



## 2011 Methanol Industry In Focus

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## Growing Momentum of Methanol Industry Development in Asia & Middle East

By **Ahmed M. Alumar**, Vice President, SABIC Asia Pacific,  
Chairman of the Board, Methanol Institute

2010 was a year of leadership renewal and consolidation for the Methanol Institute (MI).

On June 30, John Lynn retired as President/CEO of the MI after 14 years of service. On behalf of MI's Board and members, I sincerely thank John for his contribution and leadership during his tenure. Shifting MI's global HQ to Singapore from Washington has provided us with the opportunity to realign MI's manpower resources with our goals. Greg Dolan and Roland Yap were appointed as Executive Directors for Americas/Europe and Asia/Middle East respectively, reporting to the Board. New Government Affairs Managers in both regions also increased our outreach capabilities. In addition, we welcomed three new members in 2010.

MI's ongoing engagement with regulators across various jurisdictions allows us to stay ahead of the curve on a myriad of regulatory issues that affect our industry. In particular, it allows us to respond in a concerted manner to specific developments that have wide-spread impact beyond the markets that they occurred in.

Two examples stood out in 2010. Our efforts to ensure that the best available science is used in the U.S. Environmental Protection Agency's methanol health assessment led to the Agency's exceptional action to place the assessment on hold. In Asia, MI responded to China's anti-dumping investigation against methanol imports from Saudi Arabia, Malaysia, Indonesia and New Zealand with a White Paper that detailed the repercussions of imposing anti-dumping duties on imported methanol. During this investigation, MI engaged and provided input to the Bureau of Fair Trade and Bureau of Industry Injury Investigation. On December 23, 2010 the Ministry of Commerce of People's Republic of China announced its decision to return the deposit paid by importers, a move appreciated by many of our members.

In terms of market development, MI is focusing on growing the methanol fuel blending segment in Asia and the U.S. The association is also actively promoting DME use and methanol fuel cell technologies as well as looking at ways to further bio-methanol technology development.

On the product stewardship front, MI launched a suite of safe handling tools: a Safe Handling Manual, Crisis Communications Guidebook and Safe Handling Video. These are made available in multiple languages to the global methanol industry.

While market and environment forces may influence methanol costs and pricing, analysts projected methanol global consumption could exceed 60 million metric tonnes by 2015. With China continuing its blistering growth trajectory and several countries (including the U.S.) recovering from the global economic downturn the macroeconomics of the methanol industry look promising.

MI has set an aggressive agenda for 2011 which builds on our accomplishments in 2010. This is a very exciting albeit still challenging time for the global methanol industry. Your continued support for MI will give us the resources and momentum to reach new heights in 2011.

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# 2010 a Remarkable Year for Methanol

BY Mark Berggren, MMSA

2010 was another remarkable year for the methanol industry, with the world adding record amounts of new production capacity along with a record amount of demand growth. Given the vast diversity of the industry on both geographical and end use fronts, the relative lack of price volatility during the year speaks loudly for the ability of participants to work together towards the common good. In the spirit of continued industry communication, here the outlook for 2011 and beyond will be provided, utilizing analysis developed by Methanol Market Services Asia (MMSA) in its Methanol and Derivatives Analysis service (with the 2011 version available at the end of March).

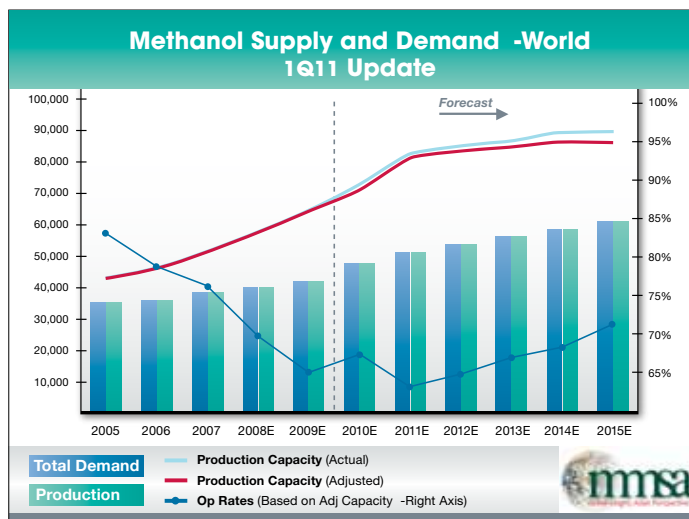
Please consider the chart below (“Methanol Supply and Demand – World”), which describes the global supply and demand outlook from 2005 through current estimates for 2015. Unquestionably, the 6 million metric ton per year jump in methanol demand in 2010 (along with associated production) is the highlight of this chart. Driving the growth has been energy use in China (with total demand of around 20.5 million metric tons), driven by the relatively low calorific value of methanol, as well as positive economic growth in China and many emerging economies. These trends are expected to continue in the next few years, albeit at a slightly lower growth rate. Coupled with slight postponement for some new capacities globally, aggregate operating rate has increased in 2010. Capacity totals here include “phantom capacity” around the world (i.e. Iran, Chile, China, Malaysia, Russia, Europe producers having feedstock and/or other operating issues during the year).

Moving forward, global methanol markets are set to steadily improve, not only demand wise, but in operational terms, reaching 61.4 million metric tons globally by 2015. In 2011, the improvements noted in 2010 are expected to continue.

In 2011, significant new capacity will issue in China and Egypt (with the expectation that recent unrest will be overcome by the end of the year), along with restarts in Canada and possibly the United States. Production in the Middle East and North Africa looks to be impacted by traditional operational problems (in the case of Iran) and potentially local political impacts (with the latter highly uncertain at the present writing). Regardless, production losses will require operations of higher cost plants at margin, keeping a firm floor under methanol prices.

On the opposite front, methanol demand is set to continue the strong growth pattern of 2010, with conditions for growth in energy remaining buoyant (essentially driven by the relative calorific cost

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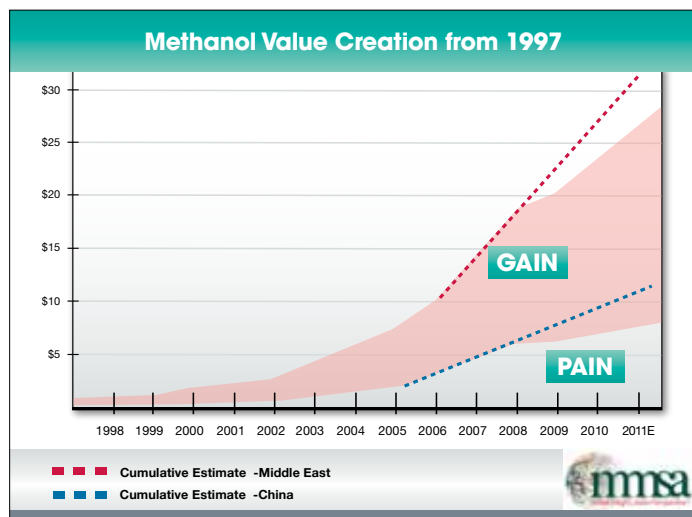
## Remarkable Year for Methanol

effectiveness of methanol and DME versus gasoline, naphtha, LPG, and diesel), as well as economies slowly on the mend in the United States and Europe. In particular, strong physical demand growth is expected in China in energy use (notably MTBE and methanol to olefins (MTO)).

Another anticipated development for 2011 deals with the lowered natural gas valuations in the United States and the implications of such in North America. In the near term, this situation is enabling start ups of mothballed facilities in Canada and on the US Gulf Coast. The lowered natural gas feedstock should start serious conversations about the use of methanol into gasoline and olefins in the region.

On the methanol pricing front, averages in 2011 are expected to gradually increase based on improvements in demand despite new capacity additions, especially as these are delayed. Prices will be constrained on the upside by derivative affordability, especially that of DME. This suggests that another “super spike” in pricing will be difficult to sustain unless crude oil prices shoot up unexpectedly. At the same time, a major crash in pricing is unsustainable as feedstock pricing (in particular, China thermal coal) will necessitate a slightly higher “floor” of methanol prices. Overall, methanol prices in 2011 are likely to be as volatile as they were in 2010 (i.e. not very) with slightly higher average margins for China producers.

The health of the methanol industry is evident. In fact, the methanol world continues to add tremendous value, as depicted in the chart below (“Methanol Value Creation from 1997”). In the Middle East and China, it is estimated that over 26 billion USD of cumulative profits will have been added in 14 years’ time in these two regions alone. Unfortunately for the Chinese, they are bearing the burden of being the “price maker” given the high cost of their operations. It is for this reason that greater caution and more sober thought will be given to major methanol production facilities in China. As such, given strong demand growth from energy use, and “balanced” prices which enable that growth, methanol’s future looks bright for the next several years.



## U.S. Congress Explores Methanol Fuel Blending



*Methanol fuel blending* represents the single largest potential for increased demand for methanol, and the country that first pioneered methanol flexible fuel vehicles, is exploring its promise once again. The Methanol Institute is assisting a coalition of supporters in the United States seeking to enact legislation pursuing widespread adoption of alcohol fuels in passenger vehicles. In the past, the Open Fuel Standard Act has been introduced into the U.S. Congress; a mandate that would require automakers to produce alcohol flexible fuel vehicles capable of running on ethanol, methanol or gasoline. In the 112th Congress – one split by one major party controlling each chamber – MI is working with both parties and trade associations representing each facet of this complex issue to find common ground and craft a bill that will include methanol fuel as a driving provision.

By working closely with the offices of the bill’s primary Congressional supporters, MI has secured broader support than was available in the past by developing more creative ways to attain our goals. The inclusion of provisions relating to fuel economy standards and infrastructure plans has helped to build a diverse array of supporters in both the House and Senate, as well as trade associations that might traditionally oppose this particular legislation. Our Washington, D.C. office is currently working to finalize the language of a bill with our lead sponsors, who will be reintroducing the legislation this spring.

In an economy that consumes roughly 375 million gallons of gasoline a day, by introducing affordable and abundant methanol into the competitive marketplace the industry stands to experience a massive expansion. And as automakers and fuel retailers adjust their businesses to incorporate the fuel of the future, ripples through the global economy will reduce dependence on oil, which can lower the cost for products of all types and help to meet the increasing demand of rising nations whose thirst for vehicles and fuel grows every year.

# Renewable Methanol

As the world focuses more heavily on the resources from which we derive our consumer products, chemicals, and fuels, new companies are tapping into innovative feedstocks to create methanol from novel sources that give new life to waste and apply technology to utilize limitless resources. These three companies in particular highlight novel solutions to meeting our growing appetite for methanol for all the products that touch our daily lives and increasingly as a renewable source of transportation fuel and energy.

## BIOMCN

The Methanol Institute's newest member, Netherlands-based BioMCN, was the first company to begin bio-methanol production on an industrial scale. Bio-methanol is highly versatile and can be used as a chemical feedstock, clean fuel, or means of producing other environmentally-friendly fuels, such as biodiesel, bio-MTBE and dimethyl ether (DME). By using glycerine, a by-product of producing biodiesel fuels, BioMCN is turning waste into a resource to meet Europe's growing demand for cleaner fuels and to offer companies a sustainable alternative for traditional methanol applications. BioMCN currently produces 200,000 metric tons of bio-methanol per year, but their newest plant boasts the capacity to produce 800,000 metric tons per year.

## CHEMREC AB

Through the use of their innovative black liquor gasification technology, Sweden-based Chemrec AB helps pulp and paper mills turn their waste into clean bio-methanol. Chemrec's technology transforms these mills into biorefineries capable of producing methanol-based fuels and additives from the black liquor feedstock, which is generally just burnt off otherwise in waste-to-energy systems. Chemrec currently has plants in New Bern, North Carolina and Pitea, Sweden, and is also looking into possible expansion into the state of Georgia. Swedish automaker Volvo has partnered with BioMCN in using DME in a pilot project for long haul trucks, which benefit greatly from the energy efficiency inherent in such fuels.

## CARBON RECYCLING INTERNATIONAL

Carbon Recycling International (CRI) was founded in 2006 in Reykjavik, Iceland to develop and market a process for producing fuel from industrial carbon dioxide (CO<sub>2</sub>) emissions. In 2007 the company opened a pilot plant in Reykjavik, Iceland and demonstrated the feasibility of its Emissions-to-Liquid (ETL) fuel production process. In 2010, the company broke ground for the world's first commercial scale CO<sub>2</sub> to liquid fuel production facility near Grindavik, Iceland, with capacity of 5 million liters/year at full scale. The plant will start supplying renewable methanol to the domestic market in spring 2011, using electricity and CO<sub>2</sub> emissions from geothermal power plants to produce renewable fuels for cars. CRI is also expanding low cost production of renewable methanol for transportation with research grant under the Icelandic government.

# Methanol is Key to Energy Security

By Gal Luft, Executive Director,  
Institute for the Analysis of Global Security

The turmoil in the Middle East is a stern reminder of the primary vulnerability of the world economy today: oil's virtual monopoly over transportation fuel. Spikes in oil prices are triggers of economic recessions, and as the world's economy is emerging from the recent recession, rising oil prices threaten to roll back the growth that has been achieved. Even with the backdrop of soaring oil prices, most of the millions of new cars that annually roll onto the road can run on nothing but petroleum. This practice becomes even more questionable considering the natural gas glut the world is currently experiencing. If oil is so expensive and gas is so cheap why not use gas to replace oil?



A recent MIT report about the future of natural gas concluded that “methanol is the liquid fuel that is most efficiently and inexpensively produced from natural gas.” But in order to open the door for methanol - whether made from natural gas, coal, biomass or even carbon dioxide - to compete against gasoline at the pump most new cars with internal combustion engines must be flex fuel vehicles, cars that can run on any blend of gasoline and alcohol fuel.

The methanol industry has shown strong growth in recent years. If cars become platforms on which fuels can compete, it could grow significantly more, evolving from a chemical industry to a fuel and chemical industry.

To bring methanol to our fuel stations the first key step is to make flex fuel vehicles widespread. Once that happens there will be a business case to retrofit pumps and build new methanol production plants. Several regulatory hurdles must be overcome and a good dose of public education is needed to familiarize motorists with the economic, energy security, and environmental benefits of the methanol option. For most people methanol is still ethanol with a typo. It is up to the methanol industry and its allies to educate policymakers about this game changing fuel.

In the U.S. national security groups and Congressional leaders are gradually becoming aware of the potential of methanol blending and the impressive expansion of the Chinese methanol industry. A bill called the Open Fuel Standard requiring new internal combustion cars sold in the U.S. to be gasoline-ethanol-methanol flex fuel is pending before the U.S. Congress. Passing the Open Fuel Standard would enable methanol to compete against petroleum fuels and help shield the economy from the devastating oil shocks that no doubt will come.



## Methanol & MTBE on List of Chemicals for Endocrine Disruptor Screening

*On November 17, 2010 the U.S. Environmental Protection Agency issued a Federal Register notice with a list of 134 chemicals targeted for testing orders under the Endocrine Disruptor Screening Program (EDSP), including methanol and MTBE.*

The EDSP is a controversial program intended to screen chemicals for their potential to interact with the human endocrine system, or hormone system. MI submitted comments in January demonstrating that methanol does not meet the criteria for testing, although the public notice was structured in such a way to not consider comments seeking to remove individual chemicals from the list. It is expected that test orders could be sent to methanol producers, processors and users between now and end of the current fiscal year in September. MI legal consulting firm Crowell & Moring, reviewed EPA's Inventory Update Reporting database, with most recent data for 2006 identifying 50 companies reporting the manufacture, processing and use of methanol. This database would likely form the listing of companies that will receive testing orders. MI is now working with Crowell & Moring to explore the steps necessary to form a methanol testing consortium. The EDSP program allows companies to join in testing consortiums to jointly fund the testing, which is expected to cost between \$500,000 and \$1 million per chemical.

“...to compete against gasoline at the pump most new cars with internal combustion engines must be flex fuel vehicles, cars that can run on any blend of gasoline and alcohol fuel”.

*Below: MI's Greg Dolan behind wheel of Lotus Exige tri-flex-fuel demonstrator vehicle*





# Anti-dumping Investigation in China: Protecting Interests of our Members

By Janet Chang, Government Affairs Manager (Asia & Middle East), Methanol Institute

An anti-dumping investigation against the imports of methanol originating in Saudi Arabia, Malaysia, Indonesia, and New Zealand was first initiated on June 24, 2009 by the Ministry of Commerce of the People's Republic of China (MOFCOM). The petition was filed by 14 PRC domestic producers and supported by an additional 19. These 33 domestic producers represent more than 50% of China's domestic methanol production capacity. The Methanol Institute, as the voice of the global methanol industry, expressed concern about the potential impact of the investigation on the development and health of both the global methanol industry and of downstream methanol consumers in China. In order to provide the MOFCOM with accurate information about the methanol industry and potential ramifications of any anti-dumping duties, MI registered to participate formally in the MOFCOM investigation.

Chinese anti-dumping investigations involve parallel investigations by two bureaus within the MOFCOM. The Bureau of Fair Trade (BOFT) investigates whether individual companies from subject countries have sold products at less than normal value to China ("dumping"), while the Bureau of Industry Injury Investigation (BIII) determines whether the imports from all countries under investigation have threatened or caused material injury to the Chinese domestic industry. In general, the Chinese authorities release their preliminary determination between 6 to 12 months after the initiation of the investigation, and release a final determination in approximately 18 months after the initiation of the investigation.

In consultation with members and our legal counsels, MI submitted a White Paper to the MOFCOM on December 14, 2009, highlighting that the imposition of antidumping duties on imported methanol might affect Chinese policies concerning public safety, workplace safety, industrial development, environmental protection, and China's longer term trade, economic and public interests. MOFCOM's senior officials appreciated MI's White

Paper. Senior officials of both the Bureau of Fair Trade (BOFT) and Bureau of Industry Injury Investigation (BIII) also held several meetings with MI staff in 2010 to better understand our arguments. As many downstream Chinese enterprises do not have a platform to voice their concerns, MI also took the initiative to conduct several dialogue sessions with over 45 downstream partners in various Chinese provinces. Some of the downstream enterprises subsequently expressed their concerns either directly or indirectly to MOFCOM. With these efforts, MOFCOM could consider the implications of their decisions for both the domestic producers and downstream enterprises. Throughout the period of investigation, MI also submitted relevant rebuttals to protect the interests of members and address the concerns of domestic producers.

MI members were delighted with the outcome of the final preliminary determination released on December 23, 2010, when MOFCOM announced that considering the special circumstance of the anti-dumping case, it had decided not to impose the anti-dumping measures temporarily, and will decide the timing of measures according to the future situations. Further, MOFCOM's decision to return the deposit paid by importers after the initial preliminary determination was most welcome by our affected members. Going forward, MI looks forward to working with Chinese authorities, relevant associations, members and domestic producers to further boost methanol industry development.



# The Emergence of DME as a Global Energy Source

By Christopher Kidder, Executive Director,  
International DME Association

A surge of interest in dimethyl ether (DME) this year appears to reflect a growing appreciation of its efficiency, flexibility, and value as an ultra-clean low carbon fuel option. Following on the steady growth of DME capacity and use in China as a bottled fuel (blended with LPG) for use in home cooking and heating, interest is appearing in new regions and for new markets. Driving the interest are a number of related issues, including a desire for energy independence, the strategic use of available resources, regulatory incentives or mandates for low carbon and renewable fuels, and good economics. In addition, recent developments connected with the production of BioDME (DME produced via gasification of biomass) have created interest in the possibilities that this channel presents for industries such as paper and pulp.

The DME industry has important connections and mutual interests with both the methanol and the LPG industries, and a strategic partnership has been in place for several years between the IDA and those industries' international representative bodies. New collaboration in 2011 and 2012 is being discussed with both the Methanol Institute and the World LP Gas Association and some of their members on a number of initiatives involving health & safety, regulations & standards, and research & development.

As DME can be derived from many sources, including renewable materials (biomass, waste and agricultural products) and fossil fuels (natural gas and coal), the projects, initiatives and investment cover a wide range of channels.

In Egypt, Methanex and its partners are moving ahead with their EDME project in Alexandria, which will monetize abundant Egyptian natural gas with an initial production of 200,000 KT/Y of DME. Egypt is a significant importer of LPG, and the DME produced will be blended into the domestic LPG supply for use in homes, thus decreasing the country's reliance on LPG imports. New DME projects are currently underway, in planning or announced in India, Indonesia, Korea, Uzbekistan, and Vietnam. A number of projects are being studied in Australia, for both fossil-derived (from brown coal) and BioDME.

Receiving much attention now is the European BioDME Project – a €28 million project aimed at demonstrating a synthetic biofuel produced from 100% renewable feedstock at industrial scale for use



Stockholm BioDME Filling Station Inauguration

in road transport, covering the full chain from production of fuel from biomass to its utilization in vehicles. The project is funded by the European Union (EU) the Swedish Energy Agency, and a consortium of companies each contributing their own expertise to the project: Swedish heavy vehicle and engine manufacturer Volvo (vehicle procurement); Danish catalyst specialist Haldor Topsøe (synthesis technology); oil and gas giant Total (fuel and lube oil specification, field testing); Swedish refiner Preem (distribution); biofuels producer Chemrec (production and distribution); fuel injection specialist Delphi (fuel injection equipment), and the ETC (Energy Technical Centre) renewable fuel research center (experiments and sampling).

EU estimates indicate that by 2030 BioDME has the potential to replace more than 50% of the diesel fuel currently used for heavy road transport. DME can be produced from natural gas and from a variety of biomass sources, in which case it is known as BioDME. The European BioDME Project involves the development of DME fuel from black liquor, a by-product of the forestry industry. DME produced from black liquor has the highest land use efficiency of any biofuel, when the entire chain is taken into account – five times more efficient than biodiesel in terms of the transport kilometers obtained from each hectare of land used for the raw material cultivation. In addition, vehicles running on BioDME have significantly lower carbon dioxide emissions compared with emissions from vehicles running on fossil diesel.

Looking ahead to the successful completion of the BioDME project, a large new investment grant was approved in January for demonstration at industrial scale of the Chemrec technology for production of BioDME and Biomethanol in a new plant, to be built at the Domsjö Fabriker biorefinery in Örnsköldsvik, Sweden. The Domsjö plant will have the capacity to supply more than 2000 heavy trucks with fuel.



## U.S. EPA Places Hold on Draft Methanol Health Assessment

On January 12, 2010, the U.S. Environmental Protection Agency released for public comment the draft methanol health assessment under the Integrated Risk Information System (IRIS). IRIS is a database that contains potential adverse human health effects information that may result from chronic (or lifetime) exposure to specific chemicals. Chemical assessments in the IRIS database are used by the EPA and other agencies in establishing chemical regulations. The draft methanol report finds that methanol fulfills the criteria to be described as “likely to be a human carcinogen.” This cancer classification is based largely on a study by the Ramazzini Foundation of Italy. MI submitted detailed written comments to the EPA on March 15, 2010, urging the Agency to change its proposed cancer classification to “Inadequate information to assess carcinogenic potential.”

On June 15, 2010, the EPA announced that it was putting the methanol assessment – along with three others – on hold after a report from the National Toxicology Program (NTP) raised significant concerns regarding the validity of the methanol study by the Ramazzini Foundation. A team of pathologists from the NTP visited the Ramazzini “castle” in April 2010, where they reviewed 20% of the slides from the high exposure male rats and 20% of the control male rats. The NTP released a 5-page report citing only “occasional” diagnosis of cancer, and at a “lower frequency than the original findings.” On June 30, 2010 MI submitted a Freedom of Information Act Requests (FOIA) to National Institute of

Environmental Health Sciences, which manages the NTP, requesting access to all records relating to the NTP visit. In December 2010 MI received a partial response to our FOIA request, with a CD-ROM containing the individual animal Slide Review Work Sheets from the visit.

The NTP data was reviewed by MI consulting toxicologist Dr. George Cruzan, who found that the NTP 5-page public summary did not contain crucial details of the partial pathology review. The NTP pathologists did not agree with Ramazzini on most findings of cancer, and the NTP analysis does not support a conclusion of increased cancers from methanol exposure. For example, the original Ramazzini paper reporting finding that 38/100 high dose male rats had tumors and just 24/100 for the control males. The NTP pathologists found that 9/100 of the high dose males and 13/100 of the control had cancerous tumors. Significantly, the NTP reviewers found only one case of lymphoma in lungs only, where the Ramazzini researchers reporting finding 23 cases. MI continues to press NIEHS for additional records of the 2010 visit.

The NTP is planning to send a second team to Italy to hold a full Pathology Working Group review (PWG) of the Ramazzini studies, and MI has urged both the EPA and NTP to ensure that the protocol for the PWG be made available publicly for comment, along with the list of researchers. MI has been told by top officials from both agencies that they “share our concerns” with the Ramazzini studies, and want to make sure that the data is scientifically defensible before it is used for health assessment purposes.

Working with legal consulting firm Crowell & Moring, MI has held series of meetings with key Congressional staff to discuss our concerns with the methanol IRIS assessment. The focus has been on Republicans in both the House and Senate, with meetings being held with key staff from Senate Environment and Public Works Committee, House Energy and Commerce Committee and the House Science Committee.

## Telecom Industry Backs Up with Methanol

*IdaTech designs and manufactures backup power fuel cell systems for telecommunication applications.* IdaTech's ElectraGen fuel cell systems provide extended run backup power to mobile network sites when there is loss of electrical power due to severe weather conditions or limited grid capacity.

Typical backup power fuel cell systems use pressurized bottled hydrogen which powers the fuel cell stack. IdaTech's fuel cell system is unique in that it includes a fuel processor and is fueled by liquid fuel, methanol-water. A fuel processor uses a liquid fuel to make hydrogen on site and on demand. Fuel processing is the act of converting hydrogen rich fuel, methanol-water, into pure hydrogen gas as needed, then feeding the pure hydrogen directly into the fuel cell stack. Fuel cell systems with liquid fuel processors can provide backup power for days instead of hours when compared to direct hydrogen fueled systems.

IdaTech is on the path of commercializing backup power fuel cells in the telecom industry. Over 800 ElectraGen fuel cells have been sold in telecom networks worldwide.

During 2009, IdaTech significantly expanded its reach into its target markets and increased its distributor network to 35 worldwide. IdaTech believes that its selective use of distribution partners leverages its ability to cost effectively expand globally. Geographically, IdaTech is targeting Asia, Africa, and the Americas. To date, IdaTech has achieved certification for its products with 25 telecommunications companies, including five of the top 10 telecommunications companies worldwide by revenue. This strategy of seeding the market is paying off.

During 2009, IdaTech sold and shipped 445 systems. This was a record sales volume growth of over five times that shipped the previous year. All of these systems were in the targeted critical power backup application in the telecommunications market. Sales to customers for commercial deployments of IdaTech's systems represented almost all of the system sales in the year, demonstrating the increasing commercialization of IdaTech's fuel cell systems.

The financial results for 2010 have not yet been announced, but the number of fuel cell sales is still going strong.



## MI's Standing Member Committees

### ★ **Legislative/Regulatory and Public Affairs:** Directs all international public policy advocacy.

- Work with the U.S. Environmental Protection Agency to encourage a fair and balanced review of methanol under the Integrated Risk Information System.
- Support global legislative and regulatory initiatives impacting methanol derivatives (MTBE, formaldehyde, biodiesel, etc.).
- Management of news media relations, web site management, publications, and conference participation.

### ★ **Product Stewardship:** Responsible for methanol health and safety activities.

- Maintain and distribute MI's Methanol Safe Handling Manual and Crisis Communications Guidebook across the global methanol distribution chain. Provide multiple language translations for both documents.
- Distribute Methanol Safety Video as collateral material to the Manual, providing a visual guide to safe handling practices.
- Prepare and share Technical Bulletins on specific aspects of methanol safety.

### ★ **Market Development:** Helping to expand the market for methanol as an energy fuel.

- Encourage the adoption of the Open Fuel Standard Act by the U.S. Congress to mandate the introduction of methanol/ethanol/gasoline flexible fuel vehicles.
- Encourage the European Union to maintain a 3% allowance for methanol fuel blending in gasoline under the EU's Fuel Quality Directive.
- Support the adoption of national methanol fuel blending standards in China, and encourage methanol fuel use in other countries.

### ★ **Membership and Finance:** Managing member recruitment and retention activities.

- Identify prospective new members and facilitate executive-level contact between existing members and prospective new members.
- Work to identify and recruit new Affiliate Members representing organizations involved in the transport and distribution of methanol, and companies developing new methanol market applications.
- Seek additional sources of revenue, including funding for research, development, and demonstration projects from state and federal governments, and research foundations.

# Where You Fit In

## TIER 1 – MAJOR METHANOL PRODUCERS

**CRITERIA:** Major producers of methanol (over 1.5 MMT per year).

**BENEFITS:** May appoint two voting representatives to the Board of Directors; Membership on the MI Executive Committee; Ability to serve as Board Officer, including Chairman and Vice Chairman; Ability to Chair Standing Committee(s).

## TIER 2 – METHANOL PRODUCERS

**CRITERIA:** Organizations which are producers of methanol or are otherwise interested in promoting the interests of the methanol industry.

**BENEFITS:** May appoint one voting representative to the Board of Directors; May be invited to participate in Executive Committee meetings (non-voting); Ability to serve as Board Secretary or Treasurer; Ability to Chair Standing Committee(s).

## TIER 3 – ASSOCIATE MEMBERS

**CRITERIA:** Minimum level of membership for methanol producers. Also includes non-producers and sellers of methanol who are interested in promoting the interests of the methanol industry.

**BENEFITS:** May participate in Board of Directors meetings (non-voting); Ability to Chair Standing Committee(s).

## TIER 4 – AFFILIATE MEMBERS (NON-PRODUCERS)

**CRITERIA:** Organizations that are interested in promoting the interests of the methanol industry.

**BENEFITS:** Ability to Participate in Standing Committee(s).

## RECIPROCAL MEMBERS

**CRITERIA:** Allied trade associations and other non-profit organizations who are interested in promoting the interests of the methanol industry.

**BENEFITS:** Cross-listing in membership directories and web sites; sharing of newsletters and informational resources; joint legislative/regulatory activities; and co-sponsored research initiatives.

# 2011 Events Calendar

February 6-9	National Biodiesel Conference & Expo, <i>Phoenix, AZ</i>
March 1-2	6th Methanol Markets & Tech Conference, <i>Manama, Bahrain</i>
March 27- 29	NPRA Petrochemical Conference, <i>San Antonio, Texas</i>
March 30	MI Board Meeting, <i>San Antonio, Texas</i>
June 8	MI Board Meeting, <i>Vienna, Austria</i>
June 9-10	IMPCA Mini-Conference, <i>Vienna, Austria</i>
September 13-15	JJ&A Methanol Forum, <i>Houston, TX</i>
October 1-5	EPCA Annual Meeting, <i>Berlin, Germany</i>
October 10-14	International Symposium on Alcohol Fuels, <i>Verona, Italy</i>
November 1	MI Annual Members & Board Meeting, <i>Singapore</i>
November 1-3	14th IMPCA Asian Methanol Conference, <i>Singapore</i>
November 16-18	7th Asian DME Conference, <i>Niigata, Japan</i>
December 6-7	CMAI World Methanol Conference, <i>San Diego, CA</i>
December 13-15	GPCA Sixth Annual Forum, <i>Dubai UAE</i>



2011  
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In Focus

# milestones