Nacional de Energía** (Spanish National Energy Commission)

**Ramon Ferran**, Director for Energy, **Schneider Electric Spain**

**Maria Luisa Huidobro**, President, **OMEL**

- **Antonio Martínez**, Director, **Energy Park, Barcelona Innovació Tecnològica Foundation** -
- **Pedro Rivero**, President, **Spanish Electrical Industry Association (UNESA)**
- **Harry Verhaar**, Senior Director, Energy and Climate Change, **Philips**

**18:00 -18:15 Contact break**



**18:15 -19:30 Assessing the Prospects for Nuclear Energy**

*The increasing demand for energy sources in general and for non-carbon-emitting ones in particular has prompted many countries that had abandoned or frozen their civilian nuclear power programs to reconsider their positions whilst traditional leaders in this sector (France, Japan) and China and India are building a large number of 3rd generation and 3rd generation + NPPs. China and India are each expected to complete 20 new reactors by 2020. Are the new NPPs delivering on their promise to be more cost-effective and cheaper to operate whilst at the same time having longer life cycles? If so, should more countries pursue this option and how? How is the issue of nuclear waste being addressed? What promise do the prototypes of 4th generation NPPs hold out for the future? How can the current shortfall in uranium mining be overcome?*

- Moderator: **Carmen Martínez Ten**, President, **Spanish Nuclear Safety Commission**
- **José Aycart**, Nuclear Energy Director, **GE-Hitachi Spain**
- **Guido Bartels**, Worldwide General Manager for Energy & Utilities, **IBM**  
**Antonio González Jiménez**, Technical Director, **Spanish Nuclear Industry Forum** -  
**Jose Emeterio Gutiérrez**, Technical Director, **Westinghouse Electric Company LLC**
- **Ana Palacio**, Senior Vice President, **Areva**

**20: 30 Cocktail followed by dinner**

Keynote Speaker: **Paula Dobriansky**, Under Secretary of State, **US Department of State**



## Tuesday, September 30th

9:15 Keynote presentation: **James F. Burgoyne**, Managing Director of Diversified Energy, Oil & Gas, **GE Energy Financial Services**

### 9:30 -11:00 **The Evolving Energy Model in the United States**

*The sharp spike in the price of gas in the past years, a new awareness about the geopolitical risks of dependence on energy supplies from certain countries and of the reality of climate change have converged and resulted in bold initiatives by government and private-sector companies. More than half of US states have adopted targets on use of renewable energies and 40% of US cities offer incentives for “green” buildings. Moreover, at the federal level, the new US Energy Bill calls for a rise in fuel efficiency standards from 25 mpg to 35 mpg and the production of 36 billion gallons of ethanol by 2022. But currently oil supplies 40%, natural gas 23%, coal 23%, nuclear energy 8% and renewables 6% of total US energy consumption. The US Energy Information Administration predicts that the US will depend on fossil fuels (oil, gas, coal) for 85% of its energy needs for several decades. And the US, with 4% of the world’s population, accounts for 25% of oil demand, currently spending \$700 billion a year to pay for imported oil. Can a combination of the development of renewable energies, exploitation of untapped domestic oil and gas reserves, construction of new NPPs and building of new energy infrastructures (refineries, pipelines) deliver a more balanced, sustainable, self-sufficient and affordable energy mix for the US? How can government and the private sector cooperate to finance this mix and the promotion of new green technologies?*

- **Moderator: Michael Maibach**, President & CEO, **European-American Business Council - Cary Bullock**, Vice President, International Development, **Greenfuel Technologies Corporation**
- **Stephen D. Eule**, Vice President for Climate and Technology, **Institute for 21st Century Energy, US Chamber of Commerce**
- **Paul Isbell**, Director, **Energy Program, Real Instituto Elcano**
- **John Lyman**, Director, Program on Energy, Environment and Economics, **Atlantic Council of the United States**
- **Ken Stewart**, Commissioner for Economic Development, **State of Georgia (US)**

11:00 -11:25 **Contact break**

11.25 -13.00 **Financing the Clean-Tech Revolution**

*New energy and clean technologies in the 1970s were mainly financed by government R+D but in the last decades corporate investors, international banks, investment houses, “green banks”, venture capitalists, project finance, debt equity and the public stock markets have become the main players in providing capital for the clean-tech revolution. Clean-energy investments jumped from 1% of all venture investing in the US in 1999 to 9% in 2006. Venture investment in clean-tech –also including water and materials- amounted to \$2.6 billion in 2006 and analysts predict VC investing will reach \$10 billion in the 2006-09 period. What are the instruments and vehicles that private-sector investors will use to continue to finance clean-tech. What is the proper balance between public- and private- sector financing for developing countries and how can governments and public multilateral development banks work best with private-sector investors so that the big emerging economies that are greatly increasing their GHG emissions will acquire and use clean technologies as soon as possible?*

- **Moderator: Miguel Angel Noceda, El País**
- **Ricardo Angel**, Senior Vice President, **GE Energy Financial Services (EFS)** Venture Capital Group's West Coast Operations
- **Jennifer Fonstad**, Managing Director, **Draper, Fisher & Jurvetson**
- **David A. Gillespie** , Partner, **Fulbright & Jaworski L.L.P.**
- **Steve Westly**, CEO, **The Westly Group**
- **Walt White**, Partner, **Grant Thornton**
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13:05 **Closing remarks**

**Thomas C. Dorr**, Under Secretary for Rural Development, **United States Department of Agriculture**

13:40 **Farewell Drink**

*Simultaneous Translation*

