Industrial Symbiosis Section Update March 15-April 15, 2010 International Society of Industrial Ecology Industrial Symbiosis Section Peter C. Lowitt, FAICP

The purpose of this update is to provide practitioners, researchers and academics a brief glimpse into the activity occurring in our chosen area of interest. This update makes no claim to be complete, it provides highlights rather than depth and covers eco-industrial parks, networks and industrial symbiosis projects that have been brought to my attention, and now to yours.

Professor Ray Cote provides a couple of notes from Nova Scotia:

- The Kaizer Meadows Eco-Business Park in the Municipality of the District of Chester is steadily moving forward. A business plan is being developed by Eco-Industrial Solutions and the park already has its first tenant. This comes on the heels of a major report prepared by graduate students in Ray Cote's Industrial Ecology class. Kaizer Meadows Eco-business park is located adjacent to the Environmental Management Centre and regional landfill between Chester and Windsor Nova Scotia.
- The Debert eco-industrial park, twinned with Devens Eco-industrial Park in Massachusetts, is making slow but steady progress. Efforts are still being made to gain buy-in from all stakeholders. A recent industrial speed dating event to encourage exchanges of wastes and services was considered quite successful.
- In Burnside Industrial Park, the laboratory used by Ray Cote and his colleagues and students for many years to explore eco0-industrial development strategies continues to expand. Recently the municipal government which owns and manages the park has expressed interest in developing an eco-industrial area within the park.

In Fort McMurray, Canada Imperial Equities purchased a 5.4 acre lot in the Tiaga Nova Eco Industrial Park.

The Tilbury Eco Industrial Park in Delta, British Columbia Canada listed its potential savings for firms and the park goals on its web site.

Baltimore's (Maryland, USA) long dormant Fairfield Eco Industrial Park (a Clinton era President's Council on Sustainable Development Initiative) could get restarted according to a 3/29/10 announcement if the firm Energy Answers locates a CHP plant in the area.

Funding has been received for the Eco Park in Silver Bay, Minnesota USA.

Eco-Industrial Park listings can be found at MasRoy.net for EIPs in India. Government proposes low interest loan for eco-friendly units in the National Manufacturing and Investment Zones to "encourage industries to be more eco-friendly."

2010 Research on Information Sharing Mechanism of Ecological Industry Chain conference held in Changsha, China March 13-14, 2010 organized by Xiuli Wang and Geng Xian Zhu.

More news on the Tianjin TEDA area which is scheduled to start a four year industrial symbiosis program called the EU Switch Asia TBNA Industrial Symbiosis Project financed by the EU and UNIDO based on the UK's National Industrial Symbiosis program. There are nine (9) Switch programs currently running in China as of 4-12-10. The British firm, International Synergies has been selected to provide these services.

Green Door Designs moved into the Eco-Park in Pittsboro, North Carolina USA joining the Piedmont BioFuels and Piedmont BioFarm (a community supported agriculture farm), among others.

The Winter 2009 edition of *PLAN*, the journal of the Canadian Institute of Planners, featured an article entitled "Transforming Industrial and Commercial Landscapes by Greening the Business Bottom Line: Partners in Project Green: A Pearson Eco-Business Zone" by Chandra Sharma.

Found on the web, an article by Doctoral Student Tom Maes at the University of Ghent entitled "Carbon and Energy management in eco-industrial Parks." The Flemish government has adopted legal requirements to incorporate carbon neutrality for industrial (re)development projects that they finance (2007).

An interesting blog was spotted at the Swampmaster blog. Entitled "The case for cogeneration and cogen based Eco Industrial Networks."

First announcement of the ZeroWIN project's* first public event: Zero Waste in Industrial Networks (ZeroWIN) Vision Conference, Tuesday 6 July in Southampton, UK

March 26, 2010 saw an international panel on Cleaner Production in Thimphu, Bhutan discussing industrial symbiosis as part of their recommendations.

Central New York Agri-Business Park on 1100 acres proposed as Eco-industrial park with focus on agri-business. Michael Kalet spoke of a self sustaining renewable energy based industrial park to be located near Syracuse, New York, USA.

Kaiyang China progresses on efforts to step up the building of an eco-industrial park demonstration project phosphorous coal chemical industry base. "The Shandong Yanzhou Mining 600,000 tons of synthetic ammonia and supporting open-ammonium phosphate phosphorus 1.2 million tons of projects and development company Shuangliu phosphorus acid 1 exhaust system, 10 key projects recycling economy project started, Kaiyang phosphorus coal Chemical Industry (State) eco-industrial demonstration bases have entered the intensive phase."

TEDA Eco-Center in Tianjin, China was also launched this past month.

Dongying proposes to build four new Eco-Industrial Parks.

The Sandstone Eco Industrial Park in the Nanaimo Regional District, Canada proposes to locate next to a regional landfill and use methane for the EIP.

A real estate blog in Edmonton, Alberta Canada suggests that the way to get your industrial project approved in this area is to pitch it as an eco-industrial park.

Interesting web site on Industrial symbiosis in the UK can be found at WRAP: Material change for a better environment.

The JTC Development Corporation of Singapore is focusing on Sustainable and Green projects such as Seletar Aerospace Park to Biopolis and Fusionopolis.

Sustainable South Bronx has completed a feasibility study for an Eco-Industrial Project in the area. Kiva Lending announced an interest in assisting the project move forward this Spring.

The United Kingdom reorganized its various recycling and business assistance agencies into a new organization, DEFRA. NISP has been merged into this agency.

Maine Renewable Energy Corporation receives \$1 Million Maine Industrial Grant to facilitate their plans to build an eco-park in the South Portland area.

"A Systematic Literature Review of Biofuel Synergies (2010) was published in Scientific Commons by Michael Martin and Jorge Fonseca.

The Singapore Institute of Manufacturing Technology (SIMTech), an institute under the Agency for Science, Technology and Research (A*STAR), said in a statement it will be teaming up with Linkoping University on technologies such as remanufacturing, clean production technology processes and industrial symbiosis. This announcement was received in March.

In late March the Camden County North Carolina Eco Industrial Park received some of the development permits it requires to move forward with the project.

I was pleasantly surprised to find a radio interview with Marian Chertow of Yale on New Hampshire Public Radio dated April 6, 2010. This is part of that stations Next Green Thing series.

Entropy Magazine published the following article Application of Thermoeconomics to Industrial Ecology by Antonio Valero, Sergio Us´on, C´esar Torres and Alicia Valero www.mdpi.com/journal/entropy.

Policy Matters Ohio suggested eco-industrial development as an area for the state to focus its resources on in a paper released this quarter.