

# Product Registration Systems (PRS) as a tool to transform markets in ASEAN to energy-efficiency

MADELEINE EDL, UNITED NATIONS ENVIRONNEMENT PROGRAMME – UNITED FOR EFFICIENCY (UNEP-U4E)

# Presenter's Short Biography

- Energy Efficiency Specialist at UNEP-U4E since 2019, coordinating regional projects on energy efficient lighting, cooling and appliances & supporting the development of tools and resources.
- Previously advisor to the Niger Basin Authority to provide technical assistance in the context of securing the energy supply in the West African region.
- Academic background are two master's degrees, one in energy management (2022) and other one in international economies (2016).



Paper was developed thanks to teamwork with the following colleagues :



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UNEP-U4E



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IIEC



Victor Minguez  
UNEP-U4E



Kullakant Chertchutham  
IIEC



# HOW

## DOES A PRODUCT REGISTRATION SYSTEM WORK?



### TEST PRODUCT



A test laboratory, or conformity assessment body, selects samples of the product and undertakes testing in accordance with the applicable standard.

### APPLICATION



The applicant (manufacturer, importer or distributor) opens an account in the product registration system and completes an application form for approval of their product. Supporting information, such as a test report, may also be required.

### ASSESSMENT



The programme manager/regulatory authority reviews the submitted application and accompanying documentation for compliance with the requirements of the standards and labelling scheme.

### APPROVAL & ACCESS TO MARKET



If the review confirms the product complies with the governing energy efficiency regulations, such as standards and labelling, then the regulator approves the product for import and sale.

SEVERAL COUNTRIES TOGETHER



STANDALONE SYSTEM

National PRS



# WHY


## SHOULD I IMPLEMENT A PRODUCT REGISTRATION SYSTEM (PRS)?

Transition  
your markets to  
energy efficient  
products!




In countries with a PRS, products must be registered before they can enter the market

Creates a database with product information



Policy development can be based on detailed data that is readily available

Monitors which products are sold in the market



Ensures compliance with national policies, e.g. on energy efficiency

Places information on environmental impact of the products at the fingertips of government



Policymakers can access baseline data and track efficiency trends and improvements

Fosters economic development



Reduces barriers to trade by creating transparent market regulations and protects those manufacturers complying with requirements

Encourages consumers to choose energy-efficient products



Enabling consumers to access the database helps them to compare market offerings to make informed choices about the energy efficiency of products and lifetime cost

# Overview of the U4E's Work on PRS

## In cooperation with the ASEAN Centre for Energy (ACE):

- Development a regional product registration database that connects all countries in the region
- Information and guidance of policymakers on the options of harmonizing Product registration system (PRS) activities in the ten countries of the region
- Training stakeholders on the use and implementation of a PRS

## Regional Product Registration Database



## General U4E tool:

- Development of a prototype PRS system for application in countries without a PRS
- Development of PRS technical specifications

## U4E Product Registration Tool for Global Application



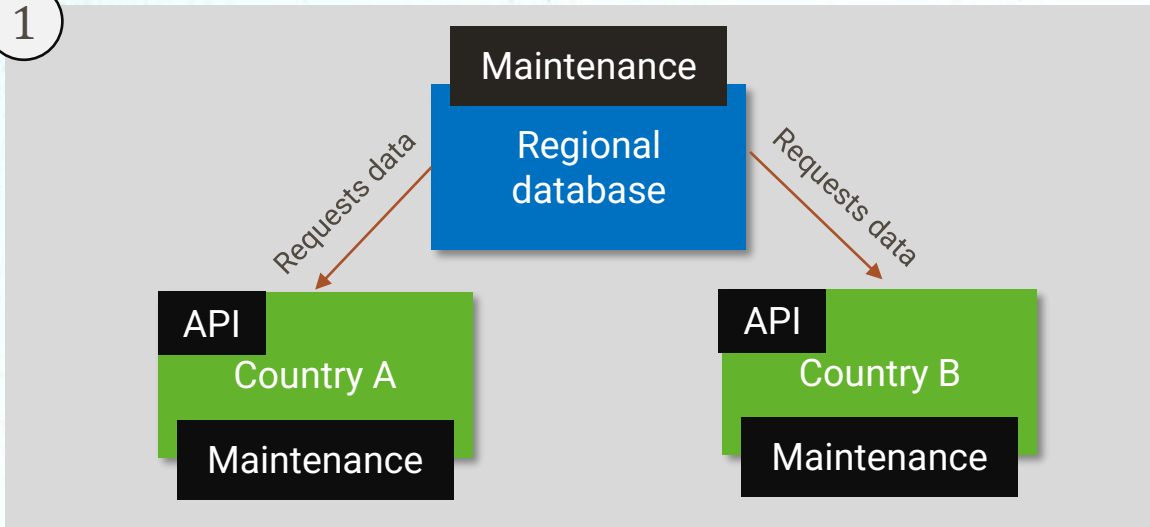
Products included:



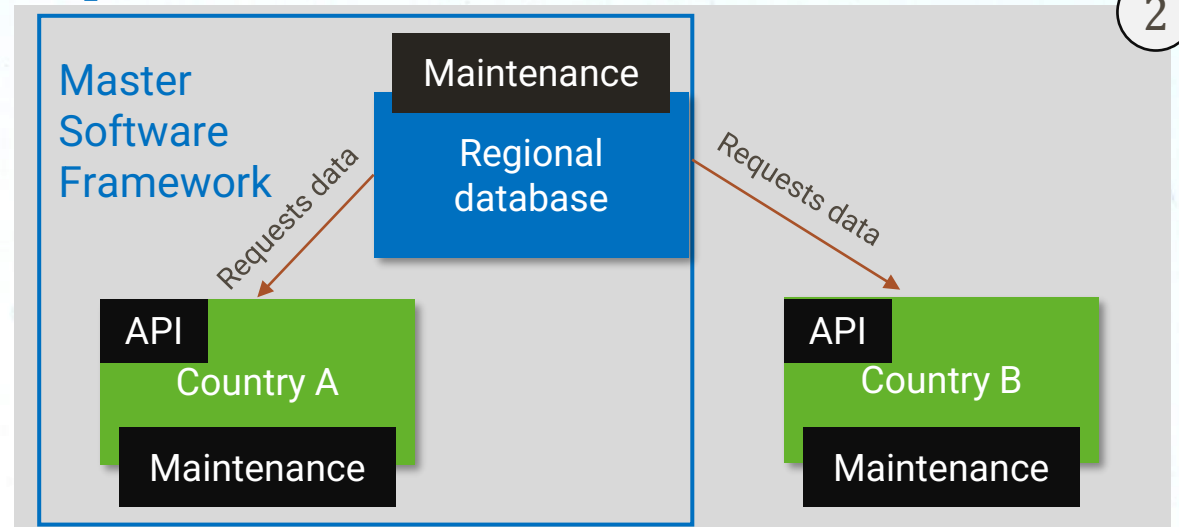
# Decision Making on Harmonization Approach

## Discussed Options

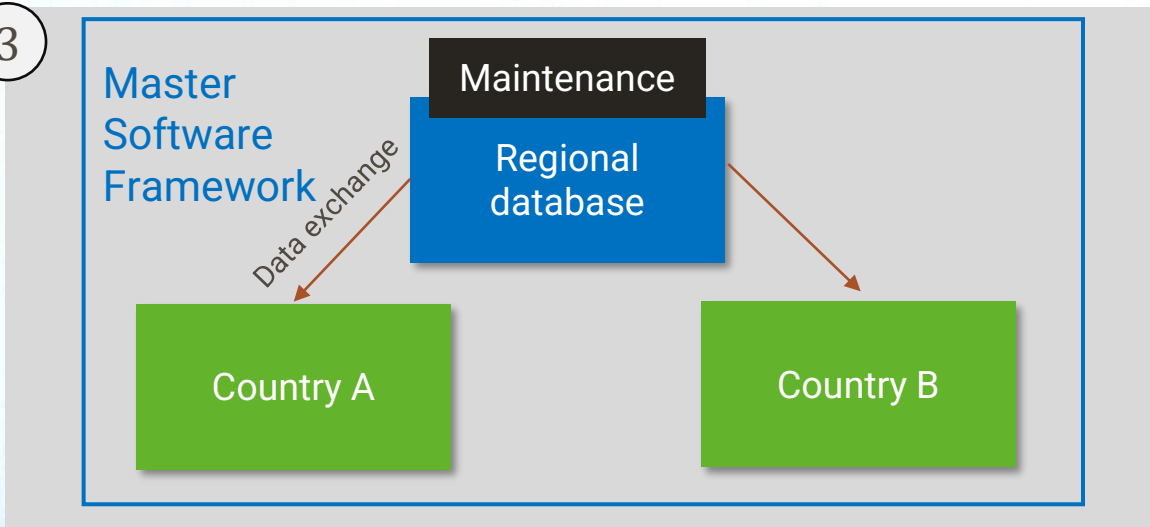
1



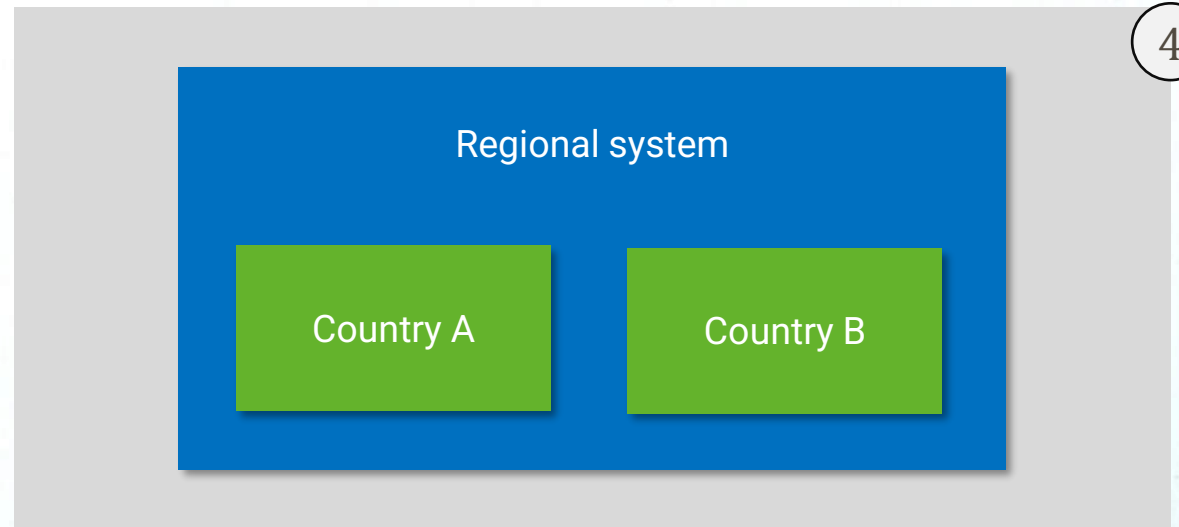
2



3



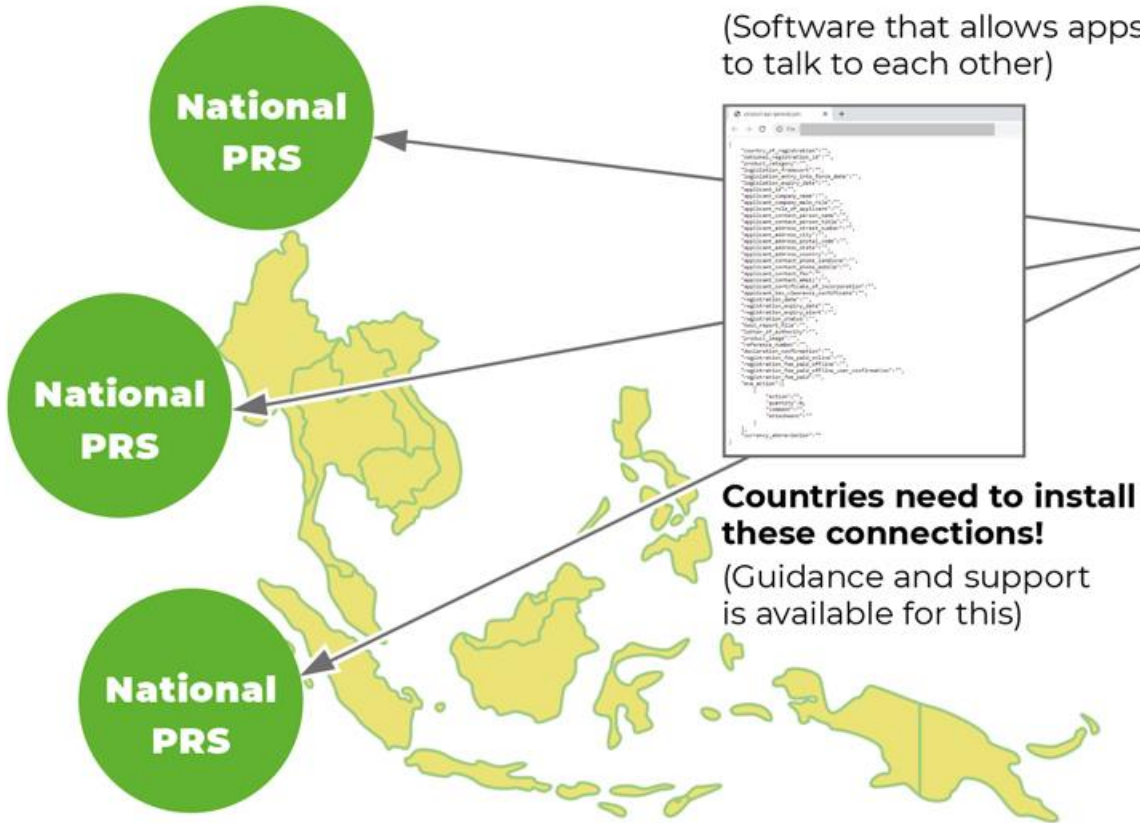
4



# DATA EXCHANGE IN SOUTHEAST ASIAN SYSTEM

Existing national systems

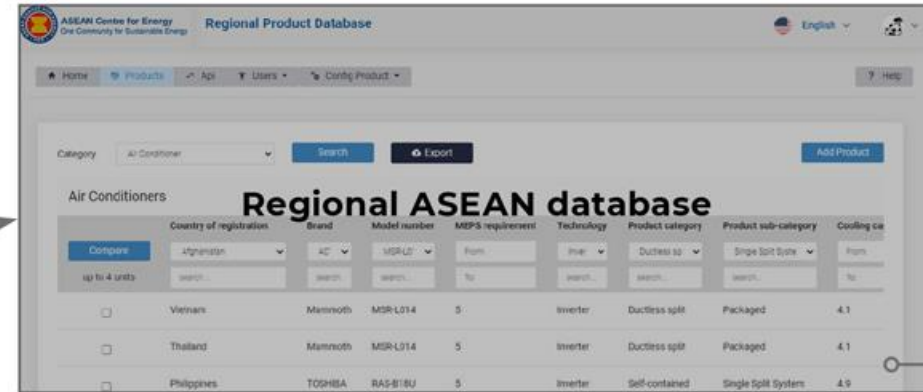
Data transferred via API connections  
(Software that allows apps to talk to each other)



Countries need to install these connections!  
(Guidance and support is available for this)

Products continue to be registered in existing national PRS

The regional system collects the information from the national systems in a common database

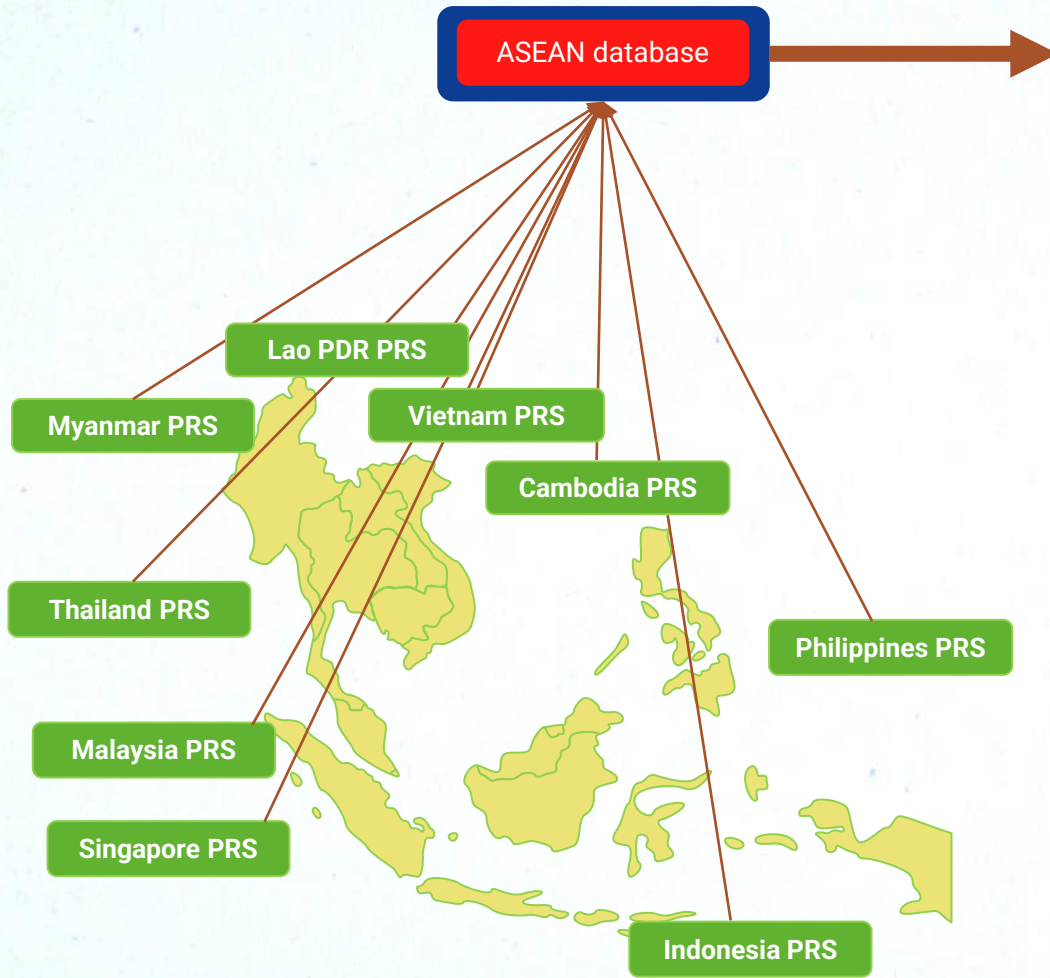



Access to the database is restricted to the ASEAN Centre for Energy and the national regulators from the 10 ASEAN countries.

The **benefits** of the regional database for all users are:

- Visibility of products allowed for sale in other countries
- Notification of new products in other countries
- Notification of products revoked in other countries
- Facilitates application of Mutual Recognition Agreements
- Ultimately, this information helps the region to adjust their policies better and to create synergies in transforming their markets to energy-efficient products

# Example Compliance with MEPS





**ASEAN Centre for Energy**  
One Community for Sustainable Energy

Regional Product Database

English

**Main Menu**

- Products
- Help →

**Products**

Category: Air Conditioner Search Export

**Air Conditioners**

Brand	Model	Product type	Country Of	Cooling	Heating	Seasonal	Registration status
ACTRON	MSR-L013	Single Split Syst	Afghanistan	From:	From:	From:	
search...	search...	search...	search...	To:	To:	To:	
Mammoth	MSR-L014	Packaged	Thailand	4.1	5.5	4.0306	Approved <a href="#">View</a>
TOSHIBA	RAS-B18UFV-A/RAS-18SAV2-A	Single Split System	Thailand	4.9	5.8	2.9753	Approved <a href="#">View</a>
GREE	GWH09MB-K3DNA4H(DRED)	Single Split System	Thailand	2.6	2.8	3.7574	Approved <a href="#">View</a>
Mammoth	MSR-L013	Packaged	Philippines	4.1	5.5	4.0306	Approved <a href="#">View</a>
DAIKIN	FDYQN180LB / RZQ180L	Multiple split - VRF	Philippines	20	22.4	3.0527	Approved <a href="#">View</a>

< 1 2 3 4 5 >



# Example Compliance with MEPS



Thailand PRS



Product not compliant!

ASEAN Centre for Energy  
One Community for Sustainable Energy

Regional Product Database

Search Here

English

Main Menu

- Products
- Help

Products

Category: Air Conditioner

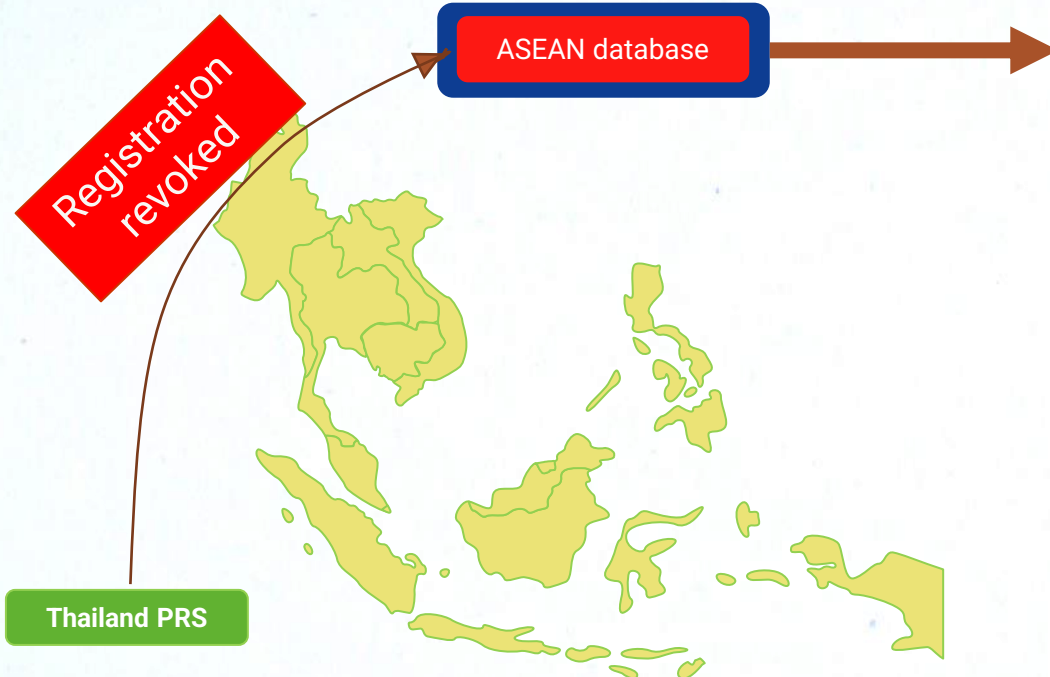
Search Export

Air Conditioners

Brand	Model	Product type	Country Of	Cooling	Heating	Seasonal	Registration status
ACTRON	MSR-L013	Single Split Syst	Afghanistan	From:	From:	From:	
search...	search...	search...	search...	To:	To:	To:	
Mammoth	MSR-L014	Packaged	Thailand	4.1	5.5	4.0306	Approved <a href="#">View</a>
TOSHIBA	RAS-B18UFV-A/RAS-18SAV2-A	Single Split System	Thailand	4.9	5.8	2.9753	Approved <a href="#">View</a>
GREE	GWH09MB-K3DNA4H(DRED)	Single Split System	Thailand	2.6	2.8	3.7574	Approved <a href="#">View</a>
Mammoth	MSR-L013	Packaged	Philippines	4.1	5.5	4.0306	Approved <a href="#">View</a>
DAIKIN	FDYQN180LB / RZQ180L	Multiple split - VRF	Philippines	20	22.4	3.0527	Approved <a href="#">View</a>

< 1 2 3 4 5 >

# Example Compliance with MEPS



ASEAN Centre for Energy  
One Community for Sustainable Energy

Regional Product Database

Search Here

English

Main Menu

- Products
- Help

Products

Category: Air Conditioner

Search Export

Air Conditioners

Brand	Model	Product type	Country Of	Cooling	Heating	Seasonal	Registration status
ACTRON	MSR-L013	Single Split Syst	Afghanistan	From:	From:	From:	
Mammoth	MSR-L014	Packaged	Thailand	4.1	5.5	4.0306	Approved <a href="#">View</a>
TOSHIBA	RAS-B18UFV-A/RAS-18SAV2-A	Single Split System	Thailand	4.9	5.8	2.9753	Approved <a href="#">View</a>
GREE	GWH09MB-K3DNA4H(DRED)	Single Split System	Thailand	2.6	2.8	3.7574	Revoked <a href="#">View</a>
Mammoth	MSR-L013	Packaged	Philippines	4.1	5.5	4.0306	Approved <a href="#">View</a>
DAIKIN	FDYQN180LB / RZQ180L	Multiple split - VRF	Philippines	20	22.4	3.0527	Approved <a href="#">View</a>

< 1 2 3 4 5 >

# Example Compliance with MEPS



**ASEAN Centre for Energy**  
One Community for Sustainable Energy

Regional Product Database

Search Here

English

Main Menu

- Products
- Help

Products

Category: Air Conditioner

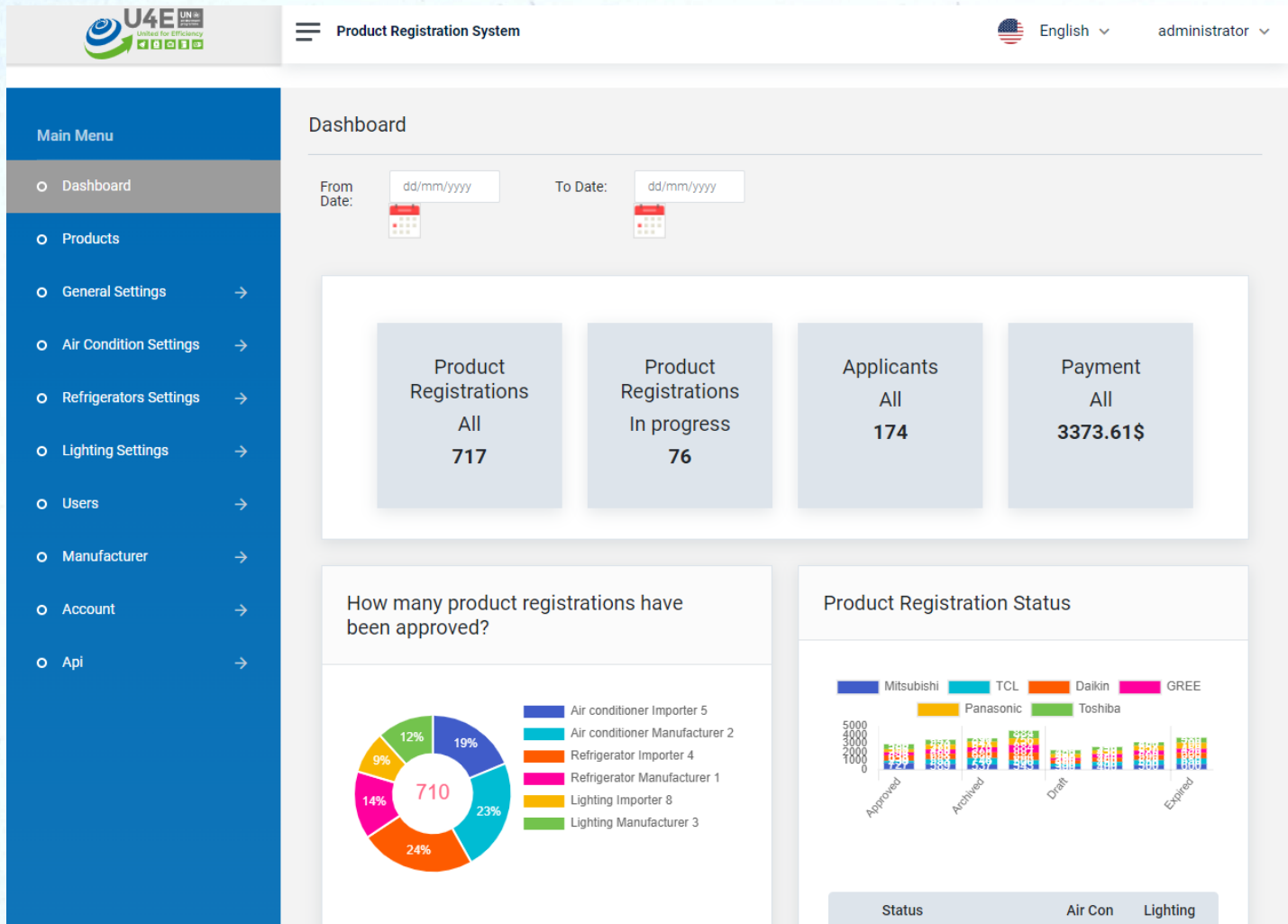
Search Export

**Air Conditioners**

Brand	Model	Product type	Country Of	Cooling	Heating	Seasonal	Registration status
ACTRON	MSR-L013	Single Split Syst	Afghanistan	From:	From:	From:	
search...	search...	search...	search...	To:	To:	To:	
Mammoth	MSR-L014	Packaged	Thailand	4.1	5.5	4.0306	Approved <a href="#">View</a>
TOSHIBA	RAS-B18UFV-A/RAS-18SAV2-A	Single Split System	Thailand	4.9	5.8	2.9753	Approved <a href="#">View</a>
GREE	GWH09MB-K3DNA4H(DRED)	Single Split System	Thailand	2.6	2.8	3.7574	Revoked <a href="#">View</a>
Mammoth	MSR-L013	Packaged	Philippines	4.1	5.5	4.0306	Approved <a href="#">View</a>
DAIKIN	FDYQN180LB / RZQ180L	Multiple split - VRF	Philippines	20	22.4	3.0527	Approved <a href="#">View</a>

< 1 2 3 4 5 >

# Prototype for Application on National Level



## Key Characteristics

- Based on best-practice functionalities which can be personalized
- Open source
- No need to start from scratch
- U4E guidance to implement the framework
- Designed to work with slow connections and data requests
- Built-in API for regional database interface
- Flexible deployment: windows/linux, cloud/on-site

Access the system [here](#)

June 1<sup>st</sup>-3<sup>rd</sup>, 2022, Toulouse, France



**Thank you !**



## Backup – Screenshots of PRS Database

# Welcome to the U4E Product Registration System

To legally import and or sell a product regulated for energy efficiency

Email

Password

Sign in

[Forgot Password](#)

[Not a member ? Create new account](#)

AIR CONDITIONERS



REFRIGERATORS



LIGHTING



This U4E Product Registration System (PRS) is developed based on the Master Product Registration Framework with a focus on energy-efficient room air conditioners, residential refrigerators and lighting as those are part of the U4E focus products. The Master Product Registration Framework takes into account specific legislation aspects such as product sub-categories, Minimum Energy Performance Standard thresholds, and Label categories, etc. This system is intended to be used as the National Product Registration Database Prototype for countries who currently do not have a PRS. Those countries who are interested, may utilize this U4E's PRS prototype in developing as their own national systems.

[Help](#)

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Main Menu

Dashboard

Products

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Air Condition Settings →

Refrigerators Settings →

Lighting Settings →

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Manufacturer →

Account →

Api →

Dashboard

From Date:

To Date:

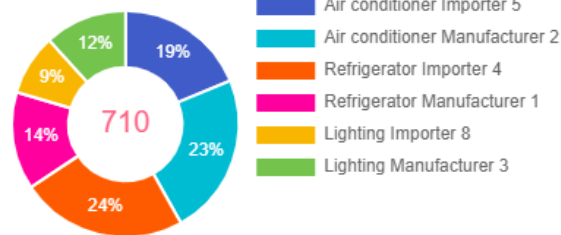
Product Registrations  
All  
**717**

Product Registrations  
In progress  
**76**

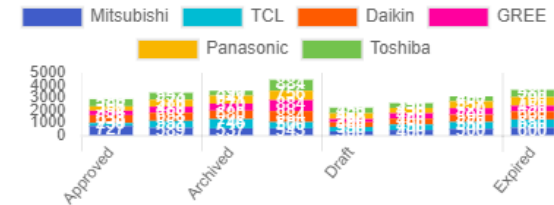
Applicants  
All  
**174**

Payment  
All  
**3373.61\$**

How many product registrations have been approved?



Product Registration Status



Status

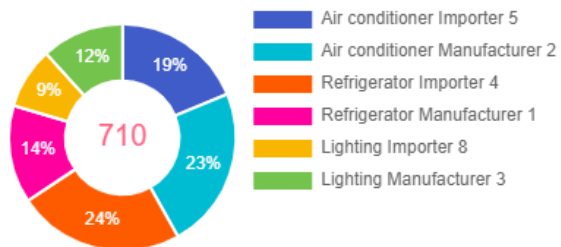
Air Con

Lighting

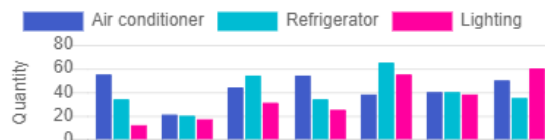


- Users →
- Manufacturer →
- Account →
- Api →

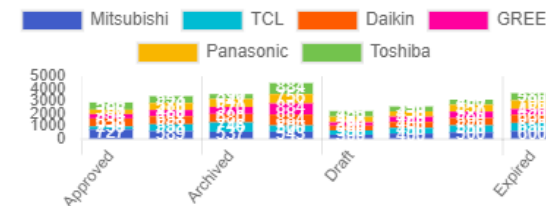
### How many product registrations have been approved?



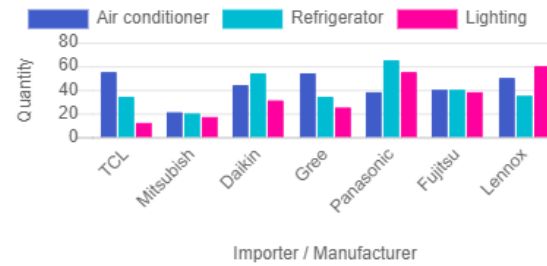
Product Category	Record Count
1. Air conditioner	232
2. Refrigerator	226
3. Lighting	252



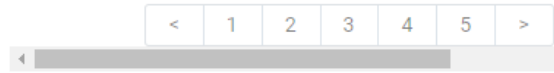
### Product Registration Status



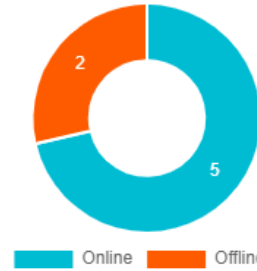
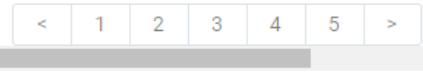
Status	Air Con	Lighting
1 Approved	2	2
2 Rejected		3
3 Archived		
4 Revoked	1	
5 Draft		5
5 In Progress		4
6 Needs more information		5
5 Expired		6



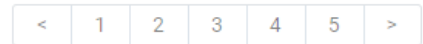
Importer/Manufacturer	Air Con	Lighting
1 Daikin	44	
2 Mitsubishi	21	
3 Philips		20
4 Samsung	12	
5 Hitachi		



6	Needs more information	5
5	Expired	6



Payment Method	Applicants
1 Online	120,000
2 Offline	90,000



Pending Actions : Applicants Approval

Date	Applicant ID	Company name	Requested role	Status	
12/09/2020	IC-20000001	Mitsubishi	Lead	Waiting for verification	<a href="#">Edit</a>
13/09/2020	IC-20000002	Carrier	Assistant	Needs more information	<a href="#">Edit</a>

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Products

Category

Refrigerator

Export

Add Product

Refrigerators

Brand name	Model number	Manufacturing country	Product type	Maximum annual energy consumption (kWh)	Energy efficiency rating
<input type="text" value="Search ..."/>	<input type="text" value="Search ..."/>	<input type="text" value="Search ..."/>	<input type="text" value="Search ..."/>	From <input type="text" value=""/>	<input type="text" value="Search ..."/>
				To <input type="text" value=""/>	
Beko	test submit re-1	Bhutan	Refrigerator-freezer	163.9400	High Efficiency
Panasonic	GWH-09MB	Thailand	Refrigerator-freezer	256.5600	Low Efficiency
Electrolux	xyzwww	Thailand	Refrigerator	118.3000	High Efficiency
Beko	L001	Thailand	Refrigerator-freezer	256.5600	Low Efficiency
Panasonic	md-96	Barbados	Refrigerator	256.5600	Intermediate
LG	RAS-B18U	Thailand	Refrigerator-freezer	256.5600	Low Efficiency
test brand	GWH-09MB	Thailand	Refrigerator-freezer	134.6000	Not compliant

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○ Air Condition Settings →

○ Refrigerators Settings →

○ Lighting Settings →

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○ Api →

Please select the product category

Air Conditioner

Add Product

Close

Category

Refrigerator

Export

Add Product

## Refrigerators

Brand name	Model number	Manufacturing country	Product type	Maximum annual energy consumption (kWh)	Energy efficiency rating
<input type="text" value="Search ..."/>	<input type="text" value="Search ..."/>	<input type="text" value="Search ..."/>	<input type="text" value="Search ..."/>	From <input type="text" value=""/>	<input type="text" value="Search ..."/>
				To <input type="text" value=""/>	
Beko	test submit re-1	Bhutan	Refrigerator-freezer	163.9400	High Efficiency
Panasonic	GWH-09MB	Thailand	Refrigerator-freezer	256.5600	Low Efficiency
Electrolux	xyzwww	Thailand	Refrigerator	118.3000	High Efficiency
Beko	L001	Thailand	Refrigerator-freezer	256.5600	Low Efficiency
Panasonic	md-96	Barbados	Refrigerator	256.5600	Intermediate
LG	RAS-B18U	Thailand	Refrigerator-freezer	256.5600	Low Efficiency
test brand	GWH-09MB	Thailand	Refrigerator-freezer	134.6000	Not compliant

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## Product Registration Process

Initiation

## Product Registration Initiation

Country where applicant is applying for registration \*

Myanmar

Select the type of product you wish to register

Air Conditioner

Legislation framework (energy performance standards) \*

U4E model regulation Air Conditioners 2022

Save

Save and Continue&gt;&gt;

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Process

Initiation

Applicant Details

Product Details

Progress Status

Approve

Rejected

Revoked

Need more information

In progress

Draft

Comment

Save

2111AC00025MMRKP

Company name \* test send mail

Export

Company's main role \* Chief

Role of applicant \* Manufactuer

Contact person's name \* manager

Contact person's title

Address: Street, number \* bangkok

Address: City \* bangkok

Address: Postal code \* 2365

Address: state/province bangkok

Address: Country \* Afghanistan

Contact phone landline \* 089874587

Contact phone mobile

Contact fax

Contact Email \* ttyeeyanoot.s@impleplus.com

Certificate of incorporation \* Choose File No file chosen

Printable-Graduation-Certificate

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Product Registration Process

Initiation

Applicant Details

Product Details

Progress Status

- Approve
- Rejected
- Revoked
- Need more information
- In progress
- Draft

Comment

Save

General Details

Registration Number: MMR-2111AC00025MMRKP

Brand name \*  Add

Model number \*

Part of a model family with same characteristics? \*

Global trade itemnumber

Manufacturers name \*

Country of manufacturer or Country of origin \*

Date of product availability \*



Projected annual sales (product units)

Website with product information

General comment

Appliance Specific Details - Air Conditioner

Save

Completion Status

- Applicant Data
- Product Data
- Test Data
- Performance Claims
- Documents
- Offline Fee payment complete
- Online Fee payment complete

Comment

Save

Appliance Specific Details - Air Conditioner

Operating modes \*

Product type \*

Product sub-type \*

HS code

Heat source medium \*

Heat sink medium \*

Cooling Mode

Rated Output Capacity – Cooling (kW) \*

Rated Input Power – Cooling (kW) \*

Rated EER (w/w) \*

Refrigerant Data

Refrigerant type \*

Refrigerant charge (kg) \*

Is refrigerant pre-charged in



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## Product Registration Process

[Initiation](#)[Applicant Details](#)[Product Details](#)[Test Details](#)

## Progress Status

- Approve
- Rejected
- Revoked
- Need more information
- In progress

 Draft

## Comment

## Test Details

Registration Number: MMR-2111AC00025MMRKP

Testing Standard \* ISO 16358: 2013

ISO 12345: 2021

## Test Results - Air Conditioner

## Cooling Mode

Test Result Cooling (As Per ISO 16358-1)

## FULL

Full capacity - Standard T (35°C) \*

Full power input - Standard T (35°C) \*

Full capacity - Low T (29°C)

Full power input - Low T (29°C)

## Degradation Coefficient

## Degradation Coefficient At Full Capacity

capacity dry coil

power input dry coil

capacity cyclic

Draft

Comment

Save

Completion Status

Applicant Data

Product Data

Test Data

Performance Claims

Documents

Offline Fee payment complete

Online Fee payment complete

Comment

capacity dry coil

power input dry coil

capacity cyclic

power input cyclic

General comments (Cooling Mode)

EER (w/w)

0.00

CSEC (KWh)

0

CSTL (KWh)

0

CSPF (KWh)

0.00

Annual performance factor (APF)

0.00

Save

Save and Continue>>

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**Product Registration Process**

Initiation

Applicant Details

Product Details

Test Details

Performance summary

**Progress Status**

- Approve
- Rejected
- Revoked
- Need more information
- In progress
- Draft

Comment

**Energy Performance**

Registration Number: MMR-2111AC00025MMRKP

CSPF

1.42

EER

1.33

Minimum energy performance requirements for cooling-only (CSPF)

7.10

Minimum energy performance requirements for cooling-only (EER)

5.00

Does this product meet the min. energy performance requirements?

No

Does the product meet the min. refrigerant performance requirements?

Yes

Energy efficiency rating (label)

Not compliant

Save

Save and Continue&gt;&gt;

Main Menu

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Product Registration Process

- Initiation
- Applicant Details
- Product Details
- Test Details
- Performance summary
- File uploads

Progress Status

- Approve
- Rejected
- Revoked
- Need more information
- In progress
- Draft
- Comment

File Uploads

Registration Number: MMR-2111AC00025MMRKP

Applicants must upload copies of documents as noted below. Simply click on the "Browser" button below each item, then use the file browser. Locate and upload the applicable documents.

Test Report\*

Test laboratory \*

Test laboratory accreditation \*

Test report number \*

Test report date \*

Test report - serial number of test unit \*

Test report - note

Test Standard\*

- ISO 16358:2013
- ISO 12345:2021

File Name	File Size	Note	Test Standard
<input type="button" value="Choose File"/>	No file chosen		(Maximum file size : 5 MB)

Need more information

In progress

Draft

Comment

Save

Completion Status

Applicant Data

Product Data

Test Data

Performance Claims

Documents

Offline Fee payment complete

Online Fee payment complete

Comment

New Test Report

Update Test Report

File Name	File Size	Note	Test Standard
<input type="button" value="Choose File"/>	No file chosen		(Maximum file size : 5 MB)

Letter Of Authority \*

File Name	File Size	
<input type="button" value="Choose File"/>	No file chosen	(Maximum file size : 5 MB)

Product Image (Optional)

File Name	File Size	
<input type="button" value="Choose File"/>	No file chosen	(Maximum file size : 5 MB)

Save

Save and Continue>>

Main Menu

- Dashboard
- Products
- General Settings ↓
- Bulk upload
- MVE
- Product Category
- Test Laboratory
- Test Laboratory Accreditation
- Refrigerant
- Blowing Agent
- Air Condition Settings →
- Refrigerators Settings →
- Lighting Settings →
- Users →
- Manufacturer →
- Account →
- Api →

Setting: Bulk Upload

Disable  Enable

Save

## Main Menu

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  - Bulk upload
  - MVE
  - Product Category
  - Test Laboratory**
  - Test Laboratory Accreditation
  - Refrigerant
  - Blowing Agent
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## Setting: Test Laboratory

[Add](#)[Air Conditioner](#) [Refrigerator](#) [Lighting](#)

Text

Seq

Air Conditioner - Test Laboratory no.1

1

[Delete](#)[Edit](#)

Air Conditioner - Test Laboratory no.2

2

[Delete](#)[Edit](#)

Air Conditioner - Test Laboratory no.3

3

[Delete](#)[Edit](#)[Previous](#)

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  - MVE
  - Product Category
  - Test Laboratory
  - Test Laboratory Accreditation
  - Refrigerant**
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## Setting: Refrigerants

(Source: UNFCCC)

[Add](#)[Air Conditioner](#) [Refrigerator](#)

Text	ODP	GWP	Seq		
R-134a	0.00	1300.00	1	<a href="#">Delete</a>	<a href="#">Edit</a>
R600A	0.00	3.00	2	<a href="#">Delete</a>	<a href="#">Edit</a>
R22	0.05	1760.00	3	<a href="#">Delete</a>	<a href="#">Edit</a>
R290	0.00	3.00	4	<a href="#">Delete</a>	<a href="#">Edit</a>
R407C	0.00	1774.00	5	<a href="#">Delete</a>	<a href="#">Edit</a>
R410A	0.00	1924.00	6	<a href="#">Delete</a>	<a href="#">Edit</a>
R32	0.00	677.00	7	<a href="#">Delete</a>	<a href="#">Edit</a>

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## Setting: Brand

[Add](#)



Text	Seq		
ac -1		<a href="#">Delete</a>	<a href="#">Edit</a>
ACTRON AIR	1	<a href="#">Delete</a>	<a href="#">Edit</a>
Samsung	2	<a href="#">Delete</a>	<a href="#">Edit</a>
GREE	3	<a href="#">Delete</a>	<a href="#">Edit</a>
Mammoth	4	<a href="#">Delete</a>	<a href="#">Edit</a>
MITSUBISHI HEAVY INDUSTRIES, LTD	5	<a href="#">Delete</a>	<a href="#">Edit</a>
Mitsubishi Electric	6	<a href="#">Delete</a>	<a href="#">Edit</a>
SPECIALIZED ENGINEERING	7	<a href="#">Delete</a>	<a href="#">Edit</a>
TOSHIBA	8	<a href="#">Delete</a>	<a href="#">Edit</a>
Trane	9	<a href="#">Delete</a>	<a href="#">Edit</a>

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## Legislation Framework

Legislation Title	Published	Preview	
U4E model regulation Air Conditioners 2022	✓		<a href="#">Edit</a>
U4E model regulation Air Conditioners 2022 - duplicate	X		<a href="#">Edit</a>

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## Users

[Add](#)

Name	Email	User Type	Role	Status
<input type="text"/>	<input type="text"/>	All	All	All
bbb	bbb@gmail.com	Manufacturer	Level 3.5 - Manuf./Import. Administrator	Active
test new account	aaa@gmail.com	Manufacturer	Level 3.5 - Manuf./Import. Administrator	Active
staff-3	wilaiwan-staff-3@gmail.com	Manufacturer	Level 3.5 - Manuf./Import. Administrator	Active
staff-1	wilaiwan-staff-2@gmail.com	Manufacturer		Active
WK	wkunchansombut111@iiec.org	Manufacturer	Level 3.5 - Manuf./Import. Administrator	Wait f
WK	wkunchansombut1234@iiec.org	Manufacturer	Level 3.5 - Manuf./Import. Administrator	Active
test Madeleine	edl.edl@m.com	Staff	Level 6 - Administrator	Active
SLICKZY	mt48.mdsoft@gmail.com	Manufacturer	Level 3.5 - Manuf./Import. Administrator	Active
M.D.Soft AC	nahm.mdsoft@gmail.com	Manufacturer	Level 3.5 - Manuf./Import. Administrator	Active
wilaiwan company 27sep21	fopaxon393@vefblog.com	Manufacturer	Level 3.5 - Manuf./Import. Administrator	Active
wilaiwan company 27sep21	wkunchansombut27@iiec.org	Manufacturer	Level 3.5 - Manuf./Import. Administrator	Wait f

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## User Role

[Add](#)

Name	Group		
Level 6 - Administrator	Administrator	<a href="#">Delete</a>	<a href="#">Edit</a>
Level 5.5 - Program manager	Government	<a href="#">Delete</a>	<a href="#">Edit</a>
Level 5 - MVE officer	Government	<a href="#">Delete</a>	<a href="#">Edit</a>
Level 5R - Staff read-only	Government	<a href="#">Delete</a>	<a href="#">Edit</a>
Level 4 - Customs	Government	<a href="#">Delete</a>	<a href="#">Edit</a>
Level 3.5 - Manuf./Import. Administrator	Manufacturer	<a href="#">Delete</a>	<a href="#">Edit</a>
Level 3 - Manuf./Import. data entry	Manufacturer	<a href="#">Delete</a>	<a href="#">Edit</a>
Level 2 - Partner Read-only	Manufacturer	<a href="#">Delete</a>	<a href="#">Edit</a>
Level 5.2 test victor	Government	<a href="#">Delete</a>	<a href="#">Edit</a>
Test Admin	Government	<a href="#">Delete</a>	<a href="#">Edit</a>
Test Level 3.5	Manufacturer	<a href="#">Delete</a>	<a href="#">Edit</a>

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## Manufacturers

[Add](#)

Name	Email	Status		
<input type="text"/>	<input type="text"/>	All	<input type="button" value="Search"/>	
bbb	bbb@gmail.com	Wait for verify	<input type="button" value="Delete"/>	<input type="button" value="Edit"/>
test new account	aaa@gmail.com	Approved	<input type="button" value="Delete"/>	<input type="button" value="Edit"/>
WK	wkunchansombut111@iiec.org	Wait for verify	<input type="button" value="Delete"/>	<input type="button" value="Edit"/>
WK	wkunchansombut1234@iiec.org	Approved	<input type="button" value="Delete"/>	<input type="button" value="Edit"/>
SLICKZY	kakkrainego@gmail.com	Wait for verify	<input type="button" value="Delete"/>	<input type="button" value="Edit"/>
SLICKZY	mt48.mdsoft@gmail.com	Wait for verify	<input type="button" value="Delete"/>	<input type="button" value="Edit"/>
M.D.Soft AC	nahm.mdsoft@gmail.com	Wait for verify	<input type="button" value="Delete"/>	<input type="button" value="Edit"/>
wilaiwan company 27sep21	fopaxon393@vefblogg.com	Approved	<input type="button" value="Delete"/>	<input type="button" value="Edit"/>
wilaiwan company 27sep21	wkunchansombut27@iiec.org	Wait for verify	<input type="button" value="Delete"/>	<input type="button" value="Edit"/>
wilaiwan company	wilaiwan.tai07-test@gmail.com	Approved	<input type="button" value="Delete"/>	<input type="button" value="Edit"/>
liec	Ttkullakant@test.com	Wait for verify	<input type="button" value="Delete"/>	<input type="button" value="Edit"/>

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Information Password

User Information

User name\* administrator

Full name\* administrator Level 6

Email\* u4e\_prs\_admin@gmail.com

Department administrator

Save