

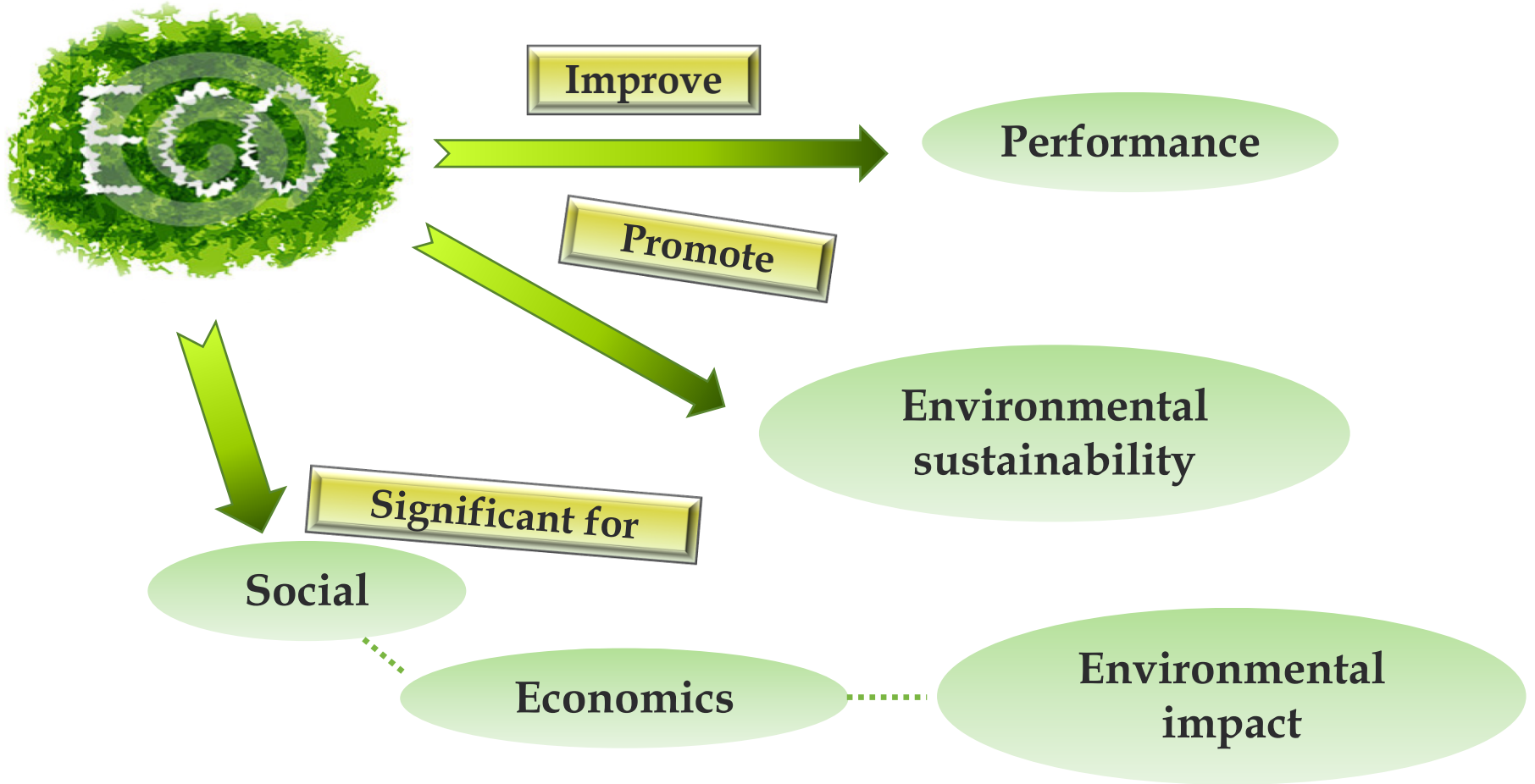


The Critical Success Factors to Eco-Industrial Park Projects in Thailand: A Case Study of Saha Group Industrial Park, Sriracha, Thailand

Kultida Bunjongsiri

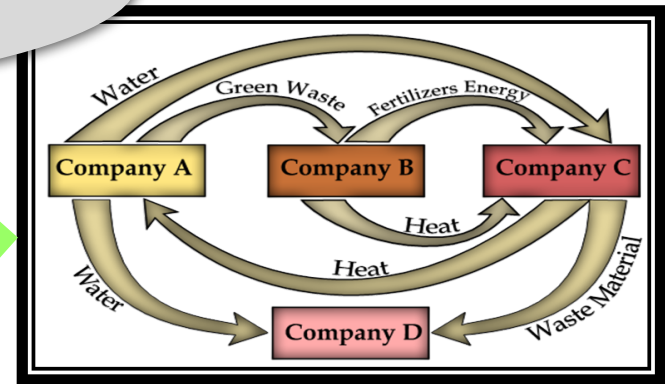
PhD (Env.Eng.),

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and Prof. Cordia Chu*



Types of Eco-Industrial park developments (EID)

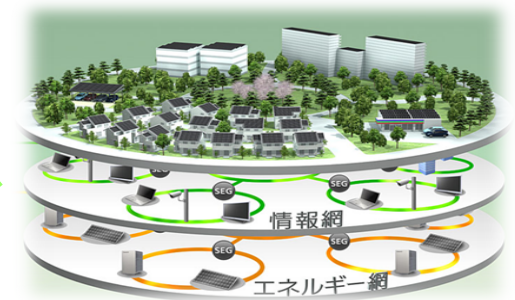
A single by-product exchange or network of exchanges.



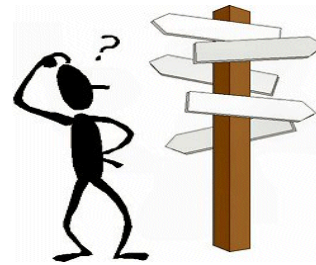
An IP designed around a single environmental theme.



A mixed-use development (industrial, commercial, and residential)



Background of EIP Practices in Thailand



2017

2000



The narrow term used as
'wastes or by-products'

Not feasible and
fails to achieve.

No EIP has succeeded



Development Plan 2017



• Eastern Economic Corridor, EEC Group (3 provinces)

• High Potential for Industrial development Group (8 provinces)

• Highly dense industrial clusters Group (4 provinces)



Data collection



Survey questionnaire from 44 firms located in Saha Group Industrial Park, Sriracha.

Part 1: General Data

Part 2: Knowledge of EIP through the requirements of EIP.

Part 3: Opinions about EIP management.

Part 4: Problems, obstacles & suggestions for implementation of EIP.



Data collection techniques

Qualitative data collection



Document review

In-depth interview



Plant visit observation



FGD



Quantitative data collection



Questionnaires



Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree
5	4	3	2	1

What do you think you can do about...?



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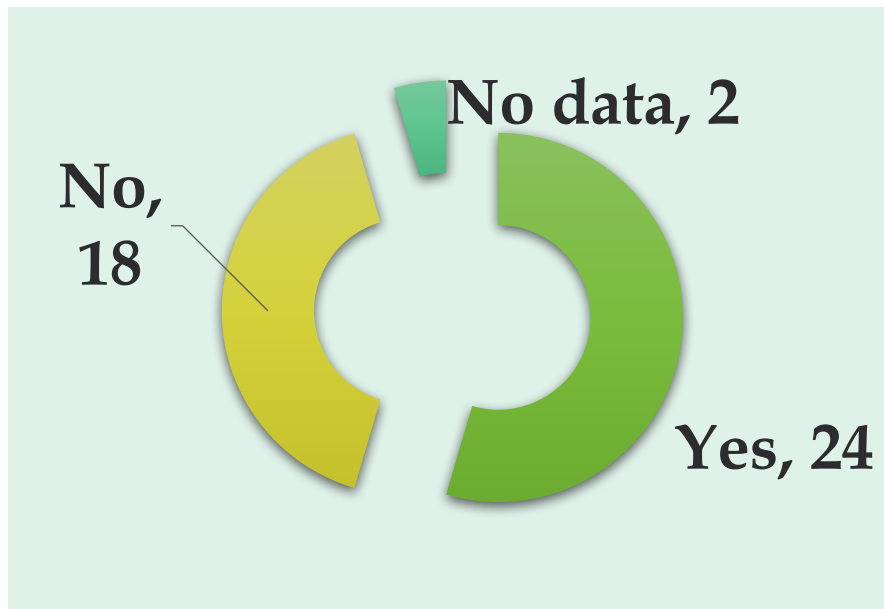


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The Knowledge of EIP from firms



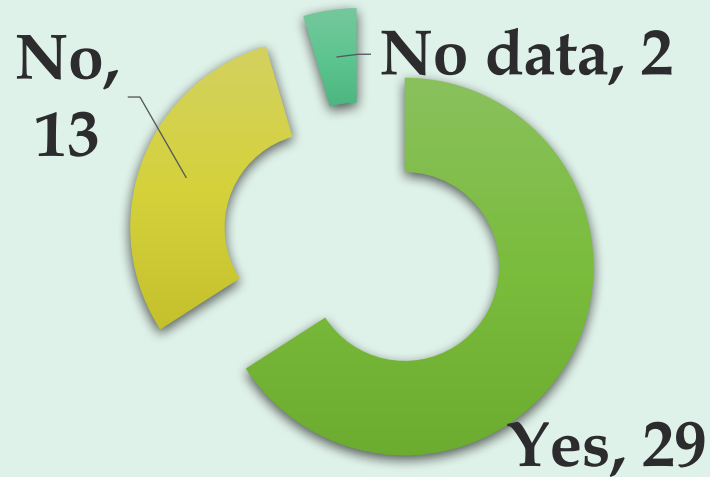
Recognition that the Eco-Industrial project supported by Department of Industrial Works.



Total 44 companies responded

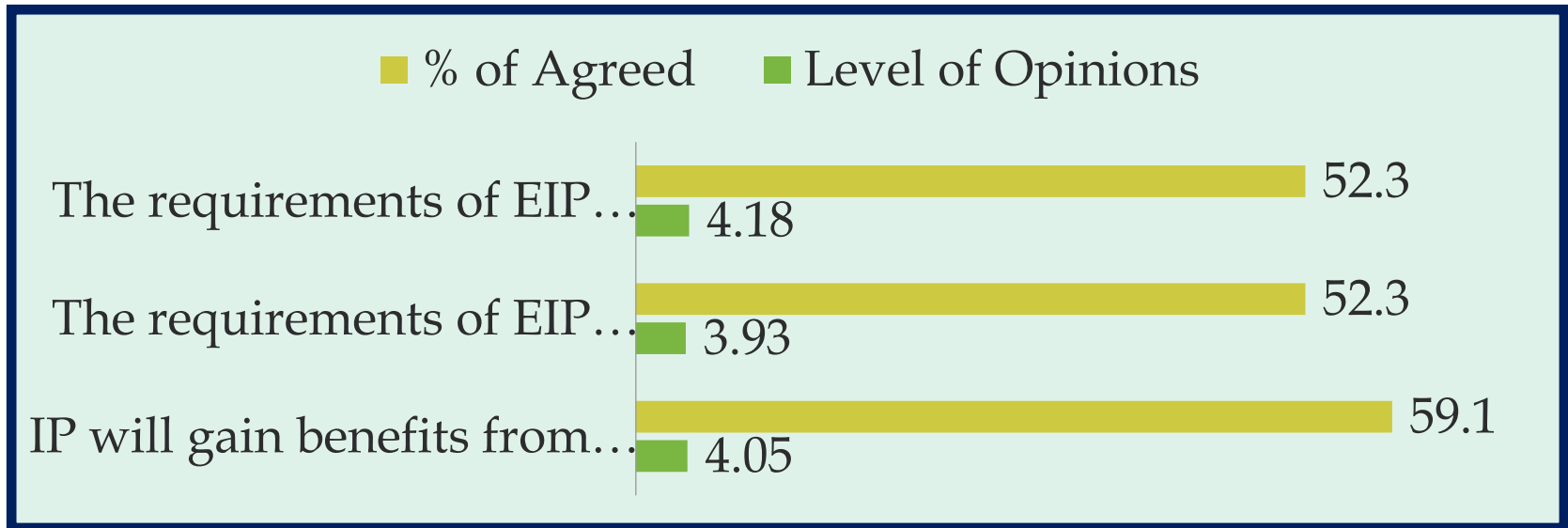
The Knowledge of EIP from firms

Recognition that the Saha Group Industrial Park, Sriracha is part of this project.



Total 44 companies responded

Level of Agreement on EIP management through EIP policies



The questionnaire is a five-point scale where 5 means 'strongly agree' and 1 means 'strongly disagree'.

5	4	3	2	1
Strongly Agree	Agree	Moderate/Undecided	Disagree	Strongly Disagree

Industrial Park level

SPI commenced implementing the guidelines for analysing development issued in 2011. The process has been slow and accounts for the low level of participation.

There is no clear documentation of the outcome. Requires an investigation to identify the real problems and capacities in the area.

Green Factory

Only 18 firms have been involved by voluntary

Full collaboration from all involved, factories, communities, public organisations and academic institutions to monitor progress.

The level of participation so far has been very low, with most firms and community members ignoring most of the project.

Different kind of problems

Eco centre

The activities under the centre were not yet as effective as expected.



Four factors for success in implementing EIPs

Policy and political factor

- Unclear criteria/measures to guide.
- Shortage of specialists in understanding EIPs.
- Lack of funding support.
- Previous narrow focus on waste management.

Industrial Parks and personal factor

- Weak cooperation between firms and the IP management.
- Need for guidance from governments (policy) and experts (advice).
- Lack of funding support.
- Firms ignoring the intention of the EIP.

Community/Local Government agencies' factor

- Weak cooperation between community and EIP management.
- Difficulty in determining leader in communities.
- Weak sense of responsibility among local government for running projects.

Technical and Knowledge factor

- Limited dissemination of knowledge.
- Lack of technical services.
- Lack of support for training/education.



Discussion




+ Many projects have failed to meet expectations, the lessons learnt from successful EIP cases can be used to help motivate other enterprises to follow their success.

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- + Thai data, there has been limited research into EIPs, especially from the industrial sector, which is hard to access.
 - + The sharing of information and communication among government sector and industry sector is lacking.



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ACTION PLAN



+ Most industrial parks in Thailand are at a very early stage of development of a sustainable approach.

+ There has been no action plan to achieve progress in developing sustainability in Thailand.

Conclusion

Most of the factories mainly focus on manufacturing benefit rather than the environmental improvement.

The owners were not interested in the environmental benefits, and regarded any environmental work as a burden on their business, not as a potential benefit.

Interest

Attention

Action

Desire

Importantly, even with a strong desire to enhance the environmental performance, the progress of EIPs in Thailand still has a long way to go.

The success of EIPs also depends heavily on support from the government and local administration as well as the local community.



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