

World CTL Conference coming to the Capital

The World CTL Conference, an international Coal-To-Liquids event, will be March 25-27 at the Renaissance Mayflower Hotel in Washington DC.

The agenda includes separate Technology and Project Workshops on Wednesday, followed by a day of plenary sessions concerning “Strategies & Technologies” and concluding Friday with “Environment & Projects” sessions.

The “Strategies & Technologies” sessions will open with a keynote presentation by West Virginia’s Governor Joe Manchin titled “CTL fuels and Energy Security: Political Vision and Leverage.”

A couple of industry testimonies will follow including the “Role of the Industry in Energy Security: Peabody Energy’s approach” by Peabody’s Senior Vice President - Government Relations Fred Palmer; and then “The Shenhua CTL plant: From the Political Decision to Liquid Fuels in the Pipes” from Shenhua Group President and CEO Zhang Yuzhuo.

Gov. Dave Freudenthal of Wyoming will provide the luncheon keynote address and later, a Coal and Oil Industries Panel will be chaired by Chuck McConnell and include:

- Pete Bartlett, Vice President, Chevron Business Development
- Milton Catelin, Chief Executive, World Coal Institute
- Pierce Riemer, Director General, World Petroleum Council
- Steven Winberg, Vice President, Research & Development, Consol Energy

Renowned scientists also appear on the Conference program such as Richard Boardman of the Idaho National Laboratory; Robert Williams, Senior Scientist at the Princeton University; and Charles Forsberg, Executive Director for the Nuclear Fuel Cycle at MIT.

For the entire conference schedule, as well as registration and accommodation information, visit <http://www.world-ctl2009.com/>.

Earlier this month, Serge Péreineau, World CTL 2009 Conference president, agreed to answer a few questions about the event for the U.S. Coal Review:

USCR: Since last year’s World CTL Conference, the industry has experienced some major turmoil. What’s the impact on CTL perspectives and can CTL be competitive when the price of crude oil is at its present level?

Péreineau: CTL and other alternative energies must be considered on a long term basis: the balance between supply and demand of oil will be impacted more by the ‘fundamentals’ than by this crisis which will prove to be temporary. Among these fundamentals, I would include the growing energy consumption and the importance of energy security. Alternative energies such as CTL have to be evaluated in this perspective.

USCR: Will the Obama Administration impact the de-

velopment of CTL in the U.S.?

Péreineau: I am probably not the best person to answer this. For the time being, the new Administration has not presented a detailed energy program. President Obama has insisted on the importance of energy security and sustainable development. Alternative energies can contribute to progress in both these areas, CTL among others, provided that it will be able to satisfy the regulations which will come into force.

USCR: Isn’t the present situation unfavourable to CTL?

Péreineau: If the present balance between supply and demand of crude oil, with its consequences on crude oil prices, remains the same forever, energy firms would completely reconsider their strategies and CTL would not be considered seriously anymore. However, this scenario is not considered to be the most likely. Research centers and companies see the present situation as temporary and continue to invest massively in new energy routes. Even if the present crisis is painful, its duration will be seen as short in the future compared to decades which is the time unit of the energy industry.

USCR: Do you foresee CTL taking a major share in energy mixes?

Péreineau: Probably not in terms of volume, but it could play a key role in terms of energy security, particularly in countries like the US, where oil production peaked several years ago while strategic fuel needs will remain high and coal reserves are the largest in the world.

No energy, including CTL, will become universally prominent. Depending on several variables such as availability of resources, economic development, local environment, many forms of energies will contribute to satisfy the population needs, which are not the same everywhere at every time.

Our ambition at the World CTL Conference is to bring the available CTL knowledge to the community and to offer a unique possibility to stake holders to connect with each other. This is the best way to have issues treated interactively and technologies developed both in terms of competitiveness and sustainable development.

USCR: In terms of sustainable development, CTL is quite controversial. Any thoughts?

Péreineau: If ‘controversial’ means there are supporters and opponents and that these actors interact and debate, that looks sane.

Among the different fossil energy routes developed so far, CTL is probably the first one on which everything is put on the table by the industry: competitiveness as well as environmental footprint. We are proud to contribute to this transparent communication, with 25 percent of our plenary sessions devoted to environment.

Before taking definitive positions on CTL, let us study all its aspects, including all environmental parameters.

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Everyone knows people who opposed nuclear power generation 20 years ago, or promoted first generation biofuels five years ago, and have reconsidered their positions since then.

USCR: What about the green house effect?

Périneau: This is a key subject. As coal is the most carbon-rich fossil source, its use generates the most carbon dioxide, a major greenhouse gas. CTL, as an additional step in the coal 'lifetime' between sourcing and final use, also generates CO₂ production.

The industry has clearly identified this issue and is working hard to tackle it.

Several methods are under consideration in this field, which would need too much time to be described here. Let me mention Carbon Capture and Storage (CCS), a technology where tremendous R&D efforts are being made.

Grossly speaking, greenhouse gases emitted in the lifetime of a fuel produced by CTL equipped with CCS is equivalent to the amount produced by conventional fuel (produced from crude).

An extensive study issued by the U.S. Department of Energy last January shows that, from the mine to the wheels of a car, the CO₂ emissions using a CTL diesel are lower by 5 to 12 percent than those of a conventional diesel, depending on the nature of investment in the CTL plant.

USCR: Is CCS a mature and affordable technology?

Périneau: CCS as a whole is in a development phase.

A lot of efforts are being made in reducing the costs of capture and in monitoring the behaviour of carbon dioxide underground.

I would like to point out two elements which will drastically facilitate the application of CCS to CTL in the US:

- CO₂ capture represents 75 to 80 percent of the costs of CCS in a classical application such as power production, mainly due to the separation from the nitrogen representing 80 percent of the air. The point is that, in the gaseous effluents of a CTL plant, CO₂ is already free of nitrogen and needs only a low cost purification. In other words, CO₂ is already "captured."

- CO₂ storage, less costly than capture, needs detailed investigations before CO₂ can be proven to be safely stored in a given underground layer. In the U.S., CO₂ is massively used for Enhanced Oil Recovery (EOR): for decades, oil has been "pushed out" of reservoirs by pressurized CO₂ and oil recovery rates have therefore been increased. Today, specialized companies supply CO₂ to the oil industry. They operate dedicated pipelines. Given the needs of CO₂, it is mined from underground natural reserves. Of course, these companies carefully monitor the development of CTL.

So, thanks to the CO₂ needs for EOR and the availability of 'captured CO₂' in CTL plants, CTL is an excellent opportunity for CCS, why not a "launching customer"? □

INTERNATIONAL NEWS...

Socha: India in potentially confounding sourcing issue; global impact seen

Estimates for thermal coal consumption growth by India have revealed some pretty eye-popping numbers, forcing a crucial question to the forefront: where will the supply be sourced?

Once the global economic downturn becomes a thing of the past, the demand in India will begin moving upward once again. With massive expansion plans in the works for the next several years, Indian consumers are concerned about availability of supply as coal requirements increase rapidly on the utility side.

At least one projection has India's coal requirements rising to 680 mil-

lion metric tonnes by 2012.

"They will require somewhere between 80-100 million tonnes of additional imports," James River Coal CEO Peter Socha said during a fourth quarter earnings call. "That's interesting when you look at the global picture in coal.

"That 80-100 million number is a current number. It's based on the current economy. It's not based on a May 2008 projection or anything like that. Where will it come from?"

Indonesia? Not likely. Growing domestic demand will keep Indonesian supply at home in bigger numbers in the future.

"There are a lot of credible forecasts that say their exports will remain flat to maybe up a little," Socha said.

How about Australia? The grand plans to increase coal shipments through port expansions and rail upgrades haven't progressed as well as producers would like, meaning Australian export numbers might not climb in a meaningful way for some time.

"Some of the infrastructure projects that would be expected to increase seaborne supply are being delayed," Socha said.

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