

# Transporting Environmental Management Systems: Roads to Success

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Transportation Research Board's  
Committee on Waste Management in Transportation (ADC60)  
"Environmental Stewardship in Transportation" Conference  
July 17 – 19, 2005  
Charlotte, North Carolina

## Presentation Abstract

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*Many organizations are electing to develop environmental management systems (EMS) to improve the effectiveness of their environmental programs. A transportation case study will be presented for web-enabling EMS, including the reasons for doing it, obstacles to making it happen, and “lessons learned” from the project.*

# What is an Environmental Management System (EMS)

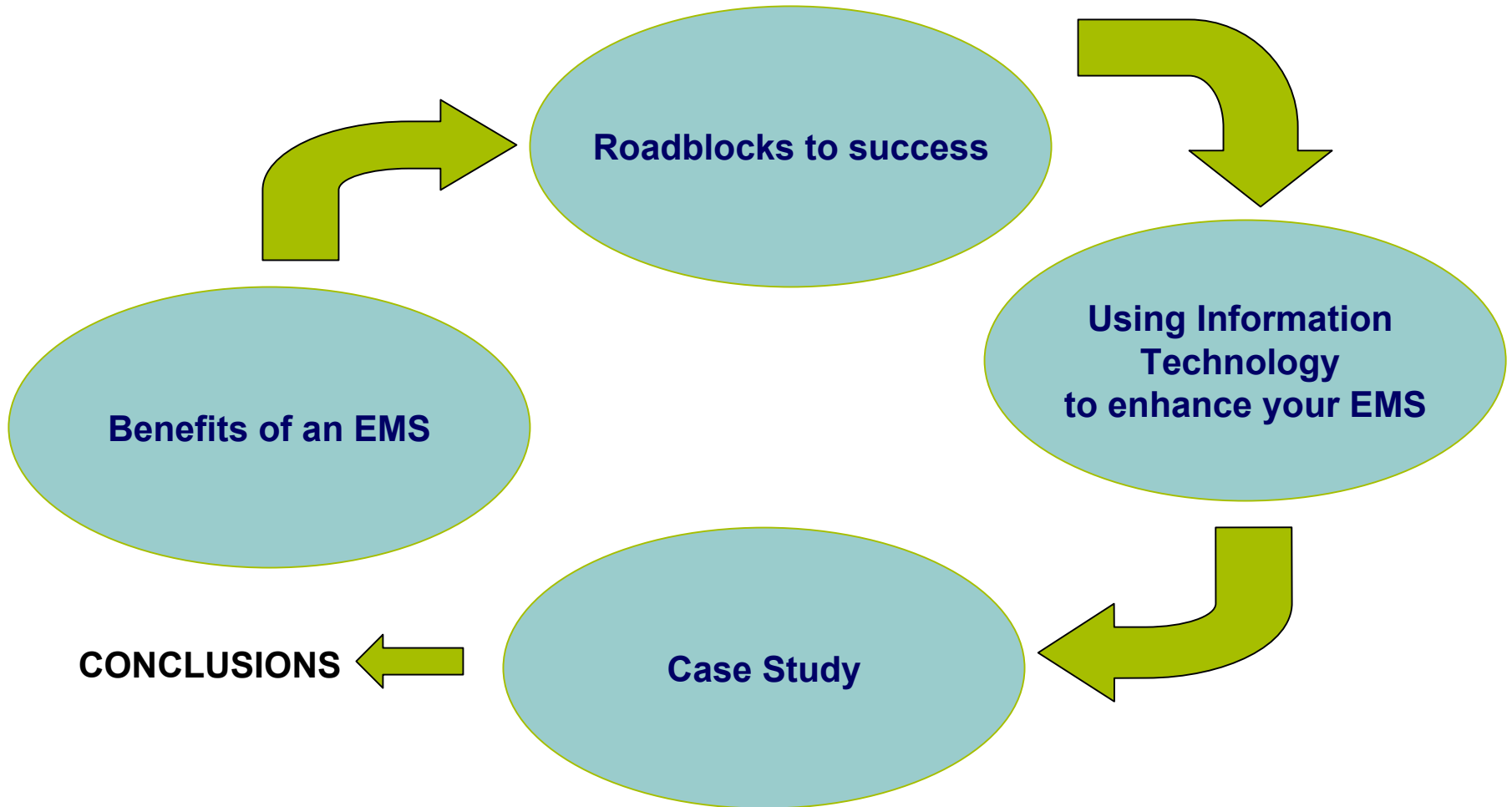
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In general, an effective EMS requires that you:

- Understand and control the impact your operation has on the environment
- Communicate roles & responsibilities to your workers
- Train your workers
- Monitor your environmental performance
- Continuously improve your operation

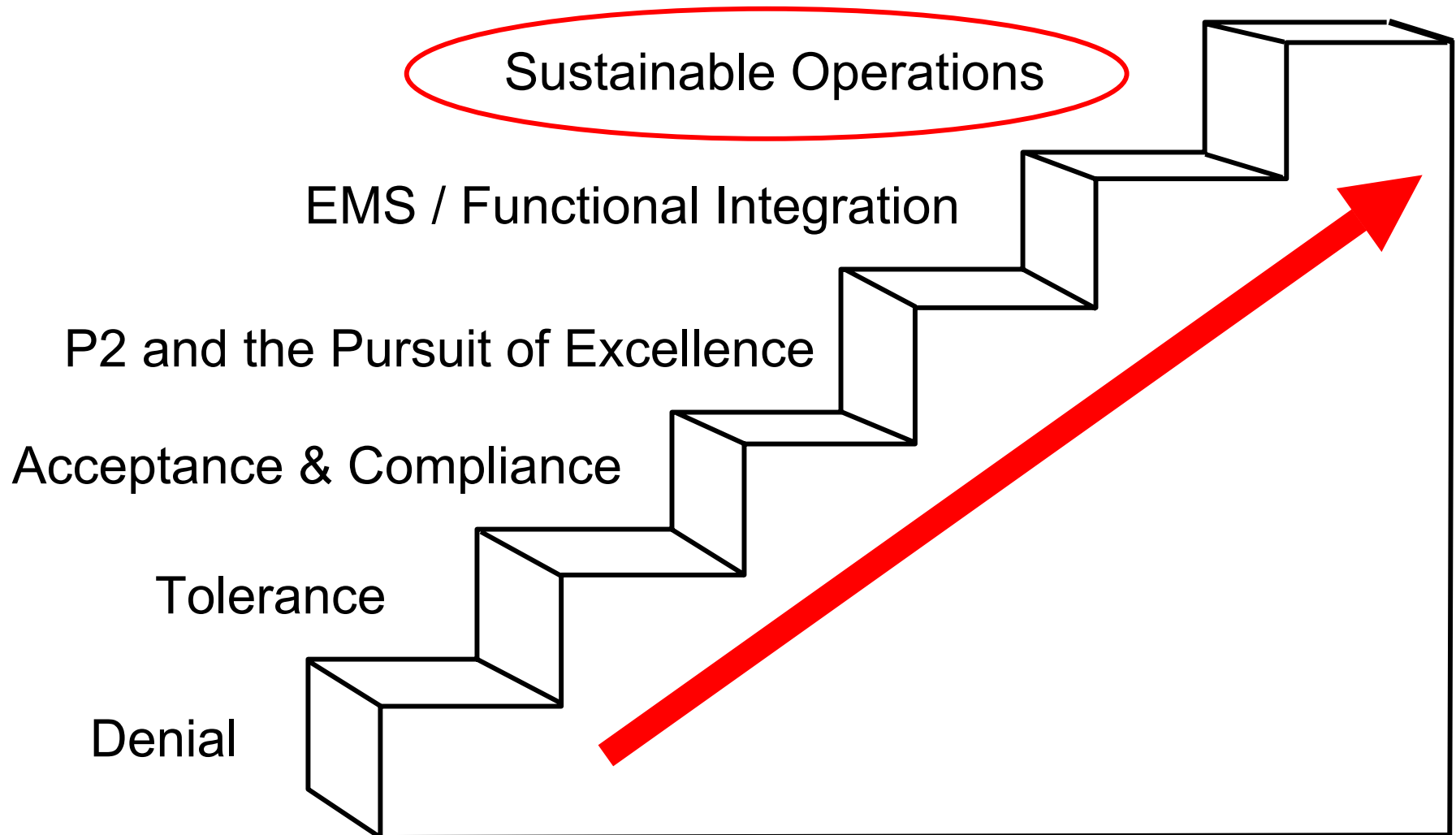
# Presentation Outline

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# The ultimate benefit of an effective EMS is sustainable operations

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## Common Organizational Realities

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- 75 to 85% of the core EMS requirements already exist
- There are multiple management systems (e.g., Quality, Health & Safety, Financial) with duplicate reporting and recordkeeping requirements
- Resources for development and integration are limited
- There is a resistance to change
- The operations guys think environmental compliance is the sole responsibility of the environmental managers

## Typical Barriers to Success

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- Lack of senior leadership commitment, support, or interest
- Failure to communicate goals and objectives effectively throughout organization
- Lack of employee buy-in and participation
- Unrealistic expectations for return on cost
- Belief that “one size” fits all
- Environmental management viewed as non-essential for operational risk management



# Some of the benefits of putting your EMS onto a web-based platform

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- Efficient way to communicate environmental goals and objectives
- Effective means for document management, control, and distribution
- Simple Internet Browser to access information – no need to purchase additional software and licenses
- Multiple users can manage content simultaneously
- No need to re-invent the wheel - existing workflows, processes, systems, and datasets can be used.

## Some potential difficulties

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- Avoid (where possible) static document postings to site that require high maintenance by webmaster
- Avoid websites that require more individual effort to share and distribute information
- If web site goes down, you have no access to your EMS documents
- Users do not have the same level of computer skills – Keep It Simple!



# CASE STUDY – Web-Enabling the EMS for a nationwide transportation company

**Browse Topics**

- Central Region
- Administration
- Northeast Region
- Southeast Region
- Western Region
- Canada
- Help & Info

**Home**

- Search
- Project Team
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- RFI Center
- Feedback
- News Center
- Calendar
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**Latest News**

No current news.

[Go to News Center](#)

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**Document Exchange**

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**Incoming RFIs for action**

No current unread RFIs

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**Search**

Quick Search for Documents by Title

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**Calendar items for 7-Jun-2005**

No current events.

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Legend:

- Western Region
- Central Region
- South East Region
- North East Region

## Reasons for deciding to web-enable the existing EMS

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- Transportation facilities are located across 23 eastern states - sharing and distributing information is difficult and time-consuming.
- EMS documents and most environmental managers are centralized at corporate HQ
- Difficult for remote workers to obtain and utilize EMS documents and procedures
- High travel costs associated with training workers
- Even at HQ, difficult to keep EMS documents current amongst all users

## Overcoming Obstacles

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- Finding a “champion” to understand the need and fight for the funding
- Reaching a consensus amongst users concerning the design and functionality for the website
- Deciding website security and user permission levels
- Overcoming fears concerning website reliability, network security from viruses, and the ability to recover any lost data (should it be necessary)
- Investing the time required to pay attention and “get it right” the first time

## A few “lessons learned”

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- Consultants charge by the hour – take the time to reach consensus on the website design and communicate your exact requirements to the consultant BEFORE the project begins.
- Get your EMS documents organized and ready for uploading to your website BEFORE the consultant needs them – keep the project moving ahead.
- Develop an efficient plan for system-wide implementation of your new EMS website and training workers on its use.

## Conclusions

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- Communication is critical to the success of any organization – providing EMS information via a web browser is efficient and cost-effective.
- An EMS website is an effective means for document management, control, and distribution.
- Training is essential to make certain all users are comfortable using the website.
- Using the website can eliminate the need for unnecessary meetings, emails, and conference calls
- EMS documents are available 24/7.

## Questions and Discussion

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