

Industrial Symbiosis Eco-Industrial Development Section Update
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International Society for Industrial Ecology
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This update service is provided by the Industrial Symbiosis Eco-Industrial Development Section of the International Society for Industrial Ecology. We welcome your announcements, call for papers and announcements of academic publications, corrections, insights and feedback.

After a successful conference in Tokyo and Kawasaki our attention turns with toward the upcoming ISIE Conference in Berkeley, California next June, 2011. There is a conference track devoted to industrial symbiosis and eco-industrial development. Arrangements are underway to have a IS Research Symposium prior to the main conference. We hope to provide more information on this forthcoming event in this column, on our web site and via email as it becomes available.

Conferences, workshops, courses and other events

The Eco Products International Fair will be held February 10-12, 2011 at **Pragati Maidan, New Delhi**

Publications and presentations of interest:

- “Research on the Stability of Eco-Industry Chains” by Jingfu Guo & Wenzhi Cui School of Economy & Management, Dalian Nationalities University, Dalian 116600, China. E-mail: drguo@dlnu.edu.cn www.ccsenet.org/ijbm International Journal of Business and Management Vol. 5, No. 11; November 2010.
- Analyzing the Environmental Benefits of Industrial Symbiosis: Life Cycle Assessment Applied to a Finnish Forest Industry Complex by Laura Sokka, Suvi Lehtoranta, Ari Nissinen, Matti Melanen in the Journal of Industrial Ecology November 2010.
- Eco-Efficiency of High-Tech Industrial Parks : Concept and Evaluation Indicator System by **Wang Jinde Guo Zheng**
Shanghai Academy of Quality Management
- Assessing the Potential of Industrial Symbiosis to Mitigate Greenhouse Gas Emissions by Shi Han *Dept. of Public and Social Administration, City University of Hong Kong, Hong Kong, hanshi@cityu.edu.hk*
- Eco-Efficiency Assessment for Eco-Industrial Park based on Energy Analysis by Hua Shang and Jiabo Li in Modelling Risk Management in Sustainable Construction Computational Risk 2011.
- Sarah Murray wrote a piece entitled “Alliances that Lead to Creative Industrial Symbiosis” in the Monday November 29 2010 edition of the Financial Times which lauded the work of NISP and International Synergies. Bravo to our colleagues at NISP!

Eco-Industrial Development and Industrial Symbiosis in Practice:

Eco-Industrial Projects:

COUNTRY: USA

Rhode Island: Tiverton's Eco Industrial Park will be the site of a 2400KW wind farm according to the US Department of Energy.

North Carolina: Forsite Development, Inc. is the winner of the 2010 Business Innovation Award for its ReVenture Eco-industrial park along the Cawtaba River in Charlotte, North Carolina. The project proposes to redevelop a 667 acre superfund site as an eco industrial park anchored by a 20 MW bio-mass power and thermal energy plant. FCR Recycling will also locate in the park and invest \$30 million in a trash to fuel suitable for a 30 MW plant.

Minnesota: Section member Tim Nolan made a presentation on Eco Industrial Development to the City of Silver Bay regarding a proposed Silver Bay Eco Industrial Park. In other eco industrial news from Minnesota, the Itasca Eco-Industrial Park in Grand Rapids, MN received a \$1.75 Million Economic Development Administration grant to assist with the parks development. Mr. Nolan made another presentation to the local economic development authority in International Falls, Minnesota on Eco Industrial Development.

Georgia: Northern Forsyth County has received a proposal to rezone 115 acres to accommodate an eco industrial park which will focus on renewable energy and academic research park uses.

Nevada: The Reno City Council has approved the sale of a strip of land on East Commercial Row for \$1.1 million to Waste Management Nevada for expansion, including a single-stream recycling center. According to RGJ.Com "The sale would be the start of an eco-industrial park approved by the city on land inherited from Union Pacific Railroad as part of the ReTrac railroad trench project."

Washington: Port Townsend is reportedly eyeing developing an Eco-Industrial Park according to the local paper. Seattle is also moving toward incorporating Eco Industrial districts into its future growth plans. "The [Metropolitan King County Council](#) last month adopted a proposal that calls for a partnership with the City of Seattle (which resides in King County) to create Eco-Industrial Districts in the city and throughout the county."

Puerto Rico: Wanan International announced plans to construct waste to energy facilities as part of eco-industrial parks in collaboration with municipalities. A write up on the conceptual design of the Wanan Eco industrial park can be found at their web site.

European Union Mediterranean Innovation Projects

ECOMARK's main objective is to promote and apply the Eco Industrial parks as an eco alternative to Green Marketing principle to Industrial Areas where several SMEs are settled, raising environmental awareness among the actors of the industrial sector, without negative impacts onto the entrepreneurial goals. Through concrete actions that consider environment and profit as equally important, the SMEs are stimulated either to settle in Eco Industrial parks or to convert to 'sustainability' in an existing Industrial Area. The project will provide : guidelines for Green Marketing Plans, schemes for innovative services and demonstration of a reduced environmental impact induced by industrial areas on the local community.

COUNTRY: Thailand

Mr. Andreas Koenig spoke with businesses in Bangkok in August about opportunities to create by-product exchanges and eco-industrial development with industrial estates.

COUNTRY: Malaysia

Nusa Jaya is the site for the proposed BioXcell Ecosystem Industrial Park which is in the master planning phase.

COUNTRY: United Kingdom

Northern Ireland: International Synergies has received funding from the Department of Environment (DOE) to run a pilot programme to divert waste from landfill in Northern Ireland. The pilot, named Rethink Waste Industrial Symbiosis (RWIS), will match organisations that produce waste with organisations that can put this waste to effective use as input materials.

COUNTRY: Canada

City of Prince Albert, Saskatchewan continues to develop a Green Industrial Zoning District and Park incorporating eco-industrial development practices.

COUNTRY: Denmark

Incibon is operating a large biomass refinery and plant as part of the Kalundborg eco industrial project. They were recently written up on the Biorefining web site in an article entitled "Growing Biomass ideas in Denmark." It's interesting to see how the participating firms describe the industrial symbiosis project on their web sites. Check out Stat Oil's web site as an example.

COUNTRY: China

Binhai New Area reports they are working successfully to integrate the concept of the Circular Economy into their development efforts, integrating industrial ecology and eco-industrial development into their development projects.

COUNTRY: Trinidad and Tobago

Tamana's eco-industrial focus includes the following statements from their web site:

- 30% of Tamana's 1,100 acres is devoted to green space

- A linear park design with a rich trail network for hiking and biking, along with other recreation areas and green space
- Special wildlife corridors throughout the Park that protect the native flora and fauna
- The largest butterfly emporium in the Caribbean, raising awareness about sensitive species and T&T's ecosystem
- On-site public transportation system that minimizes environmental impact and provides convenient transport around the Park

COUNTRY: Japan

Kawasaki officials announce progress toward meeting their goal of becoming Japan's leading Eco Industrial Zone. Good luck with your efforts and thank you for hosting the section meeting this Fall.

Professional Changes: