

ISRS event

6/17/16 7:29 PM

IS in India - Elsa Olivetti MIT

- Mapping of material flows - working with businesses to redirect flows.
- Boiler ash from combustion for energy generation. Heavier than fly ash. Reuse into new brick.
- Digging for red clay (soil erosion), high demand for housing and boiler ash requires less heat energy to produce.
- Room temp curing vs. 1000 degree Celsius

Marian Cherow - Circular Economy

- Need a network cross connections in all IS projects. Need a knowledge of feedstocks
- Secondary markets act differently than primary so have to understand this.
- Dynamics of IS article in JIE
- Journal of sustainability- looking for articles on how EcoParks are set up.
- Need to collaborate more. Opportunities for creating a whole new market (like compost and c&d)

Guillaume Massard - ISIE website ISIE.org

- Sign up for newsletter
- Linked in group
- Eco Innovation Parks in Switzerland report on site
- Network page - sign up

World Round-Up

- Regulatory barriers to SD
- Sustainable agriculture in Chicago using EID as a strategy for economic development
- Bridgeport creating mayor training program
- NS- ag, forestry and fisheries byproducts identified. Pulp mill is study reported by Professor Cote
- K? meadows eco industrial park (Kaiser Meadows Eco-Industrial Park in Nova Scotia)
- Waste to energy in Sweden
- Sweden - Chemical construction blocks made out of food waste slurry reported by Graham Aid
- Quebec - Agri food waste bio gas and working on metals and plastics
- Mexico struggling since government is not interested in IS. Still working with private firms. reported by Professor Cervantes
- Switzerland- indicator study. Web platform for management of parks and companies - manage data on material flows in companies in park. Guillaume Massard directed people to his massive study of European Eco Parks which is on the IS section web site. He is working on indicators for sustainable industrial parks.

Extracting Value from Data - Chris and Graham

Cove Eco Park

- Economic diversification. Value proposition had to be high so they provide incentives - using eco park standard as an incentive.
- Assessing what resources are available and how to maximize their use.
- 140 acres
- 150 million in infrastructure so business has to add value to the park. So they would not accept warehousing. Has to be value added.
- Multi use tenant building set up to be incubator.
- All facilities underground. 10% open space and also a buffer zone from adjacent residents. Green building. Solar street lights
- Waste recycling, condiment manufacturing, juice manufacturing, composting and recycling of waste products.
- Bitumen, condensate out of existing gas plant
- Looking for an anchor tenant
- 200 acre expansion possibility
- Eco is commitment to the island mandate

Bridgeport EcoPark

- Fuel cells and solar pv 5MW
- Waste heat from fuel cells for district energy
- Bridgeport university off grid using energy and waste heat/ district heating loop using water (technology from Denmark)
- Sludge digester in permitting. Currently being burned. Instead digest it and power the plant with the gas.
- Federal housing project next to existing sewer plant. Get rid of sewage by digester and project includes greenhouse that will grow local produce for housing project (jobs, food, local, healthy)
- Using sewage effluent to cool trash to energy plant
- Mattress recycling law in CT. \$9 Eco fee on mattresses and box spring (product stewardship laws to create commodities for recycled products (metal, wood, cotton)
- Biodiesel- grow algae in greenhouse next to trash energy facilities. Creating algae oil to add to biofuel to meet state requirement of 20% biofuels in oil in CT
- Partnerships and community engagement are key

****Track how much waste Devens generates as a new metric. How much Dona diverts. Have a competition on who can reduce the most

Ray Côte What is an Eco Park and what are performance indicators and standards

- An industrial food web. RE companies creating a circular economy.
- Level of performance or status
- Other standards to consider



- Modified LEED standard for Eco park??
- Standards targeting individual tenants vs the park as a whole.
- Efficiency and symbiosis
- Performance - Eco criteria (see Rays presentation for list from 2014)
- 249 indicators for EIP's - new study just coming out.
- Should be an International standard or criteria For defining EIP's.
- Ecosystem diversity could make setting EIP standards worldwide difficult.
- Could develop broad goals
- How people feel about the park
- LBC and ISO 14001
- Patterns of issues with EIP's - is there common EIP issues/goals throughout the world that you could develop standards that would apply across the board.
- Global performance standards for Eco-districts - something similar?
- Don't forget the human element, level of networking, community involvement.
- ISIE survey to ID elements of an EIP and analyze by world region.
- Social exchange has to be part of material exchange
- Minimum standards in China creates incentives to meet those standards