









4th Project Board Meeting

BUILDING AN ENABLING ENVIRONMENT FOR SUSTAINABLE DEVELOPMENT IN CAMBODIA (BESD)

18 December 2020
VIRTUAL MEETING (ZOOM)







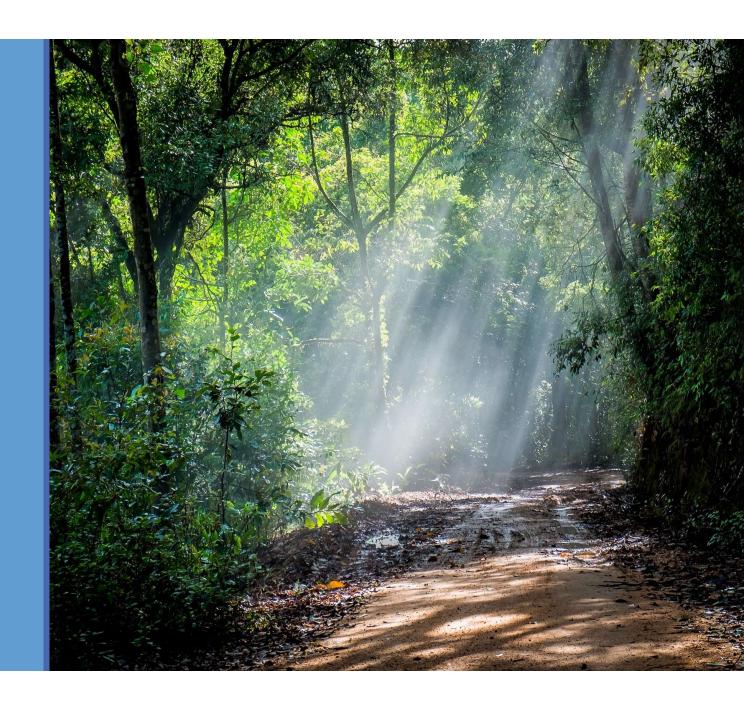
4th BESD Project Board Meeting Agenda

- 1. **Key Remarks** (UNDP, Sweden, NCSD/MOE)
- **2. Session 1:** Overall progress of the project
- Session 2: Project progress update, challenges in 2020 and 2021 workplan
- **4. Session 3:** Updating the budget and challenges in 2020
- 5. **Session 4:** Project extension and proposed changes (Jan-Jun 2021)
- **6. Approval** and Concluding Remarks

Session 1: Overall progress of the project

Presenter:

Mr., Keo Bunly, Project Coordinator, BESD, GSSD



About the project

The overall objective is to assist Cambodia achieve the Sustainable Development Goals related to:

- Natural Resources Management (NRM)
- Circular economy (focused on waste management)
- Solar energy

The project designs and tests *innovative* environmentally sustainable models in targeted areas.

Based on project results, workable models are identified for scaling up.









Updated Joint Governance Mechanisms

Senior Beneficiary NCDDS, MoE, MME

Chair of NCSD

Executive

Senior Suppliers

Sweden UNDP

Project Management Unit (PMU)

Project Directory – H.E. Dr. Tin Ponlok (NCSD)

Project Manager – Mr. Ma Chansethea

Project Contracted Staff

National Project Co-ordinator – Mr. Keo Bunly Finance assistant: Ms. Ly Rattanakserey Admin: Ms. Meas Sreythol

Project Assurance

Dr. Moeko Saito-Jensen, Environmental Policy Specialist **Ms. Nimnuon IvEk,** Head of Policy and Innovation Unit

Technical Assistance

International technical specialists
(P4 – Dr. Moeko Saito Jensen (30%) & P5 – Butchaiah Gadde- 40%)
National technical specialists

(SB5 – Mr. Sony Oum (80%); SB4 – Mr. Va Vuthy (80%) SB3- Sreykhuoch Kim – Project Assistant (100%)

Component 1: Sustainable NRM Responsible party: MoE

CBNRM: GDLC & ADF

Sustainable financing for PAs: GSSD,

MoE, MEF (new)

Component 2: Circular Economy
Responsible party: NCDDS & DGE/GSSD

Municipality: NCDDS, GDEP/MoE, DGE/GSSD

Industry: H&M

Academia: RUPP, NUM (new)

Regulations: GDEP, DGE

Component 3: Solar PV Responsible party: MME

Technical: GDE/MME, DGE/GSSD,

MoE, MEF

Innovation: EnergyLab

Decisions of the 3rd/virtual board meeting

No	Items	Status
1	The Project Board and implementing partners agreed to approve the budget revisions as well as proposed changes due to COVID-19	The budget revisions are implemented.
2	The proposed changes cover less than 10% among each component was notified to the board	This decision is implemented.
3	The additional tree planting/cash for work activities approved virtually by the board	The board accepted and 3rd budget revision was approved and implemented
4	BESD extension proposal and budget	The project extension and additional budget is approved by Sweden













Output 1: CBNRM institutions strengthened and financial resources mobilized for sustainable NRM

Key Achievements for CBNRM in 2020

- Livelihoods support actions reached 37 households (solar water pump)
- MOE endorsed a new expansion area for CPA of 798 ha
- > 5 CPA Prakas and 4 Management Plans endorsed
- > 97,800 trees are planted to restore ecosystem of 131.93 ha, which directly supported 2,114 workers (47% women), of which 72 were women-headed households affected by COVID-19.
- > 45,000 tree seedlings for plantation in flooded areas produced and maintained

Key Achievements of PES in 2020

- Assessments on Kulen and Kbal Chhay conducted, including PES funding options, water availability and quality, and willingness to pay/donate and biodiversity
- **Four technical developments** drafted:
 - PES funding mechanisms
 - PES Conceptual Design and Results Framework
 - PES Management Plan for Kbal Chhay
 - PES Roadmap (2021-2030)

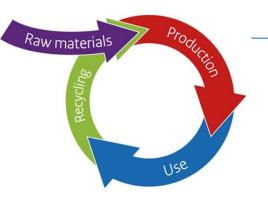












Bringing businesses together to build a circular economy in Cambodia What is a circular

Output 2: Circular Economy

Key Achievements in 2020

- Municipal waste separation stations in Kep selected
- Key policies drafted:
 - Industrial On-site incinerator guideline and sub-degree on plastic management drafted
 - Circular Economy Strategy and Action Plan drafted
- Mainstreaming environmental education/CE for schools in coordination with CCCA (e.g. 3 teachers' manuals are being produced)
- Mobilization of the private sector engagement and fund to foster business led innovation for CE (e.g. marine plastic)
- Green procurement and guidelines adopted
 - Youth-led campaign against single-use plastic (RUPP, NUM) are going social media (Facebook, YouTube)
 - Zero-plastic building at NUM endorsed
 - 5Rs are widely publicized in media and public awareness













Output 3: Solar Energy

Key Achievements in 2020

- Installation of Solar DC microgrids at three villages to support 140 unelectrified households
- > SHS technical guidelines developed and printed
- Trained 20 technicians on solar power installations and basic maintenance skills
- Solar energy Hackathon, Pre-Incubation and Incubation program is ongoing
- Re-allocation and installation of solar PV to support vulnerable communities/range station completed











Watch the **BESD Video** for Summary Results











Session 2: Project progress update, challenges in 2020 and 2021 workplan

Presenters:

- **1. Mr. Ros Chor (NRM),** Dept Director of Community Livelihoods, GDLC, MOE
- **2. H.E Meng Monyrak (PES**), Deputy Secretary General, NCSD
- 3. Chhum Bunnara, Head of PMSD, NCDDS
- **4. Mr. Taing Meng Eang**, Director, DGE, GSSD
- **5. Mr. Chiphong Sarasy**, Deputy Director, Department of Renewable Energy and Other Energy, GDE, MME













Output 1: Natural Resource Management (NRM)

Output 1.1: Sustainable NRM & Community Livelihoods

Mr. ROS Chor

Department Director

Department of Community Livelihood, General Directorate of Local

Community, Ministry of Environment (MOE)



Key Update: Sustainable NRM & Community Livelihoods

1. Creation and strengthening of CPA networks

- Strengthened the capacity of a total of 130 members (64 female) of 5 Community
 Protected Areas (CPA) through networking and training events
- 15 banners for CPAs and 250 signboards were installed

2. CBNRM pilot support for Kulen Mountain

- > 5 CPA by-law regulations/Prakas and 4 CPA Management Plans endorsed
- > 97,800 trees planted on 131 ha by 2,114 workers (47% women), 72 womenheaded households in Pursat and Siem Reap as a COVID-19 Response
- 45,000 flooded tree seedlings produced and maintained by TCO/FiA
- 37 households and 100 school children are benefiting from a solar water pump in Po Pel village and 13 families participated in chicken and pig raising in Khlar Khum village, implemented by ADF
- Ecotourism facilities for the Popel CPA crated and **798** ha expanded for Khlah Khmum CPA were offiically **expanded and demarcated**, **13 banners** on tree planting installed.











Cash-for-Work: Tree planting as a Covid-19 response





















Lessons Learned and Priorities 2021

Lessons learned

- Networking and capacity building through on the job or peer learning is more effective for community
- ➤ Important to closely align project priorities with COVID-19 situation and response to build resilience for communities

Priorities for 2021

- Reinforce awareness raising and partnerships
- Vocational skills training will be provided to local communities in promoting organic farming and alternative and sustainable livelihood in line with PES programming activities



















Output 1: Natural Resource Management (NRM)

Output 1.2: Payment for Ecosystem Services (PES)

H.E. Meng Monyrak, Deputy Secretary General,

General Secretariat for Sustainable Development (GSSD),

National Council for Sustainable Development (NCSD)



Key update: PES

- Biodiversity and land-use baseline research Kulen and Kbal Chhay completed
- 2. Consultative meeting on PES/Biodiversity TWG inputs collected for policy documents
- 3. Four technical guidance documents drafted:
- PES funding mechanisms
- Conceptual Design and Result Framework
- PES Management Plan for Kbal Chhay
- PES Roadmap (2021-2030) drafted and inputs have been collected from the Biodiversity TWG on 27 Nov 20.
- **4. PES Awareness raising:** Media campaign and formation of Provincial TWG on PES implementation mechanism in Kulen National Park (18-20 Dec 2020)









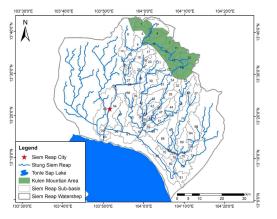


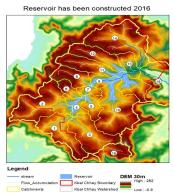
Some exmaples of results

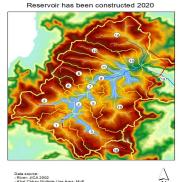
- Biodiversity assessment in Kbal Chhay found that 29 threatened species exist.
- Land-use mapping 2018-2020 assessed.
- Micro-catchment and sediment findings show both Kulen and Kbal Chhay are critical for provision of water sources

























Possible PES Financing Sources

No.	Possible financing sources for PES	Proposed Collection Rate
1	Earmarking fund from ESF	US\$20,000-40,000/year
2	Water usage	
2.1	Angkor Beer Company, and SEZ (Kbaly Chhay)	Min: US\$ 0.075 (300KHR) / m ³
	Kulen Company (Kulen)	Max: US\$ 0.125 (500KHR) / m ³
2.2	Hotels (3,4, 5 stair); based on WTP in Kulen during pre-Covid	Min: 0.5 US\$ / night / room (Occupancy rate: 25-50% in SR and PP)
2.3	Hotels and restaurants; based on WTP in Kulen during pre-Covid	Min: 1 US\$ /month
		Max: 5 US\$ / month
2.4	Casino (80 in SHV)	Min: 10 US\$ /month
		Max: 50 US\$ /month
3	Entrance fees for both Kulen (160K visitors) and Kbal Chhay (20-50K visitors/ year)	Min: US\$ 0.125 (500KHR)/person (local visitors)
		Max: US\$ 0.25 (1,000 KHR)/person (foreign visitors)
4	Other sources from DPs	Voluntary basis









Lessons Learned and Priorities 2021

Lessons learned

- PES (Watershed) is still at an early stage which requires strategic communication and awareness raising among key stakeholders:
- Building trust and transparent fund governance is key to PES mobilization and operationalization
- During the pilot stage, donation from key private Champions and earmarked fund from the government plays a critical role for PES operationalization, especially during/post COVID time
- Challenging to reallocate state budget to protection of watershed/ecosystem services

Priorities for 2021

- Expansion and strengthening of CBNRM through CPA and restoration of key watersheds
- Operationalization of PES mechanism in Kbal Chhay and Phnom Kulen
- Development of a National PES strategy and Action Plan
- Development of strategic communication strategy and information materials









Watch the PES Video















Output 2: Circular Economy

Output 2.1:

Municipal pilot for circular economy (Kep)

Mr. CHHUN Bunnara

Head of Programme Management and Support Division,
National Committee for Sub-National Democratic Development Secretariat (NCDD-S)

Key update Circular Economy: Municipal and Industrial Pilot





1. Circular Economy Pilot in Kep - Municipality level

- Collection point/storage containers were identified, and contract is being negotiated (NCDDS)
- Design and procurement are under process
- Deka (local ordinance) for waste management in Kep is being developed

2. Circular Economy Pilot - Industrial level

- Conducted air quality assessment of a new waste-to-energy solution completed
- The guidelines for on-site incinerator drafted and inputs will be collected at forthcoming stakeholder consultation (SW Department, MOE)











Lessons Learned and Priorities 2021

Lessons learned

- Municipal pilot: Engaging provincial government was vital in the design and pilot of the waste sorting model, public procurement and law enforcement
- Industrial pilot of on-site waste to energy: Identified the critical need to institutionalize measures to control safety and need for guidelines for on-site incinerator installation and maintenance

Priorities 2021

- Municipal pilot: Operationalise and test a workable circular economy model for a small city like Kep for replication (NCDDS)
- Industrial pilot: Implement monitoring mechanism/guidelines for on-site incinerators (SWMD) and regulations on plastic
- Strategic communication, awareness raising and private engagement









Watch the CE Model in Practice (KBC)



















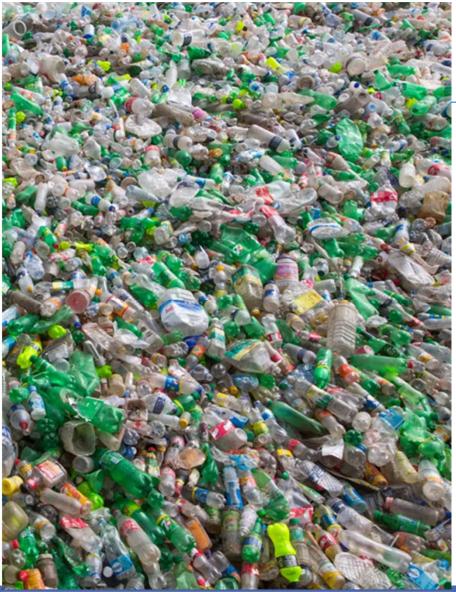
Output 2: Circular Economy

Output 2.3-2.4:

Development of enabling policies and measures for circular economy

Mr. TAING Meng Eang

Director, Department of Green Economy,
General Secretariat of the National Council for Sustainable Development (NCSD)



Key update Plastic & CE Interventions

Key interventions led by the Taskforce on plastic

- **Awareness raising**
- Research & policy development
- **Stakeholder engagement**











Strategic comunnication for awareness raising







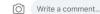






ព្លាស្លិកគឺជាសារធាតុម្យ៉ាងស្ដើងដែលមានភាពយឺត ទង់ ងាយស្រួលចត់ថែន និងប្រើប្រាស់បានយូវ ប៉ុន្តែវាបង្កផលប៉ះពាល់ ជាច្រើនដល់បរិស្ថាន និងសុខភាពមនុស្ស។ ព្លាស្ទិកភាគច្រើន ធ្វើឡើងពីធនធានធម្មជាតិកម្ររ រួមមានដូចជាប្រេង ធ្យូងថ្ម និង សែនល្យូលូស ដែលធនធានទាំងនេះសុទ្ធតែពិបាកនឹងកកើត ឡើងវិញ។ Link #noplasticKH #saynotoplastic #plasticfreecambodia 1













- National consultation Circular Economy strategy and action plan
- Kep and Kampong Cham Campaign
- National forum on plastic mobilized over 130 participants and built a strategic coalition of to promote the shared goal of combatting plastic waste



















- Four eco-friendly hotels/resorts in Kep selected and awarded by MoE
- DMC/RUPP and NUM youth-led plastic campaigns
- Zero-plastic Building F at NUM endorsed













- 60 separated trash bins installed the in Kep city for improving solid waste management
- The regulations /policies on solid waste management, and posters
 compiled and published













- > (1) Draft new sub decree for improving plastic management and (2) Draft new technical guidelines for on-site incineration management
- Video Developments: (1) Together forward plastic waste reduction in Kep City and (2) Current solid waste management in Cambodia











Research and Policy Development

Research

- Assessment on COVID-19 impact on informal waste pickers and potential engagement strategies
- Four learning series events on plastic recycling, organic waste recycling, waste to energy, and circular economy conducted

Policy

- Draft recommendations for regulations on single-use plastic
- Draft CE Strategy completed and being translated into Khmer
- Guidelines on small scale incinerator drafted
- Plastic communication and media plan developed
- Green procurement drafted









Lessons learned and Priorities 2021

Lessons learned

- Creating circular business models requires a whole-society participation (government, society and businesses)
- Introducing new regulations require a phase-approach and implementation tailored to the local context
- Promotion of alternatives to plastic is key for government to build an enabling environment and de-risk investments/innovations

Priorities 2021

- Development of strategic Communication strategy and information materials
- Development of enabling policies and measures
- Development of scale-up strategies including programming and new partnership













Watch the Video on Plastic Awareness made by DoSWD





















Output 3: Solar Energy

Mr. Chiphong Sarasy, Deputy Director
Department of Renewable Energy and Other Energy,
General Department of Energy (GDE),
Ministry of Mines and Energy (MME)



Output 3: Solar Energy

Key Achievements in 2020:

- Improving energy access for 140 households in 3 villages with solar DC microgrid
- ➤ Building technical capacity for installation and maintenance of solar and awareness raising workshops (168 participants, of which 55 were female)
- > The solar home system (SHS) guidelines finalized and printed
- ➤ Raising awareness about solar through workshops and trainings (e.g. Solar home system (SHS) leaflet and videos)
- ➤ **Business support** through solar energy Hackathon, Pre-Incubation and Incubation program extended until 30 April 2021 at no-cost
- > Technical study and policy advocacy through economic appraisal of the potential of PV Solar in Cambodia
- Installed 32kW solar AC off-grid system with Solar PV from MOE at Sre Ampil Community, Kdol Commune, Teukphos District, Kampong Chhnang Province









Strategic comunnication for awareness raising





Guideline for Solar Home System Development in Cambodia



Phnom Penh, April 19, 2020













Research and Policy Development

Research

> The publication of "Economic Appraisal of the Potentials of Solar Energy in Cambodia" will be in January 2021 (delayed)

Policy

Working closely with EAC to finalise a pricing structure for off-grid energy systems specifically, solar based DC micro-grids











Lessons learned and Priorities 2021

Lessons learned

- Theory of change from traditional solutions such as SHS to an interconnected model of microgrids/swarm grids
- There are numerous regulatory challenges to implement swarm grids in Cambodia

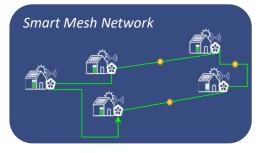
Priorities 2021

- Business model of solar DC micro grid shall be finetuned further to suit the energy demands of vulnerable communities
- Develop localized energy efficiency design guidelines for new residential and commercial buildings (EE design guidebook)
- Pilot demonstration of energy efficiency solutions in one public building





50x less power over distribution line in mesh network















Watch the Solar Video (GDE)











Session 3: Updating the budget and challenges in 2020

Presenter:

Mr. Sony Oum, Policy Specialist BESD Project Manager, UNDP



Actual Expenditure Report as of November 2020

Description	Total Budget (G03)	Cumulative Expenditure			Polones	Delivery
Description	[2019-2020]	Gov't [Disbursed]	UNDP [Disbursed]	Total	Balance	[%]
Output 1: CBNRM institutions strengthened and financial resources mobilized for sustainable NRM	974,210.55	245,823.16	400,184.30	646,007.46	328,203.09	66%
Output 2: Waste reduced, recycled and reused through the application of circular economy model.	648,070.61	79,205.61 413,405.51		492,611.12	155,459.49	76%
Output 3: Improved access to clean, affordable, and sustainable energy for the rural poor	556,016.09	50,320.14	334,674.73	384,994.87	171,021.22	69%
Project management (PMC)	329,920.31	73,845.42	165,683.65	239,529.07	90,391.24	73%
Total*	2,508,217.56	449,194.33	1,313,948.19	1,763,142.52	745,075.04	70%
Note: *BESD budget + Tree planting (\$470,880)						





** Combined Delivery Report @ 30-Nov-20







Projected Financial Delivery in 2020

Description	BESD	Trees	BESD + Trees
Budget in 2020	1,215,896.19	470,880.00	1,686,776.19
Total Delivery @ 30 November 2020	651,721.46	289,979.70	941,701.16
Projected Delivery (December)	392,512.41	87,028.66	479,541.07
Q4 NEX Advances (Expenditure by IPs upto 30-Nov-20)	_		
	143,178.15	27,277.60	170,455.75
2020 Commitment (PO)	111,823.55	-	111,823.55
Fixed cost of salaries (Dec-20)	19,521.88	2,180.09	21,701.97
Q4 NEX advance to be cleared (NCSD, MME, NCDDS) +	,		
UNDP Projection (Dec)	88,913.84	51,124.40	140,038.24
GMS	29,074.99	6,446.57	35,521.56
Total Projected Delivery (USD)	1,044,233.87	377,008.36	1,421,242.23
Projected Balance as 31 December 2020	171,662.32	93,871.64	265,533.96
Projected delivery in (%)	86%	80%	84%









COVID-19 Impact, Delivery, Carried Forward for 2021

Description	Balance (USD)	Remarks
Output 1: CBNRM institutions strengthened and financial resources mobilized for sustainable NRM	129,360.13	Planned budget for tree planning (\$93K), PES workshop, Annual reflection workshop, travel and meetings and GMS
Output 2: Waste reduced, recycled and reused through the application of circular economy model.	92,779.20	Depot developing and trainings at Kep \$65K, training on sub-degree on waste management, meetings, and travel, and GMS
Output 3: Improved access to clean, affordable, and sustainable energy for the rural poor	(521.49)	Supporting to Solar installation
Project management (PMC)	43,916.12	Final evaluation (29K), Operations, travel cost, GMS
Total	265,533.96	











Update on Risks

- The Nov 3 and Nov 28 COVID incidences have caused at least nine planned physical events to delay to be held next year.
- Virtual meetings remain challenging for consultative meetings and promotion of active participation.
- The COVID situation in country changes quickly, which requires an adaptive management, regardless of when vaccines will be available













Session 4:
Project
Extension and proposed changes
(Jan-Jun 2021)





Proposed Changes for Output 1

CBNRM

- Carry forward the unspent budget for maintenance of planted trees and development of maintenance and building capacity of communities in restoring key watershed to 2021
- Invest more in community-led and COVID-response activities in 2021
- Extend scope of community livelihood support to align with the BESD extension up to June 2021

PES

- Investment communication and media campaigns and material to mobilize PES funds, partnership and programming
- Fund for sub-national TWG and PES like livelihood activities (such as solar and water system, etc.)







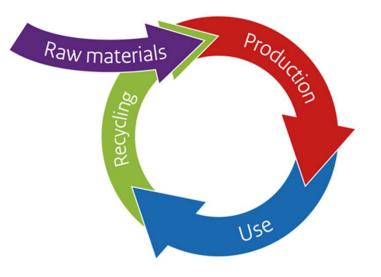




Proposed Changes for Output 2

Municipal Waste Model

- Carry forward the unspent budget including:
 - Exchange learning and waste separation stations to 2021 because of disruption of COVID-19 incidence
- Deka or Mechanism for waste management in Kep
- Implement and participate in capacity building and sharing knowledge and experience on solid waste management and circular economy and other related activities













Proposed Changes for Output 3

Solar

- Extend the implementation period for responsible parties including EnergyLab to create an impact of incubation program.
- As COVID community incidence, delivery terms for solar installation should be extended to January 2021.











Proposed Budget 2021 (4th Revision)

Outputs	Approved Budget (G03) (USD)			Proposed Budget Revision (G04) (USD)				
Outputs	2019	2020	Total	2019	2020	2021	Total	
Output 1:Natural Resource Management (NRM)	245,398.66	728,811.89	974,210.55	245,398.66	728,811.89	152,891.28	1,127,101.83	
Output 2: Circular Economy	284,383.84	363,686.77	648,070.61	284,383.84	363,686.77	192,011.04	840,081.65	
Output 3: Solar energy	208,841.33	347,174.76	556,016.09	208,841.33	347,174.75	213,526.80	769,542.89	
Project Management Cost	82,817.53	247,102.78	329,920.31	82,817.53	247,102.78	91,570.88	421,491.19	
Grand Total	821,441.36	1,686,776.19	2,508,217.56	821,441.36	1,686,776.19	650,000.00	3,158,217.56	











Budget Extension 2021 (4th Revision) by Responsible Parties

Budget summary by responsible parties

		· · ·									
Budget Revised (G03) (USD) - Approved 3rd Board Meeting		Budget Revision (G04) (USD)			Changes in USD				Budget for		
2019	2020	Total budget	2019	2020	2021	2019	2020	2021	Total	responsible parties	
131,252.14	418,567.86	549,820.00	131,252.14	418,567.86	250,680.00	-	-	250,680.00	250,680.00	NCSD (Including all grants under NCSD)	
26,666.67	133,491.33	160,158.00	26,666.67	133,491.33	42,000.00		•	42,000.00	42,000.00	GDLC/MOE	
-	37,000.00	37,000.00	-	37,000.00	40,000.00		(-	40,000.00	40,000.00	GDEP/MOE	
47,883.33	122,228.67	170,112.00	47,883.33	122,228.67	58,000.00			58,000.00	58,000.00	DBD/NCSD	
23,169.00	23,831.00	47,000.00	23,169.00	23,831.00	50,680.00	-	-	50,680.00	50,680.00	DGE/NCSD	
4,366.15	72,633.85	77,000.00	4,366.15	72,633.85	20,100.00	-	-	20,100.00	20,100.00	NCDDS	
3,164.20	148,600.80	151,765.00	3,164.20	148,600.80	30,950.00			30,950.00	30,950.00	мме	
682,658.87	1,046,973.68	1,729,632.55	682,658.87	1,046,973.68	348,270.00		_	348,270.00	348,270.00	UNDP	
821,441.36	1,686,776.19	2,508,217.56	821,441.36	1,686,776.19	650,000.00	-	-	650,000.00	650,000.00	TOTAL	











4. Proposals for the Board's Approval

- ✓ Carry forward the projected COVID-19 affected, budget and activities in 2020 to 2021
- ✓ Approval of budget extension 2021
 (Version G04) and priorities plan presented
- ✓ Allocate the unspent resources for tree planting to maintenance and planting activities in 2021

5. Any other business (Q&A)













