

WEC-CFFS - London, October 26, 2008



**World Coal-To-Liquids
Conference**

3-4 April 2008 • Paris, France

Serge Périneau, World CTL Conference

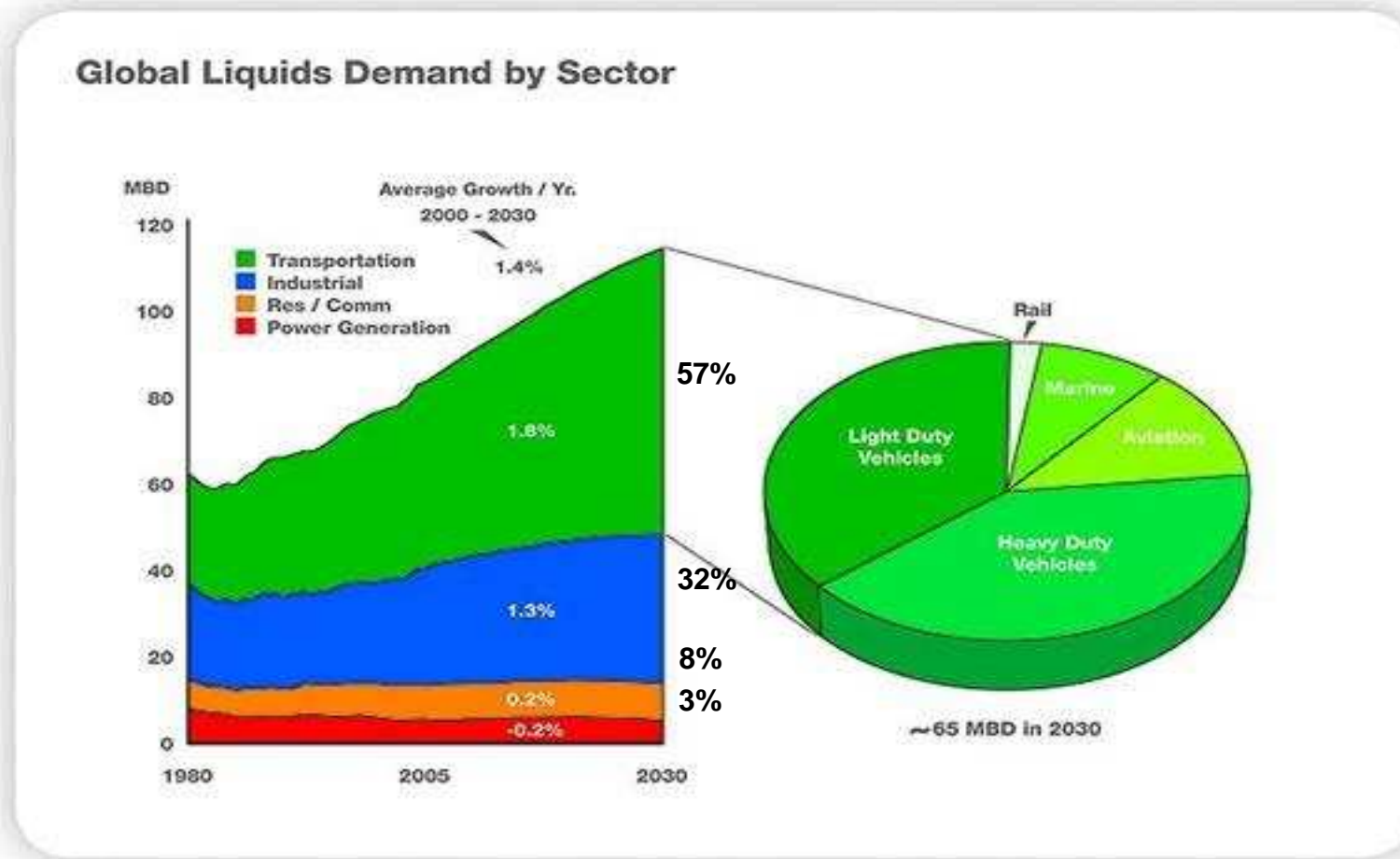
Presentation of the Conference



- **The reasons of the renewed interest for CTL**
- **The rationale and objectives of the First World CTL Conference**
- **The Program**
- **The Partners, Speakers and Chairs**
- **Conclusion**

The reasons of the renewed interest for CTL

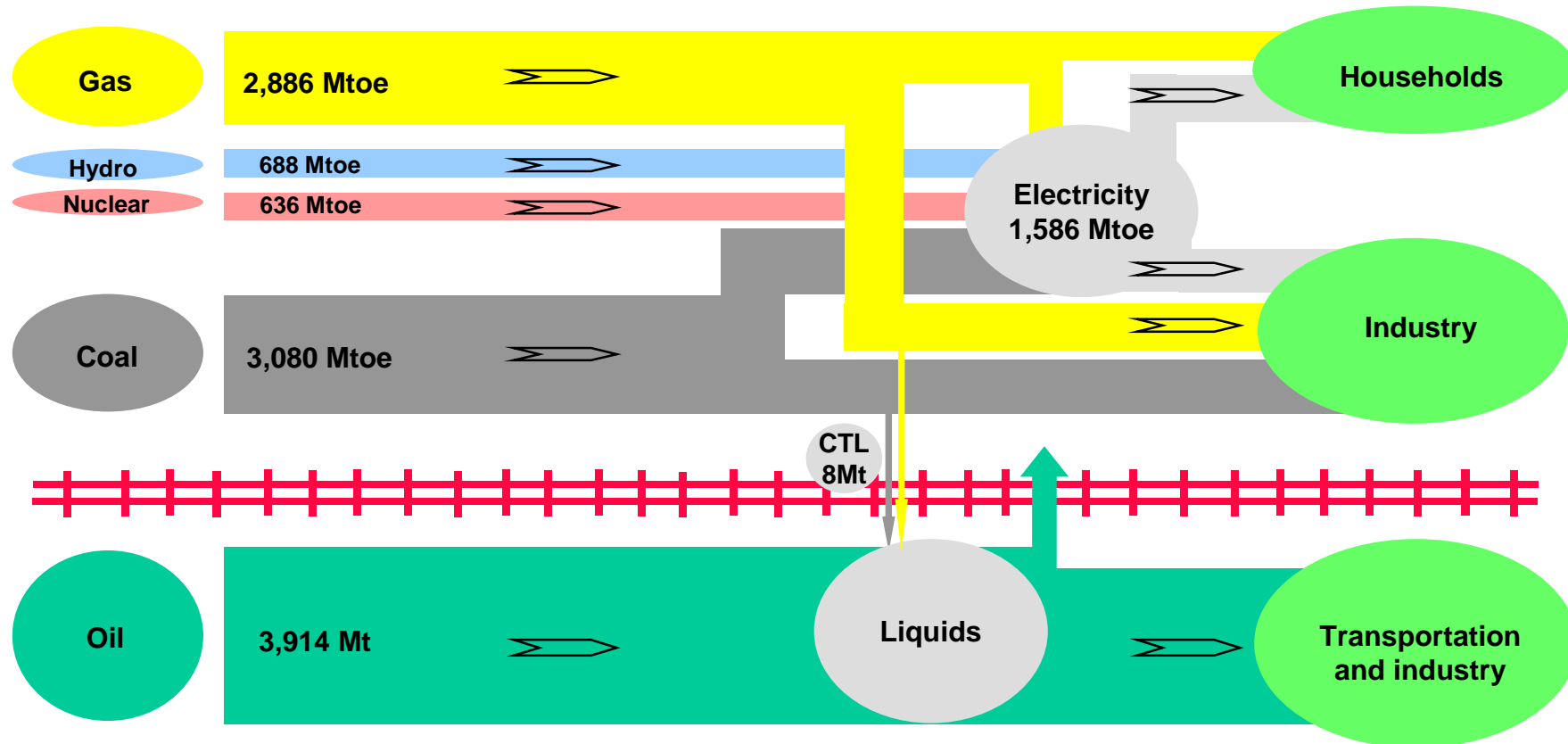
The demand for Liquids is anticipated to increase



Source: ExxonMobil Energy Outlook 2007

The reasons of the renewed interest for CTL

A barrier isolates Liquids from primary energies except oil



Source: BP Statistical Review 2007

The reasons of the renewed interest for CTL



The outlook for Liquids is full of uncertainties

- **Liquids demand:**
 - Increasing
- **Liquids source**
 - Almost only Oil
- **Oil limitations:**
 - Oil reserves: 41 years*
 - 85% of oil reserves “captive” or located in “potentially unstable” countries
 - High and volatile crude oil price (\$85-90/bbl in October, 2007).

* Source: BP Statistical Review 2007

The reasons of the renewed interest for CTL



CTL can contribute to solve the oil supply and demand equation:

- Coal is widely available (147+ years of reserves);
- Reserves are located in major politically stable countries;
- Crude oil price is high and volatile;
- Coal price is reasonable and less volatile;
- Feasibility has been proven (South Africa);
- Several governments co-operate with the industry for CTL development: USA, China, South Africa.

BUT

- CO₂ is a major issue;
- Capital expenditures to build on CTL plant amount to several billion \$;
- The price volatility of crude oil generates major economic risks.

The reasons of the renewed interest for CTL



Renewed interest and stakes give CTL more visibility

More and more communication:

- 30+ ongoing projects worldwide;
- A growing number of articles in the media;
- CTL presentations included in most Coal conferences;
- Already CTL-dedicated conferences.

However, the information is:

- often incomplete,
- sometimes wrong,
- generally overlooked concerning GHG emissions.

The rationale and objectives of the First World CTL Conference



- **Starting points:**
 - CTL stakes are outstanding;
 - Access to information should not be limited to CTL stakeholders;
 - CTL dimension is worldwide;
 - The community needs a meeting point for all parties interested in CTL.
- **These needs are not covered by existing CTL events, which are:**
 - focused on a geographical territory (USA or China);
 - generally dedicated to particular subjects (eg: technology, regulations);
 - giving no or few importance to environment issues;
 - attended only by CTL stakeholders.

The rationale and objectives of the First World CTL Conference



The Conference has a clear objective:

To provide a transversal knowledge on CTL, dealing with:

- **All subjects: strategy, economics, technology, environment;**
- **All countries;**
- **All technologies: Direct as well as Indirect route;**
- **All the audiences:**
 - Stakeholders (coal, oil, technology providers, project holders),
 - National and transnational organizations, institutions,
 - “Upstream” and “downstream” industries.

The program



The program features four half-day sessions

- 1. Medium term energy supply and demand, with emphasis on**
 - Renewed contribution of coal and CTL;
 - Associated challenges for public and business organizations.
- 2. CTL available routes and “Coal-Oil” debate**
 - Indirect and Direct routes: economics, versatility, environmental impact;
 - Assessment by the Coal and Oil industries.
- 3. Environment**
 - Greenhouse effect, Carbon Capture and Sequestration;
 - Environmental impact of CTL output, specific operations and R&D projects.
- 4. Associated industries**
 - Industrial gases, engineering, finance;
 - Coal-To-Chemicals, Biomass-To-Liquids.

The Partners, Speakers and Chairs



- **Institutional Partners**
3 leading institutions, the WEC, IFP and the WCI, and the nascent World CTL Association;
- **Advisory Board**
7 executives from industries and research centres involved in CTL;
- **Organizing Committee**
4 executives with expertise in industry, energy, sustainable development, event organization;
- **Logistics organization**
MCI, a leader in international events organization.

The Partners, Speakers and Chairs



The Advisory Board

Thomas Erickson	Associate Director for Research, Energy and Environmental Research Center, University of North Dakota, USA
Diane Hildebrandt	Director, Centre of Material and Process Synthesis, University of the Witwatersrand, South Africa
Frederick Palmer	Senior Vice President, Government Relations, Peabody Energy, USA
James Rockall	Managing Director, World LP Gas Association Vice-President, International DME Association
Patrick Sarrazin	Director, Refining & Petrochemical, IFP, France
Prem Sawhney	Senior Vice President, Reliance Industries Limited, India
Yuzhuo Zhang	Chairman, Shenhua Coal Liquefaction Corporation, China Vice President, Shenhua Group, China

The Partners, Speakers and Chairs



Major organizations participating as Speakers or Chair

As of October 26:

- **Institutions**

The WEC, the IEA, IFP, the LP Gas Association, the WCI;

- **Research centers**

COMPS - University of the Witwatersrand (South Africa), Idaho National Laboratory, IFP, the University of North Dakota;

- **Companies**

Air Liquide, Anglo American, Axens, Headwaters/HTI, Peabody Energy, Reliance Industries Ltd, Sasol, Shenhua, Siemens, Rentech.

Conclusion

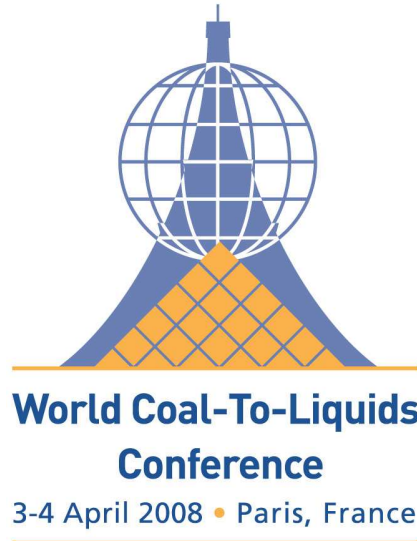


The World CTL Conference is business oriented

- Strategic stakes as the fundamental background;
- Environmental issues treated as critical;
- Economic results understood as companies' essential objectives;
- A worldwide frame, with the objective of boosting links between industries, governmental bodies and individual participants;
- A wide approach with no taboo.

... in one sense, along with WEC philosophy.

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Thank you!

www.world-CTL2008.com