

Project Title:	Biomass Energy 2022: fuelling the economy - protecting forests
Project Number:	90074
Implementing Partner:	UNDP
Start Date:	01/08/18
End Date:	31/12/2023
PAC Meeting date:	04/12/18

Brief Description

From 2013 to 2018, the Sri Lanka Sustainable Energy Authority (SLSEA) with UNDP and UNFAO implemented a project on – “Promoting sustainable biomass energy production and modern bio-energy technologies” (Biomass Energy Pilot Project) to promote modern biomass use in industry and institutions. The project piloted technological applications and locally manufactured equipment, fuelwood growing models and collection systems to systematically promote green energy in Sri Lanka.

Building on the experiences, best practices and lessons learned from biomass project phase 1, Biomass Energy 2022 (Biomass Project Phase II) will consolidate the results and up-scale promising models that support local industry, afforestation efforts and Sri Lanka’s goal of increasing the share of renewable energy in the energy mix in line with the energy policy. The project will build on partnerships established with public institutions and private sector during the implementation of GEF-funded Biomass Project (2013-2018) and support the expansion of viable models and activities through new partners and south-south cooperation.

The expected outcomes of the Biomass Project Phase II are strengthened rural economy, increased forest cover, improved living standards for rural women, sustainable industries and small and medium enterprises (SMEs) in Sri Lanka and growth of technology suppliers for clean and modern biomass technology. The project contributes to the achievement of the Sustainable Development Goals (SDGs) in Affordable and Clean Energy (Goal 7), Industry Innovation and Infrastructure (Goal 9), Gender Equality (Goal 5) and Climate Action (Goal 13). It indirectly contributes to targets under Life on Land (Goal 15) and No Poverty (Goal 1).

The project is closely aligned to a number of national policies and programmes. These include:

- National Energy Policy and Strategies for Sri Lanka – The national energy policy of Sri Lanka has a target to increase the commercial supply of biomass for industrial thermal and household applications. The project will help towards increasing the supply of biomass by establishing fuelwood plantations and upscaling the supply chain
- Nationally Determined Contributions - The project contributes to NDC 3 and NDC 6 of the energy sector in the INDC plan developed for 2017 – 2019 by establishing small scale biomass power plants and developing policies to strengthen the biomass energy sector. The target of the NDC 3 is to establish 105 MW of biomass power plants and NDC 6 is to strengthen sustainable energy related policies.
- Public Investment Programme 2017-2020 – The project contributes to the goal of this program by creating employment, enhancing income levels and strengthening of rural economy.
- Enterprise Sri Lanka programme - to create entrepreneurs for the biomass energy sector by the project aligns with the main objective of Enterprise Sri Lanka
- Program to Plant One Billion Trees as Renewable Energy Sources – supports the establishment of fuelwood plantations.
- National Poverty alleviation programme – support provided by the project for growing, establishing supply chains and SMEs, employment will be created in rural areas and household income enhanced for youth and women.
- National Policy Framework for SME Development -project aims to improve access to clean efficient appropriate technology that reduce transaction costs of SMEs and increase access to credit.

Contributing Outcome (UNDAF/CFD, RPD or GPD): Development of policies and technology transfer in place for biomass energy by 2022 to achieve a low carbon development to contribute the country’s renewable energy target. Indicative Output(s) with gender marker: Number of SMEs using modern biomass energy technologies – GN2 Number of new entrepreneurs for growing and processing – GN2 Value of loans obtained for biomass energy sector – GN2	Total resources required: 19,305,000 USD	UNDP:	705,000 USD
		Climate Finance (Donor):	
Total resources allocated:	Undeclared	Private Sector	
		Government	3,200,000 USD
		Cash:	
		Government In-Kind:	

Agreed by (signature) :

UNDP



Jonn Sorensen
UNDP Resident Representative a.i.

Date: 13 March 2019



EXPECTED OUTPUTS	PLANNED ACTIVITIES	RESPONSIBLE PARTY	PLANNED BUDGET						Planned Budget by Year					
			Funding Source	Donor Code	Budget Code	Budget Description	Total Amount	Y1 (2018)	Y2 (2019)	Y3 (2020)	Y4 (2021)	Y5 (2022)	Y6 (2023)	
Output 1.1: 5000 industries converted to modern biomass energy systems by 2022	1.1.1 Activity: Provide support to access appropriate and affordable modern biomass energy technologies by linking SMEs to technology suppliers	UNDP	30071	00221	75700	Training, Workshops and Confer	45,087.49		2,000.00	11,328.01	11,994.12	19,765.36	-	
			UNDP	04000	00012	71300	Local Consultants	2,034.67		2,034.67				
Output 1.2: Improved performance of biomass energy technologies	1.2.1 Activity: Conduct studies to find opportunities for biomass technology/efficiency improvement by at least 5% giving priority for co-generation	UNDP	30071	00221	71300	Local Consultants	16,128.01		2,800.00	13,328.01				
			UNDP	04000			Grants to Inset & Other Benef	-						
Output 1.3: Access to credit schemes enhanced for SME for fuel switching	1.3.1 Activity: Linking SMEs to convenient credit schemes offering features like low interest, long term payments and credit guarantee	UNDP	30071	00221	75700	Training, Workshops and Confer	36,587.49		1,000.00	8,828.01	9,494.12	17,265.36		
			UNDP	04000	00012	71600	Travel	500.00		500.00				
Output 1.4: Relevant stakeholders are trained on modern biomass energy	1.4.1 Activity: Training of SMEs on preparation of project proposals for modern biomass energy technologies	UNDP	04000	00012	71401	Contractual Services-Individuals	12,996.16		12,896.16					
			UNDP	04000	00012	71300	Local Consultants	2,034.67	-	2,034.67	-	-		
Output 1.4: Relevant stakeholders are trained on modern biomass energy	1.4.2 Activity: Training of the technology providers on modern biomass energy technologies, efficiency improvements, credit schemes etc	UNDP	04000	00012	75700	Training & Workshops	600.00		600.00					
			UNDP	04000	00012	72500	Supplies	317.00		317.00				
Output 1.4: Relevant stakeholders are trained on modern biomass energy	1.4.3 Activity: Raising awareness amongst officials of the banks and financial institutions on appraisal of modern biomass energy technologies	UNDP	30071	00221	75700	Training, Workshops and Confer	123,287.49		11,200.00	34,328.01	34,994.12	42,765.36		
			UNDP	04000	00012	71600	Travel	1,500.00		1,500.00				
Sub-Total for Output 1						240,722.98	2,750.00	36,882.50	67,812.04	56,482.36	79,795.08	-		
Output 2.1: 500,000 households using modern biomass cooking systems by 2022	2.1.1 Activity: Implement initial pilot programme with 500 modern cook stoves and the required supply chain will be setup to determine how the cook stoves are accepted	UNDP & Ministry of Power & Renewable Energy	30071	00221	72100	Contractual Services-Companies	145,665.14	-	16,000.00	46,328.01	21,994.12	29,765.36	31,577.55	
			UNDP	30071	00221	71300	Local Consultants	63,465.14	-	800.00	8,328.01	8,994.12	16,765.36	28,577.65
Output 2.1: 500,000 households using modern biomass cooking systems by 2022	2.1.2 Activity: Develop the most effective distribution channel to reach the 500,000 households	UNDP	02551	00012	72300	Materials & Goods	23,275.00	23,275.00						
			UNDP	04000	00012	72301	Materials & Goods							

Output 3.1: Establishing 16000 ha of fuelwood plantations contributing to the forestry target of Sri Lanka and producing 150,000 tons of biomass energy per annum	3.1.1 Activity: Draft set of guidelines to provide support to develop entrepreneurs operating in the biomass energy supply chain for growing and processing of biomass.	UNDP	30071	00221	74200	Audio Visual&Print Prod Costs	37,322.13		4,000.00	16,328.01	15,994.12			
	3.1.2 Activity: Conduct training programmes on the operation of the biomass energy supply to the entrepreneurs	UNDP	04000	00012	71300	Local Consultants	2,034.67		2,034.67					
	3.1.3 Activity: Development of land bank and register the land owners and potential investors, credit schemes, etc under different matching categories	UNDP	30071	00221	71300	Local Consultants	23,322.13	-	5,000.00	8,828.01	9,494.12			
	3.1.4 Activity: Conduct training and awareness raising events for land owners and investors on benefits of producing fuelwood	UNDP	04000	00012	75700	Training & Workshops	400.00	-	400.00					
	3.1.5 Activity: Implement public promotional activities on fuelwood growing and production	UNDP	30071	00221	75700	Training & Workshops	57,622.13	-	10,300.00	23,328.01	23,994.12			
	3.1.6 Activity: Facilitation for establishment of 16000 ha of fuelwood plantation under different categories identified in the land bank	UNDP	04000	00012	71600	Travel	500.00		500.00					
	Output 3.2: 100,000 tons of agricultural waste converted annually to biomass energy forms used by Industries	3.2.1 Activity: Develop database of entrepreneurs interested in fuelwood growing and processing	UNDP & Ministry of Power & Renewable Energy	30071	00221	72100	Contractual Services-Companies	169,322.13	-	26,000.00	71,328.01	71,994.12		
		3.2.2 Activity: Prepare guidelines and criteria for different agriculture waste to be converted as biomass energy by densification	UNDP & Ministry of Power & Renewable Energy	30071	00221	71300	Local Consultants	3,746.00	-	3,746.00				
		3.2.3 Activity: Register agriculture waste suppliers and establish a transport and collection mechanism to support the guidelines and criteria developed in 3.2.2	UNDP	30071	00221	75700	Training & Workshops	97,465.14	-	4,800.00	18,328.01	17,994.12	24,765.36	31,577.65
		3.2.4 Activity: Register agriculture waste suppliers and establish a transport and collection mechanism to support the guidelines and criteria developed in 3.2.2	UNDP	30071	00221	75700	Training & Workshops	200.00		200.00				
	Output 3.3: 1000 new entrepreneurs supporting biomass growing and processing by 2022	3.3.1 Activity: Awareness and training on biomass growing and processing technologies	UNDP	04000	00012	71600	Travel	500.00		500.00				
		3.3.2 Activity: Link entrepreneurs with convenient credit schemes and end users.	UNDP & Ministry of Power & Renewable Energy	04000	00012	72100	Contractual Services-Companies	-						
3.3.3 Activity: Awareness and training on biomass growing and processing technologies		UNDP	02551	00012	72100	Contractual Services-Companies	30,000.00	30,000.00						
3.3.4 Activity: Linking entrepreneurs with credit schemes		UNDP & Ministry of Power & Renewable Energy	30071	00221	75700	Training & Workshops	200.00		200.00					
3.3.5 Activity: Linking entrepreneurs with credit schemes		UNDP	04000	00012	75701	Training & Workshops	207,496.38	-	1,331.22	40,828.01	43,994.12	62,765.36	58,577.67	
3.3.6 Activity: Linking stakeholders for growing and processing	UNDP	04000	00012	71600	Travel	500.00		500.00						

Output 3.4: 50 satellite collection centers established in rural areas listed wide to increase collection of biomass energy which will also contribute to the above mentioned growth of new entrepreneurs	3.4.1 Activity: Study and map the most feasible locations for the satellite terminal based on the findings of biomass resource survey conducted under phase 1.	UNDP	04000	00012	71300	Local Consultants	5,780.65	-	5,780.65	-	-	-	-	-	-	-	-	-	-
	3.4.2 Activity: Establishment of 50 satellite collection centers linking to large scale biomass energy terminals and end users.	UNDP	30071	00221	71300	Local Consultants	16,828.01	-	3,000.00	13,828.01	-	-	-	-	-	-	-	-	-
Output 3.5: 50 suppliers certified under SLIS 1551	3.5.1 Activity: Certification of the 50 biomass suppliers (training, certification, surveillance tests, registration in online database)	UNDP	04000	00012	71600	Training & Workshops	200.00	-	200.00	-	-	-	-	-	-	-	-	-	-
	3.5.2 Activity: Link entrepreneurs with convenient credit schemes and end users.	UNDP	30071	00221	75700	Training & Workshops	19,322.13	-	1,000.00	8,828.01	-	-	-	-	-	-	-	-	-
Project Management	Sub-Total for Project Management	UNDP	04000	00012	71300	Local Consultants	3,746.00	-	3,746.00	-	-	-	-	-	-	-	-	-	-
		UNDP	30071	00221	72100	Contractual Services-Consultants	76,287.49	-	3,200.00	21,328.01	-	-	-	-	-	-	-	-	-
		UNDP	04000	00012	71600	Travel	1,000.00	-	1,000.00	-	-	-	-	-	-	-	-	-	-
		UNDP	04000	00012	71300	Local Consultants	3,746.00	-	3,746.00	-	-	-	-	-	-	-	-	-	-
		UNDP	02551	00012	71600	Contractual Services-Individuals	1,883.00	-	1,883.00	-	-	-	-	-	-	-	-	-	-
		UNDP	02551	00012	71200	International Consultants	210.00	-	210.00	-	-	-	-	-	-	-	-	-	-
		UNDP	02551	00012	72400	Contractual Services-Audio Visual Equip	(79.00)	-	(79.00)	-	-	-	-	-	-	-	-	-	-
		UNDP	02551	00012	76100	Foreign Exchange Loss	(9.00)	-	(9.00)	-	-	-	-	-	-	-	-	-	-
		UNDP	04000	00012	72200	Equipment & Furniture	400,000.00	-	-	100,000.00	-	-	-	-	-	-	-	-	-
		UNDP	04000	00012	73400	Rental and Maintenance of Other Equip	41,632.00	-	2,000.00	39,632.00	-	-	-	-	-	-	-	-	-
UNDP	04000	00012	72400	Communication and audio visual equip	1,000.00	-	1,000.00	-	-	-	-	-	-	-	-	-	-		
UNDP	04000	00012	72400	Communication and audio visual equip	1,000.00	-	1,000.00	-	-	-	-	-	-	-	-	-	-		
UNDP	04000	00012	72400	Communication and audio visual equip	1,000.00	-	1,000.00	-	-	-	-	-	-	-	-	-	-		
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UNDP	04000	00012	72400	Communication and audio visual equip	1,000.00	-	1,000.00	-	-	-	-	-	-	-	-	-	-		
UNDP	04000	00012																	