



# Initial Poverty and Social Analysis

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Project Number: 53283-001  
December 2020

## THA: Green Yellow Rooftop Solar Project

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Asian Development Bank

## **CURRENCY EQUIVALENTS**

(as of 1 December 2020)

Currency unit	–	baht (B)
B1.00	=	\$0.0033
\$1.00	=	B30.50

## **ABBREVIATIONS**

ADB	–	Asian Development Bank
C&I	–	commercial and industrial
E&S	–	environmental and social
ESMS	-	Environmental and social management system

## **WEIGHTS AND MEASURES**

MW	–	megawatt
MJ	–	megaJoule

## **NOTES**

- (i) The fiscal year (FY) of GreenYellow Solar 1 (Thailand) ends on 31 December.
- (ii) In this report, "\$" refers to United States dollars.

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## INITIAL POVERTY AND SOCIAL ANALYSIS

Country:	Thailand	Project Title:	Green Yellow Rooftop Solar Project
Lending/Financing Modality:	Project Loan	Department/ Division:	Private Sector Operations Department Infrastructure Finance Division 2

### I. POVERTY IMPACT AND SOCIAL DIMENSIONS

#### A. Links to the National Poverty Reduction Strategy and Country Partnership Strategy

The proposed loan facilities Asian Development Bank (ADB) will support GreenYellow Solar 1 (GY Solar 1) in the development and operations of 92 solar photovoltaic systems in Thailand. The solar projects are located within the premises of large commercial and industrial (C&I) consumers with total installed capacity of 60.3 megawatts (MW). The project is consistent with ADB's country partnership strategy, 2013–2016 and country operations business plan, 2019–2021 for Thailand, which accentuate the provision of nonsovereign investments in renewable energy and energy efficiency projects.<sup>a</sup> The development of photovoltaic solar projects is in line with the 20-year National Strategy Framework (2018-2037) and 12<sup>th</sup> National Economic and Social Development Plan (2017-2021) of the Government of Thailand to increase the share of alternative energy in final energy consumption and to reduce the dependency on natural gas for electricity generation.<sup>b</sup>

#### B. Poverty Targeting:

☒ General intervention ☐ Individual or household (TI-H) ☐ Geographic (TI-G) ☐ Non-income MDGs (TI-M1, M2, etc.)

The development of energy supply through renewable sources could bring environmental, social, and economic advantages, including job creation, improved health, and a cleaner environment due to less pollution and greenhouse gas emissions.

#### C. Poverty and Social Analysis

1. Key issues and potential beneficiaries. The project will provide direct benefits to C&I electricity consumers/offtakers of 92 off-grid solar power projects owned, built, and operated by GY Solar 1. It will provide more reliable electricity supply with reduced cost and less emissions to C&I consumers. The C&I sectors are significant contributors to the growth of Thailand's gross domestic product (GDP) and also the major consumers of electricity supply, 33.9% electricity consumption for the commercial sector and 42.4% for the industrial.<sup>c</sup> The project will also provide sustained employment opportunities for GY Solar 1 and contractors and subcontractors' employees/workers.

2. Impact channels and expected systemic changes. The project will help achieve the country's goal of shifting to clean energy sources and help fulfill its international commitments to reduce greenhouse gas emissions. As of 2017, Thailand has reached 100% electrification rate with 1,970 MJ energy use per capita, with 0.2% of its GDP accounted for energy subsidies. It consumed a total primary energy supply of 138,525 thousand tons of oil equivalent, of which 21% are from renewable sources.<sup>d</sup> The government is committed to reducing its dependency on imported and fossil fuel-based energy sources and shifting to renewable sources in supplying the increasing electricity demand, driven by its commitment to attaining energy security, economic affordability, and environmental sustainability.

3. Focus of (and resources allocated in) the transaction TA or due diligence. ADB will audit the adequacy of the existing environmental and social management system of GY Solar 1 (Thailand). A number of solar rooftop projects, two ground-mounted, and one floating solar projects that are undergoing constructions and under operations will be visited to evaluate the compliance of the project with all the environmental and social (E&S) provisions of the applicable laws and regulations in Thailand and ADB's 2009 Safeguard Policy Statement (SPS) and social policy requirements. The review and assessment will be undertaken by the Lenders' Technical Advisor (LTA) engaged in conducting technical due diligence of the project.

### II. GENDER AND DEVELOPMENT

1. What are the key gender issues in the sector and/or subsector that are likely to be relevant to this project or program?

Thailand has reached gender parity in primary school enrolment and women outnumber men in secondary and tertiary education. The labor market is open, and women participate actively in the agriculture and non-agriculture sectors. However, despite this progress, women's labor market participation in 2020, at 59%, is considerably below both that of men (at 75%), and the peak of female labour participation of 68% in 1997.<sup>e</sup> In addition, women are underrepresented in management and other decision-making positions and over-represented in low-paid, low-skilled occupations leaving them in a more disadvantaged economic position than men.<sup>f</sup>

Women represented 29% of employees in the utilities sector and 26% of management positions in Thailand in 2019.<sup>g</sup> These broader trends are reflected in the renewable energy sector in Thailand which has a small proportion of women in management and technical roles and a high concentration of women in administration, finance and human resource positions. There are however notable exceptions with several renewable energy private sector firms in Thailand led by women.<sup>h</sup>

2. Does the proposed project or program have the potential to contribute to the promotion of gender equity and/or empowerment of women by providing women's access to and use of opportunities, services, resources, assets, and participation in decision making? ☒ Yes ☐ No

Potential gender measures that will be explored during due diligence and gender analysis are likely to include targets for women in technical roles, technical internships for women and implementation of an anti-sexual harassment policy and associated training.

3. Could the proposed project have an adverse impact on women and/or girls or widen gender inequality?

☐ Yes ☒ No

4. Indicate the intended gender mainstreaming category:

☐ GEN (gender equity) ☒ EGM (effective gender mainstreaming)

☐ SGE (some gender elements) ☐ NGE (no gender elements)

### III. PARTICIPATION AND EMPOWERMENT

1. Who are the main stakeholders of the project, including beneficiaries and negatively affected people? Identify how they will participate in the project design. The main stakeholders of the project are C&I consumers or offtakers of the power produced from the solar photovoltaic system of GY Solar 1 (Thailand). The community and stakeholder engagement at the project level is integrated into the Code of Practice (CoP) prepared for every project before construction. Due diligence will review the CoP's to determine the engagement activities conducted in each project.

2. How can the project contribute (in a systemic way) to engaging and empowering stakeholders and beneficiaries, particularly, the poor, vulnerable, and excluded groups? What issues in the project design require participation of the poor and excluded? Due diligence will review the requirement for continuous engagement activities with the community and government authorities especially for the ground-mounted and floating solar projects.

3. What are the key, active, and relevant civil society organizations (CSOs) in the project area? What is the level of civil society organization participation in the project design?

☒ (L) Information generation and sharing ☐ Consultation ☐ Collaboration ☐ Partnership

4. Are there issues during project design for which participation of the poor and excluded is important? What are they and how should they be addressed? ☐ Yes ☒ No The audit of the LTA will review the adequacy of the stakeholder engagement activities in the CoP and the grievance redress mechanism at the project level, especially for the ground-mounted and floating solar projects. The findings of the audit will determine if further actions should be incorporated in the project design.

### IV. SOCIAL SAFEGUARDS

**A. Involuntary Resettlement Category** ☐ A ☐ B ☒ C ☐ FI

1. Does the project have the potential to involve involuntary land acquisition resulting in physical and economic displacement? ☐ Yes ☒ No

The LTA's due diligence includes an initial screening of the project with involuntary resettlement impacts. All the rooftops, floating, and ground-mounted solar power projects are within existing C&I premises, owned or leased by offtakers. This arrangement is unlikely to entail any land acquisition, physical or economic displacements, or impacts to indigenous peoples' communities. The categorization will be confirmed upon completion of the project due diligence.

2. What action plan is required to address involuntary resettlement as part of the transaction TA or due diligence process?

☐ Resettlement plan ☐ Resettlement framework ☐ Social impact matrix  
☐ Environmental and social management system arrangement ☒ None

**B. Indigenous Peoples Category** ☐ A ☐ B ☒ C ☐ FI

1. Does the proposed project have the potential to directly or indirectly affect the dignity, human rights, livelihood systems, or culture of indigenous peoples? ☐ Yes ☒ No

2. Does it affect the territories or natural and cultural resources indigenous peoples own, use, occupy, or claim, as their ancestral domain? ☐ Yes ☒ No The solar photovoltaic systems of GY Solar 1 (Thailand) are located within the property of offtakers located in C&I areas. Due diligence will confirm that the project will not entail any impacts on Indigenous Peoples.

3. Will the project require broad community support of affected indigenous communities? ☐ Yes ☒ No Impacts on Indigenous Peoples are not envisaged.

4. What action plan is required to address risks to indigenous peoples as part of the transaction TA or due diligence process?

☐ Indigenous peoples plan ☐ Indigenous peoples planning framework ☐ Social impact matrix  
☐ Environmental and social management system arrangement ☒ None

### V. OTHER SOCIAL ISSUES AND RISKS

1. What other social issues and risks should be considered in the project design?

<input checked="" type="checkbox"/> (L) Creating decent jobs and employment <input checked="" type="checkbox"/> (L) Adhering to core labor standards <input type="checkbox"/> Labor retrenchment <input type="checkbox"/> Spread of communicable diseases, including HIV/AIDS <input type="checkbox"/> Increase in human trafficking <input type="checkbox"/> Affordability <input type="checkbox"/> Increase in unplanned migration <input type="checkbox"/> Increase in vulnerability to natural disasters <input type="checkbox"/> Creating political instability <input type="checkbox"/> Creating internal social conflicts <input type="checkbox"/> Others, please specify _____ NA _____
<p>2. How are these additional social issues and risks going to be addressed in the project design? GY Solar 1 engaged the services of Green Yellow (Thailand) for the development and management of solar power projects. The LTA's audit at the corporate level and solar project level will review the compliance of Green Yellow (Thailand) with national labor laws and requirements and measures being taken to adhere to the core labor standards. Identified gaps and required actions will be discussed and agreed upon with GY Solar 1 and Green Yellow (Thailand).</p>
<p align="center"><b>VI. TRANSACTION TA OR DUE DILIGENCE RESOURCE REQUIREMENT</b></p>
<p>1. Do the terms of reference for the transaction TA (or other due diligence) contain key information needed to be gathered during transaction TA or due diligence process to better analyze (i) poverty and social impact, (ii) gender impact, (iii) participation dimensions, (iv) social safeguards, and (v) other social risks. Are the relevant specialists identified?</p> <p><input checked="" type="checkbox"/> Yes                      <input type="checkbox"/> No</p>
<p>2. What resources (e.g., consultants, survey budget, and workshop) are allocated for conducting poverty, social, and/or gender analysis, and participation plan during the transaction TA or due diligence? An LTA is engaged and fielded to conduct technical due diligence, including the audit of the ESMS at the corporate level and E&amp;S performance at the solar power project level. The E&amp;S staff from headquarters provide guidance to the LTA's environment specialist in the conduct of the audit. ADB's private sector gender team has been discussing with the client for the gender analysis and gender mainstreaming of the proposed ADB investment.</p>

<sup>a</sup> ADB. 2013. *Country Partnership Strategy: Thailand, 2013–2016*. Manila. and ADB.2020. *Thailand: Country Operations Business Plan, 2021-2023*. Manila

<sup>b</sup> National Economic and Social Development Board, Office of the Prime Minister. 2017. *The Twelfth National Economic and Social Development Plan, 2017–2021*. Bangkok.

<sup>c</sup> International Renewable Energy Agency. 2017. *Renewable Energy Outlook: Thailand*. Abu Dhabi.

<sup>d</sup> REN21. 2019. *Asia and the Pacific Renewable Energy Status Report*. Paris.

<sup>e</sup> International Labour Organization. 2021. ILOSTAT database. <https://ilostat.ilo.org/data>.

<sup>f</sup> Asian Development Bank. 2013. *Country Partnership Strategy: Thailand, 2013–2016*

<sup>g</sup> International Labour Organization. 2020. ILOSTAT database. <https://ilostat.ilo.org/data>.

<sup>h</sup> USAID Clean Power Asia. 2017. *Gender Equality in Renewable Energy in the Lower Mekong: Assessment and Opportunities*. Bangkok.

Source: Asian Development Bank