

RISK ASSESSMENT AND RISK MANAGEMENT PLAN

Risk Description	Risk Assessment	Risk Management Plan
Macroeconomic Risks		
High capital and maintenance cost of SGES due to the devaluation of the local currency	Medium	Many SGES, such as those marketed under the GIZ Warm Comfort program, are made locally, which reduces the risk of price increases due to currency devaluation. Increased competition through the development of local SGES manufacturers and craftsmen should moderate cost increases. Access to finance and public awareness campaigns will increase demand and yield economies of scale for suppliers. Tax exemptions on selected SGES will reduce retail costs on these SGES.
Affordability problem due to high interest rates on loans for SGES	Medium	Tajikistan households' disposable income remains very low, limiting people's affordability of SGES purchased in a lump sum. Monthly installments for purchasing these solutions will lessen the burden on sub-borrowers. MFIs that have shown their interest in participating in this program have indicated that they will pass on the low cost of capital for onlending for "green finance." In partnership with Habitat for Humanity, two MFIs—IMON and Arvand—have made nearly 6,000 housing improvement loans at interest rates between 20%–30% since March 2011. This demonstrates that there is significant demand for SGES even at relatively high interest rates. Additionally, ADB's household survey shows significant demand for credit for solar SGES at interest rates typically offered by MFIs. Providing long-term local currency credit lines at lower interest rates than presently available to multiple MFIs that have low intermediation costs and compete in many areas of the country will improve affordability and result in lower interest rates and monthly payments.
Information Asymmetry Risks		
Lack of knowledge about SGES	Medium	Public awareness campaigns funded under the project will increase knowledge about the benefits of SGES. The project will distribute to potential clients through MFIs lessons learned through pilot projects and technical assistance provided by donors such as GIZ and Habitat for Humanity. Suppliers receiving technical assistance under the project will learn how to improve knowledge about their products in order to stimulate demand from households.

Risk Description	Risk Assessment	Risk Management Plan
Business Risks Poor quality SGES	Medium	The project will include SGES products that meet high-quality technical standards and specifications that have been developed under programs implemented by donors including GIZ and Habitat for Humanity. The project will work with suppliers and MFIs to develop and/or market additional high-quality SGES. The project will encourage MFIs to finance only high-quality SGES, and with respect especially to expensive SGES with long expected usage periods, to finance only SGES that includes reasonable warranties. MFIs will monitor selected SGES installations to ensure product quality and proper installation. With respect to SGES that require professional installation and periodic maintenance, households will be encouraged to select only experienced, competent suppliers.
MFI Default Risk	Low	Extensive financial due diligence will be performed on MFIs that apply for credit lines under the project. Only MFIs that meet all prudential requirements imposed by the National Bank of Tajikistan, that have audited financial statements prepared by highly reputable auditing firms, and that fulfil ratios that indicate good profitability and excellent underwriting of credit risk will be selected. Most MFIs that meet these eligibility criteria have large equity and demonstrated ability to manage debt from multiple lenders even during periods of high economic stress (i.e., the 2009 financial crisis).
Overall	Medium	Overall, the risks appear manageable and, if mitigation measures are effectively implemented, the project's benefits are expected to outweigh the potential risks.

ADB = Asian Development Bank, GIZ = Deutsche Gesellschaft für Internationale Zusammenarbeit, MFI = microfinance institution, SGES = smart green energy solutions
 Source: Asian Development Bank.