

RISK ASSESSMENT AND RISK MANAGEMENT PLAN

Risk Description	Risk Assessment	Mitigation Measures or Risk Management Plan
Protracted economic slowdown in the international and domestic markets may reduce growth in the renewable energy and energy efficiency subsectors	Medium	Renewable energy and energy efficiency are national development priorities. ADB's assessment indicates government support for renewable energy and energy efficiency development is expected to be sustained over the implementation period of the ADB project. The government provides various forms of support to IREDA, such as tax-free bonds and a sovereign guarantee, and IREDA also receives implicit support from MNRE in the form of equity injections. ADB will continue its dialogue with the government to ensure that such support is sustained.
Any changes to regulations or incentive programs, such as feed-in-tariffs, could affect subproject funding demand	Medium	The government's commitment to renewable energy development is based on both climate change and energy security concerns, and is viewed as a means to reduce the rapid increase in fossil fuel imports. The government's commitment to regulatory support is strong—for example, in the state of Gujarat a challenge to feed-in tariffs was declined by the independent regulator that oversees tariff matters.
Implementation of facility delayed	Medium	IREDA has participated in a large number of development assistance programs and is experienced with their administration. IREDA has sufficient market demand for its funds. Development partners (AFD, JICA, and German development cooperation through KfW) have provided TA to supplement lending to IREDA. ADB also provides IREDA with comprehensive training on safeguards and will provide further institutional capacity building, including in financial risk management.
Capacity that is built in IREDA is not sustained	Medium	IREDA is implementing a comprehensive institutional capacity development program with the support of its development partners—ADB, AFD, JICA, and German development cooperation through KfW; the latter has ongoing TA projects totaling over \$2 million that cover risk management, treasury operations, a credit risk-rating system, and international financial reporting standards. AFD has an ongoing TA totaling €300,000 and focuses on the development of new renewable energy technologies. JICA is preparing TA covering new renewable energy technologies, financial mechanisms for commercialization, and a computerized database for project monitoring and performance evaluation. ADB currently supports the operationalization of the ESSU. ADB will also provide a capacity development TA from 2014 or 2015. During the implementation of tranche 1, ADB intends to help IREDA strengthen its financial management practices, including by assessing IREDA's provision review and implementing liquidity and interest rate gap reporting. All capacity development work will be provided to IREDA in a coordinated, structured, and harmonized manner to ensure

		tasks designed by various development partners at different times and/or loan tranches can be incorporated into ADB's MFF implementation. This will provide substantial gains to IREDA, because it will be possible to apply the resulting systems to all development partner assistance (i.e., one environmental and social management system that will meet government and development partner requirements).
Revenue volatility due to market shock	Medium	IREDA's portfolio is concentrated in renewable energy subprojects. A market shock to the renewable energy sector could impact IREDA, which is also susceptible to general financial market volatility that could impact its long-term funding cost. These risks are inherent to the facility. IREDA's business plan identifies the need to diversify its concentrated sector risk by developing advisory services and venturing into uncorrelated market sectors.
Subborrower credit risk (including management and execution risk) affects loan quality	Medium	IREDA has strong renewable energy project credit review and technical evaluation capacities. Consultation with several development partners indicates that their current loan portfolios with IREDA are performing well. Ongoing and planned TA from development partners and ADB will further improve IREDA's operational capacity, including in financial risk management, credit risk rating, and international financial reporting standards.
Financial management risk over the period of ADB facility implementation.	Medium to Low	ADB and its development partners are in the process of helping IREDA improve its financial management through a coordinated capacity development program beginning in 2014. ADB will work with IREDA to assess its loan provision review from an annual to quarterly basis, implement liquidity gap reporting and interest rate risk gap reporting, and separate credit and treasury functions, among others. The capacity development work will incorporate tasks designed by various development partners over differing timeframes and loan tranches in support of ADB facility implementation. This will provide substantial benefits to IREDA, because the systems developed will be applicable to all development partner requirements (i.e., one environmental and social management system will meet government and development partner requirements). ADB will monitor and review IREDA's financial management practices throughout the facility implementation period.
Rapid asset expansion could lead to a decline in IREDA's capital adequacy	Low	Currently, IREDA is overcapitalized, with a capital adequacy ratio of about 25% for FY2013, far exceeding the RBI's prudential norm of 15% for nonbank financial institutions in India. ADB conducted a stress test of IREDA that concluded that revenue growth of 14% per annum during FY2014–FY2024 would not require any equity injection. More importantly, IREDA's compliance with the RBI prudential norms is a regulatory requirement and is unlikely to be breached. Given the Government of India's strong commitment to renewable energy development and energy security, it is expected that MNRE would provide an equity

injection in case of possible distress, if all other options fail.

Overall**Medium**

ADB = Asian Development Bank, AFD = Agence Française de Développement, CDTA = capacity development technical assistance, ESSU = environment and social safeguard unit, FY = fiscal year, IREDA = Indian Renewable Energy Development Agency Limited, JICA = Japan International Cooperation Agency, KfW = German development cooperation through KfW, MFF = multitranches financing facility, MNRE = Ministry of New and Renewable Energy, RBI = Reserve Bank of India, TA = technical assistance.
Source: Asian Development Bank.