

### Ananth. V. Iyer

Susan Bulkeley Butler Chair in Operations Management

Director, GSCMI and DCMME
Krannert School of Management
Purdue University

### Welcome

- Industry Sponsors, Visiting Industry Participants, Guest Students, Krannert Students, Purdue Faculty and Staff
- To the Spring GSCM Conference
- Sponsored by DCMME/GSCMI at the Krannert School of Management at Purdue University and
- Purdue CIBER



- Mary Pilotte, Managing Director
- Va'Linda McBride, Center Admin Assistant
- Center GAs







### Thank you Event Sponsors!

















### Thank you Center Partners!

Center Partners are:























Thank you Speakers!















### Thank you Student Organizations!

Krannert Operations Club

&

Krannert Graduate Student Association

### **Conference Ideas**

•The energy, water, emissions generated by supply chains will be used to define product attributes.

- Competing based on these attributes may require new:
  - o products, technologies,
  - o supply chains and
  - o approaches to affect customer choices.





### Two Words – what do they mean?

#### **Solastalgia**

From the Latin solacium (comfort) and the Greek root —algia (pain). "the pain experienced when there is recognition that the place where one resides and that one loves is under immediate assault . . . a form of homesickness one gets when one is still at 'home'."

### Soliphilia

"the love of and responsibility for a place, bioregion, planet and the unity of interrelated interests within it." Associated with positivity, interconnectedness and personal empowerment.

Source: http://neuroanthropology.net/2010/01/30/solastalgia-and-the-ecopsychology-of-our-changing-environment/





### **MBA Case Competition**

- Case based on Sustainable Supply Chains
- Based on an industry context
- •28 teams started, we have six finalists
- Presentations by the six teams in the afternoon
   oplease stay and provide feedback to the
   student teams!





# Why should we care how we drive the global supply chain?

#### Because...

- our customers care
- our company cares
- our governments care
- •It is the right thing to do
- It can drive future growth
- •It is a development imperative





# A recent book "Green Recovery" by Andrew Winston suggests that...

- Green initiatives enable resource efficiency, creativity and motivation
- Save energy
- Reduce Waste
- Save Money
- Preserve capital
- Provide focus to innovation
- Provides examples from WalMart, Proctor & Gamble, DuPont etc



### Case: Message in a Bottle

- Case developed with context provided by Saint Gobain Containers.
- •Purpose is educational and uses a fictitious context and data to create a business scenario.
- •Glass bottles are infinitely recyclable and decrease production costs, energy use in successive cycles.
- •How do you co-opt customers, communities, government regulators etc into the procurement process for recycled material?
- •Can such "closed loop" processes be demanded by customers in the future?
- •How will such perspectives affect "product design and packaging" choices?



# How does cullet (recycled glass) use affect manufacturing?

- Saves energy (2 to 3 % cost reduction for 10 % cullet use
- Decreased by-products
- Saves raw material and carbon requirements (sand, soda ash, limestone)
- Reduces landfill costs
- Lessens greenhouse gas emissions: 10 % recycled glass decreases 6 % nitrous oxide emissions and 9.5 % raw materials
- Increases Furnace life
- •Improves procurement given soda ash costs have doubled in the last five years





# Question: What should SGS do to manage its supply chain and surge ahead as a leader in sustainable manufacturing?

#### CHOICES offered in the case:

- On source recycling
- Simplifying refunds
- Grass roots movements like "Sustainindy"
- •Bottle Bills (states with such bills have an 80 % recycle rate vs. 27 % average)
- Reuse bottles after washing
- New technology to permit mixed cullet to be used (green and clear bottles)
- Penalize those who do not recycle (proposed \$ 500 penalty in San Francisco)
- •Avoid future tax liabilities on firms without sustainable practices





### **Student Case Presentations**

- •New case material provided last night Communicating the Message in a Bottle PHASE 2.
- •Six teams will focus on how to link supply chain sustainability to customers and thus demand.
- •The goal is to both create an educational context as well as a dialog regarding alternatives.
- •Perhaps the solutions chosen will vary across communities.

We encourage you to stay for the presentations by student teams.





### The rest of the program ...

- Enjoy the conference
- Participate
- Collaborate
- Connect with
  - Jeb Conrad and Don McCreary from Greater Kokomo Economic Development Alliance (GKEDA)
  - Conexus Indiana Lisa Laughner
- Think about the "Message in a Bottle" ......







## Thank you

aiyer@purdue.edu