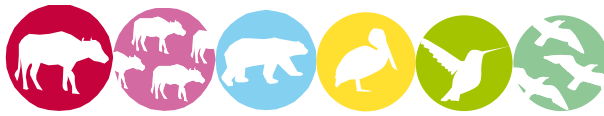


## ANNEX R – PASSPORT TEMPLATE

### CONTENTS



- A. Project title**
- B. Project description**
- C. Proof of project eligibility**
- D. Unique Project Identification**
- E. Outcome stakeholder consultation process**
- F. Outcome sustainability assessment**
- G. Sustainability monitoring plan**
- H. Additionality and conservativeness deviations**
  
- Annex 1 ODA declarations**

## SECTION A. Project Title

### [See Toolkit 1.6]

Title: SSE1 Solar PV 1 – 10 Power Plant Project

Date: 25/05/2015

Version no.: 01

## SECTION B. Project description

### [See Toolkit 1.6]

#### Summary

Siam Solar Energy Co.,Ltd. is developing a bundle of 10 solar power plants , located in Kanchanaburi and Supanburi province. The proposed bundle project has total installation capacity of 104.7 MWe and can deliver 80 MWe maximum to the National Grid.

The technology applied in the Project Activities is the solar thin film photovoltaic or PV technology. The array of PV module will convert the solar radiation into direct current electricity or DC by using semiconductors, which exhibit the photovoltaic effect. The grid-controlled solar inverter transforms the DC into Alternating Current electricity or AC for exporting to the National Grid.

#### Contribution of the project activity to sustainable development

Due to increased consumption and rising price of fossil fuel, Thailand therefore needs to import energy in higher quantity and value. This has not only resulted in the country's trade deficit and energy insecurity, but also has consequently affected the Thai economy as a whole. One alternative way to lessen dependence on fossil fuel import and foreign exchange loss is to find other sources of energy, i.e. solar energy.

The bundled project activity will contribute to the sustainable development in Thailand as follows:

#### *Environmental benefits*

By generating electricity through solar power, the project activities displace fossil fuel based electricity from the Thai national grid. Thereby, the bundled project activity contributes to the reduction of pollutants such as NO<sub>x</sub>, SO<sub>x</sub> and particles as well as greenhouse gas (GHG) emissions.

#### *Social benefits*

The project activity leads to alleviation of poverty by establishing direct and indirect employment related to the manufacturing of local components, the civil construction of the solar power plants and operation of the same. The infrastructure in and around the project area will also improve due to the

presence of the project activities.

*Economic benefits*

The bundled project activity leads to significant investments in a rural and underdeveloped region, which would rarely occur in the absence of the project activities. The project activities will reduce fossil-fuel imports (improving Thailand’s trade balance), support Thailand’s transformation to a low carbon economy, expand the reach of Thailand’s renewable energy development policy and make better use of Thailand’s natural resources. The project activities provide also job opportunities and fosters income generation in Thailand related to the construction, operation and maintenance of the solar power plants.

*Technological benefits*

The solar PV based electricity generation systems implemented under the bundled project activity represents a cutting-edge, environmentally safe and sound technology. The Project Activities contribute to technology transfer, the promotion of clean energy technologies and foster the creation of a local renewable energy industry in Thailand.

In view of the above, the project activity strongly contributes to sustainable development. The Project is also in line with the Royal Thai Government’s efforts to promote the share of renewable energy to 25% by 2021. The project, by producing electricity from solar energy, will directly complement the Thai government’s efforts to reduce the country’s dependency on imported fossil fuels<sup>1</sup>.

Estimated project start date:

The date for the approval of power purchasing agreement is considered as the project start date.

Event	PV 1	PV 2	PV 3	PV 4	PV 5
Project start date	10/04/2012	10/04/2012	10/04/2012	10/04/2012	10/04/2012

Event	PV 6	PV 7	PV 8	PV 9	PV 10
Project start date	25/07/2013	25/07/2013	25/07/2013	25/07/2013	25/07/2013



<sup>1</sup> [http://www.dede.go.th/dede/images/stories/dede\\_aedp\\_2012\\_2021.pdf](http://www.dede.go.th/dede/images/stories/dede_aedp_2012_2021.pdf)

**SECTION C. Proof of project eligibility**

**C.1. Scale of the Project**

[See Toolkit 1.2.a]

*Please tick where applicable:*

Project Type	Large	Small
	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>
	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>

	<input type="checkbox"/>
---	--------------------------

**C.2. Host Country**

[See Toolkit 1.2.b]

Thailand

### C.3. Project Type

[See Toolkit 1.2.c and Annex C]

Please tick where applicable:

Project type	Yes	No
Does your project activity classify as a Renewable Energy project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Does your project activity classify as an End-use Energy Efficiency Improvement project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does your project activity classify as waste handling and disposal project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Please justify the eligibility of your project activity:

The proposed project activities are electricity generating from solar radiation using photo voltaic or PV modules. Therefore, these proposed project activities generate and deliver energy service (electricity) from a non-fossil and non-depletable energy sources; which fits the definition of Renewable Energy Supply, and is eligible for Gold Standard registration.

Pre Announcement	Yes	No
Was your project previously announced?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Explain your statement on pre announcement  Not applicable.		

#### C.4. Greenhouse gas

[See Toolkit 1.2.d]

Greenhouse Gas	
Carbon dioxide	<input checked="" type="checkbox"/>
Methane	<input type="checkbox"/>
Nitrous oxide	<input type="checkbox"/>

#### C.5. Project Registration Type

[See Toolkit 1.2.f]

Project Registration Type	
Regular	<input type="checkbox"/>

Pre-feasibility assessment	Retroactive projects (T.2.5.1)	Preliminary evaluation (eg: Large Hydro or palm oil-related project) (T.2.5.2)	Rejected by UNFCCC (T2.5.3)
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**If Retroactive, please indicate Start Date of project activity dd/mm/yyyy:**

The Start Date of project activities is the approval date of power purchasing agreement .

Project Start Date	PV 1	PV 2	PV 3	PV 4	PV 5
EPC contract signing date	18/09/2012	05/11/2012	18/09/2012	05/11/2012	05/11/2012

Project Start Date	PV 6	PV 7	PV 8	PV 9	PV 10
EPC contract signing date	04/01/2013	04/01/2013	30/05/2013	04/01/2013	30/05/2013

**SECTION D. Unique project identification**

**D.1. GPS-coordinates of project location**

[See Toolkit 1.6]

PV1	Coordinates
Latitude	14° 19' 52.24" N
Longitude	99° 28' 27.00" E

PV2	Coordinates
Latitude	14° 38' 09.57" N
Longitude	99° 53' 29.27" E

PV3	Coordinates
Latitude	14° 46' 27.09" N
Longitude	99° 57' 05.56" E

<b>PV4</b>	<b>Coordinates</b>
<b>Latitude</b>	14° 52' 04.90" N
<b>Longitude</b>	99° 49' 46.96" E

<b>PV5</b>	<b>Coordinates</b>
<b>Latitude</b>	14° 52' 04.90" N
<b>Longitude</b>	99° 49' 46.96" E

<b>PV6</b>	<b>Coordinates</b>
<b>Latitude</b>	13° 49' 33.48" N
<b>Longitude</b>	99° 25' 23.89" E

<b>PV7</b>	<b>Coordinates</b>
<b>Latitude</b>	13° 55' 02.90" N
<b>Longitude</b>	99° 24' 00.80" E

<b>PV8</b>	<b>Coordinates</b>
<b>Latitude</b>	14° 13' 01.74" N
<b>Longitude</b>	99° 44' 10.89" E

<b>PV9</b>	<b>Coordinates</b>
<b>Latitude</b>	14° 24' 09.48" N
<b>Longitude</b>	99° 49' 53.44" E



PV10	Coordinates
Latitude	14° 44' 33.22" N
Longitude	100° 08' 10.81" E



*Explain given coordinates*

N/A

**D.2. Map**

**[See Toolkit 1.6]**



## SECTION E. Outcome stakeholder consultation process

### E.1. Assessment of stakeholder comments

#### [See Annex J]

This bundled project is the retroactive project. The stakeholder consultations as well as the referendum to get the approval for power plant project development, were carried out and summarized in Environmental & Safety Assessment (ESA) reports for each project sites.

Project Site	Date	Meeting Location
		Subdistrict , District , Province
PV01	6 <sup>th</sup> , 10 <sup>th</sup> and 17 <sup>th</sup> Sep 2012	Chongdhan , Bo Ploy District , Kanchanaburi
PV02	11 <sup>th</sup> Sep , 10 <sup>th</sup> Oct , 14 <sup>th</sup> Oct and 25 <sup>th</sup> Oct 2012	Srakrajome , Donchedi , Supanburi
PV03	8 <sup>th</sup> Aug , 10 <sup>th</sup> Aug and 15 <sup>th</sup> Aug 2012	Nongyasai , Nongyasai , Supanburi
PV04	23 <sup>rd</sup> Sep , 27 <sup>th</sup> Sep (site visit at L-Solar Project) , 30 <sup>th</sup> Sep and 5 <sup>th</sup> Oct 2012	Nongkratoom , Dermbangnangboud , Supanburi
PV05	23 <sup>rd</sup> Sep , 27 <sup>th</sup> Sep (site visit at L-Solar Project) , 30 <sup>th</sup> Sep and 5 <sup>th</sup> Oct 2012	Nongkratoom , Dermbangnangboud , Supanburi
PV06	28 <sup>th</sup> Jan and 4 <sup>th</sup> Feb 2013	Nongpai , Dhan Makamtia , Kanchanaburi
PV07	16 <sup>th</sup> and 17 <sup>th</sup> Dec 2012	Rangsali , Tha Muong , Kanchanaburi
PV08	4 <sup>th</sup> Apr and 3 <sup>rd</sup> May 2013	Rangwhai , Panomtun , Kanchanaburi
PV09	20 <sup>th</sup> Dec 2012 and 18 <sup>th</sup> Jan 2013	Nhong Aong , U-Thong , Supanburi
PV10	18 <sup>th</sup> and 20 <sup>th</sup> Mar 2013	Wang Luek , Samchuke , Supanburi

The strategy to promote the projects and public hearing during the environmental – social impact assessment for the Project; is described below.

1. Advertising via community broadcast tower to initially introduce about solar power plant. And organizing the stakeholder consultation meeting;

2. Site visit the other solar power plants (if there is the power plant located in the nearby area) ;
3. Organize community forum to clarify about the Project as well as to receive the feedback from villager around project area;
4. Conduct the referendum in order to get the approval for the Project implementation from Subdistrict Administrative Organization.

The meeting invitations were sent to ;

- Stakeholders and nearby community within 1 kilometre radius from project sites (Sub-district Officer , Subdistrict Administrative Organization , Village Headman , Villager in Chong Dhan and nearby) ;
- The parties who is responsible for ESA report preparation ;
- The parties who is responsible for ESA report consideration ;
- Other parties or organizations who may be interested in the Project.

The agenda of meeting is ;

- Objective and the information about the solar power plant ;
- Impact from solar power plant to environment and community ;
- The participation of community and revenue returned to community;
- The safety of solar power plant ;
- The examples of solar power plant from other provinces.

The medias used in the meeting are brochure, technical document as well as video presentation , about the Project and global warming.

**The summary of stakeholder meeting at PV01 site from section 4 of ESA report is provided as example.**

The stakeholder meeting was organized at Chongdhan , Bo Ploy , Kanchanaburi Province on 6<sup>th</sup>, 10<sup>th</sup> and 17<sup>th</sup> September 2012.

After the meeting , the attendees had better understanding in solar power plant. The queries raised during 3 meeting are summarized below.

- What is the management plan for the damage/broken solar panel? What is the impact to the environment?
- How much of the budget for projects?
- Does the solar power plant affect to healthiness of human?
- During the construction, is there any effect to the public transportation facility?

- Most of the land occupied by the Project , used to be rent for sugarcane plantation. The renters were not notified about the land selling before. After the land were sold for the Project , they could not earn anymore. Dose Siam Solar Energy have any plan to help them?
- Does Siam Solar Energy have any plan to support the transportation of community especially during the construction phase?
- Is there any revenue to the community?
- What is the management plan if there is any impact from the power plants?
- Is there any environmental impact from the heat of solar panels?
- What is the revenue from the Project to Chongdhan Subdistrict Administrative Organization?
- Is the organized energy foundation specified for projects? Can it be used for other purposes?
- In case of any problems occurred during construction, what is the solution from the Project?

The response from Siam Solar Energy is concluded below.

- The conditions for energy foundation will support public facilities such as school , road , etc.
- In case of any problems occurred from the Project , the company will firstly discuss with villager to find the root cause. In case the problem is caused from the Project , the company will pay for damages. In case the problem is not caused from the Project , the company will support to secure the trouble.
- Siam Solar Energy will firstly consider the local people as staff especially during construction and long-term operation.
- Other queries have been responded and answered during the meeting.

The suggestions from meeting participants are listed below.

- The project should manage the construction activities to prevent the effect to the healthiness of people such as the effect from reflective light.
- Since most of villager have planted the sugarcane, burning the debris after harvesting can cause the smoke which will interrupt the operation of solar panel.

In conclusion, all participants have agreed with the project activities. And the stakeholders also requested the Siam Solar Energy to support about the jobs of local people and community foundation to improve the public facilities such as road.



The example picture of stakeholder meeting from EIA report is pasted below.

รายงานการศึกษาผลกระทบการป้องกันและแก้ไขมลกระทบต่อคุณภาพสิ่งแวดล้อมและความปลอดภัย  
โครงการโรงผลิตไฟฟ้าพลังงานแสงอาทิตย์  
ขนาดกำลังการผลิตติดตั้ง 8 เมกะวัตต์เอซี โครงการ TSE-PV3-07

ธันวาคม 2555  
บทที่ 4 การประชาสัมพันธ์โครงการ  
และการมีส่วนร่วมของประชาชน



ภาพ 4.1 แสดงการมีส่วนร่วมของประชาชนและการประชาสัมพันธ์โครงการวันที่ 8 สิงหาคม 2555

ที่มา : บริษัท เนเจอร์ โนน จำกัด



ภาพ 4.4 แสดงกิจกรรมการเปิดเวทีขอมติอนุญาตก่อสร้างโรงไฟฟ้าพลังงานแสงอาทิตย์ วันที่ 15 สิงหาคม 2555

ที่มา : บริษัท เนเจอร์ โนน จำกัด







สิงหาคม 2015

กรมส่งเสริมการค้าระหว่างประเทศ  
โครงการส่งเสริมการค้าระหว่างประเทศขนาด 8 เมกะวัตต์

รายชื่อผู้เข้าร่วมรับฟังการบรรยาย ประชาสัมพันธ์และสร้างความเข้าใจ โครงการโรงผลิตไฟฟ้าพลังงานแสงอาทิตย์ขนาด 8 เมกะวัตต์ -  
วันที่ ๖ เดือน สิงหาคม พ.ศ. ๒๕๕๙

ลำดับ	รายชื่อ	ตำแหน่ง	ที่อยู่	รายชื่อติดต่อ	เบอร์โทรศัพท์
	นางสาว อรุณ		๘๙๕ หมู่ ๔ ต.วังน้ำเย็น อ.วังน้ำเย็น	นางสาว อรุณ	-
	นางสาว สนิทพร		๘๙๖ หมู่ ๔ ต.วังน้ำเย็น อ.วังน้ำเย็น	นางสาว สนิทพร	๐๘๕๒๖๓๖๕๗
	นางสาว อรุณ		๘๙๗ หมู่ ๔ ต.วังน้ำเย็น อ.วังน้ำเย็น	นางสาว อรุณ	๐๘๕๖๘๐๔๔๔
	นาย กนกกร		๘๙๘ หมู่ ๔ ต.วังน้ำเย็น อ.วังน้ำเย็น	นาย กนกกร	๐๘๙-๙๙๖๖๗๓๗
	นางสาว อรุณ		๘๙๙ หมู่ ๔ ต.วังน้ำเย็น อ.วังน้ำเย็น	นางสาว อรุณ	๐๙๐-๕๕๙๗๙๐
	นาย อรุณ		๙๐๐ หมู่ ๔ ต.วังน้ำเย็น อ.วังน้ำเย็น	นาย อรุณ	-

ขอรับรองว่าการลงลายมือชื่อข้างต้น เข้าร่วมรับฟังการบรรยายด้วยความสมัครใจ

(ลงชื่อ) นางสาว อรุณ (จบ.อบต.) (ลงชื่อ) อรุณ (ผู้ใหญ่วางผู้ประสานงาน)  
(.....) (.....)



TSE





ภาคีกลุ่มองค์กรที่มีองค์ประกอบดังนี้

โครงการผลิตไฟฟ้าพลังงานแสงอาทิตย์ขนาด 8 เมกะวัตต์

สิงหาคม 2555

รายชื่อผู้เข้าร่วมรับฟังการบรรยาย ประชาสัมพันธ์และสร้างความรู้ความเข้าใจ โครงการผลิตไฟฟ้าพลังงานแสงอาทิตย์ขนาด 8 เมกะวัตต์ -

106/10, 2555

วันที่ 6 เดือน สิงหาคม พ.ศ. 2555

ลำดับ	รายชื่อ	ตำแหน่ง	ที่อยู่	ลายมือชื่อ	เบอร์โทรศัพท์
1	คุณประจักษ์ สอนรัมย์	ส.อ.บ.ม.	58/1 ม.10 ต. ร้อยตม		0875253963
2	นาย สิบพร แซ่จ้อ	ส.อ.บ.ม.	127/1 ม.5 ต. ร้อยตม		0894154099
3	นาย มงคล สอนรัมย์	ส.อ.บ.ม.	1/1 ม.15 ต. ร้อยตม		0861629199
4	นาย ปิณฑิต ใจดี	ส.อ.บ.ม.	611/2 ม.11 ต. ร้อยตม		086-1772439
5	นาย สวัสดิ์ สอนรัมย์	ส.อ.บ.ม.	193/3 ม.2 ต. ร้อยตม		081-0215025
6	นาย สอนรัมย์ สอนรัมย์	ส.อ.บ.ม.	705 ม.11 ต. ร้อยตม		086-548029
7	นาง อรุณมา อ้วน	ส.อ.บ.ม.	19/3 ม.5 ต. ร้อยตม		081-0788109

ขอรับรองว่าการลงลายมือชื่อข้างต้น เข้าร่วมรับฟังการบรรยายด้วยความสมัครใจ

(ลงชื่อ) นาย ประจักษ์ สอนรัมย์ (จนท.อบต.)

(ลงชื่อ) ..... (ผู้ใหญ่บ้านผู้ประสานงาน)



TSE

กรมส่งเสริมการค้าระหว่างประเทศ  
โครงการโรงผลิตไฟฟ้าพลังงานแสงอาทิตย์ขนาด 8 เมกะวัตต์

วันที่ 6 เดือน กันยายน พ.ศ. 2555

ปีงบประมาณ 2555

รายชื่อผู้เข้าร่วมรับฟังการบรรยาย ประชาสัมพันธ์และสร้างความเข้าใจ โครงการโรงผลิตไฟฟ้าพลังงานแสงอาทิตย์ขนาด 8 เมกะวัตต์ -

วันที่ 6 เดือน กันยายน พ.ศ. 2555

ลำดับ	รายชื่อ	ตำแหน่ง	ที่อยู่	ลายมือชื่อ	เบอร์โทรศัพท์
8	นางสาววิมลรัตน์ ทรัพย์	อ.อ.ม.	62 ม.1 ต.บ้านดง อ.บ้านดง	<i>[Signature]</i>	0870684779
9	นาย ชัย น้อยนวล	อ.อ.ม.ท.	ม.ม.2 ม.บ้านดง อ.บ้านดง	<i>[Signature]</i>	0810095494
10	นาย นพวิทย์ น้อยนวล	อ.อ.ม.ท.	88/1 ม.4 ต.บ้านดง อ.บ้านดง	<i>[Signature]</i>	087-9003699
11	นาย ศุภมิตร น้อยนวล	อ.อ.ม.ท.	64/1 ม.8 ต.บ้านดง อ.บ้านดง	<i>[Signature]</i>	087-025029
12	นาย นพวิทย์ น้อยนวล	อ.อ.ม.ท.	98/4 ม.4 ต.บ้านดง อ.บ้านดง	<i>[Signature]</i>	0861711663

ขอรับรองว่าการลงนามมีชื่อข้างต้น เข้าร่วมฟังการบรรยายด้วยความสมัครใจ

(ลงชื่อ) *[Signature]* (นาย นพวิทย์ น้อยนวล) (ลงชื่อ) *[Signature]* (ผู้ใหญ่นายผู้ประสานงาน)  
(.....) (.....) (มีหลักฐาน.....)



TSE



การที่สามของระบบที่ฝังของระบบฝังดิน

โครงการฝังดินที่ป่าดงพญาผลึกบริเวณ 8 แมกะวัตต์

สิงหาคม 2555

รายชื่อผู้เข้าร่วมรับฟังการบรรยาย ประชาสัมพันธ์และสร้างความรู้ความเข้าใจ โครงการโรงผลิตไฟฟ้าพลังงานแสงอาทิตย์ขนาด 8 แมกะวัตต์ -

วันที่ 6 เดือน มิถุนายน พ.ศ. 2555

ลำดับ	รายชื่อ	ตำแหน่ง	ที่อยู่	ลายมือชื่อ	เบอร์โทรศัพท์
13	สุพัตรา คุ้มงาม	สอน	94/2 ม.9		
14	นายอภิเชษฐ์ ทอดกสิ	สอน	155/1 ม.4		080-0918809
15	นางอริสรา วัฒนศิริ	สอน	99/5 ม.10		0990469214
16	นางสาวอรุณกานต์ น.อมร		146/1 ม.15		095914866
17	นางประไพ มงคลพร	ส. อบต.	107 ม. 14		0822522640
18	นาย สืบวิวัฒน์ สร้อย	ส. อบต.	179 ม. 6		096-1590695
19	นาย พิธา คุ้ม	นายสมทบ อบต.	69 ม. 12		012-8961616

ขอรับรองว่าการลงลายมือชื่อข้างต้น เข้าร่วมรับฟังการบรรยายด้วยความสมัครใจ

(ลงชื่อ) นาย พิธา คุ้ม

(จาก อบต.) (ลงชื่อ) (ผู้ใหญ่บ้านผู้ประสานงาน)



TSE



กรมส่งเสริมการค้าระหว่างประเทศ  
โครงการส่งเสริมการค้าระหว่างประเทศ 8 เมษายน 2555

สิงหาคม 2555

รายชื่อผู้เข้าร่วมรับฟังการบรรยาย ประชาสัมพันธ์และสร้างความรู้ความเข้าใจ โครงการโรงผลิตไฟฟ้าพลังงานแสงอาทิตย์ขนาด 8 เมกะวัตต์  
วันที่ 06 มี.ค. 2555  
ณ ห้องประชุม ก้าวไกล พ.ศ. 2557

ลำดับ	รายชื่อ	ตำแหน่ง	ที่อยู่	ลายมือชื่อ	เบอร์โทรศัพท์
20	นาย อัครชัย ศรีพรหม	อ.อ.ม.ท.	75/1 ม.2 ซ.อ้อยดำ 4		081-7454866
21	นาย อัคร มุขมนตรี	อ.อ.ม.ท.	พ.ศ. 8.5/3 Solon		081-1458295
22	นาง ฉานวิไล แสนวงษา	อ.อ.ม.ท.	พ.ศ. 3 19/2 อ้อยดำ		0897180995
23	นาย-นาย กฤษ	อ.อ.ม.ท.	111 - 1A5 ต.บึง		0890507932
24	นาย ตรีศ (ทช.)	อ.อ.ม.ท.	ถ. (2 - 100/1 ม.อ้อยดำ		026-0107501

ขอรับรองว่าการลงลายมือชื่อข้างต้น เข้าร่วมรับฟังการบรรยายด้วยความสมัครใจ

(ลงชื่อ) นาย/นาง/นางสาว/นาย/นางสาว (นาม, นามสกุล) (ลงชื่อ)  (ผู้ใหญ่นาย/นาง/นางสาว)

(.....)



**TSE**

## E.2. Stakeholder Feedback Round

Please describe report how the feedback round was organised, what the outcomes were and how you followed up on the feedback.

### [See Toolkit 2.11]

The stakeholder feedback round will be conducted as per the outcome GS assessment.

## E. 3. Discussion on continuous input / grievance mechanism

### [See Annex W]

Discuss the Continuous input / grievance mechanism expression method and details, as discussed with local stakeholders.

	Method Chosen (include all known details e.g. location of book, phone, number, identity of mediator)	Justification
Continuous Input / Grievance Expression Process Book	N/A	
Telephone access	Yes	The Project Activities are in a remote area therefore travel to input details into a Process Book is not practical, neither is email as most stakeholders do not have internet access.
Internet/email access	N/A	
Nominated Independent Mediator (optional)		

*All issues identified during the crediting period through any of the Methods shall have a mitigation measure in place. The identified issue should be discussed in the revised Passport and the corresponding mitigation measure should be added to sustainability monitoring plan in section G.*

## SECTION F. Outcome Sustainability assessment

### F.1. 'Do no harm' Assessment

[See Toolkit 2.4.1 and Annex H]

Safeguarding principles	Description of relevance to my project	Assessment of my project risks breaching it (low/medium/high)	Mitigation measure
<b>Human Rights</b>			
1. The project respects internationally proclaimed human rights including dignity, cultural property and uniqueness of indigenous people. The project is not complicit in Human Rights abuses.	The project has been developed in an area where there are no communities, houses or places of cultural significance.	Low	Not required
2. The project does not involve and is not complicit in involuntary resettlement.	The project has been developed in an area where there are no communities or houses.	Low	Not required
3. The project does not involve and is not complicit in the alteration, damage or removal of any critical cultural heritage.	The project is located in a remote area with no connection to any cultural heritage.	Low	Not required
<b>Labour Standards</b>			
4. The Project respects the employees' freedom of association and their right to collective bargaining and is not complicit in restrictions of these freedoms and rights.	Thailand has labour protection act <sup>2</sup> . The law entitles the employees to form labour unions or indulge in collective bargaining or other activities necessary to claim their rights and benefits.	Low	Not required

<sup>2</sup> See Labour Protection Act BE 2541 (1998) and Thai Civil and Commercial Code. More specifically, see Labour Relations Act BE 2518 (AD 1975) for rights of employees in forming trade unions. Note that as stipulated by the Act, the responsibilities of labour unions include a) participating in negotiation with employers, guild associations, other labour unions to provoke their rights and benefits; b) assist in an effort to arrange a work strike; c) clarify any unclear points on labour conflicts; and d) arrange demonstration and participate in a strike.

	Therefore, the project activity has very low risk in breaching this safeguarding principle.		
5. The project does not involve and is not complicit in any form of forced or compulsory labour.	The project does not and will not involve any forced or compulsory labour <sup>3</sup> . Furthermore, the technology in the project activity does not involve any intensive manual labour. Therefore, it is very unlikely that the project will breach this safeguarding principle.	Low	Not required
6. The Project does not employ and is not complicit in any form of child labour.	The project does not involve any child labour and is in compliance with all the necessary national/international regulations <sup>4</sup> .	Low	Not required
7. The project does not involve and is not complicit in any form of discrimination based on gender, race, religion, sexual orientation or any other basis	The project does not and will not discriminate against individuals and employment of staffs is not based on gender, race, religion, and sexual orientation or on any other basis.  In Thailand, there is labour legislation that protects against some facets of this principle <sup>5</sup> .	Low	Not required

<sup>3</sup> Referring to Kingdom of Thailand Constitution, section 3 (right and freedoms of the citizens), the Thai citizens have the right to choose their jobs freely, <http://www.thprc.org/book/node/16.htm>

<sup>4</sup> See Labour Protection Act BE 2541 (1998) and Thai Civil and Commercial Code. According to the labour law, a child labour could be employed only if he has completed 15 years of age. But, in order to employ child labour below 18 years of age, the employer is required to notify it to the labour inspector regarding the employment of a child labour within 15 days from the date of joining the job. Likewise, the law restricts an employer to make a child labour below 18 years to work on public holidays and to do overtime. Further, child labour below 18 are not allowed work in certain working environments such as metal stamping, working with hazardous chemicals, and working with poisonous microorganisms.

<sup>5</sup> See Labour Protection Act BE 2541 (1998) and Thai Civil and Commercial Code. For example, according to the labour acts, both male and female employees must be treated equally in a working environment. However, there are certain exceptions in this case. For instance, an employer is restricted to employ female employee in such organizations engaged in mining as well as construction projects, underwater and tunnel works, and production and transportation of inflammable materials and explosives. Similarly, a pregnant female employee is prohibited from working in a plant or equipment that

<p>8. The Project provides workers with a safe and healthy work environment and is not complicit in exposing workers to unsafe and unhealthy work environments.</p>	<p>The project will provide safe and healthy work environment. The same is also included in the operation manual for the project activity. Thailand has the regulation on measures to ensure safety in the work place<sup>6</sup>.</p> <p>Therefore, the risk of the project activity breaching this safeguarding principle is low.</p>	<p>Low</p>	<p>Not required</p>
<b>Environmental Protections</b>			
<p>9. The Project takes a precautionary approach in regard to environmental challenges and is not complicit in practices contrary to the precautionary principle.</p>	<p>In accordance with the Ministry of Science and Technology “Notification on type and size of project or enterprise that must report the environmental impact assessment” dated 16 June 2009 and published in the Government Gazette dated 31 August 2009; solar PV projects are not designated as a project type required to complete an Environmental Impact Assessment (EIA). However , the power plant with install capacity between 5 to 10 MW , has to conduct the Environmental &amp; Safety Assessment (ESA) , in order to follow the Code</p>	<p>Low</p>	<p>Not required</p>

vibrates and is prohibited from lifting or carrying objects on her head that are more than 15 kilograms. Additionally, an employer cannot terminate a female employee when she is pregnant.

<sup>6</sup>See Labour Protection Act BE 2541 (1998). In the Act, it is stated that a National Safety Committee shall be established in order to determine guidelines for safety at work, and a private organization shall be established in order to assist, train and provide technology to all employers under the government’s control. Note that under the Act, government inspector can inspect the employer’s workplace; collect samples of materials or products in order to analyse the safety in the workplace; and write orders to the employer and the employee requiring them to comply with the law.



	of Practice for applying the operating license (Factory Act 1992).		
10. The Project does not involve and is complicit in significant conversion or degradation of critical natural habitats, including those that are (a) legally protected, (b) officially proposed for protection, (c) identified by authoritative sources for their high conservation value, or (d) recognized as protected by traditional local communities.	The project is in a remote area that away from any type of conservation or cultural habitats.	Low	Not required
<b>Anti-Corruption</b>			
11. The Project does not involve and is not complicit in corruption.	Thailand is a signatory of the convention against corruption <sup>7</sup> . The risk of the project breaching this safeguarding principle is low.	Low	Not required
<b>Additional relevant critical issues for my project type</b>	<b>Description of relevance to my project</b>	<b>Assessment of relevance to my project (low/medium/high)</b>	<b>Mitigation measure</b>
1			
2			
Etc.			

## F.2. Sustainable Development matrix

[See Toolkit 2.4.2 and Annex I]

Insert table as in section D3 from your Stakeholder Consultation report (Sustainable Development matrix).

Indicator	Mitigation measure	Relevance to achieving MDG	Chosen parameter and explanation	Preliminary score
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<sup>7</sup> Signatories to the United Nations Convention Against Corruption; <http://www.unodc.org/unodc/en/treaties/CAC/signatories.html>

Gold Standard indicators of sustainable development.	If relevant copy mitigation measure from "do no harm" – table, or include mitigation measure used to neutralise a score of ‘-’	Check <a href="http://www.undp.or/mdg">www.undp.or/mdg</a> and <a href="http://www.mdgmonitor.org">www.mdgmonitor.org</a>  Describe how your indicator is related to local MDG goals	Defined by project developer	Negative impact: score ‘-’ in case negative impact is not fully mitigated score 0 in case impact is planned to be fully mitigated No change in impact: score 0 Positive impact: score ‘+’
Air quality		Does not negatively impact achieving Goal 7: Integrating principles of sustainable development into country policies and programmes and reverse the loss of environmental resources	<p><b>Parameter: emissions from vehicles and dust.</b> Air emission and dust will result from land moving activities, transportation of construction materials, building construction activities, installation of equipment, and transportation of vehicles. These activities will result in short-term impact to local air quality. In order to mitigate this impact, the following management and operating practices will be maintained:</p> <ul style="list-style-type: none"> <li>• Modern machinery and transportation practices will be used;</li> <li>• Overloading of transport capacity will be prevented;</li> <li>• Dedicated transport routes will be planned and maintained;</li> <li>• Transportation will be restricted during peak hours;</li> <li>• Trucks transporting material will be covered; and</li> <li>• Water will be sprayed</li> </ul>	0

			on the ground to prevent dust on dry/warm days during construction.	
Water quality and quantity		Does not negatively impact achieving Goal 7: Integrating principles of sustainable development into country policies and programmes and reverse the loss of environmental resources	<b>Parameter: Water pollutants for solar panel maintenance.</b> Each panel will be washed every 20 days to ensure maximum performance. To avoid polluting waterways and consuming excessive amounts of local water supply, only a small amount of water will be used. In addition, the water for cleaning will be pure (with no cleaning substances) and therefore will not pollute local water or soil systems.	0
Soil condition		Does not negatively impact achieving Goal 7: Integrating principles of sustainable development into country policies and programmes and reverse the loss of environmental resources	<b>Parameter: Soil conditions from earthworks during construction.</b> The soil and biodiversity is consistent with that of degraded grassland with no critical or significant natural habitats. During construction soil and vegetation will be removed for the grounding of the solar panels. This will have minimal effect on soil and biodiversity conditions. Vegetation directly overshadowing the solar panels will be manually pruned/removed each 20 days (if required). All surrounding vegetation shall be left in its original state.	0

Other pollutants		Does not negatively impact achieving Goal 7: Integrating principles of sustainable development into country policies and programmes and reverse the loss of environmental resources	<b>Parameter: Visual pollution</b> The solar panels may cause some visual pollution. To minimize this impact, the PV type used in the project has been designed to reduce reflection; therefore the effect from light reflection is low.	0
Biodiversity		Does not negatively impact achieving Goal 7: Integrating principles of sustainable development into country policies and programmes and reverse the loss of environmental resources	<b>Parameter: Species or plant destruction risk.</b> The project is in a remote area far removed from any animal habitats or endangered plant species. There are no biodiversity effects.	0
Quality of employment		Helps achieve Goal 7: Integrating principles of sustainable development into country policies and programmes and reverse the loss of environmental resources	<b>Parameter: Training and Education</b> The project developer has given local community members priority for activities requiring labour during construction and operation. These are skilled positions with additional benefits such as solar education and on-site training.	+
Livelihood of the poor		Does not negatively impact achieving Goal 7: Integrating principles of sustainable development into	<b>Parameter: Poverty alleviation</b> Even though the project does provide limited employment opportunities for local residents it has no effect on the livelihood of the	0

		country policies and programmes and reverse the loss of environmental resources	poor – i.e. reducing or limiting the level of poverty in provinces of Supanburi and Kanchanaburi . Planters can continue their plantation around the project; there will be no wastewater discharge.	
Access to affordable and clean energy services		Does not negatively impact achieving Goal 7: Integrating principles of sustainable development into country policies and programmes and reverse the loss of environmental resources	<b>Parameter: Change in supply of energy:</b> The project will feed its electricity directly into the Thai grid so there will be no impact on the affordability of clean energy.	0
Human and institutional capacity		Does not negatively impact achieving Goal 7: Integrating principles of sustainable development into country policies and programmes and reverse the loss of environmental resources	<b>Parameter: Gender equality</b> Opportunities at the project are not gender specific rather they are based on the person’s ability to perform a set of skills or a certain task.	0
Quantitative employment and income generation		Helps achieve Goal 7: Integrating principles of sustainable development into country policies and programmes and reverse the loss of environmental	<b>Parameter: Job and income creation</b> The Project creates additional jobs for local community members with training. This is positive, as prior to the project there were no such skilled positions available in the renewable energy sector in provinces of Supanburi	+

		resources	and Kanchanaburi. Direct benefits to the community are Community Development Fund from EPPO, taxes and fee to Sub-district Administration Organization.	
Balance of payments and investment		Does not negatively impact achieving Goal 7: Integrating principles of sustainable development into country policies and programmes and reverse the loss of environmental resources	<b>Parameter: Impact of the project on a national scale regarding cash inflow into Thailand</b> The project is too small to have any impact on the balance of payments or foreign investment criteria of Thailand. The impact is neutral.	0
Technology transfer and technological self-reliance		Helps achieve Goal 7: Integrating principles of sustainable development into country policies and programmes and reverse the loss of environmental resources	<b>Parameter: Technology transfer and training/maintenance</b> The project relied on international power experts and technology providers for feasibility reports, training and maintenance of the project. Those who will gain knowledge from the trainings and transfer of technology include: the host project participants (Siam Solar Energy Company), the construction workers and the local community.	+
<p><b>Justification choices, data source and provision of references</b></p> <p>The Environmental &amp; Safety Assessment (ESA) was performed in accordance with the Notification of Ministry of Industry , Subject : Reporting of the Environmental &amp; Safety Assessment (ESA) 2009.</p>				
Air quality	No changes to air quality will take place. Therefore <b>no monitoring</b> will take place regarding this indicator.			
Water quality and quantity	The Project will not affect the amount or quality of the water in the region in any significant way. Therefore <b>no monitoring</b> will take place regarding this indicator.			



Soil condition	The Project will not affect the amount or quality of the water in the region in any significant way. Therefore <b>no monitoring</b> will take place regarding this indicator
Other pollutants	No other pollutants are associated with the Project Activity. Therefore <b>no monitoring</b> will take place regarding this indicator.
Biodiversity	Biodiversity will not be affected by the Project Activities so <b>no monitoring</b> of this indicator will take place.
Quality of employment	For monitoring we will measure the number of qualified workers employed at the Project Owner because of the project.
Livelihood of the poor	The project activity will not particularly affect the livelihood of the poor. Therefore <b>no monitoring</b> will take place regarding this indicator.
Access to affordable and clean energy services	Monitoring by measuring the amount of energy produced by the solar panels.
Human and institutional capacity	Human or institutional capacity will not be adversely affected by the Project Activities so <b>no monitoring</b> of this indicator will take place.
Quantitative employment and income generation	For the quantitative employment and income generation it will be necessary to monitor the total number of direct vacancies that the project creates
Balance of payments and investment	The Project is too small to meaningfully impact of the balance of payments and national investment levels so <b>no monitoring</b> of this indicator will take place.
Technology transfer and technological self-reliance	The indicator to monitor is number of staff that has received training to use all the new methodology.

## SECTION G. Sustainability Monitoring Plan

[See Toolkit 2.4.3 and Annex I]

*Copy Table for each indicator*

No	1
Indicator	Quality of employment
Mitigation measure	The project developer has given local community members priority for activities requiring labour during construction and operation. These are skilled positions with additional benefits such as solar technology education and onsite training.
<i>Repeat for each parameter</i>	
Chosen parameter	Training and education
Current situation of parameter	Not applicable
Estimation of baseline situation of	0

parameter		
Future target for parameter		Not applicable
Way of monitoring	How	Project record/training records
	When	Continuous and based on addition of new staffs.
	By who	Project developer

No	2	
Indicator	Quantitative employment and income generation	
Mitigation measure	The project aims to add as many jobs to trained local community members as possible.	
<i>Repeat for each parameter</i>		
Chosen parameter	Number of jobs and income	
Current situation of parameter	Not applicable	
Estimation of baseline situation of parameter	0	
Future target for parameter	Not applicable.	
Way of monitoring	How	Employment records of the project activities
	When	Continuous
	By who	Project developer

No	3	
Indicator	Technology transfer and technological self-reliance	
Mitigation measure	The project relied on international power experts and technology providers for feasibility reports, training and maintenance of the project.	
<i>Repeat for each parameter</i>		
Chosen parameter	Technology transfer and training/maintenance	
Current situation of parameter	Not applicable	
Estimation of baseline situation of	0	



parameter		
Future target for parameter		Not applicable
Way of monitoring	How	Project record
	When	Constant
	By who	Project developer

### Additional remarks monitoring

This section is Not Applicable.

## SECTION H. Additionality and conservativeness

This section is only applicable if the section on additionality and/or your choice of baseline does not follow Gold Standard guidance

### H.1. Additionality

[See Toolkit 2.3]

Please refer to the PDD for further details.

### H.2. Conservativeness

**[See Toolkit 2.2]**

Conservativeness follows GS guidance. The baseline scenario selection and the calculation of greenhouse gas emission reductions have been carried out in the most conservative manner when the methodology provided to possibilities to act.

**ANNEX 1 ODA declaration**

**[See Toolkit Annex D]**

Project financing for this project activity will not use Official Development Assistance (ODA) Funds as defined in the Gold Standard Toolkit. There are no loans or grants being provided by International Finance Institutions, which include ODA. Please see the attached ODA letter.