

Industrial Pollution in Thailand A Case of Eastern Seaboard Development and Japanese Aid and Investment

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Institutional Introduction (1)

- CAIN was established in late 1997 with its active role as an independent NGO watchdog focusing on Thailand's industrial policy and its impacts.
- It is a development of the Toxic Chemical Campaign Committee (TCCC) which was set up in response to the 1991 chemical warehouse fire at Bangkok's Central Port (Klong Toey Port)

Chemical Warehouse Explosion at Bangkok's Central Port (Klong Toey Port) on March 2, 1991

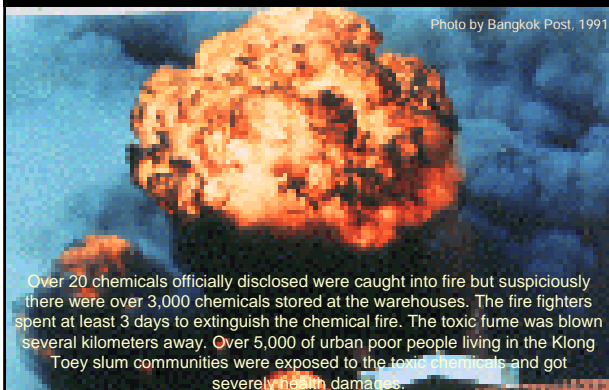
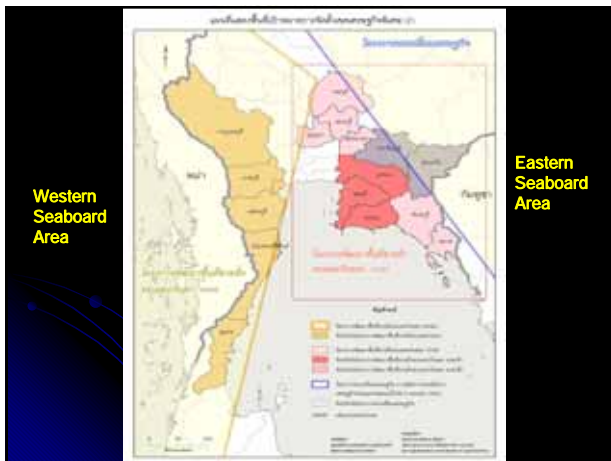


Photo by Bangkok Post, 1991





Eastern Seaboard (ESB) Development Program

ESB Program was first introduced during the 5th National Economic and Social Development Plan (1981-1984), when Thailand started changing its economic development strategy from import-substitution to export-led industrialization.

ESB is the comprehensive plan for developing Thailand's eastern region to be the main industrial zone for the export-led industries, creating new jobs to alleviate high unemployment situation in the country.

It is the largest regional development project to date that has ever been implemented in Thailand.

- ### Eastern Seaboard (ESB) Development Program
- Main components of the plan:
1. Natural Gas Pipelines from the Gulf of Thailand and Gas Separation Plants at Map Ta Phut, Rayong Province;
 2. Map Ta Phut Industrial Seaport and MTP Industrial Estate Area in Rayong, for petroleum refining plants, petrochemical, other downstream industries, iron & steel, and power plants
 3. Laem Chabang Deep Seaport and Laem Chabang Industrial Estate for light industries in Chon Buri Province
 4. Chacheongsao Industrial Zone for light industries in Chacheongsao Province
 5. Huge infrastructure and transportation networks

Eastern Seaboard (ESB) Development Program

National Economic and Social Development Board Report:

- Total Investment of 11,500 million US\$ (1997)
- Lead to the establishment of about 40 industrial estates, both inside and outside the target areas with approx. 4,000 factories in Rayong and Chonburi province.
- Create jobs around 400,000 persons
 - Direct employment 130,000 persons
 - Indirect employment 300,000 persons

- ### Japanese Aid and Investment in ESB
- Japan Government has been the key supporter for ESB since early 1980s to 1990s.
 - JBIC offered Overseas Development Assistance (ODA) focusing on the industrial development of Map Ta Phut and Laem Chabang with objectives of:
 - Develop Map Ta Phut for heavy petrochemical complex,
 - Develop Laem Chabang with a new international commercial port, and an industrial estate
 - develop water resources for these two areas
 - construct railway and highway networks for meeting the transport needs.
 - 27 ODA loans for 16 projects since early 1980s
 - Total amount of ODA (end of fiscal year 1998) is 178,768 million yen

JAPANESE ODA - SUPPORTED PROJECTS IN ESB

- **Map Ta Phut area**
 - Map Ta Phut Industrial/Urban Complex Project
 - Map Ta Phut Industrial Port Project
 - Gas Separation Plant Project
- **Laem Chabang area**
 - Laem Chabang Port Project
 - Laem Chabang Industrial Estate Project
- **Five Water Resource Development & Water Pipeline Projects**
- **Three Railway Projects**
- **Three Road Projects**

Laem Chabang Industrial Estate and its Deep Seaport in Chonburi Province



An Oil refining Plant located close to the Laem Chabang Industrial Estate in Chonburi Province



A Coal Fire Power Plant in the Map Ta Phut Industrial Estate

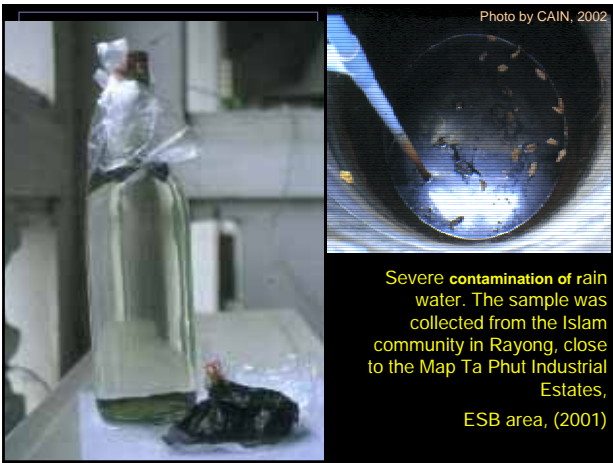


A Complex of Petrochemical and downstream factories in Map Ta Phut Industrial Estates



A Case of Industrial Pollution at the Map Ta Phut Industrial Development Area Rayong Province

Negative consequences on environment, natural resources, people health and local livelihood caused by the industrial development under the Eastern Seaboard Development



Industrial Waste Dumping near a hill at Plutaluang district in Chonburi province (1998)



Illegal Toxic waste water disposal and industrial garbage dumping by unidentified trucks usually occur in the ESB region



Waste water illegally released to the public area close to the Kodhin community, Rayong province (26 November 2003)



The first toxic waste secure landfill inside MTP IE, operated by GENCO

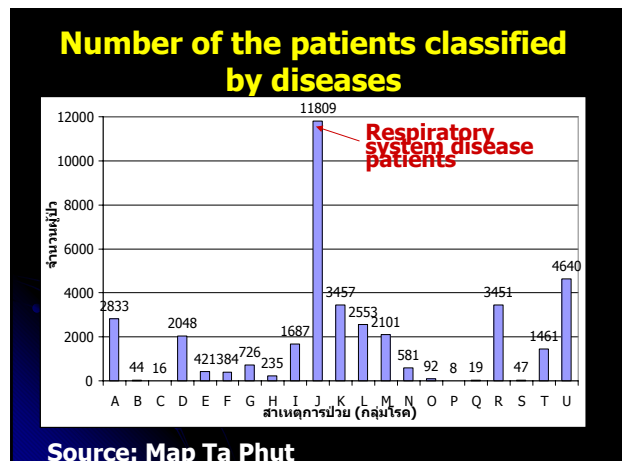


Oil spill traces and toxic contaminated beaches near TPI complex



The second largest petrochemical complex in Rayong run by TPI group

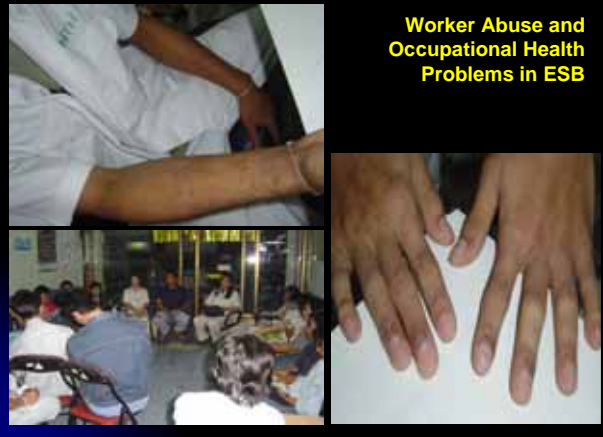




Worker Abuse and Occupational Health Problems in ESB



Worker Abuse and Occupational Health Problems in ESB



Eastern Seaboard Development Program

Thai government officials view:

The most successful industrialization program in Thailand

Thai NGOs or civil networks view:

The most visible example of serious environmental and health impacts in Thailand's development experience