

## Project Idea Notes for the JCM (PS/FS/REDD+) Study

Document release date	(27/07/2015)
Title of the proposed study	200 KWP Grid Connection Solar Power System For Office And PC Factory Production Hall Lighting
The communication focal point entity etc. of the study	<p>Name of contact entity etc: Aditya Dena Kurniawan</p> <p>Name and position of contact person: Environment Pillar Leader</p> <p>E-mail of contact person: <a href="mailto:Aditya-dena.kurniawan@unilever.com">Aditya-dena.kurniawan@unilever.com</a></p> <p>Address : PT Unilever Indonesia Tbk, Jl. Rungkut Industri IV, no : 5-11, East Java</p> <p>Phone number of contact person: 081331994465 or 031-8403300</p> <p>Address of contact entity etc:</p>
Japanese participant[s] for the study	<p>Name of participant:</p> <p>Roles:</p> <p>(Name of participant: Roles:)</p> <p>(Name of participant: Roles:)</p>
Participant[s] of host country for the project	<p>Name of participant: Aditya Dena Kurniawan</p> <p>Roles: Environment Pillar Leader</p> <p>(Name of participant: Muhammad Fajar H</p> <p>Roles:) Assistant Maintenance Manager PW Factory</p> <p>(Name of participant: Apriandi Setyawan</p> <p>Roles:) Assistant Maintenance Manager PC Factory</p>
<p>Brief summary of the study</p> <p>Example:</p> <ul style="list-style-type: none"> <li>➤ Objective of the study</li> <li>➤ Location of the study</li> <li>➤ Scale of investment including planned source of investment</li> <li>➤ Technology[ies] to be</li> </ul>	<ul style="list-style-type: none"> <li>• Electricity consumption and CO2 reduction in Unilever</li> <li>• PT Unilever Indonesia Tbk - Surabaya</li> <li>• We have done pilot project by installing 5000 WP solar power system for office lighting and we are making expansion at wider area for production hall factory lighting</li> <li>• The technology consist of :</li> </ul>

<p>adopted for the study, and brief description of the technology[ies]</p> <ul style="list-style-type: none"> <li>➤ Project implementation scheme, and role of each participant</li> <li>➤ Current status and progress of the study including planned timeline</li> </ul>	<ul style="list-style-type: none"> <li>a. Solar modul : Solar Cell Panel</li> <li>b. Inverter : Converter DC to AC</li> <li>c. Mounting sytem : mechanical support for solar module, made locally</li> <li>d. Monitoring system : Power Meter Display</li> <li>e. Grounding : grounding cable, made locally</li> <li>f. Air condition &amp; panel : Electrical panel</li> </ul> <ul style="list-style-type: none"> <li>• Project Implementation scheme :</li> </ul> <table border="1" data-bbox="592 465 1428 866"> <thead> <tr> <th>DESCRIPTION</th> <th>Timing</th> <th>PIC</th> </tr> </thead> <tbody> <tr> <td>Budget Allocation</td> <td>Sept 2015</td> <td>Unilever &amp; Japan (50 % : 50%)</td> </tr> <tr> <td>Design &amp; BoQ preparation</td> <td>Sept 2015</td> <td>Unilever</td> </tr> <tr> <td>Tendering &amp; PO</td> <td>Oct 2015</td> <td>Unilever</td> </tr> <tr> <td>Fabrication &amp; Installation</td> <td>Nov-Dec 2015</td> <td>Unilever &amp; Japan</td> </tr> <tr> <td>Commissioning</td> <td>Jan 2016</td> <td>Unilever &amp; Japan</td> </tr> <tr> <td>Review &amp; closing</td> <td>Jan 2016</td> <td>Unilever &amp; Japan</td> </tr> <tr> <td>Project closing</td> <td>Feb 2015</td> <td>Unilever &amp; Japan</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>• Current status</li> </ul> <table border="1" data-bbox="576 947 1439 1263"> <thead> <tr> <th>DESCRIPTION</th> <th>Timing</th> <th>PIC</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>Study : Comparing wind turbine vs Grid Connection Solar Power System by simulation and calculation</td> <td>June 2015</td> <td>Unilever &amp; Japan</td> <td>DONE</td> </tr> <tr> <td>Start Design &amp; BoQ preparation for 200 KWP</td> <td>July 2015</td> <td>Unilever &amp; Japan</td> <td>On progress</td> </tr> </tbody> </table>	DESCRIPTION	Timing	PIC	Budget Allocation	Sept 2015	Unilever & Japan (50 % : 50%)	Design & BoQ preparation	Sept 2015	Unilever	Tendering & PO	Oct 2015	Unilever	Fabrication & Installation	Nov-Dec 2015	Unilever & Japan	Commissioning	Jan 2016	Unilever & Japan	Review & closing	Jan 2016	Unilever & Japan	Project closing	Feb 2015	Unilever & Japan	DESCRIPTION	Timing	PIC	Status	Study : Comparing wind turbine vs Grid Connection Solar Power System by simulation and calculation	June 2015	Unilever & Japan	DONE	Start Design & BoQ preparation for 200 KWP	July 2015	Unilever & Japan	On progress
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<p>(if any) Capacity building activities for the host country (cf. information sharing among stakeholders, organizing workshops, and/or study tour to Japan)</p>	<table border="1" data-bbox="576 1585 1439 1861"> <thead> <tr> <th>DESCRIPTION</th> <th>Timing</th> <th>PIC</th> <th>Location</th> </tr> </thead> <tbody> <tr> <td>Benchmarking Technology Japan</td> <td>September 2015</td> <td>Unilever &amp; Japan</td> <td>Japan</td> </tr> <tr> <td>Site visit</td> <td>October 2015</td> <td>Unilever &amp; Japan</td> <td>Indonesia, Surabaya</td> </tr> <tr> <td>Workshop and Discussion</td> <td>October 2015</td> <td>Unilever &amp; Japan</td> <td>Indonesia, Surabaya</td> </tr> </tbody> </table>	DESCRIPTION	Timing	PIC	Location	Benchmarking Technology Japan	September 2015	Unilever & Japan	Japan	Site visit	October 2015	Unilever & Japan	Indonesia, Surabaya	Workshop and Discussion	October 2015	Unilever & Japan	Indonesia, Surabaya																				
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