The Indonesia JCM Scheme Progress Development

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Indonesia INDC and Paris Agreement article 6

PARIS AGREEMENT (article 6 para 2-3)
2. Parties shall, where engaging on a voluntary basis in cooperative approaches that involve the use of internationally transferred mitigation outcomes towards nationally determined contributions, promote sustainable development and ensure environmental integrity and transparency, including in governance, and shall apply robust accounting to ensure, inter alia, the avoidance of double counting, consistent with guidance adopted by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement.
3. The use of internationally transferred mitigation outcomes to achieve nationally determined contributions under this Agreement shall be voluntary and authorized by participating Parties.

INDC of Republic of Indonesia
.... Indonesia’s additional 12% of intended contribution by 2030 is subject to provision in the global agreement including through bilateral cooperation, covering technology/deployment and transfer, capacity building, payment for performance mechanisms, technical cooperation and access to financial resources.
.... Indonesia will meet its unconditional commitments regardless of the existence of international market mechanisms. Indonesia welcomes bilateral, regional and international market mechanisms that facilitate and expedite technology development and transfer, payment for performance, technical cooperation, and access to financial resources to support Indonesia’s climate mitigation and adaptation efforts toward a climate resilient future.
Joint Crediting Mechanism Scheme in Indonesia

Indonesia JCM organizations

1. **Joint Committee**, Indonesia Joint Committee consists of 10 members from 7 different ministries and JCM Secretariat.

2. **Indonesia JCM Secretariat**, the secretariat is located at Coordinating Ministry of Economic Affairs (CMEA) Building 2nd floor, Jl. Medan Merdeka Barat 7, Jakarta. Secretariat roles are supporting the Joint Committee tasks, including receiving PIN (JCM projects application), methodology review and sustainable development criteria implementation and report review, and facilitates project participant to develop activities under the JCM. The JCM operationalization also supported by JICA under the cooperation between CMEA and JICA (until December 2017).

3. **Third Party Entities (TPEs)** are independent bodies accredited with ISO 14065 or registered CDM DOE. JCM project is required to be validated and verified by the TPEs. Up to now, there are 10 registered TPEs in the JCM Indonesia, including 1 Indonesian entity.

We are ready to support project participants!
JCM feasibility studies

The JCM FS scheme provides financing funded by the Ministry of Environment Japan (MoEJ) and Ministry of Economy, Trade and Industry Japan (METIJ)

List of JCM implemented project (1)

<table>
<thead>
<tr>
<th>No</th>
<th>Project</th>
<th>Entities</th>
<th>Estimated Annual Emission Reduction (tCO2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Remote Auto-Monitoring System for Thin-Film Solar Power Plant in Indonesia</strong></td>
<td>Sharp &amp; PLN</td>
<td>1,433</td>
</tr>
<tr>
<td>2</td>
<td><strong>Energy Saving by Optimum Operation at Oil Refinery</strong></td>
<td>Yokogawa &amp; Pertamina</td>
<td>3,400</td>
</tr>
<tr>
<td>3</td>
<td><strong>Utility Facility Operation Optimization Technology</strong></td>
<td>Azbil &amp; Pertamina</td>
<td>58,000</td>
</tr>
<tr>
<td>4</td>
<td><strong>The low carbonization of mobile communication’s BTS (Base Transceiver Station) by the Introduction of “TRIBRID system” in Indonesia.</strong></td>
<td>KDDI Corporation, Ernst &amp; Young Sustainability Co., Ltd., PT. Packet Systems Indonesia, and PT Huawei Services</td>
<td>163</td>
</tr>
<tr>
<td>5</td>
<td><strong>Power generation by waste heat recovery in cement industry</strong></td>
<td>JFE Engineering Corporation &amp; PT Semen Indonesia Tbk</td>
<td>122,000</td>
</tr>
<tr>
<td>6</td>
<td><strong>Energy Savings at Convenience Stores</strong></td>
<td>Lawson &amp; PT Midi Utama Indonesia, Tbk</td>
<td>396</td>
</tr>
<tr>
<td>7</td>
<td><strong>Energy saving through introduction of regenerative burners to the aluminum holding furnace of the automotive components manufacturer</strong></td>
<td>Toyotsu Machinery Corporation, PT Yamaha Motor Parts Manufacturing Indonesia, Hokuriku Techno Co. Ltd., PT Matahari Wasiso Utama</td>
<td>856</td>
</tr>
<tr>
<td>8</td>
<td><strong>Solar power hybrid System installation to existing base transceiver stations in off-grid area</strong></td>
<td>ITOCHU Corporation &amp; PT Telekomunikasi Selular</td>
<td>2,786</td>
</tr>
<tr>
<td>9</td>
<td><strong>Energy saving for textile factory facility cooling by high efficiency centrifugal chillers</strong></td>
<td>Ebara Refrigeration Equipment &amp; System Co., PT Nikawa Textile Industry, PT Ebara Indonesia</td>
<td>118</td>
</tr>
<tr>
<td>10</td>
<td><strong>Energy saving by double bundle-type heat pump</strong></td>
<td>Toyota Tsusho Corporation &amp; PT TTL Indonesia</td>
<td>170</td>
</tr>
</tbody>
</table>
**List of JCM implemented project (2)**

<table>
<thead>
<tr>
<th>No</th>
<th>Project</th>
<th>Entities</th>
<th>Estimated Annual Emission Reduction (tCO2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Introduction of High efficient Old Corrugated Cartons Process at Paper Factory</td>
<td>Kanematsu Corporation &amp; PT Fajar Surya Wisesa Tbk</td>
<td>14,884</td>
</tr>
<tr>
<td>12</td>
<td>Reducing GHG emission at textile factories by upgrading to air-saving loom</td>
<td>Toray Industries, Inc, PT Indonesia Synthetic Textile Milles (STEM) / PT Easterntex / PT Century Textile Industry Tbk (CENTEX) / PT Toray Industries Indonesia (TIN)</td>
<td>566</td>
</tr>
<tr>
<td>13</td>
<td>Energy saving for air-conditioning and process cooling at textile factory</td>
<td>Ebara Refrigeration Equipment &amp; Systems &amp; PT Primatexco Indonesia</td>
<td>117</td>
</tr>
<tr>
<td>14</td>
<td>Energy Saving for Shopping Mall with High Efficiency Centrifugal Chiller</td>
<td>NTT Facilities, INC &amp; PT. Pakuwon Jati Tbk</td>
<td>925</td>
</tr>
<tr>
<td>15</td>
<td>Energy Saving for Industrial Park with Smart LED Street Lighting System</td>
<td>NTT Facilities, INC dan PT. Maligi Permata Industri Estate, PT. Harapan Anang Bakri &amp; Sons, PT. Karawang Tatabina Industrial Estate</td>
<td>900</td>
</tr>
<tr>
<td>16</td>
<td>Energy saving by introduction of high efficiency once-through boiler system in a film factory</td>
<td>Mitsubishi Plastics, INC &amp; PT. MC Pet Film Indonesia</td>
<td>429</td>
</tr>
<tr>
<td>17</td>
<td>REDD+ Model Project in Boalemo District</td>
<td>Kanematsu Corporation &amp; PT. Gobel Group DKM)</td>
<td>100,000</td>
</tr>
</tbody>
</table>

**List of JCM implemented project (3)**

<table>
<thead>
<tr>
<th>No</th>
<th>Project</th>
<th>Entities</th>
<th>Estimated Annual Emission Reduction (tCO2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>Installation of Gas Co-Generation System for Automobile Manufacturing Plant</td>
<td>Toyota Tsusho Corporation &amp; PT Toyota Motor Manufacturing Indonesia</td>
<td>20,439</td>
</tr>
<tr>
<td>19</td>
<td>Jakabaring Mega Solar Power Plant Project</td>
<td>Sharp Corporation &amp; Perusahaan Daerah Pertambangan dan Energi Sumatera Selatan</td>
<td>1,265</td>
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<tr>
<td>20</td>
<td>Introduction of high efficiency once-through boiler and RO pure water system in golf ball factory</td>
<td>Sumitomo Rubber Industries, Ltd, &amp; PT Sumi Rubber Indonesia</td>
<td>380</td>
</tr>
<tr>
<td>22</td>
<td>Project of Introducing High Efficiency Refrigerators to a Food Industry Cold Storage in Indonesia</td>
<td>Mayekawa Manufacturing Co., Ltd, PT Adib Global Food Supplies, PT Mayekawa Indonesia</td>
<td>120</td>
</tr>
<tr>
<td>23</td>
<td>Project of Introducing High Efficiency Refrigerator to a Frozen Food Processing Plant in Indonesia</td>
<td>Mayekawa Manufacturing Co., Ltd, PT Adib Global Food Supplies, PT Mayekawa Indonesia</td>
<td>21</td>
</tr>
</tbody>
</table>

Total Estimated Annual Emission Reduction 329,483
MRV in the JCM steps

- **Measurable**
  - Submission of Proposed Methodology
  - Approval of Proposed Methodology

- **Reportable**
  - Development of PDD *
  - Validation
  - Registration
  - Monitoring
  - Verification

- **Verifiable**
  - Issuance of credits

*PDD: Project Design Document

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JCM Indonesia infrastructures development

Since JCM Indonesia establishment in 2013, it has developed several guidelines, procedure, rules, registry system and methodologies

**Guideline:**
1. Project Design Document
2. Proposed Methodology
3. Third Party Entity
4. Validation and Verification
5. Sustainable Development Implementation Plan and Report (JCM Indonesia specific)

**Rules:**
1. Rules of Implementation
2. Rules of Procedure for JC

**Procedure:**
Project Cycle Procedure

**Methodologies:**
10 methodologies of energy efficiencies and renewable energy have been developed

**Registry system:**
JCM Indonesia (with support from IGES) has developed the first climate change mitigation registry system in Indonesia, and it is expected to connect with the National Registry

ISO 14065 based
JCM Methodologies in Indonesia

The role of Indonesia JCM Secretariat in the proposed methodologies review:
- Secretariat team conduct completeness check and review (in conjunction with experts)
- Using methodology review form
- Discussion meetings between related ministries
- Prepare website for public comment

10 Approved Methodologies

2. Energy Saving by High-Efficiency Centrifugal Chiller
3. Installation of Energy-Efficient Refrigerators Natural Refrigerants at Food Industry Cold Storage and Frozen Food Processing Plant
4. Installation of Air-Conditioning for Grocery Store
5. Installation of LED lighting for grocery store
6. GHG emission reductions through optimization of refinery plant
7. GHG emission reductions through optimization of boiler operation in Indonesia
8. Installation of a separate type fridge-freezer showcase by using natural refrigerant for grocery store to reduce air-conditioning load inside the store
9. Replacement of conventional burners with regenerative burners for aluminum holding furnaces
10. Introducing double-bundle modular electric heat pumps to a new building

Sustainable Development Criteria in JCM Indonesia projects

1. One of the JCM purpose is to contribute to sustainable development
2. Indicator is needed to evaluate achievement in JCM.
3. Ensure every JCM project will deliver co-benefit for Indonesia.
4. To fulfill global standards for appropriate climate change mitigation action under the UNFCCC
5. Enforcement of sustainable development criteria suitable for Indonesian conditions

- Sustainable Development Implementation Plan (SDIP) must be submitted during request of registration
- Sustainable Development Implementation Report (SDIR) is assessed during request of issuance
And the latest development is our JCM registry system

The JCM Indonesia registry system is the first GHG registry developed in Indonesia!

- The registry system in Indonesia is developed and maintained to ensure the accurate accounting of the issuance, holding, transfer, acquisition, cancellation and retirement of JCM credits.
- Three (3) basic transactions in JCM registry: transfer, cancellation, and retirement.
- Components in the Indonesia JCM registry:
  - “Master Operation sheet” to register JCM project and new account in the system and to modify the information which already in the registry system.
  - “Credit Related Operation sheet” to manage the JCM credit in the registry system.
  - “Master sheets” act as a database that store all operation and input in the system.
  - “Account sheets” is to manage the credit amount of each account.

Communication and capacity building

The JCM Indonesia registry system is the first GHG registry developed in Indonesia!
And visit our website at jcm.ekon.go.id

Thank you!
Domo arigato gozaimasta!

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