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## National Capital Area Chapter

United States Association for

# Energy Economics

[www.ncac-usaee.org](http://www.ncac-usaee.org)

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# news

## *“Coal: America’s Power”*

Speaker:

**Luke Popovich**  
**Vice President-Communications**  
**National Mining Association**

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**WHEN:** 12:00 PM, March 21, 2008  
**WHERE:** Chinatown Garden  
618 H St NW  
Washington DC 20001  
Gallery Place-Chinatown Metro Stop

At our March luncheon, Luke Popovich of the National Mining Association will present his views on the future use of coal in the US and elsewhere. He will take up some of the challenges that coal faces, particularly carbon management, and how the industry expects to meet those challenges. Till now, coal has played a major role in the growth of US power generation, and Mr. Popovich will offer us insights into the extent to which that is likely to continue.

***Please join us on Friday, March 21, at 12 noon at the Chinatown Garden restaurant for this opportunity to hear about the likely future of coal in the US. We will begin networking at noon, with the lunch served promptly at 12:30 and the presentation beginning at 1 pm. The meeting will end no later than 2 pm.***

**COST:** \$20.00 for members and their guests (\$5.00 for student members) and \$25.00 for non-members and their guests. Make checks payable to NCAC-USAEE.

**STUDENT SUBSIDY ONCE AGAIN:** We continue our efforts to attract more students to our luncheons. Any Chapter member bringing a student attending for the first time pays only the student rate – \$5.

**RSVP:** By COB Wednesday, March 19, to Mark Lively, Chapter Treasurer, by phone at (301) 428-3618 or by e-mail at [mbelively@aol.com](mailto:mbelively@aol.com).

**LUNCHEON VENUE:** For at least the March luncheon, we will continue to meet at the Chinatown Garden. The Chapter Council is investigating other venues for both the rest of this year and for the more distant future as well.

**2008 MEMBERSHIP RENEWAL/REGISTRATION:** The attached sheet provides a registration form for new members for 2008 or a renewal form for existing members. Please fill out and send (with a check for \$20) to Mark Lively, Chapter Treasurer.

**FEBRUARY 2008 LUNCHEON:** Approximately 40 members attended the February luncheon at the Chinatown Garden, to hear Donald J. Gardner's presentation on "*The Outlook for Energy: A view to 2030.*" Mr. Gardner is responsible for the use of computing technology within ExxonMobil's refining and supply business.

Mr. Gardner began his presentation by stating that economic progress requires energy, and in the next 20 to 30 years the world will need 40% more energy, with the developing world consuming an ever larger share of this energy. To help meet future energy needs, ExxonMobil develops an annual Energy Outlook, used for internal strategic planning. At the lunch he presented the latest version.

The Outlook lays out basic assumptions for energy demand and supply, underpinned by economic and population growth projections as well as an expectation of significant energy efficiency gains. The projections presumably are based on price projections as well, but Mr. Gardner indicated he could not reveal those projections publicly.

The company's projections show that over the period 2005-2030, global GDP will increase by 3.0% per annum while energy intensity (i.e. total energy demand divided by total GDP) will decrease by 1.6% per annum resulting in an increase of 1.3% per annum in energy demand. The main sectors driving growth in energy demand are the transportation, power generation, and industrial sectors. By 2030, power generation will occupy the largest share of total energy demand followed by a rapidly growing transportation sector.

Although the population of (OECD) countries is just 20% of the world's population, they account for about 60% of total electricity use. In contrast, non-OECD population is huge, but has much lower per capita electricity use. Although non-OECD per capita use is not expected to reach OECD levels in this timeframe, their electricity demand will increase by about 70% per capita, and overall demand will more than double.

Total Organization for Economic Cooperation and Development (OECD) power generation demand is expected to grow only about 1% per year through 2030. Assuming a \$30/ton cost of carbon dioxide emissions over this period, lower CO<sub>2</sub> intensive fuels will play a major role. As a result, the contribution from coal will decline from 40% to 30%, while nuclear and gas will see significant gains. Renewables will grow rapidly, but their overall contribution will continue to be small. Total non-OECD power generation demand through 2030 will increase over twice as fast as in the OECD.

Among fuels, oil demand will grow at 1.2% per year, driven by transportation demand. Gas and nuclear will grow more rapidly than oil and, along with coal, will support a significant increase in power generation. Renewables will grow even more rapidly, but because they start from a small base, their share of the world market will remain relatively small.

Demand for liquids is likely to increase from 86 to 116 MBDOE by 2030. This demand will be met by a variety of sources. Growth is expected in areas like Russia, the Caspian region, and Brazil, while oil sands (e.g. Canadian) will grow rapidly, both from mining and in-situ developments. OPEC is expected to play a major role in meeting the increased demand. ExxonMobil's projections indicate that the resource base and industry capabilities are adequate; however, access and timely investments remain vital to reliable, affordable supplies.

In the OECD, CO<sub>2</sub> emissions from energy will be almost flat, as growth in energy demand is offset by a decrease in the overall carbon intensity of energy use. In the non-OECD, output of CO<sub>2</sub> will increase at a rate of almost 2% per year, reflecting strong growth in all fossil fuels. As a result, non-OECD countries will generate close to 95% of world growth in annual CO<sub>2</sub> emissions between now and 2030.

Mr. Gardner ended his presentation by stressing three points:

- Economic progress will drive energy demand significantly higher by 2030 even with substantial gains in efficiency. This growth will be concentrated in non-OECD nations, where economies are growing most rapidly.
- Oil, gas, and coal will remain indispensable to meeting demand for reliable, affordable energy for the foreseeable future. Fossil fuels will provide 80% of world energy in 2030.
- Significant reductions in global CO<sub>2</sub> emissions will require global participation, changes in energy efficiency, technology gains, and massive investment over decades. Substantial and cost-effective efforts will also need to reach broadly across the economy – from producers to consumers – and maximize the use of markets.

# 2008 MEMBERSHIP RENEWAL/REGISTRATION FORM

## National Capital Area Chapter

## U.S. Association for Energy Economics

Please check here for membership renewal.

Please check here for new membership registration.

Membership registration/renewal for the NCAC-USAEE is expected by the end of the preceding calendar year.

Please return your registration form and check to **Mark Lively** — NCAC-USAEE Treasurer at: **Utility Economic Engineers, 19012 High Point Dr., Gaithersburg, MD 20879**. Phone: 301-428-3618. Email: MbeLively@comcast.net

Full membership dues for 2008 are \$20.00 (students \$10.00). Please make checks payable to NCAC-USAEE.

*Please print clearly.*

**NAME**

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**TITLE**

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**ORGANIZATION**

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**MAILING ADDRESS \***

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**TELEPHONE NUMBER**

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**FAX NUMBER**

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**E-MAIL ADDRESS \*\***

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**Would you be interested in becoming more involved in NCAC-USAEE by serving on the Council or as an officer of the Chapter? Yes \_\_\_ No \_\_\_**

**Please list topics or speakers you would be interested in:**

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\* For DOE, please provide complete routing address.

\*\* Provide the **best e-mail address** to receive the newsletter.