
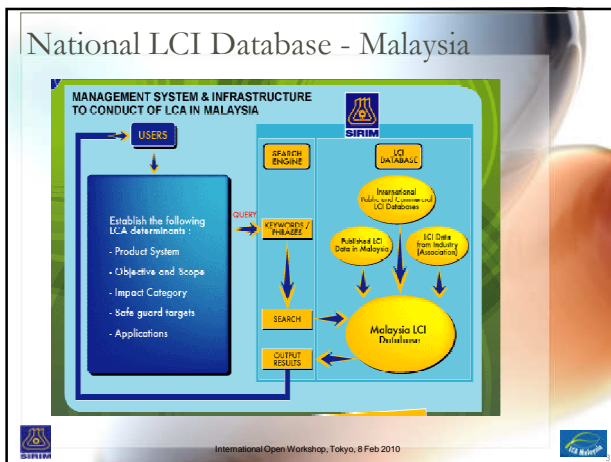

Status Development
MY - LCID
 Malaysia Life Cycle Inventory Database

Wan Mazlina Wan Hussein
 Environment Technology Research Centre
 SIRIM Berhad
 Malaysia

Presentation Contents

- ❑ Status of LCI Database - Malaysia
- ❑ The Needs for A National LCI Database
- ❑ Challenges in Database Development

International Open Workshop, Tokyo, 8 Feb 2010



Stages of MYLCID Development

- ❑ Initial start-up of national LCI database – 9th Malaysia Plan (2005 -2010) Government's mandate to SIRIM (implementing agency)
- ❑ 2005 : Formation of a National LCA structure
- ❑ 2005 – 2007: Slow progress, low industries' reception, LCA studies mostly conducted by SIRIM
- ❑ 2007: alternative route to fast-track LCI database infrastructure development; tender out for external consultants
- ❑ Apr 2008 – Jan 2009: contract awarded to a foreign consultant (PE Engineering, Germany)
- ❑ SIRIM selected & specified datasets relevance to Malaysian industrial needs (local production, total import, mixed production & import)
- ❑ ~150 regionalised LCI datasets (use own local electricity, water, fuel data)

International Open Workshop, Tokyo, 8 Feb 2010

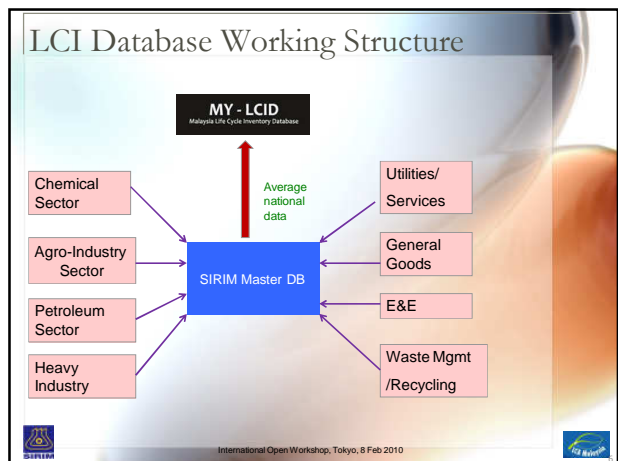
Stages of MYLCID Development

- ❑ Breakdown of datasets by category:

Category	No of Datasets
Energy carriers & technology	20
Material production	74
Systems	58
Transport Services	5

- ❑ Basis for LCI infrastructure framework
- ❑ Datasets expansion/replacement – actual site/industrial data collection in progress

International Open Workshop, Tokyo, 8 Feb 2010



No	LCI Project Name	No	LCI Project Name	No	LCI Project Name
1.	Electricity	16.	Butanol	31.	Alum
2.	Water Supply	17.	Ethylene and co-products	32.	Treatment of Hazardous Waste
3.	Crude Steel /billet	18.	HDPE	33.	Treatment of Solid Waste by RDF
4.	Hot Briquetted Iron (HBI)	19.	PVC	34.	Landfill of Solid Waste
5.	Hot Rolled Long Products	20.	Petrochemical Derivatives	35.	Marine Transports
6.	Cold-rolled Long Products	21.	Natural Gas Products	36.	Road Transports
7.	Aluminium sheet	22.	Ammonia	37.	Plastic Pellets
8.	Printed Circuit Board 0.01 m2 double layer	23.	Urea	38.	Vacuum cleaner –plastic body part
9.	Air conditioner 1 HP	24.	PET Bottle 1 unit 500ml	39.	Plastic Films
10.	Ballast	25.	Corrugated Paper Products	40.	Shower Bottle
11.	Integrated Circuit	26.	Batik		
12.	Gold Plated sheet	27.	Crude Palm Oil		
13.	Crude oil extraction	28.	Biodiesel		
14.	Natural gas extraction	29.	Latex		
15.	Diesel	30.	Sulphuric acid		


SIRIM LCI Studies

- Cradle to gate GHG gas profiling
- Next action plan - eutrophication, resource depletion, acidification

International Open Workshop, Tokyo, 8 Feb 2010

MY - LCID

Malaysia Life Cycle Inventory Database



Malaysia Life Cycle Inventory Database is developed in line with the Malaysian Government's mandate to SIRIM Berhad under the 9th Malaysia Plan (2009-2010) which is part of the National Life Cycle Assessment (LCA) initiative. The database will be used to conduct life cycle assessment studies, support the National Eco-labelling Programme and fulfil the requirements of foreign legislation that demand evidence of the control measures taken to reduce environmental impact of products and services throughout their life cycle.

Log in:

Password:

International Open Workshop, Tokyo, 8 Feb 2010

MY - LCID

Malaysia Life Cycle Inventory Database

LCI Data Sets (By Category) | Search Data Sets | Logout

LCI data sets

View and download

Browse and view data sets (by category)

You can show the sub-categories by clicking on the + sign on the left of the category entry. To list all ELCD data sets of a shown sub-category, just click on the name of the sub-category.

By clicking on an individual data set, it opens in an overview window from where you can open the full data set including meta documentation and inventory.

Energy carriers and technologies	20
Materials production	74
Systems	58
Transport services	5

Download data sets

[Download all data sets](#)

International Open Workshop, Tokyo, 8 Feb 2010

MY - LCID

Malaysia Life Cycle Inventory Database

LCI Data Sets (By Category) | Search Data Sets | Logout

Home

The Malaysian Life Cycle Inventory Database is a mandate from the Government of Malaysia under the Ninth Malaysia Plan. The Database will be used to conduct life cycle assessment studies, support the National Eco-labelling Programme and fulfil the requirements of foreign legislation that demand evidence on the control measures taken to reduce environmental impact of products and services throughout their life cycle.

International Open Workshop, Tokyo, 8 Feb 2010

MY - LCID

Malaysia Life Cycle Inventory Database

LCI Data Sets (By Category) | Search Data Sets | Logout

LCI data sets

View and download

Browse and view data sets (by category)

You can show the sub-categories by clicking on the + sign on the left of the category entry. To list all ELCD data sets of a shown sub-category, just click on the name of the sub-category.

By clicking on an individual data set, it opens in an overview window from where you can open the full data set including meta documentation and inventory.

Energy carriers and technologies	20
Materials production	74
Systems	58
Transport services	5

Download data sets

[Download all data sets](#)

International Open Workshop, Tokyo, 8 Feb 2010

MY - LCID

Malaysia Life Cycle Inventory Database

LCI Data Sets (By Category) | Search Data Sets | Logout

LCI data sets

View and download

Browse and view data sets (by category)

You can show the sub-categories by clicking on the + sign on the left of the category entry. To list all ELCD data sets of a shown sub-category, just click on the name of the sub-category.

By clicking on an individual data set, it opens in an overview window from where you can open the full data set including meta documentation and inventory.

Energy carriers and technologies	20
Materials production	74
Systems	58
Transport services	5

Energy carriers and technologies

Industrial steam	6
Hand craft hand tools	1
Crude oil (solid fuels)	6
Heat and steam	4
Electricity	2
Natural gas (liquid fuels)	1

Materials production

Materials production	74
Systems	58
Transport services	5

International Open Workshop, Tokyo, 8 Feb 2010

Energy carriers and technologies	20
Materials production	74
Inorganic materials	17
Other materials, materials	6
Metals and alloys	16
Organic chemicals	20
Plastics and additives	1
Textiles and non-textiles	3
Agricultural production means	7
Other materials	1
Systems	58
Electricity, heat, electronics, IT	42
Sustainable	16
Transport services	5
Air	3
Rail	1
Water	1

MY - LCID
Malaysia Life Cycle Inventory Database

LCI Data Sets (by Category) | Search Data Sets | Logout |

LCI data sets

View and download

Browse and view data sets (by category)

You can show the sub-categories by clicking on the + sign on the left of the category entry. To list all ELCID data sets of a shown sub-category, just click on the name of the sub-category.

By clicking on an individual data set, it opens in an overview window form where you can open the list data set including meta documentation and inventory.

Energy carriers and technologies	20
Inorganic materials	6
Hard coal based fuels	1
Crude oil based fuels	6
Natural gas	4
Electricity	2
Sustainable	1
Materials production	74
Systems	58
Transport services	5

LCI Data Sets (by Category) | Search Data Sets | Logout |

Data set search form

Please enter your search terms and options. They will be interpreted as additive search conditions. To include all options just leave all possible entries unselected (default). **Note:** To de-select a search term, which you have previously selected in the pull-down-lists, use left-mouse-click on the term while pressing "Ctrl".

Full text search in name and description of dataset

Search terms: don't search in description

Geographical and time coverage of dataset

Geographical Coverage: Reference year: between and

Type of dataset

type of dataset: parameterised

Category of dataset

Categories to search for: Select categories from this list:

MY - LCID
Malaysia Life Cycle Inventory Database

LCI Data Sets (by Category) | Search Data Sets | Logout |

List of selected data sets

This page lists the data sets for your search or chosen index category. Click on the name of the data set to see the description of the data set.

Location	Name of Process or LCI result set	Category	Reference year	Parameterised?
MY	Global gas mix from refinery and other production processes and LCI transport consumption, at industrial site (refined)	Energy carriers and technologies/Natural gas based fuels	2002	no
MY	Power from natural gas, consumption mix, at power plant, 100% NGCC	Energy carriers and technologies/Electricity	2005	no
MY	Package steam from natural gas, total plant average consumption mix, at plant (all)	Energy carriers and technologies/Heat and steam	2002	no

LCI Data Sets (by Category) | Search Data Sets | Logout |

Data set overview page

Data set: Natural gas mix

Type of process (LCI result)	Parameterised?	Related formal LCI ID	Country/region	Related use domain (Eco-label)	Available languages	Download of dataset as PDF
MY 2002	no	Malaysia	Malaysia	Malaysia	English	Download

Category: Energy carriers and technologies (Natural gas based fuels)

Reference year: 2002

Parameterised: no

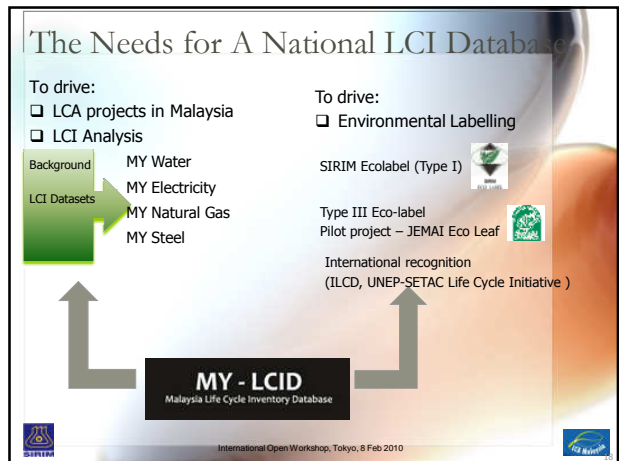
Description: Global gas mix from refinery and other production processes and LCI transport consumption mix, at industrial site (refined)

Related use domain: Malaysia

Available languages: English

Download of dataset as PDF: Download

Internal review: The internal review was done by several stakeholders concerning raw data validation, raw data documentation, responsibility, completeness and consistency of metadata sets required by ISO 14040 and 14044. The review of the documentation was performed by Eco-label and in compliance with ISO 14040 and 14044. The data set documentation is complete in view of the requirements of the information provided. It includes all relevant information in view of data specific and scope of application of the respective LCI result.



Challenges in Database Development

- ❑ Industry collaboration to provide foreground data involving own industrial processes
- ❑ Dealing with business confidential information
- ❑ Developing LCI datasets that representing the national average
- ❑ International acceptable of our LCI datasets
- ❑ LCA beyond research & academic activities – application of LCA to actual industrial practices for production of eco-products/systems/services



International Open Workshop, Tokyo, 8 Feb 2010



Challenges in Database Development

Malaysia Life Cycle Inventory Database



- ❑ national launching by end 2010
- ❑ industries / associations driven development ([industry provided data](#))

A National Initiative for the Development of Eco-Friendly Products and Services



International Open Workshop, Tokyo, 8 Feb 2010



**Terima Kasih
Thank you!**

CONTACT:

SIRIM LCA Team
Email: sau.soon_chen@sirim.my
Email: w.mazlina_w.hussein@sirim.my

SIRIM Berhad
Environment Technology Research Centre
1, Persiaran Dato' Menteri
Section 2, P. O. Box 7035
Shah Alam, Selangor
Malaysia
<http://www.sirim.my>



International Open Workshop, Tokyo, 8 Feb 2010

