



SUSTAINABLE DEVELOPMENT IMPACT FORM (Version 01.1)

Instructions:

Activity participants shall:

- identify and assess the potential positive and negative direct impacts of their A6.4 activities on the sustainable development (SD) of the host Party(ies) by considering the host Party(ies) SD objectives and priorities and the Sustainable Development Goals (SDGs);
- establish activity-level SD indicators;
- monitor and report the outcomes against the established indicators.

Step 1: Identify SD objectives and priorities of host Party

Activity participants shall identify the host Party's SD objectives and priorities, which may include national strategies for SD and/or SDG achievement, SDG national targets and indicators, and economic, social and environmental indicators related to the A6.4 activity and:

- (a) If the host Party defines national strategies for SD, SDG achievement, or SDG national targets and indicators, activity participants shall explicitly identify any SDG-specific objectives and priorities in 1.1 of Step 1 and Step 2;
- (b) If the host Party objectives and priorities relevant to the A6.4 activity are not clearly responsive to any SDG, activity participants shall establish A6.4 activity-level SD indicators in 1.2 of step 1.

Step 2: Assess impacted SDGs

(a) Activity participants shall identify the SDGs that the A6.4 activity directly impacts positively and/or negatively. Activity participants shall provide justification for any excluded SDGs, considering the SD objectives and priorities of the host Party;

(b) Impacts on the SDGs and their goals shall:

- (i) Be relevant to the A6.4 activity type (based on SDGs targets and indicators and/or host Party SDG targets and indicators);
- (ii) Result in a direct impact (i.e., the A6.4 activity is the main driver of change); and
- (iii) Be recurring/lasting during the crediting period of the A6.4 activity and impact the stakeholders and/or local environment in a direct and measurable way;

(c) Once activity participants identify SDGs impacted by the A6.4 activity, they are required to:

- (i) Review the respective targets defined under the identified SDGs from the host Party targets and the latest "Global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development";
- (ii) Select target(s) under the SDGs based on the criteria defined in (b) above;
- (iii) Review indicators defined under the selected target(s) within the identified SDGs and select relevant indicator(s) including host Party SDG indicators. Since these indicators are defined at regional and national levels, activity participants shall develop their own activity-level SD indicators as per step 3 below.

Step 3: Establish A6.4 activity-level SD indicators

(a) Activity participants shall establish A6.4 activity-level SD indicators for each identified direct impact to the SDG resulting from the A6.4 activity, taking into consideration the SDG, SDG targets and SDG indicators. All relevant SDG targets and corresponding indicators for each SDG should be chosen;

(b) When activity participants identify negative impacts on any of the 17 SDGs, they should refer to the outcomes of the risk assessment A6.4-FORM-AC-015;

(c) If the identified negative impacts on the SDG, SDG targets and SDG indicators are already considered in A6.4-FORM-AC-015 and A6.4-FORM-AC-016, activity participants do not need to establish relevant activity-level SD indicator(s);

(d) If the identified negative impacts on the SDG, SDG targets and SDG indicators are not already considered in A6.4-FORM-AC-015 and A6.4-FORM-AC-016, activity participants are required to establish relevant activity-level SD indicator(s) to minimize and mitigate the identified negative impacts. Where complete avoidance of identified negative impact is not possible, activity participants shall provide evidence, including monitoring of activity-level SD indicators, that the A6.4 activities align with host Party legislation.

(e) A6.4 Activity-level SD indicator(s) can be qualitative or quantitative and shall be monitorable over the crediting period. The A6.4 activity-level SD indicator(s) shall:

(i) Be in line with the objectives and intent of the SDGs and their corresponding targets;

(ii) Be directly impacted by the activity;

(iii) Not be a one-off occurrence;

(iv) Include the monitoring approach and parameters, including the frequency of monitoring, to be used for each selected activity-level SDG target indicator.

Monitoring

This section is for recording the monitoring of A6.4 activity-level SD indicators identified in Step 2 and Step 3 during each monitoring period. The activity participants require to use this section for each monitoring periods.

Document information

Version	Date	Description
02.0	10 November 2025	Final version of the Safeguards Risk Assessment for submission with the A6.4 activity report.
01.1	08 August 2025	Minor editorial improvements for useability.
01.0	11 February 2025	Initial publication of form template.

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Business Function: A6.4 activity cycle

Keywords: A6.4 mechanism, environmental impacts, risk assessment, safeguards, sustainable development

Step 1: Identify SD objectives and priorities of host Party

Host Party's SD objectives and priorities related to your A6.4 Activity

1.1. Host party's SD objectives, priorities and strategies linked/related to SDG national targets and indicators related to the A6.4 activity. Activity participants are required to further elaborate any objectives and priorities in step 2.	The project aligns with the **Thailand 4.0** agenda and the **National Strategy (2018-2037)** , specifically prioritizing: **Economic Stability** (SDG 1 & 8 - new income sources for smallholders), **Environmental Sustainability** (SDG 13 - Carbon Neutrality 2050 goal, promotion LULUCF sector action), and **Digitalization/Innovation** (SDG 8 & 17 - promoting Smart Farming and DLT adoption for transparency).
1.2. Host Party objectives, priorities and strategies not clearly responsive to any SDG related to the A6.4 activity. Activity participant are required to elaborate "Monitoring of the A6.4 activity-level SD indicators - no SDG related" in step 3 (if applicable).	N/A . All major project impacts are clearly linked to the UN Sustainable Development Goals (SDGs) and Thailand's national policies.

Source:

****Thailand National Strategy (2018-2037), Thailand's NDC (Nationally Determined Contribution), TGO's Carbon Neutrality Roadmap****
Provide source of information <https://www.greennetworkthailand.com/cop26-Thailand> (Thailand's climate change policy and plans)

Step 2: Assess impacted SDGs

Sustainable Development Goal (SDG)	Does the A6.4 activity directly impact this SDG ?	Please provide justification for your answer provided in column F	Select SDG Target (if answer in column F is "yes")	Describe related Host Party SDG Target (if available)	Type of impact (Positive / Negative)	Select SDG indicator	Describe activity-level SD indicator linked to host party's SD objectives, priorities and strategies if the activity participants identify them in 1.1 of step 1.	Describe activity-level SD indicator
SDG_1_End_Poverty	YES	Enhance economic for smallholder farmers, ensuring increased income and financial resilience.	<u>1.1 By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day</u>	[TEXT]	Positive	1.a.2 Proportion of total government spending on essential services (education, health and social protection)	plus non-essential but basic services, by recipient income quintile. Increase "Section D.1.2, Appendix 8	Annual tracking of Carbon Token value distribution to aggregated farmer accounts (per capita income enhancement) via "Blockchain DLT Smart Contract" as per the "Benefit Sharing Agreement (ETM-016 SDGs-01BRIS1)
SDG_2_Zero_hunger		[TEXT]	<u>2.1 By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round</u>	[TEXT]	Negative	SDG 2 indicators:	[TEXT]	[TEXT]
SDG_3_Health_and_wellness		[TEXT]	3.1 By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births	[TEXT]	No impact at SDG Target	SDG 3 indicators:	[TEXT]	[TEXT]
SDG_4_Quality_education		[TEXT]	4.1 By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes	[TEXT]		SDG 4 indicators:	[TEXT]	[TEXT]
SDG_5_Gender_equality		[TEXT]	5.2 Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation	[TEXT]		SDG 5 indicators:	[TEXT]	[TEXT]
SDG_6_Clean_water_and_sanitation		[TEXT]	6.2 By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations	[TEXT]		SDG 6 indicators:	[TEXT]	[TEXT]
SDG_7_Affordable_and_clean_energy		[TEXT]	7.3 By 2030, double the global rate of improvement in energy efficiency	[TEXT]		SDG 7 indicators:	[TEXT]	[TEXT]
SDG_8-Decent_work_and_economic_growth	YES	Promote sustained, inclusive, and sustainable economic growth, full and productive employment and decent work for all.	8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors	[TEXT]	Positive	8.2.1 Annual growth rate of real GDP per employed person	Section D.1.2, Appendix 8	Monitoring the number of farmers and local staff trained in "Digital MRV (dMRV) technology and blockchain literacy", enhancing digital employment skills in rural areas.
SDG_9_Industry_innovation_and_infrastructure		[TEXT]	9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities	[TEXT]		SDG 9 indicators:	[TEXT]	[TEXT]
SDG_10_Reduction_of_inequalities		[TEXT]	10.4 Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality	[TEXT]		SDG 10 indicators:	[TEXT]	[TEXT]
SDG_11_Sustainable_cities_and_communities		[TEXT]	11.4 Strengthen efforts to protect and safeguard the world's cultural and natural heritage	[TEXT]		SDG 11 indicators:	[TEXT]	[TEXT]
SDG_12_Responsible_consumption_and_production		[TEXT]	12.3 By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses	[TEXT]		SDG 12 indicators:	[TEXT]	[TEXT]
SDG_13_Climate_action	YES	Take urgent action to combat climate change and its impacts.	<u>13.2 Integrate climate change measures into national policies, strategies and planning</u>	[TEXT]	Negative	13.2.2 Total greenhouse gas emissions per year	Section D.1.2, Appendix B.7.4 (NER Calculation)	Annual reporting of Net Emission Reductions (NER) and verifiable reduction in N2O emissions from optimized fertilizer use (direct mitigation outcome).
SDG_14_Submarine_life		[TEXT]	14.2 By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans	[TEXT]		SDG 14 indicators:	[TEXT]	[TEXT]

SDG_15_Life_of_terrestrial_ecosystems		[TEXT]	15.3 By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world	[TEXT]		SDG 15 indicators:	[TEXT]	[TEXT]
SDG_16_Peace_justice_and_strong_institutions		[TEXT]	16.2 End abuse, exploitation, trafficking and all forms of violence against and torture of children	[TEXT]		SDG 16 indicators:	[TEXT]	[TEXT]
SDG_17_Partnerships_to_achieve_the_objectives	YES	Revitalize the global partnership for sustainable development.	17.16 Enhance the Global Partnership for Sustainable Development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the Sustainable Development Goals in all countries, in particular developing countries	[TEXT]	Positive	17.16.1 Number of countries reporting progress in multi-stakeholder development effectiveness monitoring frameworks that support the achievement of the sustainable development goals	Section A.6, Appendix 8	Tracking the **formal agreements and MOUs** established with local government/NGOs/Technology partners; documenting the operational model of the **Blockchain Smart Contract** for equitable and **transparent benefits distribution (as per ETM-016-SDGs-01BR1S1)**

Step 3: Establish A6.4 activity-level SD indicators

Please describe below each of the A6.4 activity-level SD indicators - SDG related identified in step 2

(Copy this table for each indicator identified in step 2)

A6.4 activity-level SD indicator 1 - SDG related		
Monitoring indicator:	Annual Carbon Token Revenue per Participating Farmer	
SDG	SDG1: No Poverty	
SDG target:	1.a: Mobilize resources...to implement programmes and policies to end poverty in all its dimensions.	
SDG indicator	Proportion of total Carbon Token value distributed to farmenrs.	
Description:	The monetary value of carbon tokens received by farmers per annum (demonstrating new income stream and **financial transparency via DLT as per ETM-016-SDGs-01BR1S1**	
Data Unit:	THB/Farmer/Year (or USD/Farmer/Year)	
Source of data:	Blockchain Transaction Records (Immutable Smart Contract Log)	
Measurement procedure:	Smart Contract executes token distribution; Annual reconciliaion report of crypto-to-fiat value	
Monitoring frequency:	Annual	
Comments:	Directly monitors the economic co-benefit of the Tokenization mechanism and compliance with the Benefit Sharing Agreement.	
Year	Baseline	Activity value
1	0	THB
2	0	THB
3	0	THB
4	0	THB
5	0	THB

A6.4 activity-level SD indicator 2 - SDG related		
Monitoring indicator:	Farmer Digital Literacy Training Completion Rate	
SDG	SDG 8: Decent Work and Economic Growth	
SDG target:	8.2: Achieve higher levels of economic productivity through diversification, technological upgrading and innovation.	
SDG indicator	Proportion of farmers trained in dMRV/Blockchain tools.	
Description:	The percentage of participating farmers who complete the required training on using the **dMRV mobile app** and accessing their **digital wallet**.	
Data Unit:	%	
Source of data:	Training Attendance Records; Post-training assessment data.	
Measurement procedure:	Annual training sessions; Formal record of passing digital competency assessment.	
Monitoring frequency:	Annual	
Comments:	Monitors technological upgrading and skill enhancement (SDG 8).	
Year	Baseline	Activity value
1	0%	
2	0%	
3	0%	
4	0%	
5	0%	

A6.4 activity-level SD indicator 3 - SDG related		
Monitoring indicator:	Annual Net Carbon Removals Credited	
SDG	SDG 13: Climate Action	
SDG target:	13.2: Integrate climate change measures into national policies, strategies and planning.	
SDG indicator	Total verifiable CO2 sequestered and reduced annually.	

Please describe below each of the A6.4 activity-level SD indicators - no SDG related, identified in step 1

(Copy this table for each indicator identified in step 1)

A6.4 activity-level SD indicator 1 - no SDG related		
Monitoring indicator:	n/a	
Description:	n/a	
Data Unit:	if applicable	
Source of data:		
Measurement procedure:	if applicable	
Monitoring frequency:	if applicable	
Comments:		
Year	Baseline	Activity value
1		
2		
3		
4		
5		

A6.4 activity-level SD indicator 2 - no SDG related		
Monitoring indicator:	n/a	
Description:	n/a	
Data Unit:	if applicable	
Source of data:		
Measurement procedure:	if applicable	
Monitoring frequency:	if applicable	
Comments:		
Year	Baseline	Activity value
1		
2		
3		
4		
5		

A6.4 activity-level SD indicator 3 - no SDG related		
Monitoring indicator:	n/a	
Description:	n/a	
Data Unit:	if applicable	
Source of data:		

Description:	The core result of the project (Net Emission Reductions or Net Removals), confirming direct contribution to NDC/SDG 13 targets.	
Data Unit:	tCO2e/year	
Source of data:	Digital MRV (Satellite/AI) System ; Project Monitoring Report.	
Measurement procedure:	Calculated via the Proposed New Methodology (A6.4-FORM-METH-002) and verified annually.	
Monitoring frequency:	Annual	
Comments:	Core output indicator.	
Year	Baseline	Activity value
1	2,000	
2	2,500	
3	3,000	
4	3,500	
5	4,000	

Measurement procedure:	if applicable	
Monitoring frequency:	if applicable	
Comments:		
Year	Baseline	Activity value
1		
2		
3		
4		
5		

Monitoring of A6.4 activity-level SD indicators

A6.4 activity information			
Title of A6.4 activity or Title of CDM project (transition to A6.4 activity):	Buriram Rubber Plantation Carbon Sequestration & GHG Emission Reduction Project: A Cryptocurrency, Blockchain, and Satellite Technology Initiative.		
A6.4 Activity number or CDM project number (transition to A6.4 activity):	01BR1S1 (Internal Project ID)		
A6.4 activity registration date dd/mm/yy:	(Pending Registration)		
Crediting period: ☒ Fixed ☐ Renewable		Start date	End date
	1	01.01.2016	31.12.2036
	2	01.01.2037	31.12.2043
	3	01.01.2044	31.12.2050
Monitoring period:		Start date	End date
	1	01.01.2016	31.12.2022
	2	01.01.2023	31.12.2029
	3	01.01.2030	31.12.2036

Monitoring of the A6.4 activity-level SD indicators - SDG related		
(Copy this table for each indicator identified in step 3)		
A6.4 activity-level SD indicator 1 - SDG related		
Monitoring indicator:	Annual Carbon Token Revenue per Participating Farmer	
SDG	SDG 1: No Poverty.	
SDG target:	1.a: Mobilize resources....to implement programmes and policies to end poverty in all its dimensions.	
SDG indicator	Proportion of total Carbon Token value distributed to farmers.	
Description:	The monetary value of carbon tokens received by farmers per annum (demonstrating new income stream and **financial transparency via DLT as per ETM-016-SDGs-01BR1S1**	
Data Unit:	THB/Farmer/Year	
Source of data:	Blockchain Transaction Records (Immutable Smart Contract Log)	
Measurement procedure:	Smart Contract executes token distribution; Annual reconciliation report of crypto-to-fiat value.	
Monitoring frequency:	Annual	
Comments:	Directly monitors the economic co-benefit of the Tokenization mechanism and compliance with the Benefit Sharing Agreement.	
Year	Baseline value	Activity value
1	0 THB	1
2	0 THB	2
3	0 THB	3
4	0 THB	4
5	0 THB	5
6	0 THB	6
7	0 THB	7
8	0 THB	8
9	0 THB	9
10	0 THB	10
11	0 THB	11

Monitoring of the A6.4 activity-level SD indicators - no SDG related		
(Copy this table for each indicator identified in step 3)		
A6.4 activity-level SD indicator 1 - no SDG related		
Monitoring indicator:	n/a	
Description:	n/a	
Data Unit:	if applicable	
Source of data:		
Measurement procedure:	if applicable	
Monitoring frequency:	if applicable	
Comments:		
Year	Baseline value	Activity value
1		
2		
3		
4		
5		

12	0 THB	12
13	0 THB	13
14	0 THB	14
15	0 THB	15
16	0 THB	16
17	0 THB	17
18	0 THB	18
19	0 THB	19
20	0 THB	20

Monitoring of the A6.4 activity-level SD indicators - SDG related

(Copy this table for each indicator identified in step 3)

A6.4 activity-level SD indicator 2 - SDG related		
Monitoring indicator:	Farmer Digital Literacy Training Completion Rate	
SDG	SDG 8: Decent Work and Economic Growth	
SDG target:	8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation.	
SDG indicator	Proportion of farmers trained in dMRV/blockchain tools.	
Description:	The percentage of participating farmers who complete the required training on using the **dMRV mobile app** and accessing their **digital wallet**.	
Data Unit:	%	
Source of data:	Training Attendance Records; Post-training assessment data.	
Measurement procedure:	Annual training sessions; Formal record of passing digital competency assessment.	
Monitoring frequency:	Annual	
Comments:	Monitors technological upgrading and skill enhancement (SDG 8).	
Year	Baseline value	Activity value
1	0%	1
2	0%	2
3	0%	3
4	0%	4
5	0%	5
6	0%	6
7	0%	7
8	0%	8
9	0%	9
10	0%	10
11	0%	11
12	0%	12
13	0%	13
14	0%	14
15	0%	15
16	0%	16
17	0%	17
18	0%	18
19	0%	19
20	0%	20

Monitoring of the A6.4 activity-level SD indicators - no SDG related

(Copy this table for each indicator identified in step 3)

A6.4 activity-level SD indicator 2 - no SDG related		
Monitoring indicator:	n/a	
Description:	n/a	
Data Unit:	if applicable	
Source of data:		
Measurement procedure:	if applicable	
Monitoring frequency:	if applicable	
Comments:		
Year	Baseline value	Activity value
1		
2		
3		
4		
5		