

# BRUNEI DARUSSALAM

## ENERGY EFFICIENCY GOALS

### 1. GOVERNMENT POLICY ON ENERGY EFFICIENCY

In March 2014, Brunei Darussalam launched an Energy White Paper (EWP) with detailed strategies on energy efficiency and conservation. The EWP is a long-term policy document developed to achieve and fulfil the objectives of Vision 2035 (Wawasan 2035). It establishes a framework for action in order to address energy challenges and manage future risks to the economy. To ensure that all initiatives are translated into real action, the outcomes achieved are continuously generated, evaluated, and implemented.

### 2. ENERGY EFFICIENCY STRATEGY

In 2011, Brunei Darussalam established an Energy Efficiency and Conservation (EEC) roadmap that specifies a comprehensive action plan to 2035. Brunei Darussalam will reduce total energy consumption by up to 63%, primarily from a reduction of fossil fuel supply for domestic energy use via five major sectors: power, commercial, residential, transportation and industrial.

#### FUNDING

Supported by the government.

#### LINKS

Brunei Darussalam's INDC:

[http://www4.unfccc.int/submissions/INDC/Published%20Documents/Brunei/1/Brunei%20Darussalam%20INDC\\_FINAL\\_30%20November%202015.pdf](http://www4.unfccc.int/submissions/INDC/Published%20Documents/Brunei/1/Brunei%20Darussalam%20INDC_FINAL_30%20November%202015.pdf)

### 3. ENERGY EFFICIENCY ACTION PLAN

The government has established a number of legislative measures to realise EEC targets such as the standard and labelling order, financial incentives for energy efficient appliances and products, and the adoption of an energy management policy that is compatible with ISO 50001, among others.

#### FUNDING

Supported by Energy and Industry Department, Prime Minister's Office (EIDPMO), Ministry of Communications, Ministry of Development and Ministry of Education.

#### LINKS

Brunei Darussalam's INDC:

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#### 4. ENERGY EFFICIENCY, INTENSITY OR EMISSIONS REDUCTION TARGETS

Brunei Darussalam has set a target to achieve 45% energy intensity reduction by 2035 (baseline 2005), which is in line with the Asia-Pacific Economic Cooperation (APEC) target declared in Honolulu, Hawaii in 2011. In addition, at the United Nations Climate Change Summit 2014 in New York, Brunei Darussalam announced plans to reduce total energy consumption by 63% by 2035 with 2009 as the baseline (compared to business-as-usual).

##### LINKS

2014 Energy White Paper:

[http://energy.gov.bn/Shared%20Documents/Publications/Energy%20White%20Paper%202014\(1\).pdf](http://energy.gov.bn/Shared%20Documents/Publications/Energy%20White%20Paper%202014(1).pdf)

#### 5. SECTORAL ENERGY EFFICIENCY TARGETS

Not applicable.

#### 6. LEAD ENERGY EFFICIENCY INSTITUTIONS

The Energy Efficiency & Conservation (EEC) Unit of the Sustainable Energy Division at EIDPMO

##### INSTITUTIONAL SETTINGS AND RESPONSIBILITIES

The EEC unit is responsible for ensuring that all EEC projects form an integral part of reducing carbon emission in order to support the economy's aspiration on the mitigation of climate change issues. The strategic goals are as follow:

- Implementation of all EEC legislative measures.
- Promoting and developing all plans and programmes related to EEC economy-wide.
- To incorporate and integrate the reduction of carbon emission via the energy intensity reduction into the national climate change programme.

##### STAFF AND BUDGET

No information.

##### BUDGET USE

No information.

##### LINKS

EEC Unit of EIDPMO: <http://www.ei.gov.bn/SitePages/Sustainable%20Energy%20Unit.aspx>

#### 7. OTHER ENERGY EFFICIENCY AGENCIES

Not applicable.

## 8. ENERGY EFFICIENCY INFORMATION DISSEMINATION

Information on energy efficiency and conservation is continuously disseminated through briefings, seminars, workshops, reference books, energy-saving booklets and posters, the official website, and the media. This information and knowledge sharing is aimed at all levels of society in both urban and rural areas.

### LINKS

Not applicable.

## 9. ENERGY EFFICIENCY AWARENESS RAISING

The EIDPMO holds an annual energy awareness campaign titled, 'Energy Week', to continually increase the public's awareness of the subject. It also works closely with educational stakeholders through its 'Energy Club', which is held at schools to educate students about energy efficiency and conservation.

Capacity-building and energy efficiency and conservation activities have been going on for the past few years. To enhance competency, seminars/workshops have also been conducted in collaboration with local and international organisations.

### LINKS

Not applicable.

## 10. GOVERNMENT SUPPORTED ENERGY EFFICIENCY TRAINING

Brunei National Energy Research Institute (BNERI) carried out the research and development on EEC projects that will support the Vision 2035 under the Energy White Paper. It was established in April 2012 as an energy think tank.

### LINKS

BNERI: <http://www.bneri.org.bn/research>

## 11. PRIVATELY OPERATED TRAINING

Not applicable.

## 12. GOVERNMENT SUPPORTED RESEARCH & DEVELOPMENT

Research and development of energy efficiency programmes are also being carried out by the UBD|IBM Centre, which is a research collaboration between the University of Brunei Darussalam and the IBM Corporation.

### LINKS

Not applicable.

## ENERGY EFFICIENCY MEASURES

### 13. COLLECTION AND MONITORING OF ENERGY EFFICIENCY OUTCOMES

Not applicable.

### 14. EVALUATION OF ENERGY EFFICIENCY PROGRESS OR POTENTIAL

Not applicable.

#### LINKS

### 15. SELF-EVALUATION OF ENERGY EFFICIENCY PROGRAMMES

Not applicable.

### 16. CROSS-SECTOR ENERGY EFFICIENCY INITIATIVES

Not applicable.

### 17. INDUSTRY ENERGY EFFICIENCY INITIATIVES

#### **Energy Management**

##### OBJECTIVE

To reduce energy consumption to 10 percent from the Business-As-Usual (BAU) scenario of the total targeted energy intensity reduction by 2035.

##### OUTLINE

- Introducing energy management process that is compatible with international standards such as ISO 50001.
- Introducing energy audit policy for buildings and industries.
- Promoting Energy Service Company (ESCO).

#### LINKS

Not applicable.

### 18. TRANSPORT ENERGY EFFICIENCY INITIATIVES

#### **Fuel Economy Regulation**

##### OBJECTIVE

To establish a cleaner, greener, and more sustainable transport system as part of the EEC initiatives to reduce energy intensity by 45% by 2035.

## OUTLINE

- To set efficiency standards of 17.2 km/L by 2020 and 21.3 km/L by 2025 (EU 2020 target equivalent).
- Introduce hybrid vehicles, electric vehicles (EVs), and fuel-efficient vehicles (FEVs) as well as improving the deployment of public transport.

## LINKS

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## 19. BUILDING ENERGY EFFICIENCY INITIATIVES

### **EEC Building Guidelines for non-residential sector**

#### OBJECTIVE

To establish energy efficiency and conservation standards as well as a regulatory mechanism for buildings in Brunei Darussalam.

#### OUTLINE

- A collaboration project with the Ministry of Development.
- The guidelines were launched on May 14, 2015, by the Minister of Development.
- The guidelines are mandatory for all government buildings and voluntary to all commercial buildings. Regarding the latter, it will become mandatory upon notification by government authorities.

## LINKS

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## 20. ENERGY EFFICIENCY COOPERATION

### COOPERATION AGREEMENTS WITH OTHER ECONOMIES OR ORGANISATIONS

Both non-government organisations and private-sector organisations have shown support for all EEC initiatives and programmes set by the EIDPMO. Some of these organisations have come forward with funding for EEC events such as the Energy Efficiency and Conservation video, energy club projects, and the energy exhibition. Private funding was also provided to sponsor EE technologies such as the inverter air-conditioning system for "Energy Club" activities at schools. EIDPMO is also working together with Earth Hour Brunei to implement the event on an annual basis.

The private sector has also made efforts to increase the awareness of energy efficiency and conservation as well as to implement their own EEC activities. The government has supported these initiatives and has brought different sectors to participate in workshops, seminars, and trainings such as energy auditing and energy management. Energy audits have also been conducted on selected companies.

#### BILATERAL, REGIONAL OR MULTILATERAL COOPERATION AGREEMENTS

- Energy Efficiency and Conservation – Sub Sector Network (EEC-SSN)

The EEC-SSN is an important platform for all ASEAN member states to establish effective networks toward the development and implementation of various EEC programmes and initiatives. All EEC programmes that endorsed through EEC-SSN meetings have helped narrow the gaps regarding the implementation of the EEC initiatives, especially in terms of policy and legal frameworks. All EEC programmes that have been endorsed by the EEC-SSN will be materialised under the AJEEP programme.

- ASEAN-Japan Energy Efficiency Partnership (AJEEP)

The AJEEP programme is important for Brunei Darussalam since it provides an opportunity to seek assistance directly from Japan for the development of EEC programmes, including policy and legal frameworks. For the past three years, experts from the Energy Conservation Centre of Japan (ECCJ), the Institute of Energy Economics, Japan (IEEJ), and the Economic Research Institute of ASEAN and East Asia (ERIA) have visited Brunei Darussalam to conduct training workshops and provide advice. Through AJEEP, Brunei Darussalam is able to participate in the Energy Conservation ASEAN Partnership (ECAP) workshop, which is jointly organised by the Ministry of Economy, Trade and Industry (METI) of Japan, the ASEAN Centre of Energy (ACE), and the ECCJ.

Brunei Darussalam's participation under the AJEEP programme has yielded many benefits in the development of EEC legislative measures, which include the Standard and Labelling Order and the EEC Building Guidelines. Brunei Darussalam also sees the continued involvement with AJEEP as an effective platform to accelerate the development of other EEC initiatives/programmes, especially the implementation of important legislative measures such as energy management policies and the expansion of the standards and labelling scheme.

- Board of Judges on ASEAN Energy Awards (BOJ-AEA)

The Board of Judges on ASEAN Energy Awards (BOJ-AEA) is another important platform for Brunei Darussalam to learn and implement best practice building efficiency management. Additionally, this programme has given Brunei Darussalam an opportunity to participate in building management and efficiency competitions at the ASEAN level.

- APEC Expert Group on Energy Efficiency and Conservation (EGEEC)

The EGEEC promotes energy conservation and the application of energy-efficient practices and technologies through advancing demonstrated options. The EGEEC also aims to enhance trade between APEC economies in products and services as well as energy-efficient practices and technologies. Brunei Darussalam benefits from this work, especially toward the development of EEC programmes and initiatives. However, Brunei Darussalam is not a regular participant in the EGEEC, and hence, receiving assistance from APEC experts is limited.

LINKS

Not applicable.

21. OTHER ENERGY EFFICIENCY EFFORTS

Not applicable.