

An aerial photograph of a city, likely Hanoi, Vietnam, showing a wide river in the foreground, a dense urban area with many high-rise buildings, and a large green park area in the lower right. The sky is overcast.

Promoting Cleaner Production in Vietnam

**The Role of Training & Education in
Strengthening Industry's Environmental
Behaviour**

**Researcher: Carrie Mitchell
Presenter: Cheryl Gonsalves
Waste-Econ Program
University of Toronto**



Waste-Econ Program

- Five year collaborative program funded by CIDA, between the University of Toronto and partner institutions in Vietnam, Laos and Cambodia.
- Focused on promoting Integrated Waste Management (IWM) concepts through institutional capacity development, educational exchanges and pilot projects.

Context

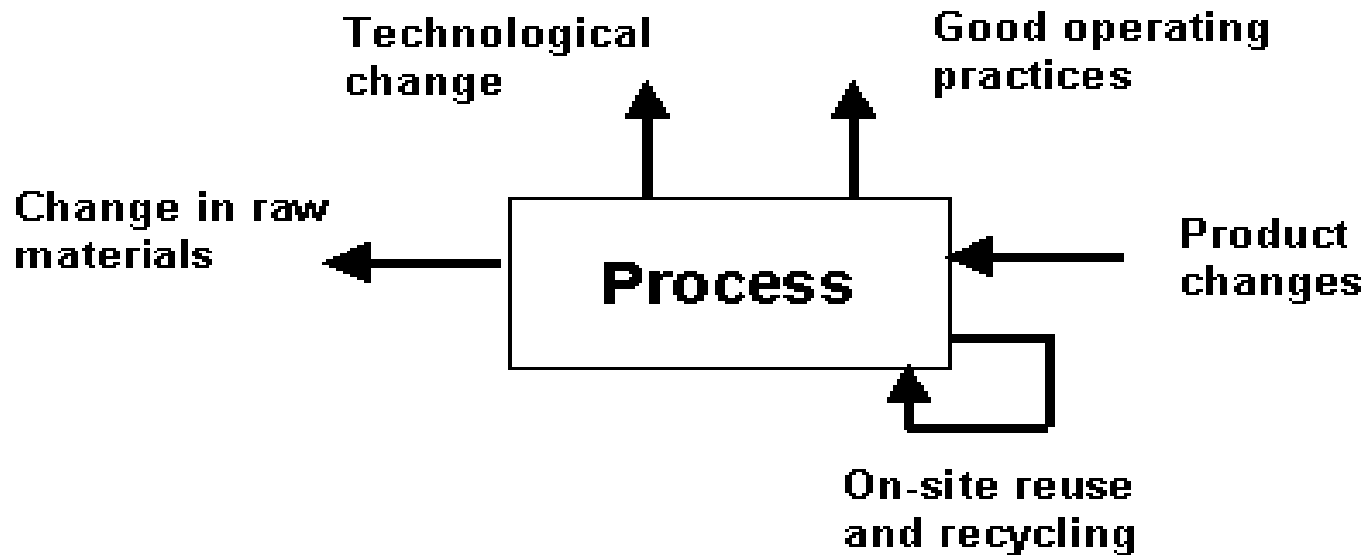


Problem Statement

- Despite the promotion of CP by government, academic and research institutions in the past few years, only a small number of companies have adopted it.



Cleaner Production



Research Method

- Literature review
- Key informant interviews
 - Donor organizations
 - Government
 - Academic and research institutions
- Questionnaire
 - Certified CP trainers and consultants
 - Other academic and government stakeholders

CP Root Causes

- Policy environment
- Dependence on outside assistance
- Traditional corporate culture
- Internal management and accounting structure

Existing T & E

Strengths

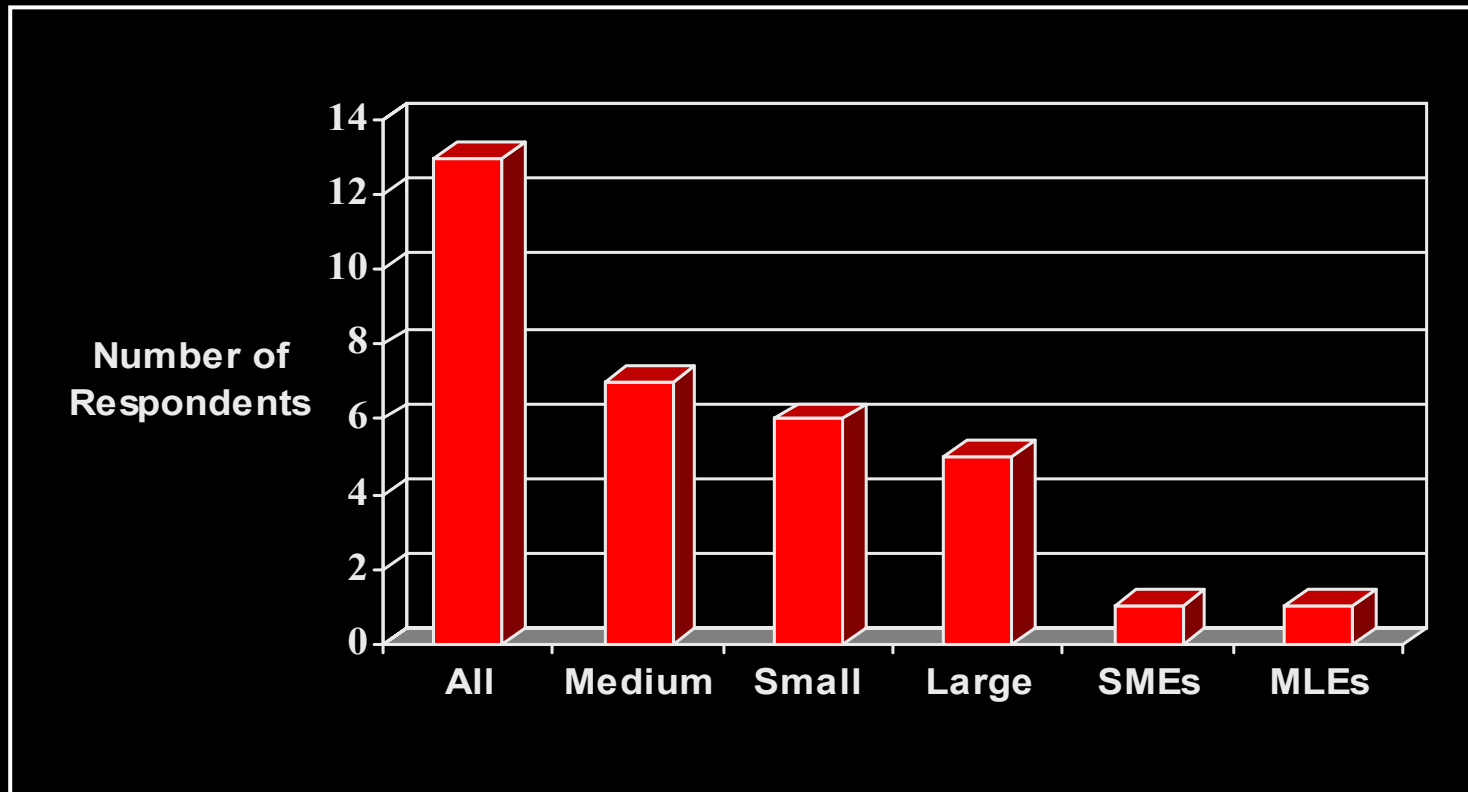
- Raising awareness
- Practical application
- Generating enthusiasm

Weaknesses

- Low dissemination rate
- Too much breadth
- Lack of sector-specific training

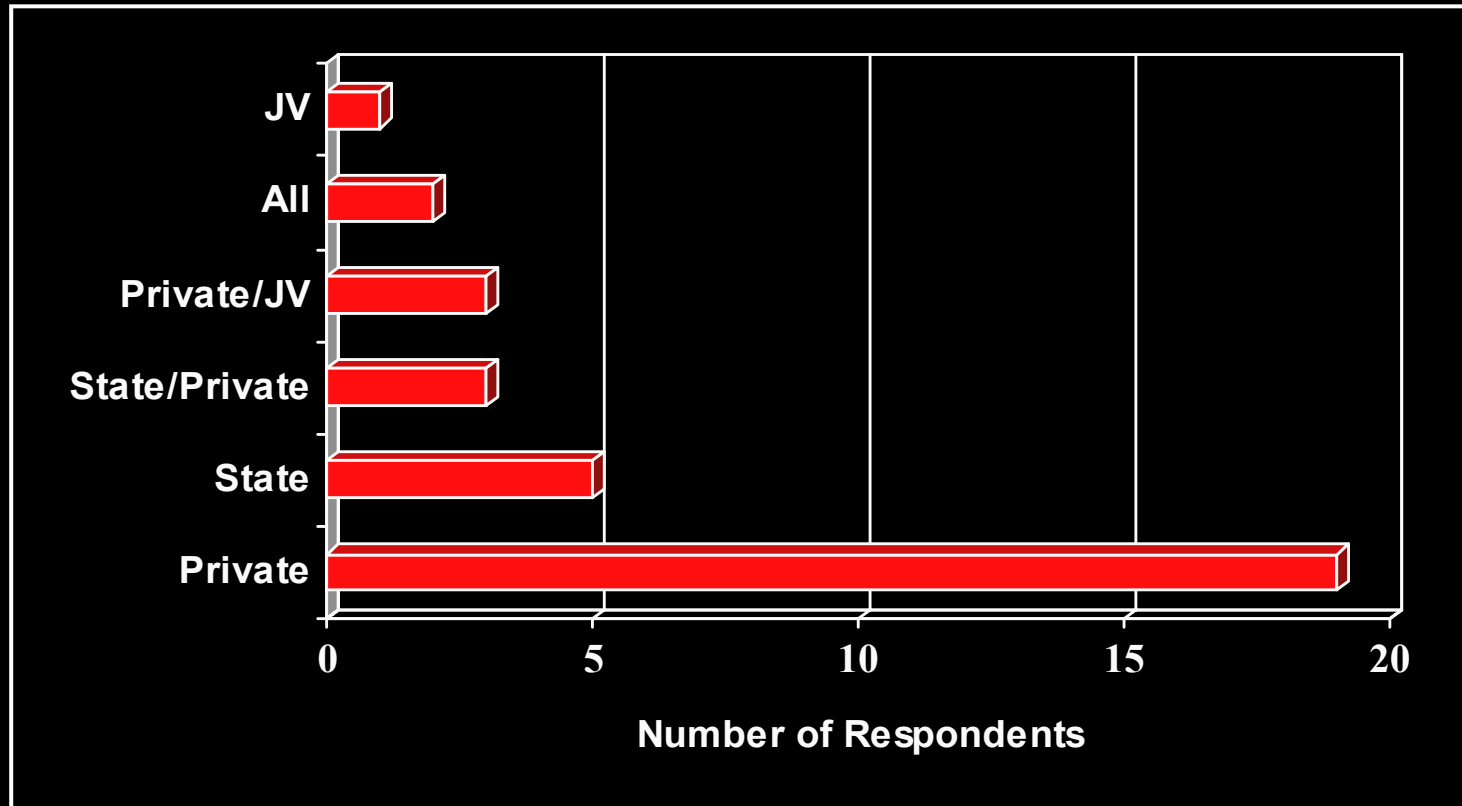
Questionnaire Results

Size of Firm and Effectiveness at CP Implementation



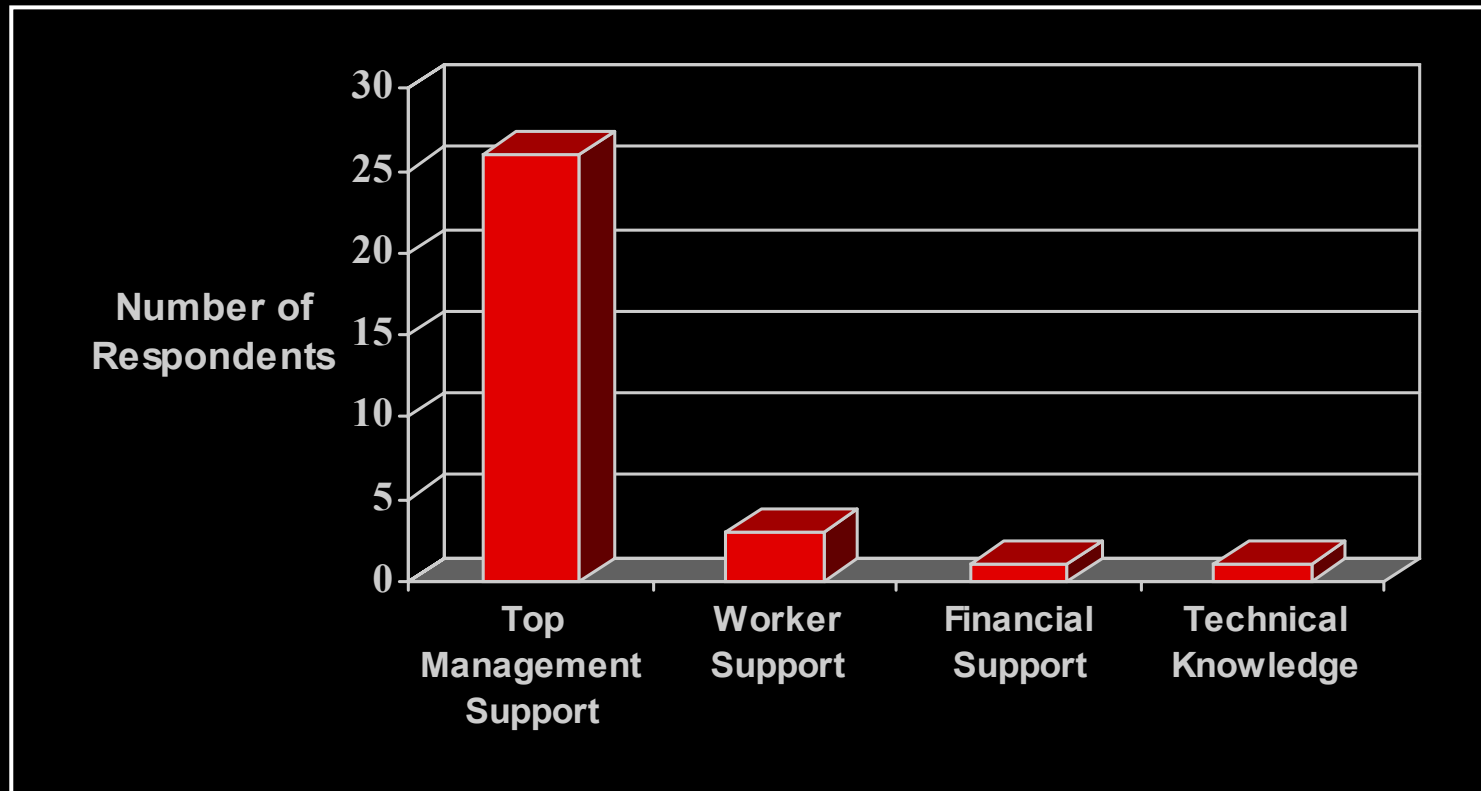
Questionnaire Results

Management Style and Effectiveness at CP Implementation



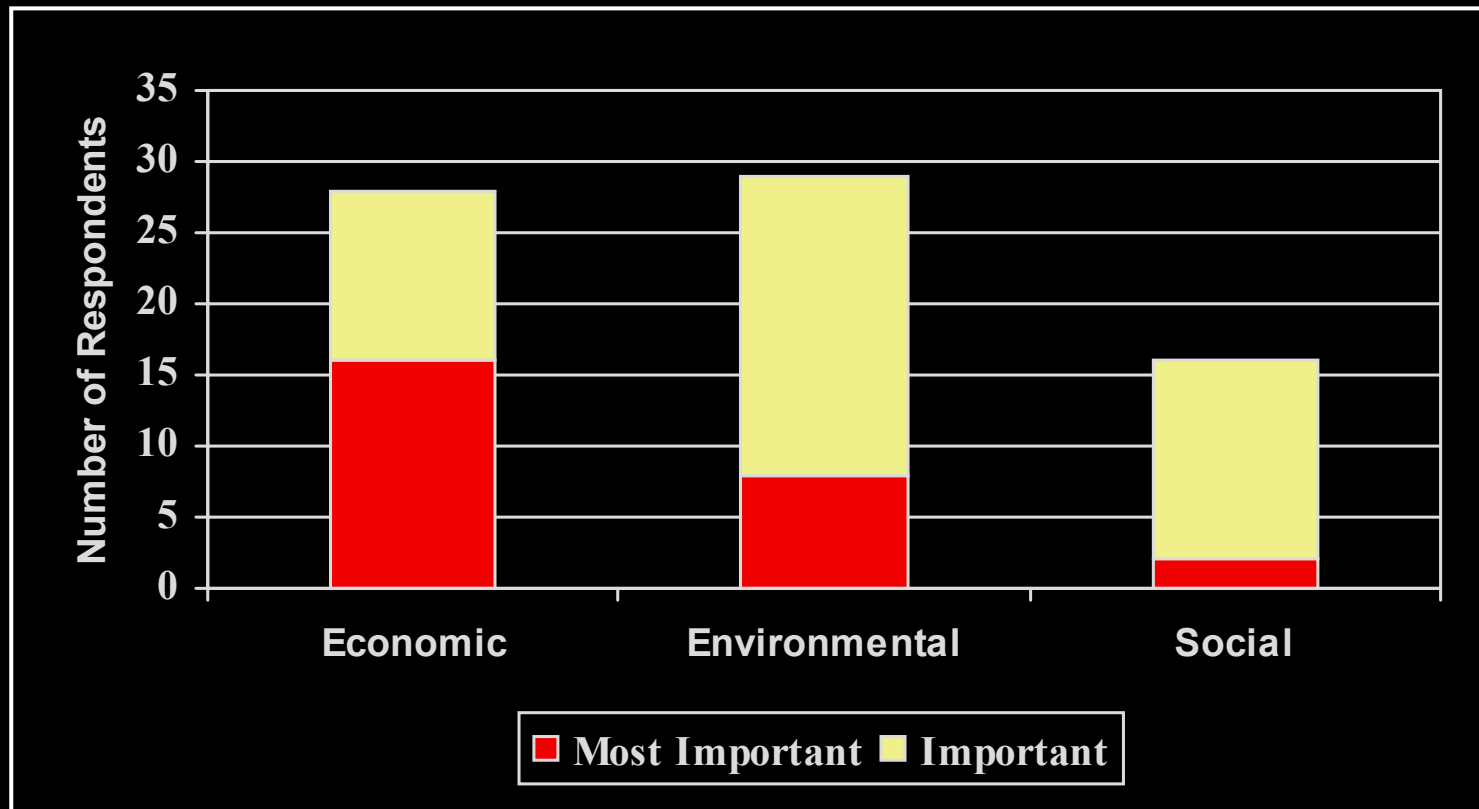
Questionnaire Results

Important Factors for CP Success in Companies



Questionnaire Results

Benefits Motivating Companies to Adopt CP



Conclusions

- Barriers to CP are actually part of larger systemic root causes associated with pollution prevention in general.
- The weaknesses associated with current training programs may inhibit CP from being adopted on a wide scale.
- While management structure does affect CP adoption, the size of firms may be less of a barrier.
- Economic considerations are the primary factor motivating the adoption of CP.

Picture Sources:

- Vietnam Venture Group (downtown HCMC)
- UNEP (air pollution in Vietnam)
- UNEP (CP diagram)