Responsible Business Fund (RBF) Myanmar

RBF-SEC's Appraisal Note - Board Meeting on 7th February 2023

A: Appraisal Overview			
Project Title	**Solar Dryer Dome and Solar PV Installation at a Mushroom Processing Facility in Hlegu Township**		
Name of SME **RBF Project Reference Number**	Myanmar Pann Co., Ltd 61-02-29		
Names of the majority owners of the SME	U Myo Myint		
Geographic Location of the Project	Hlegu Township, Yangon Region	**Timeframe**	4 - 6 months
RBF Focus Areas covered	Renewable Energy		
Proposed RBF Grant in million MMK	11	**RBF Grant as a % of total investment**	25%
Project summary	Myanmar's demand for electricity is expected to reach 80,000-gigawatt hours (Gwh) by 2030, with an annual growth rate of 14%. The challenge of fulfilling such a high demand can never be met by the government of Myanmar alone; hence, it is important to encourage the private sector to fill in the gaps by producing their own electricity in a green and sustainable manner. Additionally, starting from early 2022, countrywide electrical blackouts have increased. Long-lasting power outages and rising gasoline costs in Myanmar are hurting the profitability of Micro, Small and Medium Enterprises (MSMEs) and raising the risks of loss of jobs and livelihoods for the factory workers. As a small contribution towards lowering the Mushroom Processing Sector's dependence on the national electricity grid, SME has proposed a project to install a mid-sized Solar Dryer Dome and 3.6 kW Solar PV System at their factory in Hlegu Township. The proposed project idea is to install the following: 1. Mid-Size Solar Dryer Dome with a size of 8x12 meter to replace their Electric Dryer 2. A 3.6 kW Solar PV System to reduce the electricity usage of SME's operations. SME has a rooftop area that is suitable for installing a Solar PV system with a capacity of 3.6 kW, which will be designed to work in hybrid mode. SME is currently relying on the national electric grid using about 32,800 kilowatt-hours per annum, which costs approximately MMK 4.9 million. SME also uses a diesel generator, which consumes 2,880 liters of diesel per annum, at a cost of MMK 7.2 million. With the Solar PV and Solar Dryer Dome, SME can reduce their reliance on the national electricity grid by 29,555 kilowatt-hours per annum, saving MMK 4.4 million and their diesel generator to the extent of 726 liters of diesel every year, saving MMK 1.8 million every year for the next 20 to 25 years.		
Recommendation (YES / NO)	YES		
B: Assessment of the Applicant and Due Diligence			
Review of past business performance of the Applicant and support if any received from other Donor Programs	In 2013, SME began cultivation of oyster mushrooms and other vegetables in Hlegu Township. Since 2016, SME started producing value-added products such as oyster mushroom powder, dried oyster mushroom and others.		

	Currently, SME has 13 employees and sells the dried mushrooms and mushroom powder in several cities and towns of Myanmar. SME has not received grant support in the past or for the proposed project from any other donors or organizations.
C: Technical Analysis	
Demonstration potential within Myanmar / Region / State / District / Township	The proposed Solar Dyer Dome and Solar PV installation project would be the first agribusiness in Hlegu & Hmawbi Township, which is growing fast with over 40 similar businesses. Proposed project can demonstrate that solar energy is a serious alternative source of power and results in lower power bills and less noise and smoke pollution from diesel generators, which are frequently of concern to local communities and factory employees. Further, most of the small businesses in Yangon Region rely on the national grid and diesel generator for power sources and hence, the proposed project is expected to inspire other businesses to invest in responsible practices for improving their energy efficiency.
Commercial viability measured in terms of pay-back period	Without RBF support, the proposed project will take around 7 years to pay back the investment. With the RBF grant support, the payback period is expected to around 5 years.
Service Provider / Equipment Supplier's track-record	SME has chosen two suppliers as follow: **Snacks Mandalay Co. Ltd** was established in August 2015. Their vision is value addition of agricultural raw materials, responsibly sourced from smallholders, leading to: manufacturing of safe and quality foods and raising awareness about risks of improper drying and storage technology. **Sandi Solar Co., Ltd** was founded in 2015 as a Solar Energy Company in Myanmar. They design, manufacture and install a complete line of solar power generating systems and commercializes a wide variety of solar products in Myanmar. SME chose both suppliers due to the low cost and reliable quality of the equipment.
Non-financial / non-quantifiable benefits to Employees, Local Community and Environment	The benefits of the installation of Solar Dyer Dome and Solar PV system are as follows: • Environmentally friendly energy production with reduced CO2 emissions. • Improve the local community's learning and sensitivity about sustainable development in their region. • Pave the way for long-term investments in Renewable Energy and showcase responsible business practices in their area. • Benefits the environment by reducing the reliance on fossil fuels that harm the environment by emitting greenhouse gases.
D: Project Implementation Risks	
Risks foreseen by the Applicant or assessed by RBF-SEC	Possible implementations delay due to a delay in the import of Solar PV supplies.
Suggested measures for Risk Mitigation	SME will be encouraged to place the order and pay advance to the supplier without any delays immediately after the RBF Grant Agreement is signed.
E: Results of Appraisal / Evaluation	
RBF Board's Decision	**Approved** | | **Rejected** |
RBF Board's Suggestions / Comments for implementation	
RBF Board's reasons for rejecting the Project Proposal	