



Strategic Opportunities in Sustainability



**MARRIOTT**

15.972



# Background

- Marriott is a large player in the hospitality industry with 3,420 lodging properties worldwide
- Multiple business segments/brands
  - From Courtyard to Ritz-Carlton
- Existing environmental strategies
  - Five-point plan developed with Conservation International
  - Carbon Footprint Monitoring
    - 3 million metric tons annually; certified by ICF International



# Sustainability Challenges

- Current environmental vision excludes the s-word
    - “Marriott’s environmental vision is to be the global hospitality leader that demonstrates how responsible hospitality management can be a positive force for the environment and create economic opportunities around the world...”
  - Proposal: a sustainable hospitality industry which preserves our world for all stakeholders including future generations
  - Opportunity areas:
    - Sourcing
    - Energy
    - Waste
- 

# Sustainability Frameworks

## Cradle-to-Cradle (C2C)

- **Technical** or **Biological** nutrients
- Closed Loop vs. Downcycle

## The Natural Step (TNS)

- Four System Conditions
- TNS Resource Funnel

## Daly's Triangle

- Economy, Environment, and Equity
- Preserve each component of the triangle

# Sustainable Sourcing: Challenges

**Exterior:** Building and construction materials

**Interior:** Paint, wallpaper, drapes, furniture, carpets

**Products & Services:** Uniforms, food

# Sustainable Sourcing: Solutions

Area of Improvement	Possible Solution	Status	Framework
Building Materials	Certified FSC Wood		TNS
Drapes, upholstery	Regionally sourced material		
Wallpaper & paint	Non-toxic, zero VOC	√	TNS
Carpets	Natural carpets		TNS
Furniture	Recycled materials		C2C
Uniforms	Organic wool/cotton, bamboo		C2C
Food	Waste = Food		C2C
Conference materials	Recycled and recyclable		TNS, C2C

# Energy Reduction Challenges

- Low incentives for guest conservation
- Low utilization of rooms during peak energy demand
- High customer sensitivity to comfort & amenities

# Energy Reduction Solutions

- Expanded Demand Response Programs
- Expand Solar/White roofing to more hotels
- green roofing  
(thermeleon)
- Advanced building management
- Smart thermostats
- Hot water timers



# Waste Reduction Challenges

- External (Customer Facing)
  - Reduce waste without affecting customer experience
    - Single use items (toiletries, coffee)
    - Newspapers
  - Maintain or exceed current quality
- Internal (Operations)
  - Reduce excess packaging
  - Decrease waste to landfill ratio

# Waste Reduction Suggestions

- External
  - Implement dispenser system in every room
    - Use brand name shampoo and conditioner
  - Add recycle bin to every room
  - Create area in lobby for newspaper pick-up
- Internal
  - Expand sustainable supply chain beyond Europe
    - Biodegradable laundry bags, low-phosphate laundry detergent



# Next Steps

- Develop a vision for a sustainable hospitality industry – consumers want this
- Create a sustainability working group of customers, employees, vendors to suggest sustainable business practices or identify new products to meet sustainability goals
- Run analysis to identify positive NPV project
- Implement sustainability projects for competitive advantage

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15.972 Professional Seminar in Sustainability  
Spring 2010

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