

# SusChemAlliance

Fall 2009 Newsletter

## Green Chemistry – Clean Chemistry Leads to Sustainability

Sustainability is found in all aspects of our lives today and is no longer dominated by special interest groups. We see it and practice it on a regular basis, from recycling programs to what we buy. Political speeches almost always include references to sustainability, and corporate initiatives are more often focused on clean technologies.

Today, green technologies are moving into the mainstream and it seems that even the recession has not slowed this movement. Consumers are demanding green technologies right from design to disposal – a true life cycle approach.

As “green” continues to move to the mainstream and be widely used as a term, does it get misused? There is no well defined definition of “green”. It concerns me that “green” could get to the point of being too mainstream. Green is becoming a fundamental branding message for many corporations.

Of course, as consumers we want to see clean technology with neutral to positive impact on the environment. In most cases, that is defined as green products, but in all uses it is sustainability. The public has become much more conscious of the need for sustainability – from customers to governments, shareholders and employees. There is increasing public pressure for more green products.

A study done by Info-Tech Research Group showed that 50% of corporations were planning to implement green programs in 2009 while 17% already had green programs in place. Recycling, waste and energy reduction, and sustainable sourcing of materials were main categories of the green programs.

There is a consciousness today that was not there 5 years ago about sustainability. This is leading to corporations looking at new ways to improve their bottom line through sustainable production of materials and chemicals. At the Sustainable Chemistry Alliance, we are focused on commercialization of sustainable technologies. We target products and processes that are already proven from a research and pilot scale perspective. Our interest is in helping move these technologies to commercial opportunities through start-up companies or creating partnerships with existing companies. Our support can range from an advisory role to some limited investment. The Sustainable Chemistry Alliance is a non-profit organization with a mandate to facilitate commercialization of sustainable technologies for the benefit of Canada.

Our new newsletter SusChemAlliance is one of our communication vehicles to highlight the activities of the Alliance and its partners.

I trust you find this premiere issue of interest and invite your comments and suggestions.

Sincerely,

**Murray McLaughlin**  
President and CEO  
[murraym@suschemalliance.ca](mailto:murraym@suschemalliance.ca)



Helping to Commercialize Sustainable Technology and Processes

# Board of Directors Creates the Environment for Commercialization

The focus of SCA's volunteer board of directors throughout its inaugural year will be to organize the activities of the alliance firmly around its strategy and objectives. This will include building solid working relationships with key stakeholder groups in the chemical and petrochemical industries and with all levels of government.

Board members include a broad representation of stakeholders who have formed a single alliance focused on implementing a sustainable hybrid chemical industry that integrates bio and traditional industries. If additional direction or expertise is required in the future, there is the flexibility to add an additional member.

A key objective of the 12-member board will be to identify projects that can be implemented and have clear potential to create jobs and economic value. The board is committed to a selection process that will help to attract and retain technology on a commercialization basis in Canada. To ensure a fluid progress, board executive members will meet as required during the year and the full board will meet about four times annually.

The board has already addressed a number of key issues related to project opportunities that have been identified. We have been developing and testing our criteria for what we want to promote and fund. For the projects that are out there that have come to us for support and funding, we must determine if they are within the parameters of the alliance with regard to readiness to commercialize. In other words, do they meet our criteria and are we going to proceed with financial support at this point? Alternatively, we could consider helping them move forward to the point where they are eligible for funding. Those are key issues.

The board is currently reviewing projects and making decisions around funding for them. It looks for projects that have additional funding resources available to ensure their financial viability. Rather than funding entire projects, our role is to provide seed money to candidate companies.

SCA's board is well on track in its progress to date in the drive to identify commercialization opportunities that will help to meet our



**Steve Bolt,**  
Co-Chair  
of the SCA



**Dr. Bernard West,**  
Co-Chair  
of the SCA

collective goals. It sets the strategy in place and then provides the support and creates the environment that will allow President and CEO Murray McLaughlin to act on the board's directives.

As we proceed, our directors remain committed to the alliance's original mandate to help an emerging new industry across Canada to commercialize sustainable technologies and processes.

## Sustainable Chemistry Alliance Board of Directors

- Dr. Murray McLaughlin, President and CEO of the SCA;
- Steve Bolt, Co-Chair of the SCA and retired Eastern Canada Operations Director for Dow Chemical Canada Inc;
- Dr. Bernard West, Co-Chair of the SCA and former President & CEO of CANSOLV Technologies of Montreal;
- Joel Adams, Director of The University of Western Ontario Research & Development Park;
- Paul Clark, President, VisionGain Consulting Inc. and former VP Research & Technology for NOVA Chemicals Corp.;
- Jean Hamel, Vice President, Pulp and Paper at FPInnovations;
- Cam Harris, VP Process and Technology Global West in the Mining and Minerals division of WorleyParsons;
- George Mally, General Manager of the Sarnia-Lambton Economic Partnership;
- A.J. (Sandy) Marshall, President and Managing Director of LANXESS Inc. and Head, Technical Services North America;
- Richard Paton, President & CEO of the Canadian Chemical Producers' Association (CCPA);
- Dr. Gord Surgeoner, President of Ontario Agri-Food Technologies;
- William White, retired President of DuPont Canada.

# Alliance Grows Through Collaborative Efforts

BioEnterprise Corporation and the Sustainable Chemistry Alliance (SCA) have agreed to collaborate on services related to the identification of leading innovative technologies, the commercialization of those technologies and the growth of innovation-based companies in Ontario.

The collaborative relationship will see BioEnterprise and SCA providing hands-on mentorship and advice to joint project teams, as well as co-delivering entrepreneur and investor education seminars. Both organizations are committed to providing best possible advice as they see their clients move forward on the path of commercialization. This relationship will prove to strengthen their commercialization activities.

The Sustainable Chemistry Alliance is a not-for-profit organization established in 2008 to promote growth and prosperity by fostering and supporting innovation, development, commercialization and related business activities and projects in the area of green and sustainable chemistry.

Dave Smardon, President and Chief Executive Officer of BioEnterprise, comments: "Both of our organizations are mandated to commercialize new innovative technologies. Agriculture is the critical linkage that supports industrial and commercial bioproducts.

However, to be successful we need the private sector chemical companies and leading researchers as partners. This new alliance with the Sustainable Chemistry Alliance brings these partners to the table paving the way for new innovative products and technologies."

BioEnterprise is a not-for-profit company established in 2003 as a commercialization agent to help promote the creation, growth and expansion of businesses in the agri-food and agri-life sciences and bio-product industries.

SCA President and CEO Murray McLaughlin says the collaboration is an excellent fit for the alliance. "Part of my role in directing the alliance into a leadership position in sustainable green chemistry for Ontario and Canada, is to ensure that we are aligned with the key organizations that can assist us with achieving our goals. BioEnterprise is one of those organizations that can help us in project assessment, building business cases, general diligence and investments. I look forward to working with the BioEnterprise team."

The SCA has also been endorsed for affiliate membership in the U.S.-based Algal Biomass Organization by ABO's board of directors.



*The U.S.-based Algal Biomass Organization (ABO) is a non-profit organization whose mission is to promote and advocate for the*

*development of commercially viable transportation and power generation fuels as well as other non-energy applications for algal biomass. It aims to facilitate commercialization and market development of microalgae biomass specifically for biofuels production and greenhouse gas abatement.*



*BioEnterprise Corporation is a not-for-profit company founded in 2003 through the financial support of Agriculture and Agri-Food Canada and the Ontario Ministry of Agriculture, Food and Rural Affairs. BioEnterprise is a commercialization agent, established to help promote the creation, growth and expansion of businesses in the agri-food and agri-life sciences and bio-product industries.*

# OUR PARTNER IN SUSTAINABILITY: LANXESS CANADA

Sustainability is not a new program at LANXESS Inc. It is part of our continuous improvement initiative that focuses on becoming more sustainable. Part of that journey over the past few years has been requiring all of our operations to become ISO 14001 Environmental Management System certified. This initiative is focused on reducing our collective environmental footprint. By implementing a management system that could eliminate or control significant environmental impacts, providing continuous improvement in all aspects of air or water emissions and reduction of waste from our operations.



**A.J. (Sandy) Marshall,**  
President and  
Managing  
Director of  
LANXESS Inc.



**Archie Kerr**  
Director of  
Sustainability at  
LANXESS Inc.

Our Canadian operations also have a history of taking our social responsibilities seriously. We have a very active Community Advisory Panel led by an external facilitator. The panel is made up of a cross-section of representatives from near neighbors, First Nations, downriver and U.S. border communities and local secondary school students. The group meets at least five times a year with senior management representatives to give advice, ask probing questions and receive detailed information on the Sarnia Site and our HSE performance.

As part of its corporate social responsibility the LANXESS Sarnia Site was one of the main founding members of the Bluewater Sustainability Initiative (BSI). This initiative has been in existence for three years and the company continues to provide its strong support. The BSI vision for Sarnia-Lambton is to be recognized world-wide as a green hybrid community and to enable the integration of key stakeholder groups in the identification and execution of sustainability initiatives in the region.

The Sarnia Site's future sustainability and continuous improvement initiatives have not been "cast in stone". However, the path forward is clear, global warming will be the number one challenge. As a society we need to become more energy conscious, reduce the intensity of our use of fossil fuels and reduce our carbon dioxide emissions. The site intends to measure its carbon footprints not only at its manufacturing facilities but up and down the supply chain to ensure both the company and its suppliers are working together to become more efficient. We also intend to determine the carbon impact of our products by conducting life cycle analyses.

Innovation will play a key role in sustainability by significantly reducing our energy requirements for our butyls and olefins processes. We must also research and develop new routes of our current feedstock, by looking at bio-based renewable resources or by converting wastes into sustainable chemical feedstocks.



*LANXESS is a leader in specialty chemicals and operates in all important global markets. Sarnia Site is its headquarters in Canada and includes a large chemical manufacturing facility focused on production of butyl rubber and olefins chemical intermediates. Lanxess is working to make more efficient use of its infrastructure and energy by encouraging companies to set up manufacturing facilities within Chemical Park Sarnia.*

## Contact Us

### Sustainable Chemistry Alliance

The SCA is actively looking for business ideas and opportunities, so if you have a commercial opportunity for sustainable chemistry and clean technology please contact us to discuss how we may be able to assist.

**Dr. Murray McLaughlin,**  
President & CEO

1086 Modeland Rd.  
Sarnia, ON, Canada N7S 6L2  
Ph: 519.383.8303 ext. 237  
Fax: 519.332.6862  
Cell: 519.550.5525

[murraym@suschemalliance.ca](mailto:murraym@suschemalliance.ca)  
[www.suschemalliance.ca](http://www.suschemalliance.ca)