



RISK AND OPPORTUNITIES ASSESSMENT MATRIX

Year: **2022**

Office/Unit: **Renewable Energy Research Center**

A. RESEARCH PROGRAM

#	ACTIVITIES	ISSUES		RISK	IMPACT (for all weaknesses and threats)	EXISTING CONTROL (for all weaknesses and threats)	RISK ASSESSMENT SCORE			RISK PRIORITY NUMBER	ACTION PLAN (Risks)	Current STATUS (Action Plan)	Contingency Plan	OPPORTUNITIES	ACTION PLAN (Opportunities)
		Internal (Weaknesses)	External (Threats)				SEV	OCC	DET						
Key Result Area(s): Ensuring Research Relevance (G2, KRA1) Communication of Research Results (G2, KRA5)															
A.1	Publication of research outputs	RERC-22-W1 The Center has no regular research staff.	RERC-22-T2 Transfer of the two (2) trained JO SRAs of the Center to other agencies interested to hire them	RERC-22-W1/W2/T2-R1/R2/R2 Loss of competitive advantage in doing research and extension	Limited/ No published research outputs	Hiring of Science Research Assistants (SRAs), on Job Order status	2	3	3	18 (Medium Risk)	RERC-22-APR-01 Request for regular research staff	The two (2) SRAs on Job Order Status in the Center are recommended for renewal of their contract of service	RERC-22-CP-01 Recruit more qualified affiliate faculty researchers to join the Center	RERC-22-O2 The two (2) existing Science Research Assistance (SRAs), who are registered AB Engineers, are very qualified to be given regular Science Research Specialist (SRS) position RERC-22-O4 Availability of regular faculty members with engineering and socio-economics background as affiliate researchers of the Center	RERC-22-APO-01 Request for conversion/ promotion of existing SRA position to Science Research Specialist (SRS) RERC-22-APO-02 Recommend faculty members with working knowledge on RE as affiliate researchers of the Center

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		RERC-22-W2 RERC Director scheduled to retire from service on 24 February 2022		RERC-22-W2/W1-R2/R1 Loss of managerial, facilitative and support staff	Reduced operational efficiency	Director is reporting to office until date of retirement	1	2	1	2 (Low Risk)	RERC-22-APR-02 Recommend new Director	To be implemented	RERC-22-CP-02 Wait for the Office of the VSU President to designate a new Director of the Center	RERC-22-O3 New RERC Director carrying new and innovative ideas	RERC-22-APO-03 Recommend a new Director with engineering background
		RERC-22-W3 The Center lacks laboratory facilities for the conduct of advanced RE researches in biofuels, bio-energy, and other RE-related technologies	RERC-22-T1 High competition and reduced funding for Research	RERC-22-W3/W4/T1-R3/R4/R1 Limited scope of research and inaccurate and/or incomplete data generated	Minimal research outputs	Maximize utilization of existing laboratory facilities and borrowing required equipment from the other units, as needed	2	4	2	16 (Medium Risk)	RERC-22-APR-03 Submit proposal for funding by DBM and other funding agencies for building and equipment	For implementation in the next 3 years	RERC-22-CP-03 Collaborate with other research Centers and Academic units with existing facilities	RERC-22-O1 The Philippine Government is supporting RDE of RE Technologies through R.A. 9367- The Biofuel Act of 2006 and R.A. 9513-The Renewable Energy Act of 2008	RERC-22-APO-04 Strengthen collaborations with the Department of Energy (DOE) through collaborative research RERC-22-APO-05 Submit RE-based research proposals for funding
		RERC-22-W4 The Center lacks portable equipment for field monitoring of installed RE facilities			Minimal research outputs	Maximize utilization of existing laboratory facilities and borrowing needed equipment from the other units as necessary	2	3	3	18 (Medium Risk)	RERC-22-APR-04 Request funding for field equipment from OVPREI	For implementation on for the next 3 years	RERC-22-CP-04 Borrow from other units, as needed	RERC-22-O5 Opportunity to request laboratory tools and equipment from the university and other external funding agencies	RERC-22-APO-06 Submit request for the procurement of laboratory tools and equipment to OVPREI

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			RERC-22-T3 Heavy teaching workload of potential affiliate faculty researchers	RERC-22-T3-R3 Reduced interest in conducting research	Minimal research outputs	Designation of qualified faculty members as study leaders of some RERC researches	2	3	3	18 (Medium Risk)	RERC-22-APR-05 Invite qualified faculty members from different Academic departments as affiliate faculty researchers	Two (2) faculty members of the Department of Agricultural and Biosystems Engineering are affiliate faculty researchers of the Center	RERC-22-CP-05 Recommend more qualified faculty members from the College of Engineering and Technology as affiliate faculty researchers of the Center	RERC-22-O6 Promotion of faculty researchers through their publication output RERC-22-O7 Existence of a duly accredited international scientific journal (Annals of Tropical Research) and an Institutional Journal (Science and Humanities Journal) in the Visayas State University	RERC-22-APO-07 Publish more research studies in refereed journal, ATR and SHJ.
			RERC-22-T4 Delayed procurement process and processing of financial documents of RDE funds causing delay of project implementation	RERC-22-W4-R4 Delay in the completion of the research projects	Delayed implementation of project activities due to delayed delivery of supplies and materials	Constantly follow-up the Procurement Office for the delivery status of the requested goods	2	3	3	18 (Medium Risk)	RERC-22-APR-06 Request for project extension to supplement the delay in project schedule	To be implemented	RERC-22-CP-06 Use petty cash advance to purchase small amounts of materials for immediate use while waiting for the requested supplies and materials to arrive	RERC-22-O8 Funding for publication fee in ISI/Scopus Indexed Journal upon request to OVPREI	RERC-22-APO-08 Submit article for publication to avail the publication incentive from OVPREI
A.2	Utilization of research outputs by the industry or other		RERC-22-T5 Potential intellectual piracy of	RERC-22-T5-R5 Delayed/prevent promotion	Non-utilization of research output	Non-disclosure of details of technology in project	3	3	2	18 (Medium Risk)	RERC-22-APR-07 Apply patent for	To be implemented	RERC-22-CP-07 Pilot-testing of technologies to qualified		

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Mission: Development of a highly competitive human resource, cutting-edge scientific knowledge and innovative technologies for sustainable communities and environment.

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	beneficiary		other SUCs with similar mandate	of technology		reports					patentable technologies		stakeholders		
			RERC-22-T6 Typhoons and other weather disturbances may damage the RE demonstration units in the RE Park	RERC-22-T6-R6 Loss/damage to properties	Cease in the operation of the RE demo unit	Conduct of repair and maintenance of RE demo units	2	2	3	12 (Low Risk)	RERC-22-APR-08 Repair and maintenance of RE Demonstration units	Existing JO Skilled Worker (for renewal of contract of service) assigned to do the repair and maintenance of RE demonstration units	RERC-22-CP-08 Hire Job Order Skilled Worker to conduct repair and maintenance and other related jobs		
		RERC-22-W5 The Center has no experience in participating trade fairs/exhibits to promote RE technologies		RERC-22-W5-R5 Overtaken by competition	Low adoption and commercialization of knowledge, products, and technologies	The Center has established working models of RE technologies thru its Energy Park as showcase prototype	2	3	3	18 (Medium Risk)	RERC-22-APR-09 Participate in RE trade fairs/exhibits and similar activities	To be implemented	RERC-22-CP-09 Strengthen the Renewable Energy Park's technology demonstration units with the corresponding operation manuals	RERC-22-09 Several LGUs, NGOs, and private companies are looking for appropriate RE technologies that are viable alternative sources of energy for agri-industrial purposes	RERC-22-APO-09 Propose collaboration with interested LGUs, NGOs, and private companies.

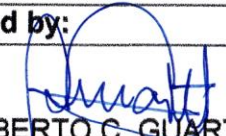
B. TECHNICAL ADVISORY EXTENSION PROGRAM

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Key Result Area(s): Community Empowerment (G3, KRA2)															
B.1	Partnerships with Local Government Units (LGUs), industries, Non-Government Organizations (NGOs), National Government Agencies (NGAs), MSMEs and other stakeholders as a result of extension	RERC-22-W6 Limited manpower. The Center has no regular research staff, one (1) permanent administrative staff, and SRAs are on Job Order status		RERC-22-W6-R6 Loss of facilitative and support staff	Reduced operational efficiency		2	2	3	12 (Low Risk)	RERC-22-APR-10 Request for plantilla positions		RERC-22-CP-10 Hire support staff on job order status	RERC-22-O10 Presence of faculty members and researchers in VSU with diverse and relevant fields of expertise on RE	RERC-22-APO-10 Recommend faculty members and researchers with diverse and relevant fields of expertise on RE as affiliate researchers of the Center
			RERC-22-T7 Constrained project implementation due to severe weather disturbances hindering the connection between two interested parties	RERC-22-W6/T7-R6/R7 Loss of opportunity for sustained RDE partnership and output dissemination	Limited to no extension projects or output		2	2	3	12 (Low Risk)	RERC-22-APR-11 Prepare alternative mode of sustaining partnership monitoring and project implementation		RERC-22-CP-11 Communicate regularly the collaborative partners through online means RERC-22-CP-12 Create and maintain Webpage and Online Newsletter	RERC-22-O11 Emerging development needs on renewable energy and interests of LGUs, industries, NGOs, NGAs, MSME and other stakeholders in this period of pandemic and climate change	RERC-22-APO-11 Needs assessment of LGUs, NGOs, NGAs, MSMEs, and other stakeholders.
Key Result Area(s): Capability Development (G2, KRA4) Enhanced Capacity of Faculty, Staff and Students to Engage in Extension (GA3, KRA1) Community Empowerment (G3, KRA2)															
B.2	Conduct of trainings and provisions of	RERC-22-W7 Limited space for face-to-face		RERC-22-W7/W8-R7/R8	Reduced budget in extension	RE Park showcasing prototype	2	3	3	18 (Low Risk)	RERC-22-APR-12	On-going implementation	RERC-22-CP-13 Produce short	RERC-22-O12 Internet infrastructure of the	RERC-22-APO-12 Request for

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	advisory service	training RERC-22-W8 No internet connectivity for online trainings and webinars		Hampered effectiveness of extension service delivery		demo units of RE technologies					Continue existing face-to-face delivery with innovative observation of safety health protocols		video on the different RE Technologies found at the Center for dissemination	country is a priority program of the Department of Information and Communications Technology (DICT) RERC-22-013 VSU is focused on providing Internet connectivity to all its campuses	internet connectivity from the university
Key Result Area(s): Communication of Research Results (G2, KRA5) Enhanced Capacity of Faculty, Staff and Students to Engage in Extension (GA3, KRA1) Community Empowerment (G3, KRA2)															
B.3	Delivery of extension programs consistent with the SUC's mandate and priority programs	RERC-22-W9 There is no regular research staff in the Center RERC-22-W10 Lack of digital media facilities and equipment	RERC-22-T8 High competition and reduced funding for Extension	RERC-22-W9/W10/T8-R9/R10/R8 Inability to meet mandated extension service deliverables	Limited nature and scope of extension services	Operational RE park, an extension program aligned with the VSU's mandate and priority programs	2	2	3	12 (Low Risk)	RERC-22-APR-13 Maintain operation of the RE Park	On-going implementation	RERC-22-CP-14 Periodic monitoring of the functionality of the RE Park	RERC-22-014 Availability of faculty members and researchers in VSU which can be tapped for extension programs and services	RERC-22-APO-13 Recommend faculty members and researchers for extension programs and services of the Center

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