Responsible and Profitable Port Development, Expansion & Operation

Desarrollo Portuario, Expansión y Operación Responsables y Provechosos

CUIDAD PANAMA
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World Bank’s 2025 “Global Economic Prospects”

World Output will increase over 200% in 25 years.

- 2000: $30 Trillion
- 2025: $66 Trillion
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Source: Global Insight, 2005
By 2020 demand will exceed current capacity of many U.S. ports by as much as 200%.
Panama Canal Dynamics/Limitations

- Panama Canal to reach capacity by 2009 to 2012
- By 2011, 40% of the container fleet will not fit through the canal
- Needs to be expanded to keep up with competing routes

- Suez Canal
- US Intermodal
ARE WORLD AND US PORTS PREPARED?

A Service from Asia to the U.S. East Coast Represents 104 Yearly Transits (NYX Service)

Impact on the Canal
Yearly transits: 104

Frequency 7 days
8 vessels - Average 4,320 TEUs

US West Coast Ports

Latin American and Caribbean ports
NAFTA, CAFTA & Columbian Free Trade Agreements
Pressures Create a set of Opportunities/Challenges For American and World Ports:

- Meet cargo demand and Vessel Traffic by:
- Expanding and upgrading marine cargo handling facilities & infrastructure:
- Adequate depth in navigation channel (47-50’ MLLW) to accommodate post-panamax vessels
- New vessel berths and docks that can accommodate post-panamax vessels
- New post panamax cranes
- Other support infrastructure
Pressures Create a set of Opportunities/Challenges For World and American Ports:

- Vessel traffic, ports expansion/infrastructure growth translates into:
- Air Quality Issues
- Water Quality Issues
- Invasive Species Issues
- Other Environmental Management Issues
What are the Solutions For Ports?

- Grow and expand in a sustainable way across the board:
- Green and sustainable dredging practices
- Carbon efficient marine cargo handling facilities & infrastructure
- Green and carbon efficient buildings
- Sustainable methods to manage construction projects
What are the Tools to Help Implement Solutions?

- ISO 14001: Environmental Management Systems (EMS)
- Sustainability Policy and Program Development
- Combination of the EMS and Sustainability
EMS: “Sistema De Gerencia Ambiental”: Plan, Haga, Verificar, Tomar Accion

- ISO 14001 Standards
- An Environmental Management System (EMS) is a set of processes and practices that enable an organization to reduce its environmental impacts and increase its operating efficiency.
- Can be successfully used to help guide the ports’ master plan and capital expansion plans
Sustainability: Sostenibilidad

- A balance among economy, ecology, and social equity.
- A port sustainability policy can support the port’s:
  - Master plan developments in a Responsible and profitable way
  - The responsibility factor refers to the Environmental and social responsibility and profitability to the economy.
- Also, sustainability principles can be used in the day to day operations of the port.
EMS AND SUSTAINABILITY

- They can be drivers of one another
- An EMS is the framework – a set of processes and tools for effective mission accomplishment.
- Sustainability is a guiding principle to keep us on track as we execute EMS
- Sustainability the guiding compass for the installation EMS
- The EMS is a mission enabler.
Port of LA Sustainability Initiatives:
Puerto Del Los ‘Angeles: Iniciativas Sostenibilidad

- Port of LA is first US port in TEU.
- Port’s sustainability is envisioned by the Mayor of The City of Los Angeles and the Port leadership.
- Sustainability principles to be integrated into the port’s initial phases of a planned 10-year capital improvement program.
- The port has assembled an executive committee to determine the scope of sustainability as well as annual reporting.
Port Authority of New York and New Jersey Sustainability Initiatives
Autoridad portuaria de Nueva York y de Nuevo-Jersey: Iniciativas Sostenbilida

- Third Largest US Port
- Implemented an Environmental Management System
- Started a Green Practices Task Force
- Designed Sustainability into New Infrastructure
  - E.g. ExpressRail Expansion and Electric Cranes
- Incorporated a Sustainable Design Policy into all New Construction and Major Renovations
Port Freeport EMS
Puerto De Freeport, Texas
EMS

- currently ranked as the 13th largest port in the United States in terms of foreign tonnage.
- Port Freeport’s vision is to develop a comprehensive EMS that would entail:
  - Port and tenant operations (conformance vs. compliance) as well as an integrated database
  - Port’s EMS is designed to be integrated into the port’s master plan to support the port’s upcoming growth and expansion.
Massport
Autoridad Portuaria De Los Massachusetts

- Massport has established a commitment to sustainable design and development to minimize the environmental impact of its operations.
- Massport has achieved ISO 14001 registration at its regional airport, operating unit of international airport, port and toll bridge facilities (the first toll bridge facility...)
- Massport is in the process of adding explicit energy conservation goals to its environmental management policy.
Questions and Answers
Preguntas y Respuestas

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