IEA Energy Efficiency in Emerging Economies

Training Week Programme

16 - 20 July 2018

DoubleTree by Hilton Hotel
Jl. Pegangsaan Timur No.17, Cikini, Menteng, Jakarta
### The Global Opportunity for Energy Efficiency

#### DoubleTree by Hilton Hotel, Jl. Pegangsaan Timur No.17, Cikini, Menteng, Jakarta

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<td>08.15-09.15</td>
<td>Participant Registration (Welcome Coffee &amp; Tea)</td>
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<td>09.15-09.30</td>
<td>WELCOME STATEMENT</td>
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<td>Mel Slade, International Energy Agency (IEA)</td>
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<td>09.40-09.50</td>
<td>ENERGY EFFICIENCY AS THE “FIRST FUEL” – EXPERIENCES FROM DENMARK</td>
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<td>Ambassador Rasmus Abildgaard Kristensen, Embassy of Denmark to Indonesia</td>
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<td>09.50-10.00</td>
<td>SWITZERLAND’S EFFORTS TO INCREASE ENERGY EFFICIENCY</td>
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<td>Ralph Stamm, Second Secretary, Embassy of Switzerland in Indonesia</td>
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<td>10.00-10.10</td>
<td>ENERGY EFFICIENCY: THE CHALLENGE OF INDONESIA</td>
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<td>Fabby Tumiwa, Executive Director, Institute for Essential Services Reform</td>
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<td>10.10-10.40</td>
<td>GROUP PHOTO AND COFFEE &amp; TEA BREAK - MAKARA FOYER</td>
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<td>10.40-12.00</td>
<td>PANEL DISCUSSION</td>
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<td>Gita Lestari, Deputy Director for Energy Conservation Technical Guidance and Cooperation, EBTKE</td>
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<td>Andi Novianto, Assistant Deputy for Energy Productivity, Coordinating Ministry for Economic Affairs</td>
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<td>Jon Respati, Masyarakat Konservasi dan Efisiensi Energi Indonesia</td>
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<td>Clorinda Wibowo, Energy Analyst, World Resource Institute, Indonesia</td>
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<td>Jean-Marc Alexandre, Project Manager, United for Efficiency (U4E), UN Environment</td>
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<td>12.00-13.30</td>
<td>Networking &amp; Lunch - Makara Foyer</td>
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<td>13.30-14.00</td>
<td>WHY DATA MATTERS FOR ENERGY EFFICIENCY POLICIES</td>
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<td>Roberta Quadrelli, IEA</td>
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<td>14.00-14.30</td>
<td>THE IMPORTANCE OF EVALUATION</td>
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<td>Charles Michaelis, Strategy Development Solutions</td>
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<td>14.30-15.00</td>
<td>SUBSIDY REFORM IN THE CONTEXT OF ENERGY EFFICIENCY</td>
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<td>Lucky Lontoh, International Institute for Sustainable Development (IISD)</td>
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<td>15.30-16.00</td>
<td>ENERGY EFFICIENCY COOLING</td>
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<td>TWO-WHEELERS IN SOUTHEAST ASIA</td>
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<td>16.30-17.00</td>
<td>HOW TO ENCOURAGE ENERGY EFFICIENCY INVESTMENT IN INDONESIA</td>
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<td>17.00-17.30</td>
<td>PROMOTING ENERGY EFFICIENCY IN INDONESIA: AN EBTKE – ADB COLLABORATION</td>
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<td>17.30-18.00</td>
<td>THE ENERGY EFFICIENCY PROSPERITY AND ENERGY EFFICIENCY TOOLKIT</td>
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<td>18.00-18.15</td>
<td>CLOSING REMARKS</td>
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<td>18.15-20.00</td>
<td>Cocktail &amp; Dinner - Makara Foyer &amp; Garden</td>
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A. Buildings

Lead: Brian Dean

09:00-09:30
Introductory roundtable
Brian Dean-IEA

09:30-10:30
1. Where to start: Understanding building energy use
   Brian Dean-IEA and Autif Sayyed-IFC
   Scenario: An influential NGO is urging for all new construction to be zero emission or net zero energy buildings.
   What factors are key to achieving zero emission or net zero energy buildings?

10:30-11:00
Coffee & Tea Break - Makara Foyer

11:00-12:00
2. Where to start: Energy efficiency potential in buildings
   Brian Dean-IEA and Autif Sayyed-IFC
   Scenario: You have been asked to create new policies for energy efficient buildings.
   How do you determine where to start?

12:00-13:00
Lunch - Makara Foyer

13:00-14:30
3. Toolkit: Energy efficient building design
   Brian Dean-IEA and Autif Sayyed-IFC
   Scenario: Builders are saying that construction timelines are short and it is not possible to design more efficient buildings because it is too complicated.
   What changes in building design can enable more energy efficiency in buildings?

14:30-15:00
Coffee & Tea Break - Makara Foyer

15:00-16:30
4. Toolkit: Energy efficient building technologies
   Brian Dean-IEA and Autif Sayyed-IFC
   Scenario: Stakeholders are saying that new policies are not possible because the technology is not available that enables increased energy efficiency.
   What technologies could change your market for energy efficiency?

16:30-17:00
Where do I get help? IEA’s Technology Collaboration Programmes
Brian Dean-IEA

17:30-19:30
Networking Activity – Poolside
09:00-09:30
Review: What we learned yesterday and questions
Brian Dean-IEA

09:30-10:30
5. Toolkit: Enabling investment with policies for energy efficient buildings
Brian Dean-IEA and Autif Sayyed-IFC
Scenario: You continue to hear from stakeholders that all they need is money and then
they will consider doing energy efficiency in buildings.
What policy approaches can enable energy efficiency investment?

10:30-11:00
Coffee & Tea Break - Makara Foyer

11:00-12:00
6. What are the next steps? Building energy codes and standards
Brian Dean-IEA and Autif Sayyed-IFC
Scenario: A respected industry association claims that the building energy codes out of date.
How do you go about testing this claim, and what do you do if this information is correct?

12:00-13:00
Lunch - Makara Foyer
Departure from the DoubleTree– please meet in the lobby at 12:45

13:00-17:00
Site Visit
Ministry of Public Works and Housing
Jl. Pattimura 20, Kebayoran Baru, Jakarta
Sela-tan
09:00-09:30

**Review:** What we learned yesterday and questions  
*Brian Dean-IEA*

09:30-10:30

7. **What are the steps:** Set targets and develop policies  
*Brian Dean-IEA and Autif Sayyed-IFC*

*Scenario:* There has been a change of government and the incoming government wants a range of options for interventions to rapidly increase energy efficiency.

*How do you identify, prioritise and quantify these policy options?*

10:30-11:00

Coffee & Tea Break - Makara Foyer

11:00-12:00

8. **Did it work?** Evaluating the multiple benefits of energy efficiency in buildings  
*Brian Dean-IEA and Autif Sayyed-IFC*

*Scenario:* You understand that there are more benefits to energy efficiency beyond just the energy savings.

*How do you determine the benefits of your policies and programmes?*

12:00-13:00

Lunch - Makara Foyer

13:00-14:30

9. **Did it work?** Tracking progress with energy efficiency indicators  
*Brian Dean-IEA and Autif Sayyed-IFC*

*Scenario:* The Minister wants to know how effective the building energy efficiency policies have been.

*How do you go about answering this?*

14:30-15:00

Coffee & Tea Break

15:00-16:30

**Where do I get help?** International and regional energy efficiency initiatives  
*Brian Dean-IEA and Autif Sayyed-IFC*

16.30-17.00

10. **Review and Energy Efficiency Quiz:** Understanding energy efficiency in buildings  
*Brian Dean-IEA and Autif Sayyed-IFC*
### DAY 2 | TUESDAY, 17TH JULY

#### B. Lighting, Appliances & Equipment

**Leads: Mark Ellis and Mel Slade**

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<th>Time</th>
<th>Session</th>
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| 09:00-09:30 | **Introductory and roundtable**  
  *Mark Ellis-IEA 4E, Mel Slade-IEA and Yujuan Xia-CNIS* |
| 09:30-10:30 | **1. Where to start: Planning Energy Efficiency Programs**  
  *Mark Ellis-IEA 4E*  
  **Scenario:** There has been a change of government and the incoming government wants a range of options for interventions to rapidly increase the energy efficiency of lighting, appliances and equipment.  
  *How do you identify, prioritise and quantify these options?* |
| 10:30-11:00 | **Coffee & Tea Break - Makara Foyer**                                                          |
| 11:00-12:00 | **2. Where to start: Selecting Products for MEPS and Labels**  
  *Mel Slade-IEA*  
  **Scenario:** You've been asked to expand the programme to cover more products including those in the industrial sector.  
  *How do you go about it?* |
| 12:00-13:00 | **Lunch - Makara Foyer**                                                                        |
| 13:00-14:30 | **3. Where to start: Assessing current performance of appliances and equipment**  
  *Mark Ellis-IEA 4E*  
  **Scenario:** A respected industry association claims that the MEPS levels for X are so out of date that all the products on your market comply.  
  *How do you go about testing this claim, and what do you do if this information is correct?* |
| 14:30-15:00 | **Coffee & Tea Break - Makara Foyer**                                                          |
| 15:00-16:30 | **4. What are the steps: Industry transformation**  
  *Mel Slade-IEA*  
  **Scenario:** Several local manufacturers of electric fans have said that the MEPS levels currently in force in several neighbouring economies would ban most of their current products lines, and threaten their businesses.  
  *What steps could you take to gain the support of local industry for the introduction of MEPS?*  
  *How do you go about deciding on the most effective ways to spend this?* |
| 16:30-17:00 | **5. What are the steps: Stakeholder involvement & communication**  
  *Mark Ellis-IEA 4E*  
  **Scenario:** You are asked to prepare a communications strategy for your MEPS programme.  
  *What are the key elements to this strategy?* |
| 17:30 - 19:30 | **Networking Activity - Poolside**                                                             |
09:00-09:30
Presentation
*Edi Sartono-Deputy Director for the Implementation of Energy Conservation Technology, EBTKE*

Review: What we learned yesterday and questions
*Mark Ellis-IEA 4E*

09:30-10:30
6. Toolkit? The relationship between product efficiency and prices
*Mark Ellis-IEA 4E*

Scenario: You have been asked to prepare an impact statement for your regulations, including the effect on product prices.

*How would you go about the task of estimating future product costs?*

10:30-11:00
Coffee & Tea Break - Makara Foyer

11:00-12:00
7. Toolkit: Insights into energy labels
*Mark Ellis-IEA 4E*

Scenario: A newspaper article has questioned the validity of energy labels on refrigerators, saying that the label does not reflect real usage. Your manager has asked you to outline a response.

*What do you say?*

12:00-13:00
Lunch – Makara Foyer
Departure from the DoubleTree– please meet in the lobby at 12:45

**Site Visit**

Best Denki
Grand Indonesia Shopping Town Market
District No. 3A Mini Anchor, Jalan MH.Thamrin,
RT.1/R-W.5
Menteng, Kota Jakarta Pusat
DAY 4 | THURSDAY 19TH JULY

09:00-09:30

- **Review**: What we learned yesterday and questions
  
  *Mark Ellis-IEA 4E*

09:30-10:30

- **8. Toolkit**: Use of ICT to make Programs Smarter
  
  *Yujuan Xia-CNIS and Mel Slade-IEA*

  **Scenario**: There are special grants available to government departments for ‘smart’ initiatives that lead to reduced costs for business.
  
  *Which projects would you put forward?*

10:30-11:00

- **Coffee & Tea Break - Makara Foyer**

11:00-12:00

- **9. Did it work?** Tracking progress and assessing the multiple benefits
  
  *Mel Slade-IEA*

  **Scenario**: The Minister wants to know how effective your program has been.
  
  *How do you go about answering this?*

12:00-13:00

- **Lunch - Makara Foyer**

13:00-14:30

- **10. Toolkit**: Monitoring, Verification and Enforcement (MV&E) of standards and labelling programmes
  
  *Mark Ellis-IEA 4E*

  **Scenario**: You’ve been given US$300,000 to improve compliance rates.
  
  *How do you go about deciding on the most effective ways to spend this?*

14:30-15:00

- **Coffee & Tea Break - Makara Foyer**

15:00-16:30

- **11. Key Learnings**: Further information, best practice
  
  *Mark Ellis-IEA 4E and Mel Slade-IEA*

  ASEAN Standards Harmonisation, *Jean-Marc Alexandre-U4E*

16:30-17:00

- **12. Review and Energy Efficiency Quiz**
  
  *Mark Ellis-IEA 4E and Mel Slade-IEA*
DAY 2 | TUESDAY, 17th JULY

C. Industry

Lead: Patrick Crittenden

09:00-09:30
- Introductory roundtable

09:30-10:30
- 1. Where to start: Exploring the challenges and opportunities of industrial energy efficiency
  *Patrick Crittenden* - Sustainable Business
  - What are the challenges that you face in designing and implementing energy efficiency policies and programmes in your country?

10:30-11:00
- Coffee & Tea Break - Makara Foyer

11:00-12:00
- 2. Where to start: Making the case for industrial energy efficiency policy
  *Patrick Crittenden* - Sustainable Business
  - Set objectives and position energy efficiency programmes in the context of national priorities and other policies and programmes.

12:00-13:00
- Lunch - Makara Foyer

13:00-14:30
- 3: Toolkit: Consulting with Stakeholders
  *Louise Vickery* - Independent Consultant
  - An interactive exercise to identify the interests of key stakeholders and develop the mechanisms to create collaborative partnerships.

14:30-15:00
- Coffee & Tea Break - Makara Foyer

15:00-16:30
- 4. Toolkit: Selecting energy efficiency programme measures
  *Patrick Crittenden* - Sustainable Business
  - Select the programme measures that will have the most impact in your country and market context.
  - Case study examples from Southeast Asia and around the world.

16:30-17:00
- Where do I get help?
  *Patrick Crittenden* - Sustainable Business

17:30-19:30
- Networking Activity – Poolside
09:00-09:30

**Review:** What we learned yesterday and questions
*Patrick Crittenden - Sustainable Business*

09:30-10:30

**5. Toolkit:** Energy audit programmes in Asia – what works?
*Mr Pawan Kumar Tiwari - The Energy and Resources Institute (TERI) India*

- Practical insights into the design and implementation of energy audit programmes.
- What are your experiences with energy auditing and how can it be integrated in your current and future programmes?

10:30-11:00

Coffee & Tea Break - Makara Foyer

11:00-11:45

**6. Toolkit:** Energy Management Programme - Case studies
*Louise Vickery - Independent Consultant*

- The Australian Energy Efficiency Opportunities Program
- Exploring the complete life cycle of an energy management programme from design through to evaluation.

11:45-12:30

Lunch – Makara Foyer

Departure from the DoubleTree – please meet in the lobby at 12:30

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**Site Visit**

**KMK Global Sport**

Jl. Cikupamas Raya No. 17, Kawasan Industri Cikupamas, Talagasari, Talaga, Cikupa, Talaga Cikupa, Tangerang, Banten
Day 4 | Thursday 19th July

09:00-09:30

**Review: What we learned yesterday and questions**
*Patrick Crittenden - Sustainable Business*

09:30-10:30

**7: Toolkit: Energy Management**
*Mr. Pak Aris - UNIDO*

Presentation on the benefits of energy management and how to design policies and programmes to support implementation.

*What are your experiences with energy management and how can it be integrated in your current and future programmes?*

10:30-11:00

Coffee & Tea Break - Makara Foyer

11:00-12:00

**8. What are the steps? Programme design scenario presentations**
*Patrick Crittenden - Sustainable Business*

*Scenario:* You are working in a programme team to design a new industrial energy efficiency programme.

*What industry sectors and segments will you target and why?*
*Which stakeholders will you consult and involve?*
*What measures will you include in your programme and what barriers will these overcome?*
*How will you gather data and communicate progress?*

12:00-13:00

Lunch - Makara Foyer

13:00-14:30

**9. What are the steps? Programme design scenario**
*Patrick Crittenden - Sustainable Business*

Participant presentations and group discussion around the five unique industrial energy efficiency programme scenarios examined in the previous session.

14:30-15:00

Coffee & Tea Break - Makara Foyer

15:00-16:30

**11. Toolkit: Looking forward - Leverage information and communication technologies**
*Patrick Crittenden - Sustainable Business*

Leverage developments in information and technology to design forward looking policies that will accelerate energy efficiency in industry.

16:30-17:00

**12. Review: Roundtable discussion on applying lessons learned within country-specific contexts**
*Patrick Crittenden - Sustainable Business*
D. Transport

LEADS: JACOB TETER

09:00-09:30
Introductory roundtable
Jacob Teter-IEA

1. Where to start: Understanding transport energy use
Introduction to the historical trends for energy consumption in the transport sector and the impact of modal choice.

Activity and Group discussion
Quiz on transport, energy use, and emissions.
What are the main limitations of transport services, and other negative impacts, in the city and country where you live and work?

10:30-11:00
Coffee & Tea Break - Makara Foyer

2. Where to start: Understanding and improving the energy efficiency of transport services
An introduction to the ASIF Approach – linking activity and fuel use.

Understand the drivers of energy use in transport, and the role of transport policy and planning, focusing on the role of “avoid and shift” policies.

Group discussion
What policies are in place in your country/city; what has worked; and what have been the barriers to success?

12:00-13:00
Lunch – Makara Foyer

3. Toolkit: Data to support policy making and evaluation
Data for effective policy making for transport energy efficiency – what’s needed, where to find it and how to use it.

Group discussion
What data sources for your country exists and how can these be used to inform policy making?

14:30-15:00
Coffee & Tea Break

4. What are the steps: Sustainable urban transport planning
Creating high-quality, efficient public transport with changing demand for shared mobility through public support or monetary policies.

What are the modal shares in public transit in major cities in your country? What factors limit the potential for further uptake of public transit and non-motorised transport in these cities?

15:00-16:30

5. Toolkit: Building the case to finance energy efficient transport policies
Prioritising key policies at each jurisdictional level, incorporating: political feasibility, effectiveness, monetary costs & benefits and co-benefits.

16:30-17:00

6. Activity: Sustainable urban transport projects
Participants form groups to propose sustainable transport projects in a city in their home country.

17:00-19:30
Networking activity - Poolside
09:00-09:30

**D**

**Review:** What we learned yesterday and questions
*Jacob Teter-IEA*

09:30-10:00

**D**

7. **Activity:** Sustainable urban transport projects

Participants form groups to propose sustainable transport projects in a city in their home country / region.

10:30-11:00

Coffee & Tea Break - Makara Foyer

11:00-12:00

**D**

8. **Activity:** Sustainable urban transport projects
*Jacob Teter-IEA*

Group presentations

Introduction to site visit

12:00-13:00

Lunch - Makara Foyer

Depature from the DoubleTree– please meet in the lobby at 12.45

13:00-17:00

**Site Visit**

Trans Jakarta
Jl. Mayjen Sutoyo No.1, RT.5/RW.5, Kb. Pala, Makasar, Kota Jakarta Timur, Daerah Khusus Ibukota, Jakarta
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<td>09:00-09:15</td>
<td>Overview: The Global Fuel Economy Initiative – an Introduction</td>
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<td>Jacob Teter - IEA</td>
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<td>09:15-10:30</td>
<td>9. Toolkit: Policy instruments available to &quot;improve&quot; the fuel economy of road vehicles (2-wheelers, cars and trucks)</td>
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<td>Jacob Teter - IEA</td>
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<td>Fuels: fuel subsidy reform; fuel taxes; fuel quality standards</td>
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<td>How much of an impact do fuel subsidies have on transport energy efficiency, and how have other countries’ successfully moved from fuel subsidies to taxation?</td>
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<td>Vehicles: fuel economy regulations; emission standards; differentiated vehicle taxes; and supporting zero emission vehicles.</td>
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<td>Discussion</td>
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<td>What policies are already implemented in your country; what are the main goals for each and how effective is each policy in meeting these goals?</td>
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<td>How stringent are they, by international standards?</td>
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<td>What other policies should your country implement?</td>
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<td>10:30-11:00</td>
<td>Coffee &amp; Tea Break</td>
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<td>11:00-12:00</td>
<td>10. What are the steps: How to develop policies</td>
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<td>Benchmarking historical fuel economies</td>
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<td>Setting targets (fuel economy costs and benefits, rationale of GFEI targets)</td>
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<td>Defining policy priorities according to regional needs</td>
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<td>Monitoring, compliance and enforcement</td>
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<td>12:00-13:00</td>
<td>Lunch - Makara Foyer</td>
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<td>13:00-13:30</td>
<td>11. Deep dive: Fuel economy policies for Heavy-Duty Vehicles (HDVs)</td>
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<td>Benchmarking: vehicle segmentation and duty cycles</td>
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<td>Modelling tools: VECTO / GEM</td>
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<td>Policy design</td>
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<td>13:30-14:30</td>
<td>12. Activity: Improving fuel economy</td>
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<td>14:30-15:00</td>
<td>Coffee &amp; Tea Break - Makara Foyer</td>
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<td>15:00-16:30</td>
<td>13. Electric Vehicle Initiative (EVI)</td>
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<td>Jacob Teter – IEA</td>
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<td>Scaling up EV uptake in developing countries</td>
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<td>Presentation of a project being developed by the IEA and the EVI with the Global Environment Facility (GEF)</td>
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<td>16:30-17:00</td>
<td>14. Review and Energy Efficiency Quiz</td>
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<td>Jacob Teter – IEA</td>
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 toolkit:
- Policy instruments available to "improve" the fuel economy of road vehicles (2-wheelers, cars and trucks)
- Fuels: fuel subsidy reform; fuel taxes; fuel quality standards
- How much of an impact do fuel subsidies have on transport energy efficiency, and how have other countries’ successfully moved from fuel subsidies to taxation?
- Vehicles: fuel economy regulations; emission standards; differentiated vehicle taxes; and supporting zero emission vehicles.
- Discussion
  - What policies are already implemented in your country; what are the main goals for each and how effective is each policy in meeting these goals?
  - How stringent are they, by international standards?
  - What other policies should your country implement?

### Electric Vehicle Initiative (EVI)
- Jacob Teter – IEA
- Scaling up EV uptake in developing countries
- Presentation of a project being developed by the IEA and the EVI with the Global Environment Facility (GEF)
E. Data & Statistics

LEADS: Roberta Quadrelli and Mafalda Silva

09.00-09.30
Introductory roundtable
Roberta Quadrelli and Mafalda Silva-IEA Energy Data Centre

09.30-10.30
1. Where to start: Why do we need data and what data do we need?
Short introduction and Group discussion
Why do we need data and what data do we need for energy efficiency policy tracking?
What are the challenges that you face about energy efficiency data?
What is your experience?

10.30-11.00
Coffee & Tea Break

11.00-12.00
2. Where to start: Introduction to Energy Statistics and Energy Balances
What can we learn from a national energy balance? What is relevant for energy efficiency?
What is relevant for energy efficiency?
Country presentation: Indonesian national energy statistical system
IEA Presentation and Practical exercise

12.00-13.00
Lunch – Makara Foyer

13.00-14.30
3. Where to start: Fundamentals of energy efficiency indicators
How can we track energy efficiency progress?
What are the international and regional approaches?
IEA and APERC presentations
The IEA approach to developing efficiency indicators
Southeast Asia approaches to developing efficiency indicators
Elvira Gelindon-APERC

14.30-15.00
Coffee & Tea Break - Makara Foyer

15.00-17.00
4. What are the steps? Data for efficiency indicators
How to collect the data needed?
Overview of methodologies and the IEA experience
Short IEA introduction and country presentations (Thailand, Malaysia)

17.30-19.30
Networking Activity – Poolside
5. Where to start: Tracking efficiency in the buildings sector
What additional insights can we learn from efficiency indicators?
What are the priority energy end-uses for households and services in your country?

6. Toolkit: Efficiency indicators in the residential sector
How to calculate the indicators, check quality and fill gaps?
Presentations and practical exercises

Coffee & Tea Break

7. Toolkit: Efficiency indicators in the residential sector
Country presentation (Philippines)
How to use modelling to obtain indicators?
IEA presentation

Lunch – Makara Foyer
Departure from the DoubleTree– please meet in the lobby at 12.45

SITE VISIT
Participants to join other stream site visit
8. Where to start: Tracking efficiency in the industry sector

- What additional insights can we learn from efficiency indicators?
- How to collect the data needed?

IEA presentation

9. Toolkit: Efficiency indicators in the industry sector

- Country presentation (Cambodia) and other national perspectives Elvira Gelindon-APERC

Practical exercise

10. Where to start: Tracking efficiency in the transport sector

- What additional insights can we learn from efficiency indicators?
- What is the priority energy consumption driver for transport in your country?

IEA presentation

11. What are the steps?: Data for efficiency indicators in the transport sector

- How to collect the data needed?

presentation by Ceclya Malik, ERIA

12. Toolkit: Efficiency indicators in the transport sector

Practical exercises

13. What are the steps?: Data for efficiency indicators across sectors

- How to gather data from different sources and fill data gaps?

Group exercise

14. Scenario: The Minister wants to know what have been the impacts of energy efficiency policy

Roberta Quadrelli, Mafalda Silva and Elvira Gelindon

- How do you go about answering this?
  Develop an action plan to get the right data

Break-out groups and plenary discussion
DAY 2 | TUESDAY, 17TH JULY

**F. Policy and Programme Evaluation**

**LEADS: CHARLES MICHAELIS AND EMILY MCQUALTER**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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</table>
| 09:00-09:30   | Introductory roundtable  
*Charles Michalis-Strategy Development Solutions and Emily McQualter-IEA* |
| 09:30-10:30   | 1. Where to start: What is Policy and Programme Evaluation?  
*A hands on exercise to introduce key evaluation concepts relating to the purpose of evaluation* |
| 10:30-11:00   | Coffee & Tea Break - Makara Foyer |
| 11:00-12:00   | 2. Where to start  
Overview presentation and discussion of policy evaluation, what it is, who should be involved, when and how it should be done  
Introducing the evaluation toolkit |
| 12:00-13:00   | Lunch – Makara Foyer |
| 13:00-14:30   | 3. Where to start: Introducing the evaluation toolkit – four elements of successful evaluation along with case study examples of how they are applied  
Presentation of two policy scenarios that will be used through the week:  
*Industrial energy efficiency policy in Indonesia*  
*Lighting and appliance policies in Malaysia* |
| 14:30-15:00   | Coffee & Tea Break - Makara Foyer |
| 15:00-17:00   | 4. Using the toolkit: Developing theories of change  
Introduction to basic concepts followed by group exercises to build theories of change for one of the two scenarios |
| 17:30-19:30   | Networking Activity – Poolside |
5. Review: What did we learn yesterday and questions

6. Toolkit: Identifying evaluation questions and collecting evidence
   Introduction to basic concepts followed by group exercises to determine indicators and evaluation questions and collect evidence for one of the two scenarios

Coffee & Tea Break

7. Planning for the site visit
   Planning for the site visit, identify evaluation questions and how they will be addressed

Lunch– Makara Foyer
   Departure from the DoubleTree– please meet in the lobby at 12.45

SITE VISIT
   Participants to join other stream site visit
<table>
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<th>Time</th>
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<tr>
<td>09:00-09:30</td>
<td>Review: What did we learn yesterday and questions</td>
<td>Charles Michalis-Strategy Development Solutions</td>
</tr>
<tr>
<td>09:30-10:30</td>
<td>8. Evaluating the site visit</td>
<td>Introduction to basic concepts followed by group exercises to consider how evidence could be collected and analysed for one of the two scenarios</td>
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<tr>
<td>10:30-11:00</td>
<td>Coffee &amp; Tea Break - Makara Foyer</td>
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<tr>
<td>11:00-12:00</td>
<td>9. Evaluating gender, human rights and intercultural perspectives in energy efficient policies and programmes</td>
<td>Emily McQuater-IEA</td>
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<td>12:00-13:00</td>
<td>Lunch - Makara Foyer</td>
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<tr>
<td>13:00-14:30</td>
<td>10. Develop evaluation plans</td>
<td>Group work to develop an evaluation plan for one of the two scenarios</td>
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<tr>
<td>14:30-15:00</td>
<td>Lunch - Makara Foyer</td>
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<tr>
<td>15:00-16:30</td>
<td>11. Evaluation plan presentations</td>
<td>Groups to present evaluation plans to a panel of experts for feedback</td>
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<td>Roundtable discussion on applying lessons learned within country-specific contexts.</td>
</tr>
<tr>
<td>16:30-17:00</td>
<td>12. Review</td>
<td>Roundtable discussion on applying lessons learned within country-specific contexts.</td>
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## Making More Energy Efficiency Happen

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<tr>
<td>09.00-09.45</td>
<td>WORK STREAMS REPORT BACK TO GROUP ON KEY LESSONS</td>
<td>Mel Slade, IEA</td>
</tr>
<tr>
<td>09.45-10.15</td>
<td>COMMUNICATION STRATEGIES TO SUPPORT ENERGY EFFICIENCY GOALS: THE PRINCIPLES OF PLANNING AND IMPLEMENTING EFFECTIVE PUBLIC OUTREACH CAMPAIGNS</td>
<td>Mel Slade, IEA</td>
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<td>11.15-12.00</td>
<td>FUEL SUBSIDIES AND ENERGY EFFICIENCY - INTRODUCTION</td>
<td>Led by Brian Dean, Evi Wahyuningsih and Luis Lopez, IEA</td>
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<tr>
<td>13.00-13.45</td>
<td>FUEL SUBSIDIES AND ENERGY EFFICIENCY - EXERCISE</td>
<td>Led by Brian Dean, Evi Wahyuningsih and Luis Lopez, IEA</td>
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<td>13.45-15.00</td>
<td>FUEL SUBSIDIES AND ENERGY EFFICIENCY - REPORT BACK</td>
<td>Led by Brian Dean, Evi Wahyuningsih and Luis Lopez, IEA</td>
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<tr>
<td>15.00-16.00</td>
<td>CLOSING REMARKS AND AWARDING OF CERTIFICATES</td>
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<td>16.00-16.30</td>
<td>Coffee &amp; Tea Break - Makara Foyer</td>
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Sector Leaders

BUILDINGS

Brian Dean is in the International Energy Agency’s Energy Efficiency Division and supports the Energy Efficiency in Emerging Economies programme, where he has provided support to China, India, Indonesia, South Africa, and Mexico. Brian also supports IEA’s Policy and Measures database, Building Energy Efficiency Policies database, the Energy Efficiency Market Report, and the development of regional energy efficiency policy recommendations. Prior to coming to the IEA, Brian was Senior Manager at ICF International and Head of the Energy Efficiency Policy and Analytics team where he supported the development of ENERGY STAR, utility-based energy efficiency programs, IECC building energy codes and US energy demonstration projects. Brian has education in engineering, architecture and political science from Rensselaer Polytechnic Institute and Massachusetts Institute of Technology.

LIGHTING, APPLIANCES & EQUIPMENT

Mark Ellis has over the past 30 years, Mark has assisted governments in the US, Europe and the Asia-Pacific region on the development and implementation of energy efficiency policies, mainly in the field of appliances and equipment. Between 2005-8 Mark was a senior policy analyst for International Energy Agency and, since then have been Operating Agent for the IEA Technology Collaboration Programme for Energy Efficient End-Use Electrical Equipment (4E), involving 12 countries.

Mel Slade has spent twenty five years in energy efficiency policy development and implementation in many parts of the world. She started out working in the UK Government on industrial energy efficiency and has worked with many governments to establish similar programmes, perhaps most notably, the Government of China. In recent times she spent six years chairing the Equipment Energy Efficiency Committee – the Australian and New Zealand Government committee overseeing the regulation of minimum energy performance standards and labels for lighting, equipment and appliances. One of the key policies Mel led while in Australia was the phase-out of inefficient lighting. Australia was second only to Cuba in this endeavour and has shared its experience widely both in the developed and developing world. Mel moved to the International Energy Agency in February 2014 to manage the new Energy Efficiency in Emerging Economies Programme.

INDUSTRY

Patrick Crittenden is the Director of Sustainable Business. He is a recognised expert in industrial energy efficiency policy and practice and has provided advisory and consultation services to national and regional governments on an extensive range of policies including the Australian Energy Efficiency Opportunities Act and the Mongolian Energy Efficiency Business Programme. Patrick is an engaging speaker and facilitator and has designed and delivered stakeholder engagement and energy efficiency capacity building events in Australia, the United States, France, India, Russia and Mongolia. He holds a Bachelor of Social Science and Policy degree as well as a PhD in Management. His PhD research examined the interaction between government policies, market forces and organisational culture to provide new insights into how and why energy management practices change in large energy using businesses.
TRANSPORT

Jacob Teter joined the International Energy Agency (IEA) as a transport energy modeller and policy analyst in Spring 2015. His focus has been on model development of the IEA Mobility Model. He has taken a lead role in disaggregating the resolution of MoMo into urban and non-urban regions for the estimation of the potential of urban transport and land-use policy to reduce car activity and energy use; in refining modelling of tailpipe emissions from road modes; of cost-benefit and lifetime cost of ownership analysis of various technology and fuel pathways for trucks and buses; and will lead the Mobility Model team’s work on modelling the energy and emissions implications of ACES – Autonomous, Connected, Electric and Shared vehicles. Jacob has contributed to recent Energy Technology Perspectives (ETP) and World Energy Outlook (WEO) reports and was the main author of the recent IEA publication, “The Future of Trucks - Implications for Energy and the Environment”. Jacob completed his PhD in Transportation Technology and Policy from the University of California, Davis in 2015. In his spare time, he enjoys hiking, biking, and cooking, as well as improving his coding capacity in C, Python and R, and his grasp of French, German, and Chinese.

Luis Lopez works as an energy analyst intern in the Energy Efficiency in Emerging Economies Division of the IEA while finishing his Masters in Management and Engineering of Energy and Environment in Universidad Politécnica de Madrid and IMT Atlantique (Ecole des Mines de Nantes). Prior to this, he spent 4 years working in process engineering design in the chemicals & petrochemicals industry and in the liquefied natural gas industry. He received a BSc in Chemical Engineering from the University of the Philippines. His main interest is working in technology, policy, and economics in the field of energy.

DATA & STATISTICS

Roberta Quadrelli is the Head of the unit on Balances, Prices, Emissions and Energy Efficiency at the IEA Energy Data Centre, where she also was head of the IEA non-member countries data unit. She previously worked at the International Council for Science (ICSU) to coordinate international research on global environmental change and sustainability. Roberta began her career as a climate researcher, with a doctorate in atmospheric sciences at the University of Washington (USA) and a master in physics at the University of Bologna (Italy). She authored several academic publications; contributed to the IPCC Guidelines for greenhouse gas inventories and to the IEA manual on Energy efficiency indicators: Fundamentals on Statistics.

Mafalda Silva is in charge of energy efficiency data at the IEA Energy Data Centre. She processes end use data from IEA member countries, and develops the respective energy efficiency indicators publications and databases. Previously to joining the IEA, she worked as a researcher for over seven years on the fields of energy demand in cities, urban planning and urban metabolism, with a PhD in Sustainable Energy Systems and a BSc. in Environmental Sciences at the University of Porto.
POLICY & PROGRAMME EVALUATION

Charles Michaelis has 25 years’ experience of evaluating government policies and programmes. He has worked in Indonesia, Vietnam and China as well as Australia and the UK. Within the energy efficiency field, Charles has conducted more than 100 evaluations of policies relating to industry, buildings, lighting and appliances. He has also worked on renewables and demand side response. Currently, Charles is leading a major evaluation of the UK’s International Climate Finance. Charles has expertise in a wide range of approaches to evaluation, data collection and analysis approaches. He believes that, even with limited resources, it is always possible to use evidence and analysis to improve the effectiveness of programmes and policies.

Emily McQualter works for the IEA’s Energy Efficiency in Emerging Economies Programme (E4), managing E4’s work in Southeast Asia. Emily has experience with energy efficiency policy making within the Australian Government as part of the Equipment Energy Efficiency Programme (E3) and has lived and worked in Southeast Asia for a number of years. Emily spent time in rural Philippines and in Thailand, where she worked for the United Nations Environment Programme, Regional Office for Asia and the Pacific on energy efficiency programmes. Emily received a BSc and Masters of Natural Resource Management from the University of Melbourne.