



EPA/AAPA Partnership

Helping Create World Class Ports

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World Class Ports

- Serve their community by using the most effective port management practices; have a proactive “stewardship for sustainability” ethic
- Sustainability - “The ability to meet today’s global economic, environmental and social needs without compromising the opportunity for future generations to meet theirs.” - Brundtland Commission, 1987

World Class Ports, Cont.

- KEY ELEMENTS according to The Sustainable Co., by Chris Laszlo:
- **Learning organization** - joint inquiry and dialogue; learning from mistakes; continuous improvement.
- **Innovation** - open to new ideas, e.g. technologies
- **Partnership** - shifting from us vs them to larger us.

EPA/AAPA Partnership designs and implements strategies to:

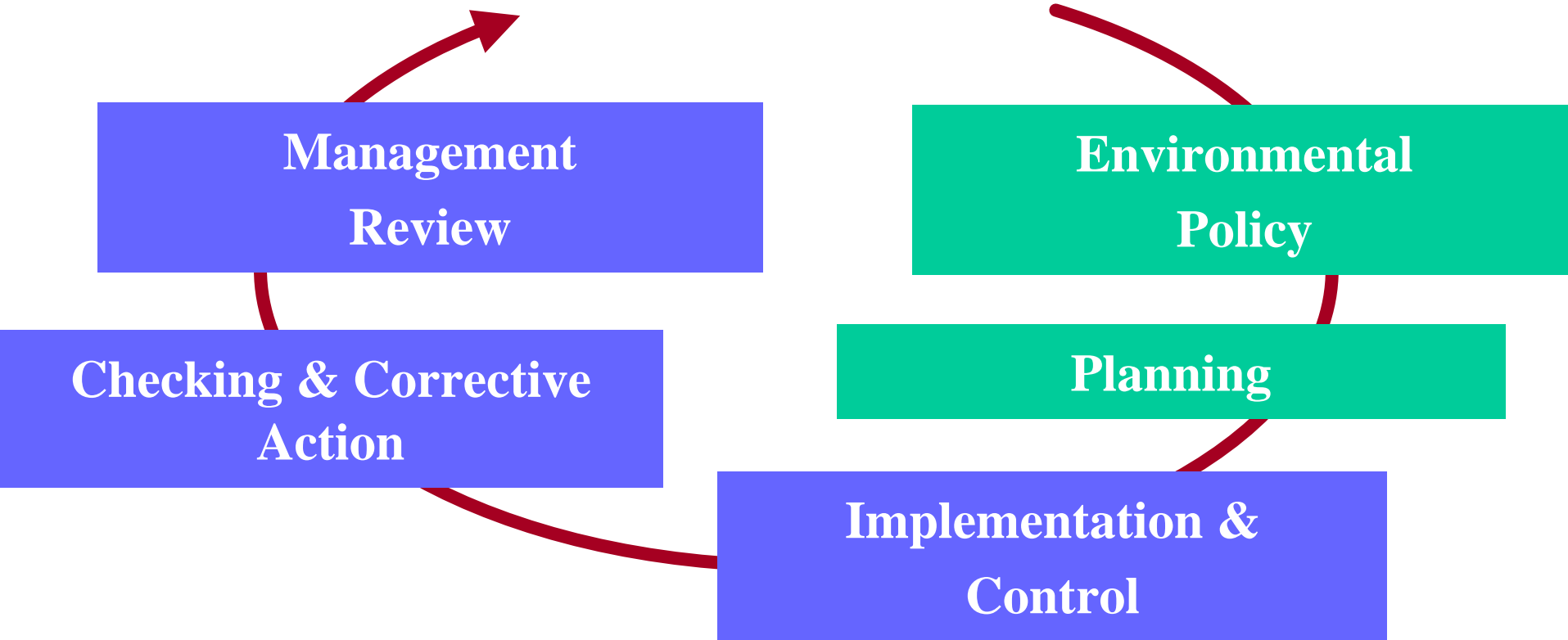
- Promote use of Environmental Management Systems
- Overcome Barriers to improved environmental performance
- Measure Environmental Performance
- Provide an EPA Point-of-Contact

What is an EMS?

- An EMS is a formal system for managing the environmental footprint of a Port.
 - Incorporates environmental considerations into day-to-day operations.
 - Provides a structured framework designed to achieve continual environmental improvement.

Plan-Do-Check-Act

Continual Improvement



Port EMS Assistance Project

- 11 ports/facilities working together to develop EMSs over about 18 mo.
- 2nd of 5 training session in May.
- Will share best practices and lessons learned; could start a new round.
- Houston applying plan-do-check-act system to security management.

Who else is doing EMS

- NYK lines - ISO 14001 certified EMS for 500 vessels and 80 facilities; does annual Social & Environmental Report.
- “K”Line - ISO 14001 certified EMS for all marine transportation services; does annual environmental report.

Overcoming Barriers

- 4 Air issue white papers have been drafted:
 - General Conformity
 - Validation of Emission Reduction Technologies
 - Emission inventories & modeling of emissions for use in SIPS
 - Port involvement in Transportation and Air Quality planning

General Conformity

- Issue: Lack of clarity and understanding about the reg., its purpose and its impact.
- Top recommendation of 9: Get port growth forecasts and expansion projects into the State Implementation Plan (SIP).
- Driver: General conformity is costly and difficult.

Validation of Emission Reduction Technologies

- Issue: Perception that technology verification is costly and difficult.
- Top recommendation of 3: There needs to be greater reciprocity between ETV and CARB.
- Driver: Technology is a big part of the solution.

Emission inventories and modeling for use in SIPs

- Issue: Inadequate information to assess ports' current and future Env. Impact.
- Top recommendation of 6: It is in Ports best interest to develop inventories and they need better EPA guidance to do so.
- Driver: Likely 8 more port communities will be in non-attainment areas for PM 2.5

Port Involvement in Transportation and Air Quality Planning

- Issue: Ports often not involved
- Top Recommendation of 4: It is in ports' best interest to become involved in regional transportation planning as well as SIPs.
- Driver: Port-related projects that reduce emissions and traffic congestion may be eligible for CMAQ funding.

Overcoming barriers, cont

- Air issue white papers available for comment from AAPA members.
 - Prioritize recommendations for discussion at May AAPA mtg.
- Other barriers?
 - Marine diesel/diesel retrofit
 - Upland impacts of port expansion?
 - Other?

Port performance measures

- Reduce diesel and other air emissions
- Reduce use of hazardous materials
- Improve handling of hazardous materials/cargo
- Improve storm water management
- Reduce facility energy and water use

Some indicators of progress

- Conversion of cranes and yard equipment from diesel to electric or alternative fuel
- Electronic gate and tracking systems
- Shifting from truck to rail/on-dock rail
- Inventorying of air emissions
- Use of green purchasing & building practices

Next steps

- In the spirit of continuous improvement, work with ports and other stakeholders to remove barriers and create incentives for ports to improve their environmental performance.

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