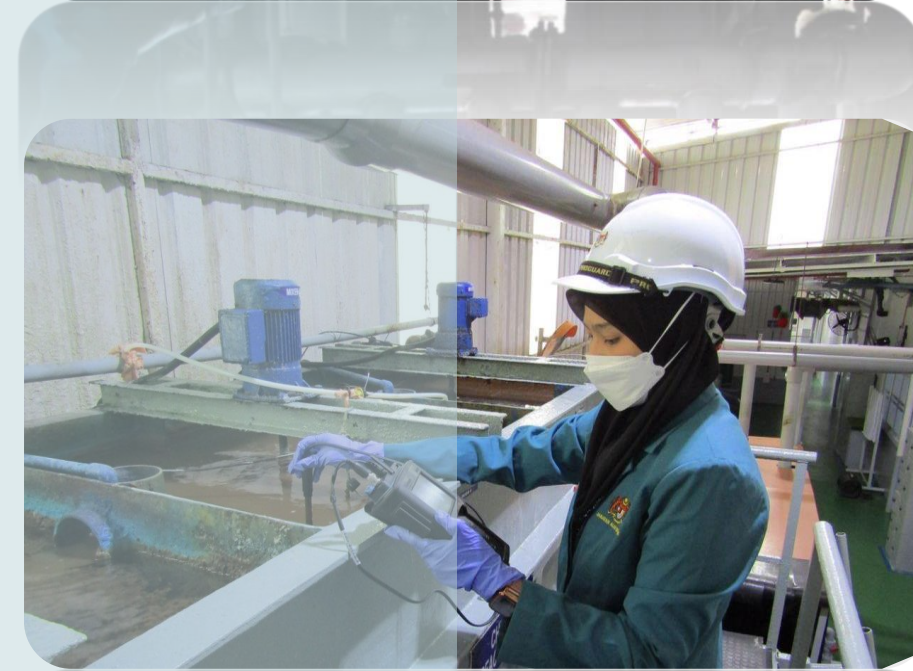




MALAYSIA'S GOVERNMENT STRATEGIES ON ENVIRONMENTAL CONTROL

SESSION 3 - MALAYSIA FOCUS
2022 SEAISI Steel Mega Event & Expo
15th November 2022

NORAZLINA AB HALIM
DEPARTMENT OF ENVIRONMENT
MALAYSIA



INTRODUCTION TO DOE AND ITS FUNCTION



DEVELOPMENT OF
ECONOMY

ENVIRONMENTAL
CONSERVATION



VISION

*Environmental
Conservation For The Well-
being of The People*



MISSION

*To Ensure Sustainable
Development In The
Process of Nation Building*



TAGLINE

*Environmental Conservation,
Our Shared Responsibility*

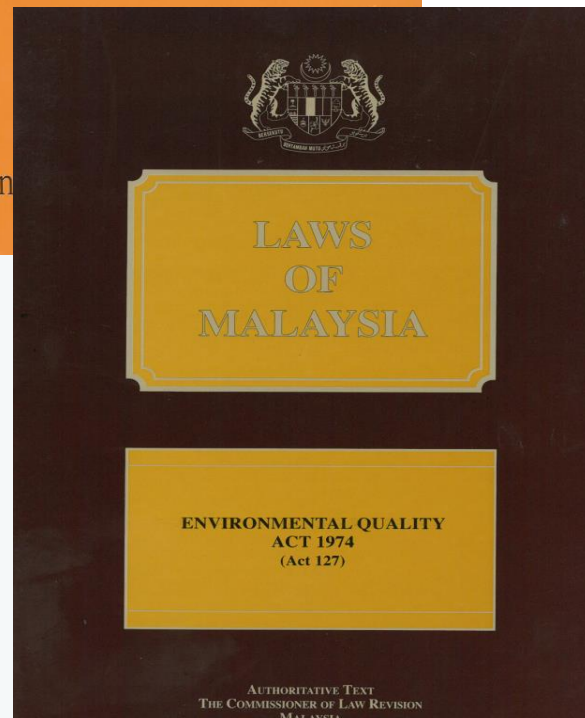
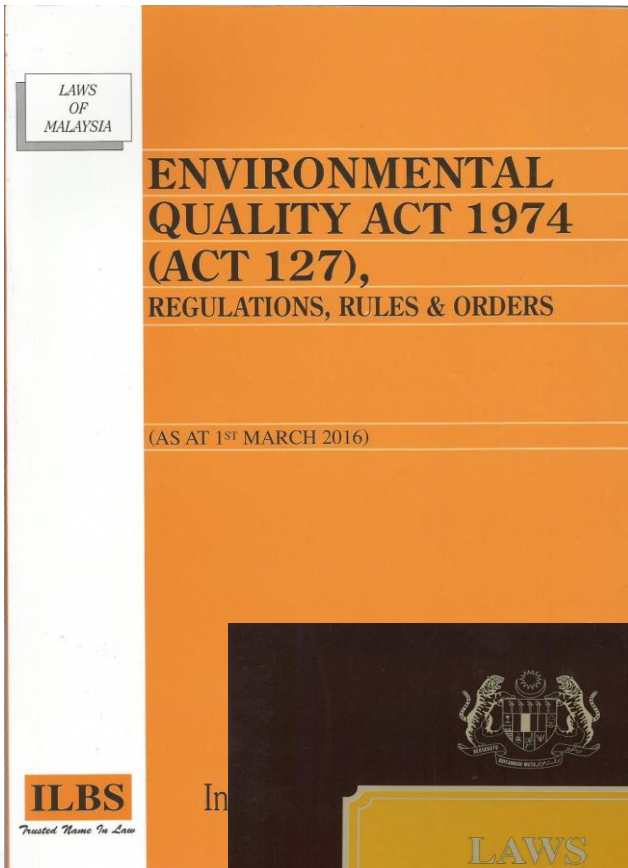


DOE COMMITMENTS TOWARDS SDG 2030



Gro Harlem Brundtland, former Prime Minister of Norway, defines it as: **"development that meets the needs of the present without compromising the ability of future generations to meet their own needs"** - Our Common Future (Report World Commission on the Environment and Development report, 1987)

DOE AS ENFORCEMENT AGENCY



The Department of Environment's main role is to prevent, control, abate pollution and enhancement of the environment through the enforcement of the Environmental Quality Act 1974, and its subsidiary legislations



Environmental Quality Act, 1974



Part IV, (Protection and Preservation of the Marine Environment), Exclusive Economic Zone Act, 1984

RELEVANT KEY SECTIONS OF ENVIRONMENTAL QUALITY ACTS 1974 (ACT 127) - PROHIBITION AND CONTROL OF POLLUTION

SECTION 22
RESTRICTIONS ON POLLUTION OF THE
ATMOSPHERE

Environmental Quality (Clean Air) Regulations 2014

SECTION 25
RESTRICTION ON POLLUTION OF
INLAND WATERS

Environmental Quality (Industrial Effluent) Regulations 2009

SECTION 34A
REPORT ON IMPACT ON ENVIRONMENT
RESULTING FROM PRESCRIBED
ACTIVITIES

Environmental Quality (Prescribed Activities) (Environmental Impact Assessment) Order 2015

Activity 6(c) of Second Schedule: Iron and steel:

- (i) Using iron ore as raw materials for production of 100 tonnes or more per day.
- (ii) Using scrap iron as raw materials for production of 200 tonnes or more per day.

SECTION 34B
PROHIBITION AGAINST PLACING,
DEPOSIT, ETC., OF SCHEDULED
WASTES

Environmental Quality (Scheduled Wastes) Regulations 2005

SECTION 49A
COMPETENT PERSON

“competent person” means a person who is competent to conduct the activities as specified in section 49A

(a) the operation of a control equipment; (b) the management of scheduled wastes; (c) the conduct of studies; (d) the preparation and submission of reports, plans, proposals, engineering drawings or other documents relating to environmental matters.

LIST OF COMPETENCY COURSES OFFERED BY INSTITUTE ALAM SEKITAR MALAYSIA (EiMAS)

Field	Courses
Scheduled Wastes	<i>i. Certified Environmental Professional in Scheduled Waste Management</i>
Air	<i>i. Certified Environmental Professional in Bag Filters Operation</i> <i>ii. Certified Environmental Professional in Scrubber Operation</i>
Wastewater/ Effluent	<i>i. Course for Certified Environmental Professional in the Operation of Industrial Effluent Treatment Systems (Biological Processes)</i> <i>ii. Course for Certified Environmental Professional in the Operation of Industrial Effluent Treatment Systems (Physical Chemical Processes)</i> <i>iii. Course for Certified Environmental Professional in the Treatment of Palm Oil Mill Effluent (Pond Processes)</i> <i>iv. Course for Certified Environmental Professional in Sewage Treatment Plant Operation</i> <i>v. Course for Certified Environmental Professional in Leachate Treatment Plant Operation</i>



ENVIRONMENTAL ISSUES AND CHALLENGES

AIR POLLUTION



OPEN BURNING
HAZE
INDUSTRIAL AIR EMISSION
EMISSION FROM MOTOR
VEHICLES
NOISE POLLUTION

WATER POLLUTION



INDUSTRIAL EFFLUENT
SEWAGE
LEACHATE
OIL SPILL

TOXIC WASTE MANAGEMENT



SCHEDULED WASTES
ILLEGAL DUMPING
SPILLAGE AND INDUSTRIAL
INCIDENT

SOIL POLLUTION



SOIL CONTAMINATION
SOIL EROSION
AND LANDSLIDE
LOSS OF AESTHETIC VALUE



Shut down of water treatment plant due to river pollution



Complexity of air pollution incident



Illegal importation of plastic wastes/ SW



Complexity of river pollution incident



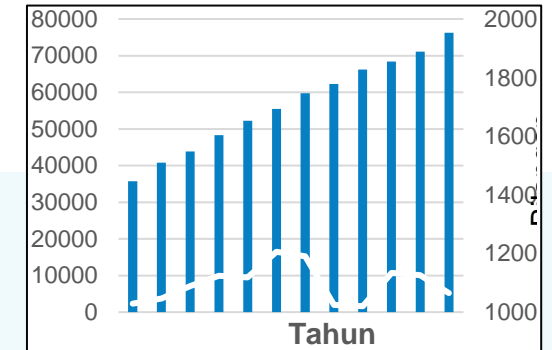
Open burning/ haze



Enforcement of illegal factories

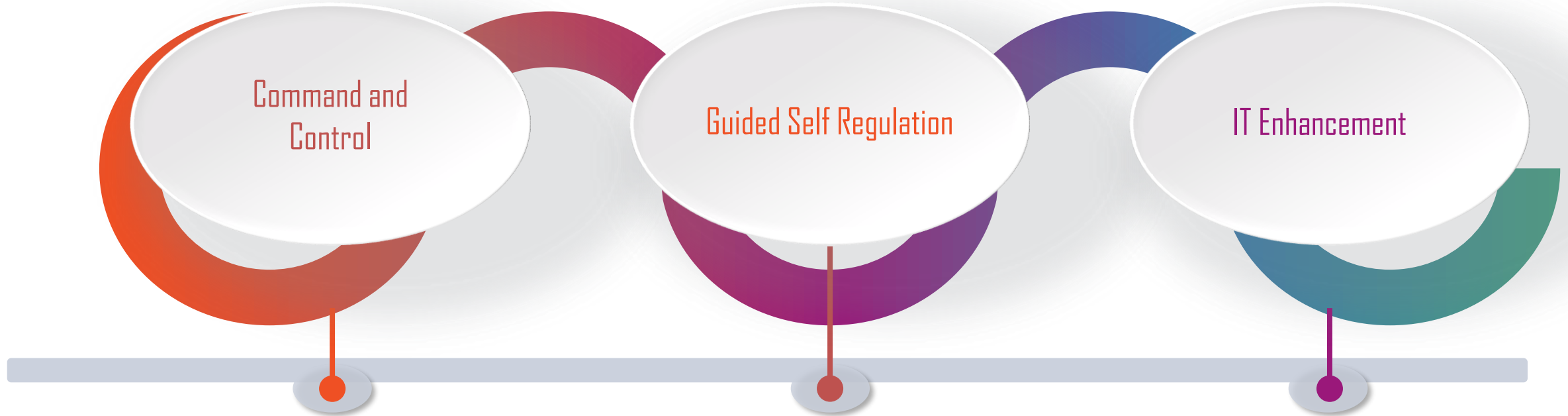


Illegal dumping of SW



Increase of pollution source vs number of enforcement officers

ENFORCEMENT APPROACHES



- Emphasis of enforcement is on Compliance Monitoring = 'Final Discharge'
- 7 Environmental Mainstreaming Tools
- Emphasis of enforcement is on Performance Monitoring (PM) "Upstream of Final Discharge" or Each Unit Operation/Unit Process
- Online reporting (eSWIS, OER)
- Online monitoring (CEMS/iREMOTE)
- Online database (inventory of pollution sources)

ENFORCEMENT OF EQA 1974

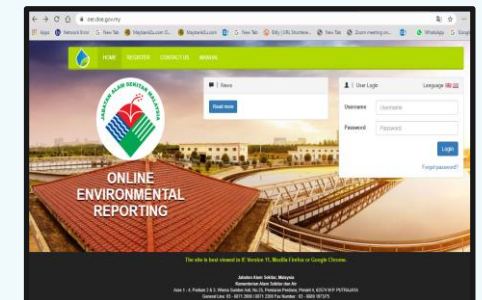
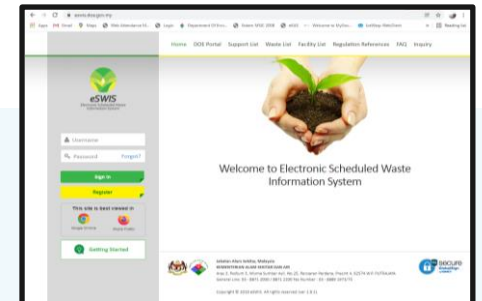
FIELD INVESTIGATION: INSPECTION OF PREMISES



- **Inspection** of all premises licensed by DOE (crude oil palm mills, raw natural rubber mills, treatment facilities and scheduled waste disposal).
- **Periodic Inspections** to premises to check compliance (priority to low compliance record / repeated offences / public complaints)

DESKTOP ENFORCEMENT

- **Desktop enforcement** is done by checking if the premises comply EQA 1974 through online systems such as Online Environmental Reports (OER), Electronic Scheduled Waste Information System (e-SWIS), Continuous Emission Monitoring System (CEMS), Environmental Mainstreaming Tools (EMAINS) and Integrated Remote Monitoring System (IREMOTE).
- A **notice in writing** will be given to premises to submit information to DOE.
- For any offenses detected from the desktop enforcement, a notice in writing will be given to the premise **to rectify the problems found**. **Site inspection** will be carried out on case-to case basis.



ENFORCEMENT OF EQA 1974

DRONE AERIAL SURVEILLANCE

- Application of **drones for aerial surveillance** to monitor and detect any suspicious activity or abnormal pollution emissions that are at risk of causing environmental pollution. Follow up enforcement actions will be carried out.

NEGARA



Rakaman foto pemantauan udara menggunakan dron oleh penguat kuasa JAS negeri Perak di Kawasan Perindustrian FTZ Jelapang dan premis industri berhampiran.

Guna dron pantau aktiviti pencemaran



JAS GUNA DRONE INTIP LOKASI PENCEMARAN DI KAWASAN INDUSTRI

Published: October 30, 2019 | 7:00 pm - Updated: 14:55 pm - Masrah Susdi



SUGGESTED NEWS

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PATROLS



- Scheduled Patrolling** in industrial areas especially in pollution hot spots or upstream of water intake points during and after office hours, including weekend/ public holidays.

GUIDED SELF-REGULATION (GSR) APPROACH

7 Environmental Mainstreaming Tools

Environmental Policy (EP)

Environmental Budgeting (EB)

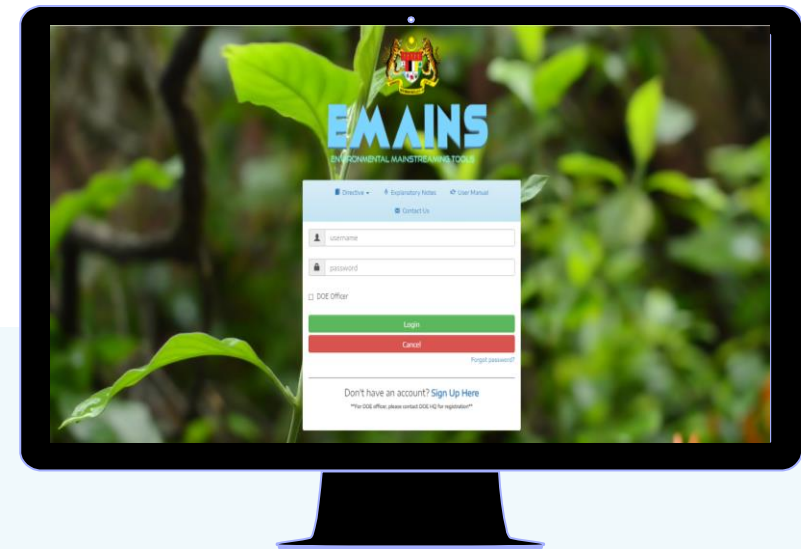
Environmental Monitoring Committee (EMC)

Environmental Facility (EF) – (which includes pollution control systems and laboratory requirements)

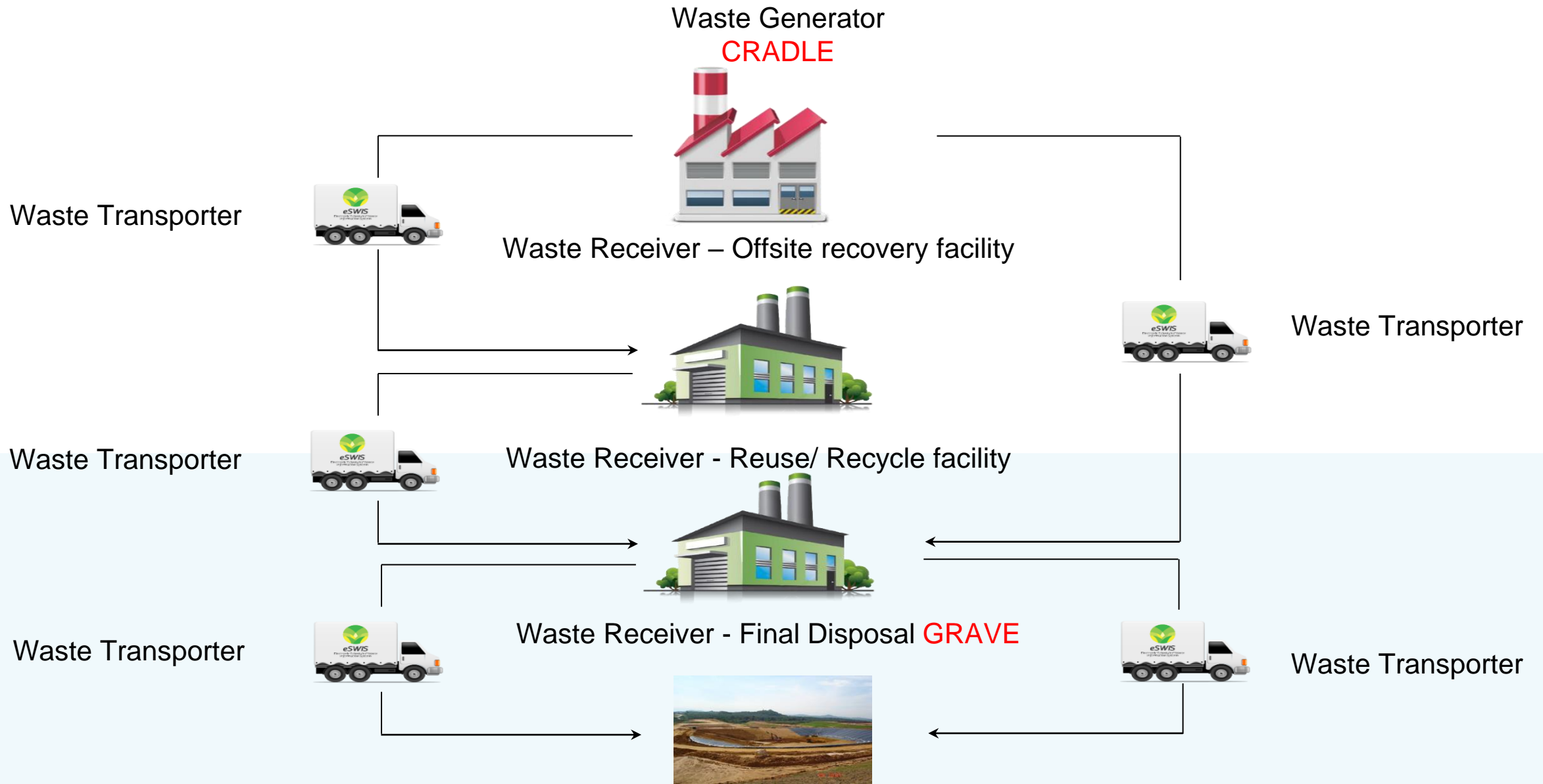
Environmental Competency (EC) – (which includes personnel and competent person requirement)

Environmental Reporting and Communication (ERC)

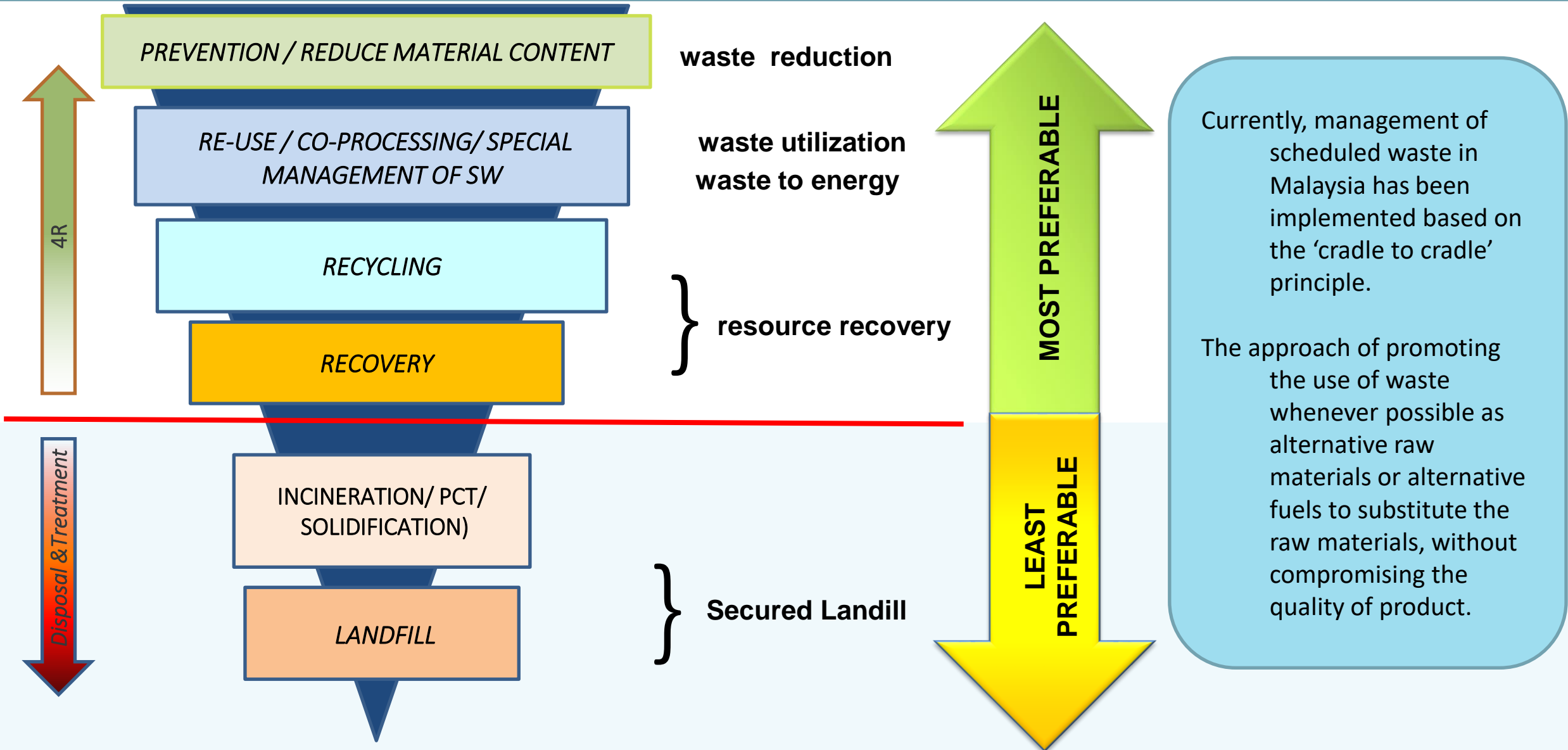
Environmental Transparency (ET)



MANAGEMENT OF SCHEDULED WASTES TOWARDS CRADLE TO CRADLE PRINCIPLE



CONCEPT OF SCHEDULED WASTE MANAGEMENT HIERARCHY IN MALAYSIA



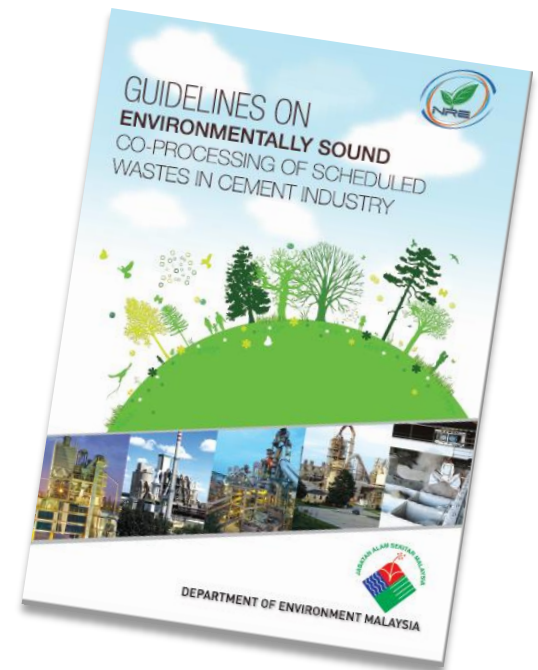
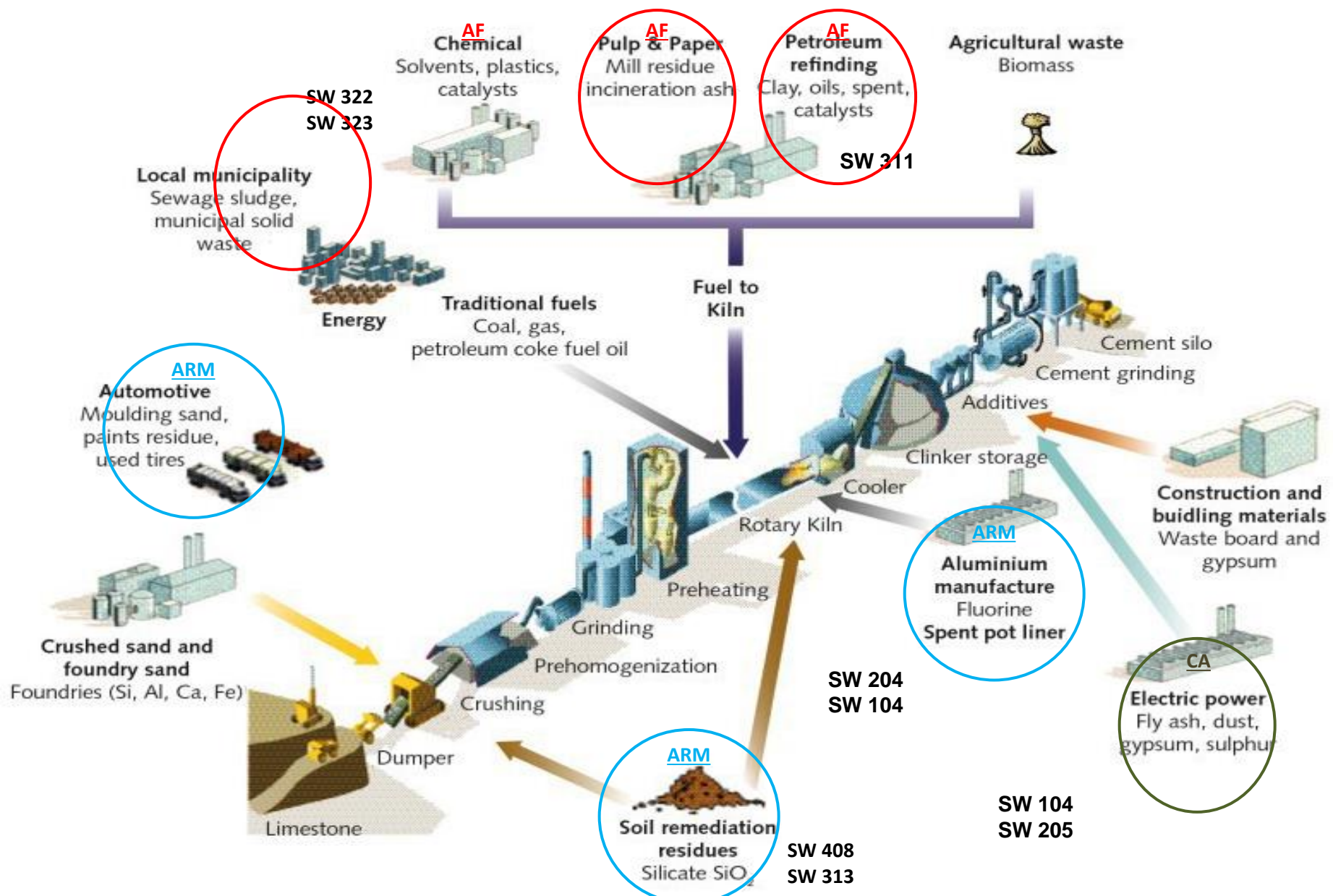
INDUSTRIAL ECOLOGY CONCEPTS





Industrial Ecology refers to industries engaging in a system of mutually beneficial symbiosis.



“one industry’s waste is another’s feedstock”

“one industry’s by-product is another’s raw material”

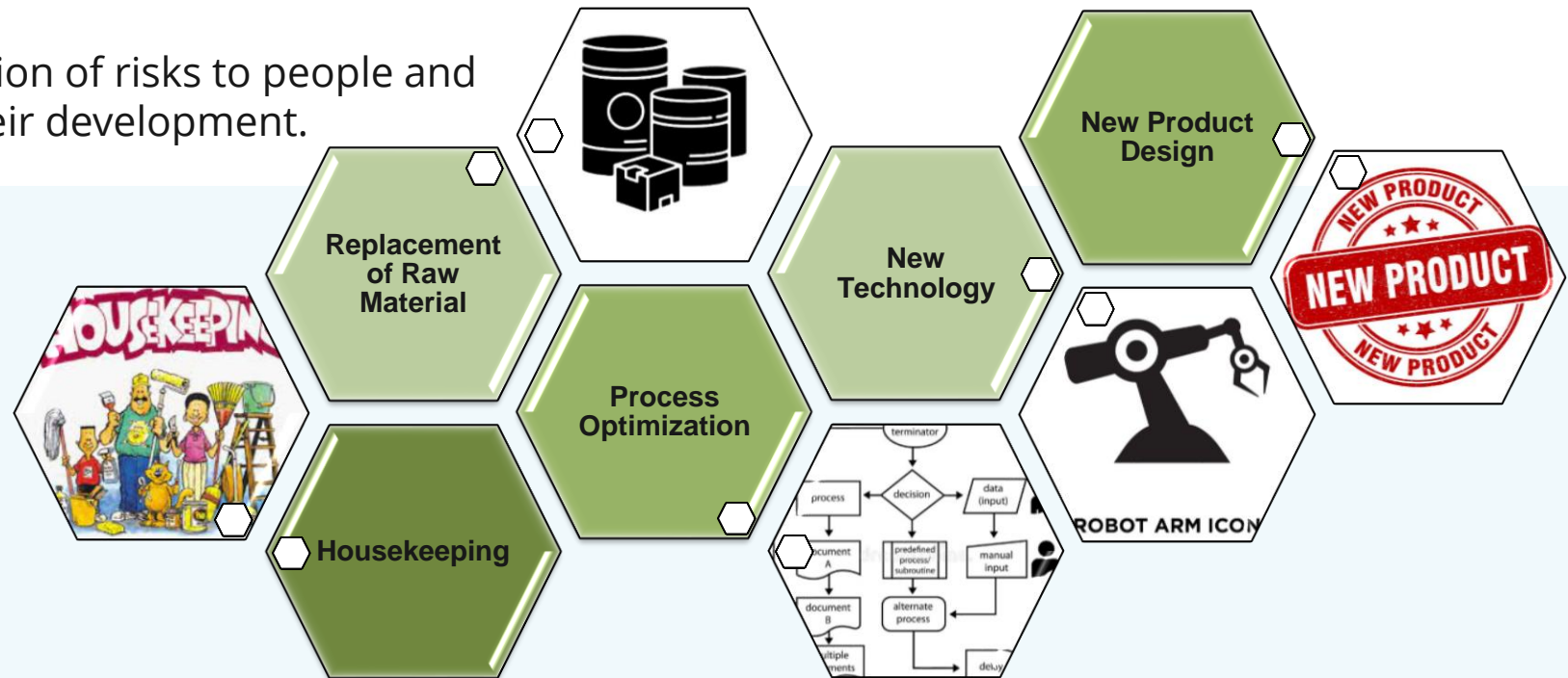
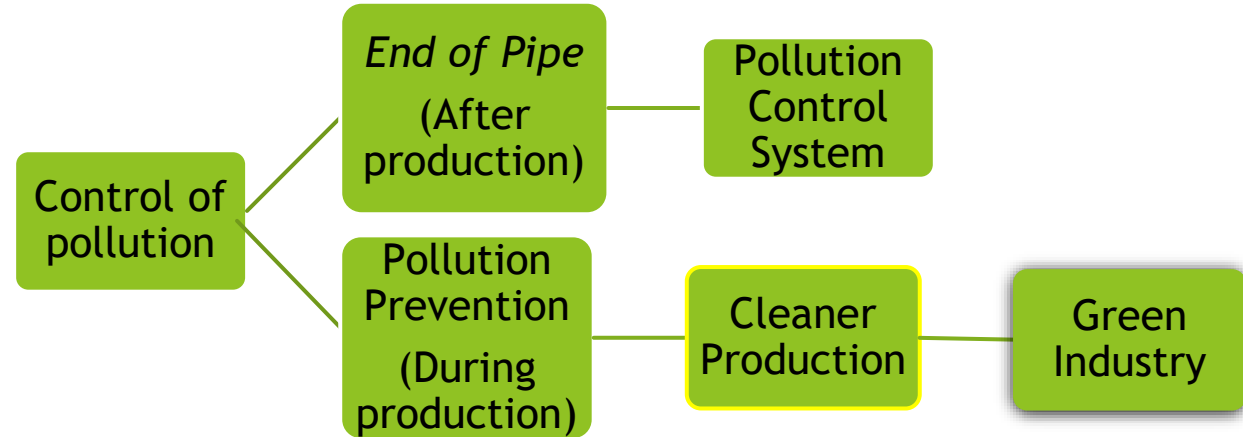


- 
Alternative Raw Material (ARM)
- 
Alternative Fuel (AF)
- 
Cement Additives (CA)
- 
Restriction

PROMOTION OF CLEANER PRODUCTION THROUGH GREEN INDUSTRY PRACTICES

The application of **preventive environmental strategies** to processes, products and services, to **increase efficiency and reduce risks to humans and the environment.**

- a) Production Efficiency: optimization of the productive use of natural resources (materials, energy and water);
- b) Environmental management: minimization of impacts on environment and nature through reduction of wastes and emissions;
- c) Human Development: minimization of risks to people and communities and support for their development.



STATEGIES

COMMUNICATION, EDUCATION AND PUBLIC AWARENESS

- ❖ Earth Day
- ❖ World Environment Day
- ❖ National Environment Day
- ❖ Langkawi Award
- ❖ Green Industry Award
- ❖ Debat Alam Sekitar
- ❖ Sekolah Lestari
- ❖ Environmental Talk
- ❖ Various public awareness activities
- ❖ Dissemination of environmental information through social media and mass media



WAY FORWARD

Strengthen smart enforcement and surveillance based on IR 4.0 technology



Monitoring of the pollution early warning system



Improve monitoring of the movement of hazardous waste



Strengthen the institutional framework towards the excellence of DOE



Review and strengthen the Act



Implementation and cultivation of self guided regulation to regulated communities such as industry and project developers



Empowering communication, awareness and environmental education



Strengthen competencies and capacity building among industry and Department of Environment officers



HANK



OU!

TERIMA KASIH