

# Three Steps Toward Reducing Our Carbon Footprint

Can you identify three areas that are cost effective and feasible that would improve environmental impact of marine terminal operations? Please describe and outline how they would be implemented.

# Three Areas of Focus

- Energy Use
- Improving Terminal Efficiency
- Keeping Score and Continuous Improvement

# Energy Use

- Energy Performance Contracting
  - Conduct energy performance audits
  - Negotiate investment and repayment contract
  - Make energy performance modifications
  - Pay for modifications through leveraging energy savings

# Energy Use

- Alternative Energy Usage
  - Wind Power
  - Solar Power
  - Bio-fuels
  - Environmentally-Smart Fuels
    - Low-sulfur diesel
    - Coal distillate fuels
  - ┆ LNG/LPG
  - ┆ Cold Iron Policy
  - ┆ Recycle Office/Packaging Waste

# Improving Terminal Efficiency

- Maximize Cargo Density
  - Densify Terminal Infrastructure
  - Maximize throughput – Agile Port
    - Fewer Moves
    - Increase Supply Chain Velocity
- Deeper Channels
- Economies of Scale

# Improving Terminal Efficiency

- Evaluate and adjust terminal operating hours
  - Reduce Idle Time
- Containerize autos
  - Auto Engines Not Used to Handle Cargo
  - More Efficient Cranes and Loaders Used
- No Idle Policy

# Continuous Improvement and Keeping Score

- ISO Standards
- Best Practices
- National/International Policies
- Green Component for Leases
- Green Space Buffers
- Ports Unite

# Continuous Improvement and Keeping Score

- Educating People
- Balanced Scorecard Methodology
  - Every Part of Operation has Green Goals
  - Every Part has Metrics to Measure Progress
  - All Individual Goals and Metrics Contribute to Organization-Wide Goals and Metrics
  - Continuous Monitoring

# Create a Green Culture

- Like the health and safety issues that companies once thought to be contrary to business efficiency, investment in Green protocols will create a healthier and happier workforce as well as a healthier and happier world.

# Special Thanks

- The Canadian Squirrel Hunting Society
- The AAPA Bowling League
- Our Good Friend Bridget for All of Her Inspiration