

Report No: PAD5441

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT FOR

PROPOSED CREDITS

IN THE AMOUNT OF US\$15.0 MILLION TO GRENADA AND SDR\$11.5 MILLION (US\$15.0 MILLION EQUIVALENT) TO SAINT LUCIA

AND A PROPOSED GRANT

IN THE AMOUNT OF SDR 4.6 MILLION
(US\$6.0 MILLION EQUIVALENT)
TO THE ORGANISATION OF EASTERN CARIBBEAN STATES (OECS)

FOR THE

OECS SKILLS AND INNOVATION PROJECT

December 13, 2023

Education Global Practice
Latin America And Caribbean Region

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CURRENCY EQUIVALENTS

For Grenada: (Exchange Rate Effective November 8, 2023)

Currency Unit = SDRs

0.759555 SDRs = US\$1

1.316560 US\$ = SDR 1

For OECS: (Exchange Rate Effective November 13, 2023)

Currency Unit = SDRs

0.759886 SDRs = US\$1

1.315990 US\$ = SDR 1

For St. Lucia (Exchange Rate Effective November 20, 2023

Currency Unit = SDRs

0.751159 SDRs = US\$1

1.331280 US\$ = SDR 1

FISCAL YEAR

Grenada: January 1 – December 31
Saint Lucia: April 1 - March 31
Organisation of Eastern Caribbean States: July 1 – June 30

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ABBREVIATIONS AND ACRONYMS

ACE	Africa Centre of Excellence				
AM	Accountability Mechanism				
CARICOM	Caribbean Community and Common Market				
CERC	Contingent Emergency Response Component				
COVID-19	Coronavirus Disease 2019				
CSEC	Caribbean Secondary Education Certificate				
CVQ	Caribbean Vocational Qualification				
СХС	Caribbean Examinations Council				
E&S	Environmental and Social				
ECA	Europe and Central Asia				
EDMU	Education Development Management Unit				
EMIS	Education Management Information Systems				
ESMP	Environmental and Social Management Plan				
FM	Financial Management				
GBV	Gender-Based Violence				
GHG	Greenhouse Gas				
GIDC	Grenada Investment Development Corporation				
GDP	Gross Domestic Product				
GRS	Grievance Redress Service				
HEInnovate	Higher Education Institution Innovate				
IBRD	International Bank for Reconstruction and Development				
IDA	International Development Association				
IFRs	Interim Financial Reports				
ILO	International Labour Organization				
IMF	International Monetary Fund				
IPF	Investment Project Financing				
IRI	Intermediate Results Indicator				
ISCED	International Standard Classification of Education				
KTIP	Knowledge, Technology, and Innovation Platform				
LAC	Latin America and the Caribbean				
LTS	Long-Term Strategy				
M&E	Monitoring and Evaluation				
MECESUP	Higher Education Quality Improvement Program (Mejoramiento de la calidad y la equidad				
	en la educación terciaria)				
MOE	Ministry of Education				
MoF	Ministry of Finance				
MPO	Macro Poverty Outlook				
MSME	Micro, Small and Medium Enterprise				
NDC	Nationally Determined Contribution				
NEWLO	New Life Organization				
NSDC	National Skills Development Centre				

OECD	Organisation for Economic Co-operation and Development
OECS	Organisation of Eastern Caribbean States
OECSC	Organisation of Eastern Caribbean States Commission
OESS	OECS Education Sector Strategy
PCM	Private Capital Mobilized
PDO	Project Development Objective
PIU	Project Implementation Unit
POM	Project Operations Manual
RPIU	Regional Project Implementation Unit
RSC	Regional Steering Committee
SALCC	Sir Arthur Lewis Community College
SEA/SH	Sexual Exploitation Abuse and Sexual Harassment
SEP	Stakeholder Engagement Plan
SVG	Saint Vincent and the Grenadines
TAMCC	T. A. Marryshow Community College
TVET	Technical and Vocational Education and Training
UNDP	United Nations Development Programme
UWI	University of the West Indies
VR	Virtual Reality

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DATASHEET						
BASIC INFORMATION						
Project Beneficiary(ies) Grenada, St. Lucia		ation Name - Skills and Innovation Project Environmental and Social Risk				
Operation ID P179210	Investment Financing (IP	Project	Classific Low	ation		
Financing & Implemen	itation Modali	ties				
[] Multiphase Program	nmatic Approa	ich (MPA)		[√] Contingent Emergency	Response Component (CERC)	
[] Series of Projects (S	OP)			[] Fragile State(s)		
[] Performance-Based	Conditions (P	BCs)		[√] Small State(s)		
[] Financial Intermedia	aries (FI)			[] Fragile within a non-fra	gile Country	
[] Project-Based Guara	antee			[] Conflict		
[] Deferred Drawdown	n			[] Responding to Natural or Man-made Disaster		
[] Alternative Procure	ment Arrange	ments (APA)		[] Hands-on Expanded Implementation Support (HEIS)		
Evaceted Approval Dat		Exposted Cla	scing Date			
Expected Approval Date Expected Clo 11-Jan-2024 08-Jan-2030						
Bank/IFC Collaboration	00 3411 2030					
No						
Proposed Development Objective(s)						
To (i) enhance youth transversal and advanced technical skills, strengthen regional collaboration in post-secondary						

Components

effectively to it.

education, and foster collaborative innovation; and (ii) in case of an Eligible Crisis or Emergency, respond promptly and

Component Name	Cost (US\$)
C1. Fostering regional collaboration for skills and innovation in the post- secondary space	4,800,000.00
C2.Strengthening post-secondary institutions and collaborative innovation	27,000,000.00
C3. Project Management and Technical Assistance	4,200,000.00
C4. Contingent Emergency Response Component (CERC)	0.00

Organizations

Borrower: Grenada, Organization of Eastern Caribbean States (OECS), Saint Lucia

Ministry of Education, Sustainable Development, Innovation, Science, Technology and

Implementing Agency: Vocational Training of Saint Lucia, Ministry of Education, Youth, Sports & Culture of

Grenada, Organisation of Eastern Caribbean States (OECS) Commission

PROJECT FINANCING DATA (US\$, Millions)

Maximizing Finance for Development

Is this an MFD-Enabling Project (MFD-EP)? Yes

Is this project Private Capital Enabling (PCE)? No

SUMMARY

Total Operation Cost	36.60
Total Financing	36.60
of which IBRD/IDA	36.00
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Development Association (IDA)	36.00
IDA Credit	30.00
IDA Grant	6.00

Non-World Bank Group Financing

Commercial Financing	0.60
Unguaranteed Commercial Financing	0.60

IDA Resources (US\$, Millions)

	Credit Amount	Grant Amount	SML Amount	Guarantee Amount	Total Amount
St. Lucia	15.00	0.00	0.00	0.00	15.00
Regional	10.00	0.00	0.00	0.00	10.00
National Performance-Based Allocations (PBA)	5.00	0.00	0.00	0.00	5.00
Other	0.00	6.00	0.00	0.00	6.00
Regional	0.00	6.00	0.00	0.00	6.00
Grenada	15.00	0.00	0.00	0.00	15.00
National Performance-Based Allocations (PBA)	5.00	0.00	0.00	0.00	5.00
Regional	10.00	0.00	0.00	0.00	10.00
Total	30.00	6.00	0.00	0.00	36.00

Expected Disbursements (US\$, Millions)

WB Fiscal Year	2024	2025	2026	2027	2028	2029	2030
Annual	1.61	5.22	5.56	7.81	7.49	7.28	1.03
Cumulative	1.61	6.83	12.39	20.20	27.69	34.97	36.00

PRACTICE AREA(S)

Practice Area (Lead)	Contributing Practice Areas
Education	Finance, Competitiveness and Innovation
CLIMATE	
Climate Change and Disaster Screening	
Yes, it has been screened and the results are discussed in th	e Operation Document
SYSTEMATIC OPERATIONS RISK- RATING TOOL (SORT)	
Risk Category	Rating
1. Political and Governance	 Moderate
2. Macroeconomic	 Moderate
3. Sector Strategies and Policies	Moderate
4. Technical Design of Project or Program	Substantial
5. Institutional Capacity for Implementation and Sustainabil	ty • Substantial
6. Fiduciary	Substantial
7. Environment and Social	Low
8. Stakeholders	Low
9. Other	
10. Overall	Substantial
POLICY COMPLIANCE	
1 Ozier Communitati	
Policy Does the project depart from the CPF in content or in other	significant respects?
[] Yes [√] No	
Does the project require any waivers of Bank policies? [] Yes [✓] No	

ENVIRONMENTAL AND SOCIAL

Environmental and Social Standards Relevance Given its Context at the Time of Appraisal

E & S Standards	Relevance
ESS 1: Assessment and Management of Environmental and Social Risks and Impacts	Relevant
ESS 10: Stakeholder Engagement and Information Disclosure	Relevant
ESS 2: Labor and Working Conditions	Relevant
ESS 3: Resource Efficiency and Pollution Prevention and Management	Relevant
ESS 4: Community Health and Safety	Relevant
ESS 5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Not Currently Relevant
ESS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources	Not Currently Relevant
ESS 7: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	Not Currently Relevant
ESS 8: Cultural Heritage	Not Currently Relevant
ESS 9: Financial Intermediaries	Not Currently Relevant

NOTE: For further information regarding the World Bank's due diligence assessment of the Project's potential environmental and social risks and impacts, please refer to the Project's Appraisal Environmental and Social Review Summary (ESRS).

LEGAL

Legal Covenants

Sections and Description

Grenada: Schedule 2, Section I.A(b): Establish, no later than sixty (60) days after the Effective Date, and thereafter maintain throughout Project implementation a Project Implementation Unit ("PIU") with composition, staff in numbers and with qualifications, resources, terms of reference, and functions acceptable to the Association, as further set forth in the Project Operational Manual "POM"), including: (i) a national Project coordinator; (ii) an innovation and entrepreneurship specialist; (iii) an environmental and social specialist; and (iv) an administrative secretary.

OECS: Schedule 2, Section I.A(a): Establish, no later than one hundred twenty (120) days after the Effective Date, and thereafter maintain throughout Project implementation, a RPIU with composition, staff in numbers and with qualifications, resources, terms of reference, and functions acceptable to the Association, as set forth in the Project Operational Manual ("POM"), including: (i) a Project manager; (ii) a Project Assistant; (iii) a financial management specialist; (iv) a procurement specialist; and (v) an environmental and social specialist.

Saint Lucia: Schedule 2, Section I.A(a): Establish, no later than sixty (60) days after the Effective Date, and thereafter maintain throughout Project implementation, a Project Implementation Unit ("PIU") with composition, staff in numbers and with qualifications, resources, terms of reference, and functions acceptable to the Association, as further set forth

in the Project Operational Manual "POM"), including: (i) a Project manager; (ii) a financial management specialist; (iii) a procurement specialist; and (iv) an environmental and social specialist.

OECS: Schedule 2, Section I.A(c): Establish, no later than ninety (90) days after the Effective Date, and thereafter maintain throughout Project implementation, a Regional Steering Committee ("RSC"), with composition, resources, terms of reference and functions acceptable to the Association, as further set forth in the POM.

OECS: Schedule 2, Section I.A(d): Appoint, no later than ninety (90) days after the Effective Date, and maintain throughout Project implementation, a chair to the Regional Steering Committee, with terms of reference and functions acceptable to the Association, as further set forth in the POM.

Grenada: Schedule 2, Section I.A(d): Appoint, no later than ninety (90) days after the Effective Date, and maintain throughout Project implementation, three (3) representatives to the Regional Steering Committee ("RSC"), with terms of reference and functions acceptable to the Association, as further set forth in the POM.

Saint Lucia: Schedule 2, Section I.A(c): Appoint, no later than ninety (90) days after the Effective Date, and maintain throughout Project implementation, three (3) representatives to the Regional Steering Committee ("RSC"), with terms of reference and functions acceptable to the Association, as further set forth in the POM.

Grenada (Schedule 2, Section I.A(e)); OECS (Schedule 2, Section I.A(e)); Saint Lucia (Schedule 2, Section I.A(d): Develop and adopt a POM, satisfactory to the Association, no later than forty-five (45) days after the Effective Date.

Grenada (Schedule 2, Section I.A(f)); OECS (Schedule 2, Section I.A(f)); Saint Lucia (Schedule 2, Section I.A(e): Submit to the Association, as further detailed in the POM, (i) a by-yearly interim financial report within forty-five (45) days after the close of each six-month period, and (ii) an annual audit report within six (6) months of the close of the financial year.

Grenada (Schedule 2, Section I.A(g)); and Saint Lucia (Schedule 2, Section I.A(f)): Ensure adequate coordination between the PIU and the other Participating Country PIU, as well as with the OECS's RPIU, in accordance with procedures set forth in the POM.

OECS: Schedule 2, Section I.A(g): Ensure adequate coordination between the RPIU and the Participating Countries' PIUs in accordance with procedures set forth in the POM.

Grenada: Schedule 2, Section I.C 2. To facilitate the carrying out of Parts 2.9A, 2.10A and 2.11A of the Project, MoE shall enter into an agreement with GIDC ("Subsidiary Agreement") under terms and conditions approved by the Association.

Grenada: Schedule 2, Section I.D: 1. The Recipient, through MoE, shall cause GIDC to develop the Regional Grants Manual, validated by the Regional Steering Committee and in a manner and with contents acceptable to the Association.

Saint Lucia: Schedule 2, Section 1.C: 1. The Recipient, through MoE, shall develop the Regional Grants Manual, validated by the Regional Steering Committee and in a manner and with contents acceptable to the Association.

Grenada: Schedule 2, Section I.E 2: The Recipient, through MoE, shall cause GIDC to make each Competitive Matching Grant under a Competitive Matching Grant Agreement with the respective Eligible Beneficiary on terms and conditions approved by the Association.

Saint Lucia: Schedule 2, Section I.D.2: The Recipient, through MoE, shall make each Competitive Matching Grant under a Competitive Matching Grant Agreement with the respective Eligible Beneficiary on terms and conditions approved by the Association.

Grenada (Schedule 2, Section I.G) and Saint Lucia (Schedule 2, Section I.F): In order to ensure the proper implementation of contingent emergency response activities under Part 4 of the Project ("Contingent Emergency Response Part"), the Recipient shall ensure that the Project is carry out in accordance with this Section.

Conditions

Туре	Citation	Description	Financing Source
Disbursement	OECS, Schedule 2, Section III.B	No withdrawal shall be made for payments made prior to the Signature Date.	IBRD/IDA
Disbursement	Grenada, Schedule 2, Section III.B	No withdrawal shall be made: (a) for payments made prior to the Signature Date; (b) under Category 2 unless and until all of the following conditions have been met in respect of said expenditures: (i) the Subsidiary Agreement has been signed, in form and substance acceptable to the Association; (ii) GIDC has developed and adopted the Regional Grants Manual and a Competitive Matching Grants Agreement template in form and substance acceptable to the Association and the Regional Steering Committee; and (iii) GIDC has developed and adopted an action plan, as required in Part 2.11A, in form and substance acceptable to the Association and the Regional Steering Committee. (b) under Category 3 unless and until all of the following conditions have been met in respect of said expenditures: (i) (A) the Recipient has determined that an Eligible Crisis or Emergency has occurred, and has furnished to the Association a request to withdraw Financing	IBRD/IDA

		amounts under Category 3; and (B) the Association has agreed with such determination, accepted said request and notified the Recipient thereof; and (ii) the Recipient has adopted the CERC Manual and Emergency Action Plan, in form and substance acceptable to the Association.	
Disbursement	Saint Lucia, Schedule 2, Section III.B	No withdrawal shall be made: (a) for payments made prior to the Signature Date; (b) under Category 2 unless and until all of the following conditions have been met in respect of said expenditures: (i) the Recipient has developed and adopted the Regional Grants Manual and a Competitive Matching Grants Agreement template in form and substance acceptable to the Association and the Regional Steering Committee; and (ii) the Recipient has developed and adopted an action plan, as required in Part 2.11B, in form and substance acceptable to the Association and the Regional Steering Committee. (c) under Category 3 unless and until all of the following conditions have been met in respect of said expenditures: (i) (A) the Recipient has determined	IBRD/IDA

that an Eligible Crisis or Emergency has occurred, and has furnished to the Association a request to withdraw Financing amounts under Category 3; and (B) the Association has agreed with such determination, accepted said request and notified the Recipient thereof; and (ii) the Recipient has adopted the CERC Manual and Emergency Action Plan, in form and substance acceptable to the Association.

I. STRATEGIC CONTEXT

A. Country Context

- 1. The Organisation of Eastern Caribbean States (OECS) is an inter-governmental organization dedicated to regional integration in the Eastern Caribbean. The OECS, established in 1981 through the Treaty of Basseterre, aims to drive and support sustainable development through regional integration, collective action, and development cooperation. Member States of this economic union are meant to adopt a common approach to trade, health, education, and the environment. All factors of production, including people, are able to move freely throughout the Economic Union Area. Grenada and Saint Lucia, the two countries participating in this regional Project, are part of the seven founding members of the OECS. The two countries have a combined population of 297,416, which places them among the smallest countries in the world in terms of land area, population, and Gross Domestic Product (GDP).
- 2. Eastern Caribbean countries face several key challenges, including vulnerabilities to external shocks, low growth, and high poverty rates.⁴ OECS Member States are generally highly open economies that are heavily dependent on external demand for their goods and services, particularly tourism, which exposes them to economic volatility due to external shocks. This region exhibits substantial fluctuations in GDP growth rates, with fiscal policies tending to exacerbate output volatility. Although Grenada and Saint Lucia find themselves at a similar level of development with slightly less than US\$10,000 Gross National Income per capita in 2021, economic growth differed substantially between the two countries before the Coronavirus Disease 2019 (COVID-19) pandemic, with an average growth rate of GDP per capita in 2010-2018 of 2.49 in Grenada and only 0.98 in Saint Lucia.⁵ The countries also experience relatively high poverty rates, with the latest estimates indicating that one in four people live below the national poverty line in both Grenada and Saint Lucia.⁶
- 3. The Eastern Caribbean is particularly vulnerable to interconnected hazards exacerbated by climate change, such as extreme weather events and disease outbreaks. The effects of climate change on this region will likely result in higher temperatures, changing rainfall patterns, rising sea levels, and increased intensity and frequency of natural disasters. Vulnerability to natural disasters is one of the Caribbean states' main economic challenges. In particular, hurricanes pose significant destructive potential due to high wind speeds, heavy rains, and powerful storm surges that produce flooding, which may increase the threat of vector-borne diseases. In the Caribbean, annual losses from hurricanes alone amount to US\$835 million. Examples of the potential scale of these hazards include the 2004 hurricane Ivan in Grenada, which damaged 97 percent of public schools, resulting in one month of school closure, students displaced both within and outside the country for several months, and makeshift schools set up in tents. Hurricane Tomas in Saint Lucia in 2010 also caused massive flooding that badly damaged school buildings and destroyed equipment. The region is also exposed

¹ The protocol members, who include the seven founding members, are Antigua and Barbuda, Dominica, Grenada, Montserrat, Saint Kitts and Nevis, Saint Lucia, and Saint Vincent and the Grenadines. They enjoy full membership. Anguilla, the British Virgin Islands, Martinique, and Guadeloupe are associate members.

² Mission statement available on OECS' website: https://www.oecs.org/en/who-we-are/about-us

³The Economic Union Area includes comprises seven (7) Protocol Member States: Antigua and Barbuda, Commonwealth of Dominica, Grenada, Montserrat, Saint Kitts and Nevis, Saint Lucia and Saint Vincent and the Grenadines.

⁴ Although only two of the OECS member countries will participate in the OECS Skills and Innovation Project, other member states will benefit from regional activities.

⁵ World Bank (2022), Macro Poverty Outlook (MPO) 2022. IMF Country Report No. 22/254

⁶ Poverty & Equity Briefs, World Bank, 2020.

⁷ IMF (2022), "Fiscal Rules in Disaster-Prone Countries: Implications for the ECCU."

⁸ GFDRR (2015) Small Island States Resilience Initiative. Washington, DC: Global Facility for Disaster Reduction and Recovery.

⁹ World Bank, Hurricane Ivan Emergency Project, 2004

¹⁰UNDP, Post-disaster Early Recovery in a Caribbean Small Island Developing State, 2007

¹¹ Saint Lucia Education for All 2015 National Review.

to geophysical hazards, as both countries face a medium risk of earthquakes and tsunamis. Additionally, Saint Lucia faces a medium risk of volcanic hazards,¹² including damaging eruptions, earthquakes, or tsunamis could impact citizens' wellbeing. These natural disasters thus affect school attendance and can subsequently impact students' performance and attainment.¹³

- 4. **Despite recent crises, OECS Member States' economies remain excessively reliant on tourism.** Before the COVID-19 pandemic, travel and tourism contributed to over 40 percent of GDP in Grenada, and over two-thirds of GDP in Saint Lucia. A large share of the workforce was employed in the tourism sector: in Saint Lucia, 19 percent of women and 16 percent of the population aged 18-29 had jobs in the purchase and sales sector, while 13 percent and 14 percent, respectively, worked at restaurants, bars, and hotels. The education system has thus focused on producing a workforce with specialized skills for the hospitality industry (such as chefs, hotel clerks, and tour guides). Recent severe external shocks, such as natural disasters and the recent COVID-19 pandemic, demonstrated the long-term unsustainability of this development model. While the average economy in Latin America and Caribbean (LAC) contracted by 7 percent during the pandemic, the decline was almost 14 percent in the OECS, with Grenada and Saint Lucia experiencing GDP per capita falls of 13.8 and 20.7 percent, respectively, due to a 70 percent drop in earnings from tourism. The pandemic contributed to a rapid rise in unemployment (from 15 percent in both Grenada and Saint Lucia in 2019 to 28 percent and 20 percent, respectively, in 2020), with youth and women disproportionately affected due to their high participation in the services sector. Indeed, nearly 45 percent of those who had been employed pre-pandemic in Saint Lucia had stopped working by May 2020, and over 70 percent of households reported falling incomes.
- 5. **OECS countries face a pressing need to invest in human capital and innovation to attain economic diversification and enhance resilience to shocks.** A new development model anchored in the provision of high-value-added services can enhance Eastern Caribbean countries' resilience to climate-related disasters and other external shocks. This requires investment in human capital and in innovation. Ensuring that everyone has robust foundational and higher-order cognitive skills, as well as the socio-emotional skills increasingly demanded across sectors and occupations, would facilitate a smooth school-to-work transition for youth, allow workers to benefit from reskilling and upskilling opportunities, and enhance resilience to the impacts of global megatrends, such as climate change, technological change, and demographic transformation. Removing barriers to innovation for firms is also needed to reach economic resilience, diversification and reduce dependence on tourism.

B. Sectoral and Institutional Context

6. The considerable skills shortages and mismatches in OECS underpin high youth unemployment and hamper productivity, which negatively affects business competitiveness, undermines employment opportunities, stimulates emigration, and reduces returns to education, creating a vicious cycle. The Human Capital Index estimates that a child born in the Eastern Caribbean will be 53 to 60 percent as productive as they could be if they had enjoyed full education, health, and nutrition, and this is to a large extent due to low quality of education.¹⁹ Youth unemployment rates in the

¹² Thinkhazard.org, Saint Lucia and Grenada

¹³ Spencer, Polachek, Srobl (2016), How Do Hurricanes Impact Achievement in School, A Caribbean Perspective.

¹⁴ World Travel and Tourism Council (2021), "Global Economic Impact & Trends 2021."

¹⁵ COVID-19 High-Frequency Phone Survey (HFPS). World Bank (2020).

¹⁶ World Development Indicators, World Bank.

¹⁷ Saint Lucia: World Bank WDI; Grenada: Eastern Caribbean Central Bank (2020) Annual Economic and Financial Review.

¹⁸ WB HFPS conducted in May 2020.

¹⁹ The figures for Grenada and Saint Lucia are 57 percent and 60 percent, respectively (World Bank. 2020. The Human Capital Index 2020 Update: Human Capital in the Time of COVID-19. World Bank, Washington, DC). There are also significant gender gaps in both schooling and learning, with boys completing almost half a year less of education and attaining lower scores on learning assessments. The learning crisis has been exacerbated by the COVID-19 pandemic, with simulations for Grenada forecasting learning losses of 1.7 learning-adjusted years of schooling (from 8.3 to 6.6).

region are generally high, and Saint Lucia and Grenada have the highest levels of youth unemployment in the OECS, with over 40 percent of 15 to 24 year-olds, mostly women, facing unemployment in the years preceding the pandemic. ²⁰ These figures increased significantly during the COVID-19 pandemic. Low participation in post-secondary education, especially among men, contributes to shortages of skilled workers. ²¹ Additionally, youth with completed tertiary education in the OECS are less likely to be employed than their peers in LAC, potentially indicating skills mismatches. ²² At the same time, firms in Grenada identify an inadequately educated workforce as the second-biggest obstacle to doing business, ²³ and almost 40 percent of firms in Saint Lucia see the current level of workers' skills and education as a significant hindrance to competitiveness. ²⁴ Moreover, about 57 percent of workers in Saint Lucia in 2019 were underqualified for their jobs. ²⁵ Importantly, employers also note that graduates lack transversal skills (such as communication, work ethic, and adaptability), as well as technical skills. ²⁶ Skills shortages and mismatches can be partly explained by the high emigration rate of the highly skilled population, which also points to low availability of good jobs.

- 7. **Partly due to missing skills, OECS firms are not adequately investing in and engaging in innovative activities.** Only 2.7 percent of firms in Grenada and 3.2 percent of firms in Saint Lucia have a department or group of professionals dedicated to research and development. Only around 14 percent of firms in participating OECS countries report having introduced new or improved goods or services into the market.²⁷ A lack of qualified employees with the skills required for innovation, including transversal skills, is a major obstacle to innovation in the OECS. This obstacle is coupled with the perception that the market is too small for the cost of innovation.²⁸ Generating in-demand skills through post-secondary institutions is a critical element to improve innovation in the OECS.
- 8. The quality of post-secondary education suffers from inadequate investment and limited capacity at both institutional and regional levels. Most OECS Member States spend between 12 and 14 percent of their education budget on post-secondary education, compared to 25 percent in Latin America and 32 percent in Organisation for Economic Cooperation and Development (OECD) countries.²⁹ National Colleges, the main providers of post-secondary education in the OECS, have outdated laboratories and workshops, which reduces the effectiveness of their programs. There is insufficient digital infrastructure to promote student engagement and facilitate learning continuity during climate- or health-related shocks. Teachers' and students' limited digital skills and lack of equipment and connectivity are obstacles to tapping into the opportunities offered by digital education.³⁰ Moreover, National Colleges do not have digital devices adapted for use by students with disabilities or special educational needs, affecting equitable access.³¹ Investments in digital infrastructure

²⁰ Data is for 2013-2016, cited in WB OECS Systematic Regional Diagnostics (2018), p. 65, Figure 5-8.

²¹ The tertiary enrollment rate in Saint Lucia is 16 percent, compared to the 54 percent average in LAC, and it is highly skewed towards women in terms of National College enrollment (with female shares of 60.7 percent in Saint Lucia and 64.2 percent in Grenada) and graduation (female share of 2021-22 graduates being 31 and 35 percentage points higher than the male share in Saint Lucia and Grenada, respectively).

²² World Bank (2018). Organization of Eastern Caribbean States System Regional Diagnostic. Report Number: 127046-LAC. June, 27, page 65.

²³ World Bank Enterprise Surveys, 2010.

²⁴ The 2018 Investment Climate Assessment Survey and Report for Saint Lucia. Preville & Associates Consulting Group (Saint Lucia) Limited. Submitted November 15, 2018.

²⁵ ILO Data, Labor Force Surveys.

²⁶ Jordan, D. (2020), Saint Lucia's Labour Market Needs Assessment Survey Report 2020. Giordano and Associates, Government of Saint Lucia and World Bank; SkYE Caribbean Employers Survey, 2020.

²⁷ Innovation, Firm Performance and Gender (IFPG) Issues in Enterprises in the Caribbean Survey 2020. Compete Caribbean Partnership Facility (2021).

²⁸ Crespi, Gustavo Atilio et al. "Exploring Firm-Level Innovation and Productivity in Developing Countries: The Perspective of Caribbean Small States." (2017).

²⁹ OECS Statistics Digest for 2019-2020.

³⁰ The development of digital learning content and the adoption of EdTech remains limited and uneven across the OECS. Royston E. and Germain, A. (2020) An Assessment of the Transition to Virtual Learning In the OECS (August), pp 6-9.

³¹ World Bank-OECS COVID-19 Rapid Response Survey.

and sustainable laboratories are needed to make education more effective, relevant, and personalized.³²

- 9. Collaboration between the private sector and post-secondary institutions is limited and inconsistent,³³ hindering firms' capacity to find the necessary skills and maximize their innovation potential. The contribution of OECS post-secondary institutions to research, local development, and innovation remains largely untapped, as the OECS spends only 0.3 percent of its GDP on research and development, compared to 2 to 3 percent in developed economies.³⁴ Joint initiatives like research projects, intellectual property initiatives, and publications are rare. Investment in building managerial and organizational capabilities and increasing firm capabilities through adoption and transfer of technology from universities, are crucial for emerging innovation ecosystems in the OECS. Creating mechanisms for direct technology transfer, including personnel rotations, can enhance alignment of knowledge supply and firm demand.
- 10. Recognizing the importance of improving skills and supporting innovation to foster growth and shared prosperity and the advantages of the regional approach, OECS Member states and the OECS Commission (OECSC) are investing in skills development efforts and innovation across sectors.³⁵ Given the small size of OECS economies, the limited fiscal space, and the OECSC' mandate, strategic actions at the regional level can improve the acquisition of transversal and advanced technical skills by the OECS workforce and achieve more results with fewer resources, especially by leveraging economies of scale.³⁶ Building on current efforts, which include regional qualification framework and vocational qualification scheme³⁷ as well as regional entrepreneurship programs,³⁸ this Project will support the OECS' vision by developing a shared approach to post-secondary education and innovation in the region and strengthening collaboration at the regional level and among key stakeholders in Member States.

C. Relevance to Higher Level Objectives

11. This Project is aligned with Pillars 1 (Economic growth and competitiveness) and 2 (Human and social development) of the Eastern Caribbean Regional Partnership Framework for the period FY22-FY25,³⁹ and specifically the High-Level Outcome 2: Improved Human Capital and Objective 4: Strengthen Health Services Delivery and Skills Enhancement Programs. As specified in this document, priorities for the Bank's regional engagement include "(i) utilizing EdTech and digital solutions to improve pertinent academic offer for individuals in need for reskilling; (ii) mainstreaming student services for support and remediation, student counseling, and career services; (iii) building new technical programs in key strategic sectors of potential growth, such as the blue economy and digital animation; and (iv) developing

³² Developing skills in the virtual environment can reduce the material, time, and expert accessibility costs of training and result in a more rapid adaption of skills to private sector needs. Rampersad, David, H. K. H.-S. (2019). Tertiary Education—Private Sector Engagement: A Strategic approach to catalysing innovation, economic revitalisation, and inclusive development in CARICOM countries. *Revista Educación Superior Y Sociedad (ESS)*, 31(31), 42-57.

³³ World Bank and Caribbean Educational Research Centre (CERC) (2023). Survey of OECS National Colleges.

³⁴ Browne, R. A., & Shen, H. (2017). Challenges and Solutions of Higher Education in the Eastern Caribbean States. International Journal of Higher Education, 6(1), 169-179.

³⁵ This includes the Caribbean Digital Transformation Project (P171528) approved in 2020, which has a component on digital skills.

³⁶ One example is when institutions (and countries) specialize in training for certain education fields that are of common interest and with high value-added potential, but also imply high input costs.

³⁷ These are the Caribbean Qualification Framework (CQF) and the Caribbean Vocational Qualification (CVQ) scheme. While the CQF provides a common reference framework for comparison of educational qualifications across countries, including OECS Member States, it lacks granularity in the descriptors of skills that may be acquired by individual students and valued by the labor market. CVQs do provide granularity and assessments but only for certain technical skills; moreover, their uptake has been low (because they are not compulsory to access various jobs in OECS States, and because employers are not aware of their benefits) and concentrated at the basic skills level, and there has been limited involvement of National Colleges in the delivery of these qualifications.

³⁸ Including the OECS Technology Ecosystem Competitive Hub for Innovation and Entrepreneurship (OECS Techie) and Eastern Caribbean Green Entrepreneurship Initiative.

³⁹ Report No. 160349-LAC, discussed by the board on May 17, 2022.

information systems to provide critical information for enhancing the Technical and Vocational Education and Training (TVET) programs' quality and relevance and monitor student transitions from education into employment." This Project is also aligned with the World Bank's Green, Resilient and Inclusive Development (GRID) approach by supporting investment in human capital, which will allow youth to meet current and future skills needs, and by promoting private sector-led innovation as a driver of climate smart productivity growth.⁴⁰

- 12. **The Project is aligned with regional and national development plans.** It is aligned with the OESS 2012-2026 Strategic Imperative 7: Increase access to and relevance of Tertiary and Continuing Education, as well as cross-cutting themes of strengthening boys' education and integrating technology in the classroom and in education, and with Articles 4-6 on harmonization of education policy in the 2022 OECS Declaration on Education. It also supports the aspirations expressed in Saint Lucia's Medium Term Development Strategy 2020-2023 in terms of Promotion of Post-secondary TVET and Provision of Post-Secondary and Tertiary Programs, as well as Grenada's National Sustainable Development Plan 2020-2035 in terms of Outcome #2: Educated, Productive, Highly Skilled, Trained, and Conscious Citizens.
- 13. **The Project also contributes to the IDA20 priorities.** Specifically, it helps implement the IDA20 commitment to a lifecycle approach in human capital investments, in particular, on improving quality and relevance of tertiary education and skills and employability of youth, which is aligned with both Human Capital and Jobs and Economic Transformation Special Themes. Moreover, the Project will contribute to Policy Commitment 6 of the Gender and Development Special Theme by implementing gender-based violence (GBV) prevention and response protocols as part of safe and inclusive educational institutions. As
- 14. The Project is consistent with the two participating countries' Nationally Determined Contributions (NDC). In the latest NDC submitted to the United Nations Framework Convention on Climate Change, Grenada committed to a 40 percent reduction of its carbon emissions by 2030, based on its 2010 level, on mitigation; and to implement actions around 6 strategic pillars (including institutional structure; climate-responsive water management; integration of climate change adaptation into national sustainable development plans and projects; food security) on adaptation. Saint Lucia committed to 7 percent of emissions reduction by 2030 in the energy sector relative to 2010 on mitigation; and to build climate resilience in the tourism, water, agriculture, fisheries, infrastructure and spatial planning, terrestrial, coastal, and marine resources management, education, and health sectors on adaptation. Saint Lucia and Grenada are currently implementing their National Adaptation Plans (NAPs), both of which highlight education as a priority sector, and are currently working on their Long-Term Strategy (LTS). The Project contributes to the NDCs by including climate change considerations in the regional strategic framework for post-secondary education, as well as in learning standards and assessments and harmonized teachers' qualifications. This it does by collecting data on post-secondary institutions' vulnerabilities, promoting climate-efficient features in post-secondary institutions, and developing or enhancing post-secondary programs in key sectors that will facilitate a transition to lower-carbon economies. Finally, the Project will strengthen human capital and innovation within key prioritized sectors that contribute to low Greenhouse Gas (GHG) emissions and increase OECS countries' resilience to natural disasters (e.g., sustainable agro-industry, blue economy, bio-economy, circular economy, smart and sustainable tourism, renewable and clean energies, and health sciences). The Bank is currently working on an Eastern Caribbean Country Climate Development Report (P179742), and its findings will inform Project implementation.
- 15. The Project is aligned with the Maximizing Finance for Development approach as it mobilizes private capital into innovation by co-financing collaborative innovation projects and removes binding constraints to private sector

⁴⁰ World Bank Group (2021). From COVID-19 Crisis Response to Resilient Recovery – Saving Lives and Livelihoods while Supporting Green, Resilient and Inclusive Development (GRID).

⁴¹ World Bank (2021). "IDA20 Special Theme: Human Capital."

⁴² World Bank (2021). "IDA20 Special Theme: Gender and Development."

growth by addressing the lack of transversal and advanced technical skills. Investment in innovation is low in the OECS, particularly by the private sector. The Project will support, through technical assistance and funding, collaborative innovation between post-secondary education institutions and the private sector. This will mobilize private capital into innovation by requiring co-financing from entrepreneurs and firms participating in the competitive matching grants program. Through this mechanism, the Project is expected to raise about US\$600,000 in Private Capital Mobilized (PCM), which corresponds to the co-financing portion of the collaborative innovation projects by participating firms and entrepreneurs (minimum between 10 percent and 20 percent depending on the business scale). Fostering (i) the regional innovation ecosystems through knowledge exchanges, networking, and (ii) collaboration in innovation activities across the OECS region and removing institutional and regulatory barriers to collaborative innovation, is expected to attract further private sector investment in innovation. Furthermore, the shortage of transversal and advanced technical skills in OECS countries hinders competitiveness, productivity, and economic growth as it limits the ability of the private sector to acquire the workforce needed for investing and creating jobs that allow it to expand and innovate. Informed by the private sector, activities under subcomponent 2.2 will improve teaching and learning of such skills by, inter alia, providing technical assistance to develop or enhance program curricula and training teachers.

II. PROJECT DESCRIPTION

A. Project Development Objective

16. To (i) enhance youth transversal and advanced technical skills, strengthen regional collaboration in post-secondary education, and foster collaborative innovation; and (ii) in case of an Eligible Crisis or Emergency, respond promptly and effectively to it.

PDO Level Indicators

- 17. Achievement of the PDO will be monitored and measured through the following indicators:
 - i. Enhance skills: Students graduating from enhanced programs in selected post-secondary institutions, disaggregated by sex (number). 43
 - ii. Strengthen regional collaboration: Common learning standards for priority skills endorsed by OECS Member States.
 - iii. Strengthen regional collaboration: Increased participation of non-nationals from OECS in student and/or teacher exchanges in supported post-secondary institutions.
 - iv. Foster collaborative innovation:⁴⁴ Innovations adopted by entrepreneurs resulting from collaboration with post-secondary education institutions (number).⁴⁵

B. Project Components

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⁴³ Enhanced programs refer to programs revised or developed under the Project according to existing standards for advanced technical skills, and/or to the new standards developed under subcomponent 1.1 for transversal skills, and/or improved teaching through integration of transversal skills in pedagogical practices. Learning assessments developed under subcomponent 1.1 will allow monitoring of these skills, but these outcomes will not be used as a PDO Indicator as they will only be implemented in year 3 of the Project, and first results will be available in year 4.

⁴⁴ Collaborative innovation is defined as innovation resulting from collaboration between entrepreneurs or private sector firms and post-secondary institutions.

⁴⁵ Innovation is defined as per the Oslo Manual, 2018, OECD, Guidelines for Collecting, Reporting and Using Data on Innovation, as «a new or improved product or process (or combination thereof) that differs significantly from the unit's previous products or processes and that has been made available to potential users (product) or brought into use by the unit (process). This definition uses the generic term "unit" to describe the actor responsible for innovations. It refers to any institutional unit in any sector, including households and their individual members» See Box 1 in Annex 2.

- 18. The Project will achieve its development objectives by leveraging regional externalities in post-secondary education and innovation investments among OECS Member States. This is expected to promote higher quality teaching and learning, generate more relevant education programs, contribute to the development of the regional innovation ecosystem, and better prepare current and future students to thrive in the ever-changing world of work, including by building the human capital needed for countries to transition to lower-carbon economies. As a result, 1,200 postsecondary graduates are expected to acquire enhanced skills, 4 innovations are expected to be adopted by entrepreneurs, and at least 120 entrepreneurs and firms are expected to engage in collaborative innovation projects with post-secondary institutions. In particular, the first component, implemented by the OECSC, will benefit all OECS Member States by enhancing regional collaboration in post-secondary education (subcomponent 1.1) and strengthening regional innovation ecosystems with private sector participation (subcomponent 1.2).46 While Component 2, implemented by Grenada and Saint Lucia, will focus on strengthening the capacity of selected post-secondary institutions to deliver a high-quality learning experience and will support private-sector-led innovation partnerships with those institutions, these activities are designed to have significant regional externalities. Subcomponent 2.1 will support assessment of capacity and needs of post-secondary institutions (developing or adopting diagnostic tools, which can be used beyond the two participating countries in the future), and the development and implementation of Regional Enhancement Plans (REPs) for strengthening the capacity of post-secondary institutions, which will feature explicit mechanisms for sharing resources and conducting knowledge exchanges with other OECS Member States. Priority transversal and advanced technical skills will be further supported through subcomponent 2.2 to make post-secondary education provision more effective, relevant, and personalized, with developed resources and lessons learned being shared with OECS Member States. The collaborative innovation between post-secondary education institutions and entrepreneurs in Grenada and Saint Lucia sponsored under subcomponent 2.3 will benefit the overall OECS region through the development of innovative solutions to address regional challenges; these solutions can eventually be adopted by other OECS countries. The OECS will benefit also from the increased dynamism in the regional innovation ecosystem, particularly since stakeholders from other OECS countries will be encouraged to participate in collaborative innovation projects or in the panels evaluating and selecting beneficiaries of the grants sponsoring these projects.
- 19. The Project will focus on a set of priority transversal skills and advanced technical skills in prioritized sectors. Priority transversal skills are defined as foundational and higher-order cognitive, socioemotional, digital, entrepreneurial, and managerial skills that were chosen to reflect the increasing demand by the private sector in the regional and global labor market, and the importance of acquiring these skills for labor market success irrespective of sector or occupation. Priority transversal skills will include the skills that employers in the region value the most (such as communication, problem-solving, adaptability, teamwork, and initiative).⁴⁷ To support climate change mitigation and adaptation, learning standards for skills for the transition to a low-carbon economy (i.e., "green and blue skills") will also be included, with definitions adapted to the context of the OECS region. The Project will also support acquisition of advanced technical skills in prioritized sectors (e.g., sustainable agro-industry, blue economy, bio-economy, circular economy, smart and sustainable tourism, renewable and clean energies, health sciences, and creative industries).⁴⁸ The selection of specific priority transversal skills and prioritized sectors, which are key for both education and innovation activities of the Project, will be finalized during the first twelve months of Project implementation in consultation with local and regional private sector stakeholders (especially with the emergent private sector that has the potential to drive future development and growth in the OECS). The selected priority skills and prioritized sectors will be validated by the Project's Regional Steering

⁴⁶ The Project will remain open for other OECS countries to join this operation during implementation.

⁴⁷ SkYE Caribbean Employers Survey, 2020; Jordan, D. (2020), Saint Lucia's Labour Market Needs Assessment Survey Report 2020. Giordano and Associates, Government of Saint Lucia and World Bank, p. 53.

⁴⁸ The list of prioritized sectors will also be validated by the RSC in consultation with regional private sector stakeholders and included in the POM; the supported advanced technical skills in the prioritized sectors will rely, where possible, on the existing competence standards developed under the CVQ framework, particularly targeting Levels 3 and 4.

Committee (RSC) and included in the Project Operations Manual (POM).

- 20. The Project will include activities to mitigate and adapt to the effects of climate change. Details on how each subcomponent will address these considerations are presented in Annex 3.
- 21. Component 1: Fostering regional collaboration for skills and innovation in the post-secondary space (US\$4.8 million). Component 1 will support the development of an overarching regional strategic framework for post-secondary education and of mechanisms to enhance collaboration among OECS Member States on post-secondary education, the improvement of post-secondary data at the regional level, and the development of a regional innovation ecosystem with strong participation of post-secondary institutions. The component will be implemented by the OECSC through an IDA grant. The benefits of the activities and outputs in this Component will accrue to all countries in the OECS region.
- i. Subcomponent 1.1: Developing regional collaboration in post-secondary education (US\$3.2 million). The objective of this subcomponent is to develop a comprehensive regional approach to post-secondary education and enhance collaboration among key stakeholders in the OECS post-secondary education ecosystem. This subcomponent will finance technical assistance for the development of a regional strategic framework for post-secondary education. This regional strategic framework, based on initial assessment of the post-secondary education sector, will provide a regional vision for post-secondary education and a coherent set of actionable strategies to implement selected reforms in post-secondary education.⁴⁹ The regional strategic framework will integrate aspects related to climate change, particularly mitigation and adaptation measures, and a Monitoring and Evaluation (M&E) framework to follow the implementation of said measures. These measures could include, inter alia, GHG emission reduction for postsecondary institution construction and repairs, teacher training modules, and climate awareness modules for students. This subcomponent will also finance the development of common learning standards and assessment tools for priority skills, harmonized standards for post-secondary teachers and institution leaders, and a regional platform (OECS Virtual Campus) for virtual knowledge exchange for faculty and students and their connection to labor market opportunities. 50 Green skills and aspects related to mitigation and adaptation to climate change will be covered under the development of learning standards and assessments, as these are part of the priority skills defined under this Project. Operating costs involved in piloting these collaboration mechanisms, as well as training costs for implementation of the developed tools and frameworks, will also be financed.

As data collection and exchange can be both a mechanism and a prerequisite for strong collaboration, this subcomponent will also support the development of a regionally inter-operable Education Management Information System (EMIS) architecture for post-secondary education to gather, share, integrate, and analyze regional data on post-secondary education in OECS member States, including development or adaptation of software as well as training of users and operational cost for piloting. The development of the EMIS architecture will also include sustainability considerations, in particular in terms of support for maintenance costs in the event of climate-related or other disasters, and collection of data on post-secondary institutions' GHG emissions and their vulnerability to climate change, to inform the implementation of adequate mitigation and adaptation measures over time. This will complement the OECSC's ongoing efforts to develop an OECS EMIS for all education levels.

ii. Subcomponent 1.2. Fostering regional innovation ecosystems with the participation of post-secondary institutions (US\$1.6 million). This subcomponent will support the creation of a Knowledge, Technology, and Innovation Platform (KTIP) to foster knowledge exchanges, networking, and collaboration in innovation activities in the Project's prioritized sectors for post-secondary education institutions, entrepreneurs, firms, the diaspora, and other key ecosystem

⁴⁹ The framework will include the development of the REP template, which will be used for institutional strengthening of OECS post-secondary institutions, including by the selected post-secondary institutions supported in subcomponent 2.1.

⁵⁰ This does not involve the creation of new data centers.

actors.⁵¹ The subcomponent will provide technical assistance to the OECSC and build capacity in the creation and operationalization of the KTIP.⁵² The KTIP will address the disconnect between post-secondary education institutions and the private sector, the information gaps and the lack of collaborative initiatives, and weak ecosystem linkages in general, which particularly affect youth labor market and business perspectives. Also, it will foster discussions and collaborations on innovative solutions for mitigation, adaptation, and building resilience to climate change in the OECS region. It will be an integral part of the OECS Virtual Campus developed under subcomponent 1.1.⁵³

- 22. Component 2: Strengthening post-secondary institutions and collaborative innovation (US\$27 million; US\$600,000 unguaranteed commercial financing). Component 2 will provide direct support to National Colleges and other selected post-secondary institutions in participating countries to implement Regional Enhancement Plans (REPs), develop new or enhance existing programs for priority skills, and support collaborative innovation projects, with the objective of promoting improved learning environments and fostering better skills and innovation in the OECS to respond to increasing private sector demand for skills. Some of the regional initiatives financed under Component 1, such as the development of common learning standards and harmonized post-secondary teacher qualifications, will be piloted and implemented at the national level through Component 2. The KTIP will also be leveraged to identify potential innovation projects and collaborators, as well as attract investors for competitive grants for collaborative innovation to be implemented under subcomponent 2.3. The component will be implemented by Project Implementation Units (PIUs) in Saint Lucia and Grenada. Most direct and indirect benefits of this Component will be regional, but some activities will accrue more benefits to national stakeholders.⁵⁴
- i. Subcomponent 2.1: Developing and implementing Regional Enhancement Plans (US\$15.5 million). This subcomponent will support the preparation of medium-term (5-year) REPs by two National Colleges - T. A. Marryshow Community College (TAMCC) in Grenada and Sir Arthur Lewis Community College (SALCC) in Saint Lucia – as well as by New Life Organisation (NEWLO) in Grenada and the National Skills Development Centre (NSDC) in Saint Lucia; it will also finance activities for the first phase of these REPs once they are validated and approved by the RSC. Establishment of REPs aims to: (i) develop capacity of post-secondary institutions for strategic planning and implementation with clear governance, financing, and M&E mechanisms; and (ii) develop state-of-the-art learning environments in these postsecondary institutions that will also benefit students and/or faculty in other institutions in the region. The REPs will be informed by a comprehensive diagnostic covering physical infrastructure, equipment, curricula, learning materials, program offerings, teaching practices, research activities, student services, internal quality assurance systems, governance mechanisms, project management capacity, collaboration and exchanges with other post-secondary institutions in the OECS, engagement with the private sector, EMIS, and GBV prevention and response protocols. Based on the diagnostics, three to five priority areas will be identified by the institutions for funding by the Project. The list of eligible activities will include purchase of equipment and learning materials, repairs of laboratories and workshops, strengthening of information systems, training for teachers and administrative staff, research activities, establishing partnerships with private sector for work-based learning, knowledge exchange programs, and student services.

PIUs in each participating country will finance the REPs based on the modules' action plans and the technical

⁵¹ Key innovation ecosystem actors include universities, colleges, TVETs, research centers, technology transfer centers, entrepreneurs, enterprises, the diaspora, incubators, accelerators, technology extension providers, business development service providers, and other service providers, metrology and standards institutions, investors, etc.

⁵² Examples of similar initiatives include: challenge.gov, the European Technology & Innovation Platform on Wind Energy (ETIPWind), the EU Research and Innovation Community Platform, the Knowledge Exchange Platform (KEP), the African Union-European Union Innovation Platform, INDIAai, and Mission Innovation.

⁵³ The KTIP does not include the construction of a data center.

⁵⁴ The total financing for the Project from the IDA20 Regional Window includes the small-state provision regarding the 20 percent cap on the country allocation to operations supported by the Regional Window in a financial year (IDA20 Regional Window guidelines, para. 9(b)(i)).

specifications provided by the selected post-secondary institutions. Activities financed through REPs will have a regional scope and include innovative activities to improve learning environments. REPs will follow requirements in terms of: (i) commitment to sharing new or updated resources and equipment with students and/or faculty from other OECS countries; (ii) engagement in knowledge exchanges or joint research with faculty from other OECS countries; (iii) sustainability plans to finance the second phase of REP implementation beyond the life of the Project; and (iv) targeted activities for students and teachers with disabilities.

- Subcomponent 2.2: Developing programs to foster priority skills (US\$2.5 million). This subcomponent will provide technical assistance for selected post-secondary institutions to improve teaching and learning of priority transversal skills and advanced technical skills in prioritized sectors. Four post-secondary programs will be developed or enhanced per country, which will eventually become flagship programs for the OECS region. These programs will be aligned with the areas of specialization defined in the regional strategic framework for post-secondary education developed under subcomponent 1.1. "Green" skills (such as ecosystem management, pollution prevention, solar systems engineering) will be emphasized to support the transition to low-carbon economies, particularly on how to use low-carbon technologies and business models. The identification of the specific programs in the prioritized sectors will involve identifying emerging trends in the private sector and analyzing the skills demands to promote growth in these sectors, building upon analytical work carried out under Component 1, including input from labor market assessments, focus groups with regional employers, and lessons learned from the KTIP. The subcomponent will finance technical assistance to develop or adapt program curricula, training of teachers to implement these programs, purchase of software licenses for off-the-shelf digital solutions to foster priority skills and for tutoring to remediate foundational skills, and technical assistance to develop and enhance career guidance services to facilitate the school-to-work transition, particularly for the developed or enhanced programs. Technical assistance to develop and enhance career guidance services will account for less than 20 percent of the financing, with most of the funding allocated to technical assistance to improve teaching and learning of priority skills.
- Subcomponent 2.3: Enabling the innovation ecosystem and sponsoring collaborative innovation (US\$9 million; US\$600,000 unguaranteed commercial financing). This subcomponent will support collaborative innovation between post-secondary institutions and the private sector in Grenada and Saint Lucia through three activities. First, it will support the development of the entrepreneurial and innovation national agenda, with special focus on post-secondary education institutions in Grenada and Saint Lucia, based on institutional and regulatory assessments that will inform action plans at institutional and national levels. Second, it will provide technical assistance and funding through competitive matching grants to foster collaborative innovation between faculty and students of post-secondary institutions participating in the Project, entrepreneurs in Grenada and Saint Lucia, and the private sector and other stakeholders in the Project's prioritized sectors. Sponsored collaborative innovation projects are expected to encourage the private sector to adopt technologies or develop innovative solutions to make production processes and services more sustainable and responsive to the effects of climate change. The leadership and participation of women in the collaborative innovation projects will also be encouraged by incorporating gender preferential criteria at equal quality conditions of project proposals. Competitive matching grants will be of two types: (i) individual grants to students collaborating with firms or to entrepreneurs collaborating with post-secondary education institutions; and (ii) grants to consortia between faculty and/or students and entrepreneurs, and other potential stakeholders (e.g., diaspora, research centers). The average minimum co-financing portion for both types of matching grants from both the private firms and entrepreneurs is expected to be between 10 and 20 percent depending on their business size, which will allow to leverage around US\$600,000 in PCM. The grants will not finance activities or projects with high GHG emissions or that generate risks of carbon lock-in. Finally, this subcomponent will support capacity building in the grants implementing entities in the areas of innovation and innovation-led entrepreneurship, ensuring adequate project implementation and sustainability.

- 23. **Component 3: Project Management and Technical Assistance (US\$4.2 million).** Component 3 will provide technical assistance to support the implementation of Project activities and finance the establishment and functioning of three PIUs. This component will strengthen selected aspects of the OECS post-secondary education system's performance, including:
 - i. *Articulation of pathways:* a consultancy to analyze pathways between secondary and post-secondary education and to provide recommendations on how to strengthen the link between these education levels in the OECS countries.
- ii. *Financing of the post-secondary education system:* a consultancy to provide recommendations on how to develop sustainable financing mechanisms for the post-secondary education sector in OECS countries.
- iii. *Technical support to identify the barriers men face to participation in post-secondary education:* based on the results of this study, the Project will provide recommendations to support boys' attainment of secondary education and promote participation of men in post-secondary education.
- iv. Just-in-time technical assistance related to priority topics for the post-secondary education system, such as students with disabilities and various educational needs, will also be financed under this Project.
- 24. This component will also provide financing to strengthen institutional capacity and support project management, including: (i) a PIU in the OECSC to procure regional activities for Component 1; (ii) PIUs in Saint Lucia and Grenada to carry out activities under Component 2 that are country specific but have regional externalities; (iii) training of staff involved in the Project to strengthen supervision, monitoring, and evaluation of specific Project activities; and (iv) carrying out of technical and Project audits. The subcomponent will also finance staff and consultant costs to support project management, procurement, financial management, environmental and social and monitoring and evaluation functions, technical advisory services, training, operating costs, acquisition of goods directly related to the Project, and incremental operating costs incurred by implementing agencies to support Project implementation. Student and teacher satisfaction studies would also be implemented under this Component.
- 25. Component 4: Contingent Emergency Response Component (CERC) (US\$0 million). Due to the OECS' high vulnerability to natural disasters, including those exacerbated by climate change, and its vulnerability to global shocks, as exposed by the COVID-19 crisis, a CERC is included in the Project. This Component will facilitate the use of critical resources in the event of an eligible national emergency. It will have an initial zero budget allocation but would allow for rapid reallocation of project funds in the event of an eligible natural disaster or crisis that has caused or is likely to imminently cause major adverse economic and/or social impacts. Activation of the CERC would involve: (i) a government request from participating countries submitted by their Ministry of Finance to the Bank for support of an eligible event through the CERC; and (ii) the preparation of an acceptable Emergency Action Plan for the use of the CERC funds that must be approved by the Bank. A specific Contingency Emergency Response Operations Manual will be prepared for this component, detailing financial management (FM) and procurement aspects, environmental and social aspects, and any other necessary implementation arrangements. In case of an event triggering the component, a reallocation of funds would be introduced to loan disbursement categories to fund the proposed activities under this component. The implementation agency for this CERC would be determined in accordance with the Contingent Emergency Response Manual.
- 26. Project financing by component for each country and the OECSC (OECSC) is summarized below.

Table 1: Project Financing by Country / Institution (US\$ million)

Table 111 Toject Financing by country / 1	OECSC	Grenada	Saint Lucia	Total
Component 1: Fostering regional collaboration for skills and				
innovation in the post-secondary space	4.80	0.00	0.00	4.80

1.1 - Developing regional collaboration in post-secondary education	3.20	0.00	0.00	3.20
1.2 - Fostering regional innovation ecosystems with the participation of post-secondary institutions	1.60	0.00	0.00	1.60
Component 2: Strengthening post-secondary institutions and				
collaborative innovation	0.00	13.50	13.50	27.00
2.1 - Developing and implementing Regional Enhancement				
Plans	0.00	7.75	7.75	15.50
2.2 - Developing programs to foster priority skills	0.00	1.25	1.25	2.50
2.3 - Enabling the innovation ecosystem and sponsoring				
collaborative innovation	0.00	4.50	4.50	9.00
Component 3: Project Management and Technical Assistance		1.5	1.50	4.20
Component 4: Contingent Emergency Response Component	0.00	0.00	0.00	0.00
Total	6.00	15.00	15.00	36.00

Cross-Cutting Priorities

- 27. Gender. There are significant gender gaps in post-secondary enrollment in the OECS, with men being less likely to enroll and graduate, and these gaps are wider than the LAC average. However, women's higher participation in postsecondary education does not translate into advantages in the labor market, as women have lower labor force participation and face higher unemployment rates and lower business ownership rates. To address the first of the two gender gaps, the Project will provide technical assistance to identify the barriers men face to participation in postsecondary education, which, existing evidence suggests, include lower learning outcomes in previous education levels, the absence of early warning systems and targeted student retention interventions, and men's aspirations and expectations, as informed by social norms. Based on the results of this study, the Project will provide recommendations to support male attainment of secondary education, and promote male participation in post-secondary education by making postsecondary learning environments more responsive to their needs, including through the development of regional standards for student services, with counseling and mentoring activities tailored to men's specific needs, considering the multi-faceted causes of dropouts (economic, academic hardship, family-related issues and social norms). To address the observed disadvantage of women in the labor market and business life, career guidance services supported in subcomponent 2.2 will also include specific modules to facilitate integration into the labor market for women and entrepreneurship development, particularly in male-dominated occupations and sectors. An indicator tracking progress around the first of these gender gaps through the gender gap in graduation from National Colleges in the two participating countries is included in the results framework. In addition, the Project will implement mitigation measures against Sexual Exploitation Abuse and Sexual Harassment (SEA/SH), such as the development of a grievance redress mechanism for the Project and include SEA/SH in professional development modules for post-secondary teachers. Finally, the selection process of innovation projects to be sponsored under subcomponent 2.3 will include affirmative action gender criteria among proposals of equal quality.
- 28. **Inclusive Education.** The Project will include measures to ensure the inclusion of learners with disabilities. The Stakeholder Engagement Plan (SEP) includes meaningful consultations with organizations of people with disabilities, which began during Project preparation. Organizations of students with disabilities, parents' organizations, and other civil society organizations (such as the National Council for Persons with Disabilities in Saint Lucia) are mapped as part of the SEP and will be consulted during Project implementation. These consultations will help identify barriers to post-secondary education and employment for persons with disabilities. Building on the consultations, the Project will generate an analysis of disability inclusion in post-secondary education in OECS countries to inform implementation and incorporate

features promoting disability inclusion in its design. The Project will identify constraints faced by learners with disabilities as part of post-secondary institutions' comprehensive diagnostics under subcomponent 2.1, and include targeted activities to support students and teachers with disabilities in the REPs. Training under subcomponent 2.2 will seek to tackle and eliminate biases against learners and instructors with disabilities. The indicator "Post-secondary teachers trained on integrating priority transversal skills in teaching practices, including on aspects related to gender and special educational needs" will also be tracked to ensure actions to foster inclusive education under the Project.

- 29. **Citizen Engagement**. The Project incorporates a citizen-oriented design, with relevant stakeholders consulted throughout preparation and implementation as indicated in the SEP and the findings of those consultations informing the design of planned activities. As part of subcomponent 1.1, the development of the regional strategic framework for post-secondary education, as well as standards and learning assessments, will involve participants from OECS countries engaging through regional workshops held at different stages of the process to ensure ownership. The KTIP under subcomponent 1.2 will develop knowledge-sharing communities and collaboration and networking among different stakeholders in the OECS region. This activity will not only support the development of the innovation ecosystem and raise awareness of innovation-led entrepreneurship as a career option for youth, but it will also provide information for policy makers and education leaders to improve their offer. The diagnostics under subcomponent 2.1 will also engage a variety of stakeholders to ensure a comprehensive assessment of challenges and constraints in the development of the REPs. To monitor citizen engagement in implementation, an indicator on citizen engagement has been included in the Results Framework; the Project will undertake satisfaction surveys of post-secondary students on skills acquired and post-secondary teachers on teaching practices. The feedback from the surveys will be used to inform implementation improvements during the Project's lifetime.
- 30. **Climate -Benefits.** A summary of Project activities to mitigate and adapt to the effects of climate change are presented in Annex 3.

C. Project Beneficiaries

31. The Project's primary beneficiaries will be 40,000 youth (defined as 18 to 34 years of age) who are currently enrolled or will enroll in post-secondary institutions in the OECS region and will benefit from regional interventions to foster collaboration in the post-secondary education space and new tools to assess priority skills, as well as 120 entrepreneurs and firms who would participate in collaborative innovation projects. Student beneficiaries would include 10,000 students, of whom at least 5,000 would be female, who are currently enrolled or will enroll in post-secondary institutions in the two participating countries. In addition, the Project will benefit teachers, counselors, and administrators of OECS post-secondary education institutions, including the two National Colleges (TAMCC in Grenada and SALCC in Saint Lucia) and another two post-secondary institutions (NSDC in Saint Lucia and NEWLO in Grenada) selected for participation in REPs, as well as training agencies, regulatory bodies, and social partners working on TVET through the development of new or enhancement of existing programs on priority skills. In addition, entrepreneurs, firms and employers will benefit from technology transfer, collaborative innovation and research, and incubation support resulting from the Project's innovation activities. Local communities will also benefit indirectly and from encouraged collaboration in innovation projects with entrepreneurs and other actors, as the Project's activities are expected to improve local labor market conditions and contribute to climate change mitigation and adaptation.

D. Results Chain

- 32. The Project's theory of change relies on the following assumptions:
 - i. There is effective coordination among the three PIUs at the regional and national levels.

- ii. There is a willingness to support innovation and regional partnerships at the regional level.
- Adequate capacity and prioritization for Project activities exists at the regional and national levels. iii.
- The private sector is willing to engage with post-secondary institutions. iv.

Figure 1. Results Chain

Shortages of advanced skills High-Level High youth unemployment Limited innovation and collaboration between academia and industry Challenges At the regional level At the country-level Challenges Lack of a shared vision for post-secondary Inadequate quality and relevance of · Policy, institutional and regulatory education in the region and limited regional framework for collaborative innovation is post-secondary programs collaboration mechanisms Low investments in and limited capacity cumbersome and underdeveloped. Disconnect between post-secondary education of post-secondary institutions. · Lack of firms' capabilities to innovate institutions and the private sector, information Low innovation and entrepreneurial and coordination failures. gaps, lack of collaborative initiatives, and weak capacity of post-secondary institutions ecosystem linkages Develop a regional strategic framework for postsecondary education (1.1) · Assess innovation and entrepreneurial Develop regional learning standards and assessment frameworks for priority transversal potential of post-secondary institutions Design and implement capacity and take transformative actions in key and advanced technical skills (1.1) strengthening plans in 4 postareas (2.3) Develop common standards for post-secondary secondary institutions (2.1) · Systemic assessment to address policy, teachers and leaders (1.1) Develop or enhance programs in the institutional and regulatory constraints Develop a Virtual Campus for regional Project's prioritized sectors** (2.2). and gaps hindering collaborative Activities collaboration among post-secondary faculty, Train teachers in integrating priority innovation by post-secondary institutions. students, and other stakeholders (1.1) transversal skills in teaching practices the private sector and other relevant Develop interoperable post-secondary EMIS innovation ecosystem actors (2.3) architecture to collect and analyze data (1.1) Facilitate school-to-work transition for Sponsor collaborative innovation projects Creation of a KTIP* to foster knowledge students in enhanced programs (2.2) between students and faculty from postexchanges, networking and collaboration in secondary institutions and entrepreneurs innovation activities across the OECS region in in the Project's prioritized sectors** (2.3) Project prioritized sectors (1.2) · Transformative actions taken by the Regional strategic framework developed · Students benefiting from direct. National Governments to strengthen Learning standards, learning interventions to enhance learning the innovation ecosystem and enable assessment frameworks for priority skills · Laboratories or workshops with improved collaborative innovation. developed learning environments Regional Enhancement Plans (REPs) Firms and entrepreneurs participating Standards for post-secondary teachers and in sponsored collaborative innovation Outputs leaders developed. designed and implemented projects with post-secondary OECS Virtual Campus developed. · Students enrolled in enhanced programs in institutions. Regionally-interoperable post-secondary selected post-secondary institutions EMIS architecture developed. Post-secondary teachers trained on Firms and entrepreneurs actively participating in integrating priority transversal skills in teaching Enhanced skills: Students graduating from enhanced programs in selected post-secondary institutions Strengthened regional collaboration: Common learning standards for priority skills endorsed by OECS Expected Outcomes Strengthened regional collaboration: Increased participation of non-nationals from OECS in student and/or teacher exchanges Fostered collaborative innovation: Number of innovations adopted by entrepreneurs resulting from collaboration with post-secondary education institutions

Long Term Outcomes

Improved youth skills, employability, and entrepreneurship Higher quality jobs and business opportunities More sophisticated and diversified economy

^{*} KTIP: Knowledge, Technology and Innovation Platform.
** Prioritized sectors: sustainable agroindustry, blue economy, bioeconomy, circular economy, smart and sustainable tourism, renewable and clean energies, health sciences, and creative industries.

E. Rationale for Bank Involvement and Role of Partners

- 33. The Bank has a long-standing partnership with the OECSC and OECS Member States on education, skills, and innovation. This Project complements Bank support to Saint Lucia through the Human Capital Resilience Project (P170445), which focuses on improving the labor market relevance of skills in selected sectors through TVET in secondary and post-secondary vocational institutions. The proposed Project will also build on engagement with the OECSC and National Colleges in developing virtual laboratories and piloting the use of the metaverse for post-secondary education, as well as conducting research on post-secondary education through the Advisory Services and Analytics task 'Supporting LAC's Capacity to Develop Virtual Laboratories for Technical and Technological Education Amid COVID-19 (P176832)'. Ongoing efforts under Digital Skills and Technology Adoption (Component 3) of the Caribbean Digital Transformation Project (P171528) provide relevant background and complementary activities to promote digital skills in the two participating countries, as well as for the OECS region. Project activities will complement ongoing support for some of the prioritized sectors, such as the blue economy and health sciences, maximizing the impact of World Bank investments. Activities related to information systems at the regional and institutional levels will benefit from the ongoing OECS Data for Decision-Making Project (P174986).
- 34. The Bank can leverage its global experience in supporting post-secondary education sector reforms and innovation systems. This includes experience with Chile's progressive yet structural reorientation of the tertiary sector towards results and accountability, and supporting establishment of Centers of Excellence in multiple countries.⁵⁷ Moreover, the Bank has accumulated experience from previous programs supporting the development and implementation of initiatives focused on innovation and business growth, including from Argentina, and the ongoing Unleashing the Blue Economy of the Caribbean Project (P171833).⁵⁸ Finally, as a global convener, the Bank will contribute to strengthening existing knowledge-sharing and coordination platforms across the region for continued capacity building to effectively respond to educational and labor market demands.
- 35. Leveraging partnerships is key for the success of this Project. The Bank is an active member of the OECS Regional Education Partners Group, which will be leveraged to ensure coordination with other development partners working on post-secondary education. In particular, the proposed Project will build on the engagement of the Caribbean Development Bank with SALCC as part of their Education Quality Improvement Project. Moreover, the Project will explore complementarities with the British Commission, which is implementing the Skills for Youth Employment program for mostly disadvantaged youth.

F. Lessons Learned and Reflected in the Project Design

36. The Project will leverage lessons learned from the design and implementation of skills-related projects in the OECS region, including in Saint Lucia, Grenada, and SVG.⁵⁹ Enhanced readiness is key for timely implementation, especially since OECSC and participating countries face important operational and fiduciary capacity constraints and heavy

⁵⁵ Activities will benefit from the Education Sector Analyses and Education Sector Plans developed under the Global Partnership for Education-funded System Capacity Grant for Education Sector Plans in the OECS (P179416).

⁵⁶ Unleashing blue economy in the Caribbean (P171833) and OECS Regional Health (P168539).

⁵⁷ Chile: Higher Education Improvement Project – MECESUP1 (P055481); Tertiary Education Finance for Results Project – MECESUP2 (P088498); Tertiary Education Finance for Results Project – MECESUP3 (P111661); Strengthening of State Universities in Chile (P163437); Centers of Excellence: African Higher Education Centers of Excellence Project I (ACE I, P126974), ACE II (P151847), and the ACE Impact Project (P164546).

⁵⁸ Argentina: Innovation Program for Smart Growth (PINCRI) (P175143).

⁵⁹ These include the OECS Skills for Inclusive Growth Project for Saint Lucia (P097141) and Grenada (P095681), Saint Lucia Human Capital Resilience Project (P170445), Human Development Service Delivery Project in St. Vincent and the Grenadines (P154253), and the Supporting LAC's capacity to develop Virtual Laboratories for technical and technological education Advisory Services and Analytics (P176832).

administrative processes that can delay the hiring of key resources for PIUs. To mitigate this risk, the process of drafting the Terms of Reference and advertising for key PIU positions is initiated by the three counterparts, with prioritization of fiduciary positions. Key positions at the OECSC and at the country levels are expected to be filled by Project effectiveness.

- 37. Simplifying implementation arrangements and carefully assigning project implementation roles is essential in the context of regional projects. This Project follows the World Bank's Independent Evaluation Group's recommendations for regional projects to simplify arrangements and minimize the layers of accountability, as well as rely on national institutions for execution and implementation of country-level program interventions, and on regional institutions for supportive services, such as coordination, data collection, and specialized technical assistance. To that end, Project teams at the country level will include a limited number of staff (mainly for project management and fiduciary functions) and work directly with the Ministries of Education for M&E, and with the Ministry of Environment for Environmental and Social (E&S) management in Grenada. Simple reporting mechanisms from the Project team to the Education Permanent Secretaries and Regional Steering Committee (RSC) will be implemented, as detailed in Annex 2.
- 38. Another lesson from regional projects in OECS countries is to simplify project design and adopt realistic implementation timelines. This includes minimizing the number of activities per subcomponent to focus on priority deliverables. Estimating implementation period based on actual processing times at the national and regional levels is also key to ensure timely completion of activities. Regional activities under Component 1 are grouped into packages to minimize the number of consultancies to be carried out. The REPs under Component 2 will also include grouped activities and small contracts will be avoided. Timelines for rehabilitation of laboratories and workshops will be carefully defined with experts during the diagnostic phase in the first year of implementation.
- 39. The Project has incorporated lessons learned from Bank projects promoting innovation through collaboration between academia and industry and competitive matching grants support, as well as from Bank knowledge products. This includes Bank-financed projects promoting innovation and collaboration between academia and industry though matching grants in Peru,⁶⁰ Argentina,⁶¹ and Colombia.⁶² The Project has also built its design based on analytical work produced by the World Bank.⁶³ Finally, the Project considers lessons learned from the design and launch of the Unleashing the Blue Economy of the Caribbean Project, which promotes Micro, Small and Medium Enterprises (MSMEs) and value chains development in OECS countries around the blue economy.

III. IMPLEMENTATION ARRANGEMENTS

A. Institutional and Implementation Arrangements

- 40. Implementation of regional level activities will be carried out by a PIU within the OECSC, which is an administrative structure of the OECS. The OECS is administered by a central Secretariat headed by a Director General. The OECSC has the fiduciary capacity to implement grant funding; it has successfully utilized PIUs to implement Bankfinanced operations.
- 41. A Regional PIU (RPIU) will be established, with technical staff from the Education Development Management Unit (EDMU), Competitive Business Unit, and fiduciary staff. The Program Director of the OECSC EDMU, through the

⁶⁰ Strengthening the Science, Technology and Innovation System in Peru (P156250); Strengthening Peru's National Science, Technology and Innovation System (P176297) and Access with Quality in Higher Education Project - PACES (P160446).

⁶¹ Access with Quality in Higher Education Project - PACES (P160446).

⁶² Innovation Program for Smart Growth PINCRI (P175143).

⁶³ See Technical, Economic and Financial Analysis section for details.

RPIU, will have overall coordination responsibility for the Project and direct administration of grant resources. The team will report to the OECS Program Directors through the Project Manager. The Project team will include a core team of experts (Project Manager, Project Assistant, Procurement Specialist, Financial Management Specialist, Environmental and Social Specialist). Other specialists such as a Monitoring, Evaluation, Reporting and Learning Specialist; Education Specialists on information systems, post-secondary education, laboratory equipment, and EdTech; and Private Sector/Innovation and Entrepreneurship Specialists will be hired as consultants as needed. The RPIU will coordinate closely with Ministries of Education of participating countries, country PIUs, OECS National Colleges, other selected post-secondary institutions, and other relevant regional stakeholders, such as the Caribbean Examinations Council (CXC), the University of West Indies (UWI), and Chambers of Commerce, to ensure coordination and smooth project implementation. Roles, responsibilities, and communication channels among the Project's main stakeholders will be further defined in the Project Operations Manual (POM).

- 42. **Component 2 activities will require country-level implementation arrangements.** These arrangements will seek to build on existing project implementation experience and capacities within the Ministries of Education (MOE) and centralized fiduciary functions housed within Ministries of Finance. The Permanent Secretaries of MOE in Grenada and Saint Lucia, through the PIUs, will have overall coordination responsibility for all matters relating to the Project and direct responsibility for the administration of IDA credit resources. Arrangements by country are described below.
- 43. **Saint Lucia.** A new PIU will be established within the MOE. The PIU team include: (i) a Project Manager; (ii) a financial management specialist; (iii) a procurement specialist; and (iv) an E&S specialist. A Project Officer would also be financed through subcomponent 2.1. In addition to these functions, the Government of Saint Lucia would finance an Innovation Officer, an Accounts Clerk, and an Administrative Secretary as part of the PIU. The PIU's office will be financed by the Government of Saint Lucia. The innovation grants under subcomponent 2.3 will be managed by the Innovation Division within the Ministry of Education, Innovation, Science, Technology and Vocational Training, whose capacity will be built as part of subcomponent 2.3.
- 44. Grenada. A new PIU will be established within the MOE led by a National Project Coordinator, financed by the Project. Fiduciary functions will be centralized at the Ministry of Finance (MoF). An Accountant from the Accountant General's Department in the MoF will work under the supervision of the Accountant General and will be responsible for all FM matters. This staff will be fully dedicated to the Project. As civil servants, their remuneration will be borne by the MoF. The Central Procurement Unit in the MoF will assign a Procurement Specialist to undertake all procurement activities of the Project. While the Procurement Specialist will be housed within the centralized MoF Central Procurement Unit, the specialist will provide dedicated procurement support to the Project and will thus be financed by this Project. An Innovation and Entrepreneurship Specialist will also be hired under subcomponent 2.3. The Project will finance the recruitment of a part-time E&S Management Specialist. To build capacity for E&S management within the Government of Grenada and for sustainability of the E&S functions, this position will provide strong mentorship to assigned Ministry of Environment staff. This institutional capacity building requirement will be stated in the terms of reference and will be included in the performance management measures for the position. The Project will also finance an administrative secretary for the PIU. The innovation grants under subcomponent 2.3 will be managed by the Grenada Investment Development Corporation (GIDC) whose capacity will be strengthened as part of the subcomponent activities (the role of GIDC is detailed in Annex 1). This arrangement will be reflected through a subsidiary agreement between GIDC and the Government of Grenada, and the signing of this agreement will be a disbursement condition for innovation grants.
- 45. **An RSC will oversee implementation of Project activities.** The RSC will be chaired by the OECSC, and comprise representatives from the Ministries of Education; Ministry of Mobilization, Implementation and Transformation of Grenada; Ministries of Commerce; Ministries of Agriculture, Chambers of Commerce; Principals of OECS National Colleges, and leaders of other selected post-secondary institutions in Saint Lucia and Grenada, among others. Experts will also be

invited to specific sessions of the RSC, as needed, to provide technical guidance. The RSC will validate the regional template for REPs and the draft REPs prepared by each selected post-secondary institution. The RSC will validate the Regional Grants Manual as per Annex 2 and as detailed in the POM. The RSC will provide overall policy guidance and ensure coordination and collaboration between regional and country stakeholders.

46. **Legal Arrangements.** Based on the proposed implementation arrangements, each participating country would enter into a Financing Agreement directly with IDA, while the OECSC would do the same through a specific Grant Agreement.

B. Results Monitoring and Evaluation Arrangements

47. **M&E** will be based on tracking of the indicators in the Project's results framework. National-level indicators are standardized for the two participating countries. The national PIUs will be responsible for data collection and reporting for these indicators on a biannual basis per procedures outlined in the POM. The RPIU will be responsible for data collection and reporting on regional-level indicators on a biannual basis. Specific evaluations of Project activities could be carried out during implementation, including process evaluations for national-level activities.

C. Sustainability

- 48. The Project is aligned with current strategies for the education sector, for which resources will be allocated in the medium and long term, ensuring the sustainability of Project interventions. The OECS Education Sector Strategy (2012-2026), ⁶⁴ which is used by Member States to align their education strategies and plans and aims to harmonize their education systems and contribute to strengthening the OECS integration process, advocates for allocation of resources to tertiary education through its 8th objective "Increase access and relevance of Tertiary and Continuing Education." Alignment with the key regional vision for the sector will ensure that activities are integrated into regional frameworks and national plans and receive adequate funding after the Project closes. It will also help build partnerships with other development organizations and with the private sector around clear objectives and increase awareness on the importance of supporting post-secondary education.
- 49. The Project's design and implementation arrangements will promote long-term sustainability. Its design has a strong focus on capacity-building and training. At the regional level, the development of standards, assessments, and frameworks, as well as the creation of the KTIP, will be accompanied by capacity building activities. Furthermore, the KTIP itself will play a crucial role in ensuring the sustainability of innovation activities, as it will contribute to building knowledge communities and networks around innovative solutions to the challenges faced by the OECS. These are expected to then continue evolving on their own, after the Project closes, into the regional innovation ecosystem. National-level activities will include teacher training to ensure that teachers and school administrators have the skills needed to coordinate and sustain Project activities. Knowledge transfer will be supported in all subcomponents. Additionally, the REPs will include maintenance budgets, starting in the first year of Project implementation. The consultancy on the financing of post-secondary education will also include recommendations on sustainability. Finally, the implementation of action plans informed by the HEInnovate assessments constitutes the first step in the roadmap for developing the innovation ecosystems and the innovation and entrepreneurial potential of post-secondary institutions.⁶⁵ In conjunction,

⁶⁴ Available on the OECS' website at https://www.oecs.org/en/our-work/knowledge/library/education/oecs-education-strategy

⁶⁵ The Higher Education Institution Innovate (HEInnovate) self-assessment tool will be applied as part of subcomponent 2.3 (see details on this tool at: https://www.heinnovate.eu/en) in conjunction with a systemic assessment at the national level of the policy, institutional, and regulatory frameworks related to collaborative innovation by post-secondary institutions.

collaborative innovation projects will plant the seeds in both students and entrepreneurs to continue working together and mobilizing investment on innovation.

IV. PROJECT APPRAISAL SUMMARY

A. Technical, Economic and Financial Analysis

- 50. The Project's design is based on sound analytical underpinnings, supported by research on post-secondary education in the OECS region, consultations with key stakeholders, and global evidence. The design is also informed by desk research and two surveys of National Colleges, conducted in March 2021, with the support of the OECSC, and in February 2023, jointly with the Caribbean Educational Research Center, as well as findings from the Market Assessment study carried out under the Caribbean Digital Transformation Project (P171528), and labor market assessments carried out under the Saint Lucia Human Capital Resilience Project (P170445) and SVG Human Development Service Delivery Project (P154253). Activities related to learning assessments under subcomponents 1.1 and 2.2 also build on the ongoing joint research initiative of the World Bank and the CXC for the piloting of learning assessment tools for transversal skills of post-secondary students and instructors. Activities related to enhancing digital learning opportunities in the OECS, particularly related to augmented and Virtual Reality (VR), build on the successful experience of integrating these technologies in Ecuador's technical institutes as part of the ActiVaR program and will scale up and extend the ongoing initiatives in the OECS, such as developing a Blue Economy Virtual Lab, training in Augmented VR for OECS college professors, and piloting education events in the metaverse. ⁶⁶
- 51. Innovation activities have been informed by Bank-financed operations on innovation in LAC and knowledge products encompassing international good practices, regional research, and consultations with regional and countrylevel stakeholders. Innovation activities were designed based on lessons learned from Bank-financed projects that promote collaborative innovation between academia and the private sector in Peru, Argentina, and Colombia and to foster MSME development in the blue economy in OECS countries.⁶⁷ The Project's design also incorporates global knowledge produced by the World Bank on innovation and productivity policy, including The Innovation Paradox, 68 Productivity Revisited,⁶⁹ A Practitioner's Guide to Innovation Policy,⁷⁰ and How to Make Grants a Better Match for Private Sector Development: Review of World Bank Matching Grants Projects. 71 At the OECS regional level, the Project leveraged analytical and operational work led by the OECSC (e.g., Ecosystem Scoping Report, 2019; GREENpreneurs, and OECS Techie programs), Compete Caribbean (e.g., Innovation, Firm Performance and Gender Survey; Exploring Firm-Level Innovation and Productivity in Developing Countries, Dohnert, 2017), and local researchers. The Project was also informed by consultations with the Competitive Business Unit of the OECSC, the Inter-American Development Bank, Compete Caribbean, Saint Lucia's and Grenada's chambers of commerce, and local experts. Moreover, the Project's design was guided by discussions with participants of four focus groups with entrepreneurs and businesspeople in Saint Lucia and Grenada, and one discussion with post-secondary students and young entrepreneurs organized with support from the OECSC Competitive Business Unit.

Paris Alignment

⁶⁶ Implemented with support from a Trust Fund from the Korea World Bank Partnership Facility (KWPF).

⁶⁷ See lessons learned section for details.

⁶⁸ Cirera and Maloney, 2017.

⁶⁹ Cusolito and Maloney, 2018.

⁷⁰ Cirera at al., 2020.

⁷¹ World Bank, 2016.

- 52. The Project is aligned with the goals of the Paris Agreement on both mitigation and adaptation. Activities are consistent with Saint Lucia's and Grenada's NDC and aligned with their NAPs. The likely adverse effects from climate hazards on the Project have been assessed and measures have been incorporated in the Project design to reduce them to an acceptable level of residual risk. In addition, activities are expected to have negligible GHG contributions and are in line with both countries' long-term decarbonization pathways (mitigation).
- 53. Assessment and reduction of mitigation risks. The Project comprises activities to enhance regional harmonization of post-secondary education (subcomponent 1.1), promote regional inter-operability in information systems (with no construction of data centers), and strengthening regional innovation ecosystems with private sector participation. Component 2, implemented by Grenada and Saint Lucia, will focus on strengthening the capacity of selected postsecondary institutions to deliver a high-quality learning experience (with small repairs but no infrastructure works) and will support private sector-led innovation partnerships with those institutions. Subcomponent 2.1 will support assessment of capacity and needs of post-secondary institutions (developing or adopting diagnostic tools, which can be used beyond the two participating countries in the future), and the development and implementation of REPs to strengthen that capacity. Post-secondary education programs will be enhanced or developed under subcomponent 2.2. Collaborative innovation grants will be financed under subcomponent 2.3, with no financing provided for activities or projects with high GHG emissions or risks of carbon lock-in. All these activities are aligned with the goals of the Paris Agreement. Minor works to rehabilitate infrastructure will employ climate-resilient and energy-efficient features (such as improved drainage, natural ventilation, and the use of climate-resilient materials and low-carbon materials). As such, the Project is not expected to have a negative impact on Grenada's or Saint Lucia's low GHG-emissions development pathways, and is thus considered aligned for mitigation.
- Assessment and reduction of adaptation risks. While climate risks are expected to affect Grenada and Saint Lucia, these are not expected to pose a material risk in achieving the PDO. Considering the high vulnerability of the OECS, the increased frequency and severity of natural hazards and climate shocks may impact Project activities with disruptions in service delivery for short periods of time, which may result in short delays in the implementation of activities. In the past few decades, hurricanes and storms have had severe impacts on school infrastructure and businesses. Similar hazards could delay the implementation of activities, particularly the consultations on regional tools for collaboration, the allocation of innovation grants, the implementation of the REPs, and training of post-secondary teachers. However, given the ample Project implementation period and the phased approach contemplated in the implementation of these activities (i.e., construction of standards/harmonization, data collection, platform development, program development, innovation grants for specific projects), this is not expected to pose a risk to achieving the PDO. Similarly, minor risks associated with minor repairs will be reduced to acceptable levels through the inclusion of climate-efficient features. As such, the Project can be considered aligned on adaptation.

Economic Analysis

55. The Project foresees significant economic benefits. With an estimated Net Present Value of US\$67.2 million over a ten-year period, a benefit-cost ratio of 3.4, and an Internal Rate of Return of 54.8 percent, the Project aims to boost the lifetime earnings of post-secondary students, potentially elevating GDP and economic growth in the participating countries and in the OECS region. The economic analysis reflects the Project's potential to enhance student retention, bridge the skills gaps between the curricula and the job market, increase the quality and relevance of education and training through improved physical learning environments and teaching practices, and boost student employability and entrepreneurship opportunities through collaborative innovation projects with industry partners. These activities are expected to result in increased lifetime earnings, driven by increased wages and employment rates. The assessment follows a cost-benefit approach, accounting for all the investments financed through the Project. Notably, this economic analysis does not encompass all private and social benefits of enhanced skills of post-secondary students, nor fully

capture the expected regional spillovers of Project activities. Thus, the results offer a conservative lower-bound estimate, with the actual benefits from the Project likely to exceed the projected figures.

56. Upon conducting a sensitivity analysis, the Project consistently exhibits economic stability across diverse settings, including multiple conservative assumptions and an increased discount rate. The analysis confirms the Project's viability even when combining several conservative assumptions, such as halving the effects on employment rates and wages, lengthening the implementation period, and considering shorter lifetimes of earnings, the Project is expected to achieve an Internal Rate of Return of 12.5 percent, with a Net Present Value estimated at US\$8.3 million.

B. Fiduciary

(i) Financial Management (FM)

- 57. The FM and disbursement arrangements of the Project will be executed by the designated implementing entities. The OECSC will carry out regional activities, a new PIU to be established within the MOE in Saint Lucia, supported by the Accounts Unit of the MOE, and a new PIU to be established within the MOE in Grenada as supported by the Project Accounting Unit in the Accountant General's Department in Grenada will carry out their respective activities.
- The FM assessment was conducted during project preparation and updated in September 2023 in accordance with Operation Policy/Bank Policy 10.00 (OP/BP 10.00) on Investment Project Financing (IPF) and the Financial Management Manual for World Bank IPF Operations (OPCS5.05-DIR.01 issued February 10, 2017). It concluded that with the implementation of the agreed upon mitigating measures, the respective implementing entities have adequate FM arrangements that should be able to provide, with reasonable assurance, accurate and timely information on the status of the funds as required by the World Bank. The Recipients, as a requirement for IPF operations, will maintain FM systems to include staffing, budgeting, funds flow, accounting, internal controls, financial reporting, and auditing. However, while the entities have adequate FM rules, regulations, and checks and balances that will apply to the Project, the assessment identified gaps in the current FM arrangements in MOE of both Grenada and Saint Lucia due to capacity constraints and limited experience implementing Bank-financed operations. This could imply a substantial risk due to the nature of the Project and the involvement of multiple implementing entities for its successful execution, as well as a potential delay in establishing the PIUs. Additionally, the Matching Grants program implies additional risks related to the capacity of the respective implementing entities in Grenada and Saint Lucia.
- 59. Measures will be implemented to mitigate the FM risks. (i) The World Bank has agreed to receive separate sets of Interim Financial Reports (IFRs) and annual audit reports from the participating implementing entities. Each implementing entity will submit: (a) semi-annual IFRs within 45 days after the close of each period, which will form the basis for documentation of expenditures; and (b) an annual audit report within six months of the close of their financial year. (ii) All the internal controls will be detailed in the POM with clear roles and responsibilities. (iii) The Project will maximize the use of Country Systems in Saint Lucia and Grenada to the extent possible, including following the national budget system, use of the Government's FM System (Smart Stream), relying on the Department of the Accountant General, engaging the Accounts Unit of the MOE, and engaging the Office of Director of Audit to audit the Project's annual financial statements. (iv) The respective implementing entities will strengthen their FM capacity where applicable by hiring FM staff who will be dedicated to the Project. (v) Saint Lucia and Grenada will develop a detailed Regional Grants Manual defining the program design, internal control arrangements, flow of funds, financial reporting and auditing requirements, implementation procedures and guidelines, terms and conditions for the provision of the Matching Grants, including the eligibility criteria, application, appraisal, approval and disbursement procedures. The Matching Grants will have a separate Category of Expenditures in the Financing Agreement and the adoption of the Regional Grants Manual will be a condition for Disbursement. Additionally, the implementing entities will enter into a Matching Grant Agreement

with each eligible beneficiary detailing the eligible activities under the Grant, and their respective roles and responsibilities. In addition, the World Bank will train PIU staff on specific Bank policies and guidelines. FM risks and compliance will be monitored during implementation support missions every six months, as well as through annual external audits. With the implementation of these measures, the respective implementing entities will have in place an FM system that should be able to provide, with reasonable assurance, accurate and timely information on the status of the funds as required by the World Bank.

(ii) Procurement

- 60. The Procurement assessment was conducted during project preparation and updated in October 2023. It concluded that with the implementation of the agreed mitigating measures, the respective implementing entities have adequate procurement arrangements. Procurement will be carried out in accordance with the World Bank's "Procurement Regulations for Investment Project Financing (IPF) Borrowers" (Procurement Regulations) Fifth Edition September 2023, with due consideration to "Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants," dated July 1, 2016, as revised and amended in November 2020, and other provisions stipulated in the Financing Agreements. In accordance with paragraph 5.9 of the Procurement Regulations, the Bank's Systematic Tracking and Exchanges in Procurement (STEP) system will be used to prepare, clear, and update Procurement Plans and monitor all procurement transactions for the Project.
- 61. A short form Project Procurement Strategy for Development (PPSD) has been developed and will define the applicable procurement arrangements, appropriate selection methods, including market approach, and type of review to be conducted by the World Bank. The PPSD describes how procurement in this Project will support the PDO and deliver value for money using a risk-based approach. The PPSD provides adequate supporting market analysis for the selection methods detailed in each implementing entities' Procurement Plan. Mandatory Procurement Prior Review Thresholds detailed in Annex I of the Bank's Procurement Procedures are applied. All procurement procedures, including roles and responsibilities of different participating entities and units, will be defined in the POM.
- 62. **Most project activities will be carried out through national or international competition.** The World Bank's Standard Procurement Documents shall be used for all contracts subject to international competitive procurement. For contracts subject to national competitive procurement, the Recipients should use Procurement Documents agreed with and found acceptable by the Bank. The procurement methods, thresholds, and prior review thresholds will be detailed in the PPSD. The residual risks related to procurement are Substantial.

C. Legal Operational Policies

Legal Operational Policies	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Area OP 7.60	No

D. Environmental and Social

- 63. The environmental and social risk classification is low. The Project will not undertake any new construction and will finance mainly consultancy and non-consultancy services, minor renovation and rehabilitation works, goods and operational costs. Five Environmental and Social Standards (ESSs) are applicable to the Project: ESS1,2,3,4 and 10. The potential environmental and social risks are minimal /negligible and include: (i) pollution from the generation and disposal of minor quantities of electronic waste (e-waste) and other non-hazardous waste; (ii) noise, dust, and occupational health and safety (OHS) risks from minor civil works; (iii) managing expectations of project beneficiaries; (iv) making sure there are enough resources to reach a sufficiently large group of beneficiaries; (v) ensuring that the institutional arrangements between the OECSC and respective country ministries have sufficient staff to carry out consultations and appropriate monitoring of E&S risks; (vi) risks of grievances related to non-selection in trainings and skills events, or selection for the competitive innovation grants, not being promptly resolved, which could lead to discredit or disinterest in the initiatives; and (vii) risks associated with lack of transparency and timely provision of information about initiatives. Overall, the above potential impacts are expected to be very minor, temporary, short-term, and can be addressed with routine mitigation measures outlined below.
- 64. The Project has developed measures to manage the above E&S risks and impacts. Draft risk management provisions have been developed and will be documented in the POM. The provisions will include, inter alia, an Environmental and Social Exclusion List, an Environmental and Social Screening Form, Environmental and Social Codes of Practice (ESCOP), a simplified Environmental and Social Management Plan (ESMP) template for activities that will require an ESMP following the results of the screening, and simplified Labor Management Procedures (LMP). The provisions will be in line with the World Bank Environmental and Social Framework and Environmental Health and Safety (EHS) Guidelines, and relevant requirements of Grenada, Saint Lucia, and the OECSC. To ensure safe operation of laboratories and workshops, the Project will support the development of a regional template for the REPs, which will cover environmental aspects of maintenance, sustainability, safety protocols for laboratories, disaster preparedness mechanisms, among others. The E&S risk classification will be reviewed periodically throughout project implementation to ensure it continues to accurately reflect the level of risk in the Project.

V. GRIEVANCE REDRESS SERVICES

65. *Grievance Redress*. Communities and individuals who believe that they are adversely affected by a project supported by the World Bank may submit complaints to existing project-level grievance mechanisms or the Bank's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the Bank's independent Accountability Mechanism (AM). The AM houses the Inspection Panel, which determines whether harm occurred, or could occur, as a result of Bank non-compliance with its policies and procedures, and the Dispute Resolution Service, which provides communities and borrowers with the opportunity to address complaints through dispute resolution. Complaints may be submitted to the AM at any time after concerns have been brought directly to the attention of Bank Management and after Management has been given an opportunity to respond. For information on how to submit complaints to the Bank's Grievance Redress Service (GRS), please visit http://www.worldbank.org/GRS. For information on how to submit complaints to the Bank's Accountability Mechanism, please visit https://accountability.worldbank.org.

VI. KEY RISKS

66. The Project's Overall residual risk is assessed as Substantial, driven by the three substantial risks described below.

- 67. **Technical design risk is Substantial.** The Project's technical design faces substantial risks given the complexities of coordinating national and regional activities to ensure they align and build on each other. Furthermore, the Project has two technical components, with interventions at country and regional levels in different locations and multiple stakeholders. The design includes relatively new activities for the OECSC and countries, such as innovation hubs, grants, and improvement plans for post-secondary institutions that have limited experience with Bank-financed Projects. This risk will be mitigated by: (i) limiting the number of activities and prioritizing key interventions per subcomponent; (ii) providing hands-on technical support to recipients (OECSC and PIUs in Saint Lucia and Grenada) during implementation; and (iii) establishing an RSC to provide overall policy guidance and ensure coordination, engagement, and collaboration between regional and country stakeholders.
- 68. **Institutional Capacity for Implementation and Sustainability is Substantial.** The OECSC's, Saint Lucia's, and Grenada's institutional capacity to implement and sustain Project activities is limited. Project implementation will involve several institutions and teams in different locations, and the teams in the OECSC and in countries are implementing several Projects financed by the Bank and other multilateral development partner organizations. Staff turnover is also substantial and opportunities to access relevant training are limited. To mitigate these risks, dedicated consultants will be financed by the Project to support day-to-day implementation at the regional and national levels, and relevant Bank training will be offered to PIU staff during Project implementation.
- 69. **Fiduciary risk is assessed as Substantial.** Despite FM reforms undertaken by the participating countries, overall fiduciary capacity remains limited. The increase in the number of development partner-financed operations in the countries has increased the burden on already capacity-constrained teams. Additionally, there is an inherent fiduciary risk due to the involvement of multiple implementing entities for a successful execution of the Project. To mitigate this risk, the FM design incorporates project-specific mitigation measures, as described in Section IV.B. Fiduciary.

VII. RESULTS FRAMEWORK AND MONITORING

PDO Indicators by PDO Outcomes

Baseline	Period 1	Period 2	Period 3	Period 4	Period 5	Closing Period
	Enhance skills					
Students graduating	ng from enhanced program	s in selected post-secon	dary institutions (Numbe	er)		
Jan/2024	Jan/2025	Jan/2026	Jan/2027	Jan/2028	Jan/2029	Jan/2030
0.00	0.00	0.00	150	450	850	1200
➤Students gradu	nating from enhanced progr	rams in selected post-sec	ondary institutions, fema	le (Number)		
Jan/2024	Jan/2025	Jan/2026	Jan/2027	Jan/2028	Jan/2029	Jan/2030
0	0	0	75	225	425	600
			Foster regional col	laboration		
Common learning	standards for priority skills	endorsed by OECS Mem	ber States (Text)			
Oct/2023	Oct/2024	Oct/2025	Oct/2026	Oct/2027		Oct/2028
Not available	Not available	Developed	Developed	Developed		Endorsed
Increased participa	ation of non-nationals fron	OECS in student and/or	teacher exchanges in su	pported post-secondary in	stitutions (Percentage)	
Jan/2024	Jan/2025	Jan/2026	Jan/2027	Jan/2028	Jan/2029	Jan/2030
0	0	5	10	25	40	50
	Foster innovation					
Innovations adopt	ed by entrepreneurs result	ing from collaboration w	rith post-secondary educ	ation institutions (Numbe	r)	
Jan/2024	Jan/2025	Jan/2026	Jan/2027	Jan/2028	Jan/2029	Jan/2030
0.00	0.00	0	0	0	2	4.00

Intermediate Indicators by Components

Baseline	Period 1	Period 2	Period 3	Period 4	Period 5	Closing Period
	C1. Fostering regional collaboration for skills and innovation in the post-secondary space					
Regional strategic frame	Regional strategic framework for post-secondary education endorsed by OECS Member States (Text)					
Jan/2024	Jan/2025	Jan/2026	Jan/2027	Jan/2028	Jan/2029	Jan/2030
Not available	Not available	Developed	Developed	Developed	Developed	Endorsed
Harmonized standards f	Harmonized standards for post-secondary teachers' qualifications developed (Text)					



OECS- Skills and Innovation Project(P179210)

lan/2024	Jan/2025	Jan/2026	Jan/2027	Jan/2028	Jan/2029	Jan/2030
Not available	Not Available	Developed	Developed	Developed	Developed	Developed
Regionally interope	rable architecture for coll	ection of post-secondary	education data develop	ed (Text)		
lan/2024	Jan/2025	Jan/2026	Jan/2027	Jan/2028	Jan/2029	Jan/2030
Not available	Not available	Not available	Developed	Developed	Developed	Developed
Firms and entreprer	eurs actively participatin	g in KTIP (Number)				
lan/2024	Jan/2025	Jan/2026	Jan/2027	Jan/2028	Jan/2029	Jan/2030
0.00	0.00	100	200	300	400	400
		C2.Strengthening	post-secondary instituti	ons and collaborative inno	ovation	
Students benefiting	from direct interventions	to enhance learning (Nu	mber) ^{CRI}			
lan/2024	Jan/2025	Jan/2026	Jan/2027	Jan/2028	Jan/2029	Jan/2030
0.00	0.00	2000	4000	6000	8000	10000.00
➤Students benefit	ing from direct interventi	ons to enhance learning -	Female (Number) CRI			
0.00	0.00	1000	2000	3000	4000	5000.00
Students enrolled in	enhanced programs in so	elected post-secondary in	stitutions (Number)			•
lan/2024	Jan/2025	Jan/2026	Jan/2027	Jan/2028	Jan/2029	Jan/2030
)	0	0	500	1000	2000	3000
➤Students enrolle	d from enhanced progran	ns in selected post-second	lary institutions, female ((Number)		•
lan/2024	Jan/2025	Jan/2026	Jan/2027	Jan/2028	Jan/2029	Jan/2030
)	0	0	250	500	1000	1500
Laboratories or wor	kshops with improved an	d/or more climate resilie	nt physical learning envi	ronments (Number)		
lan/2024	Jan/2025	Jan/2026	Jan/2027	Jan/2028	Jan/2029	Jan/2030
0.00	0.00	2.00	3.00	4.00	5.00	6.00
Firms and entreprer	eurs participating in spo	nsored collaborative inno	vation projects with pos	t-secondary education ins	stitutions (Number)	•
lan/2024	Jan/2025	Jan/2026	Jan/2027	Jan/2028	Jan/2029	Jan/2030
)	0	10	30	56	88	120
Transformative action	ons taken by the Nationa	Government to strength	en the innovation ecosy	stem (Number)	•	•
lan/2024	Jan/2025	Jan/2026	Jan/2027	Jan/2028	Jan/2029	Jan/2030
0.00	0	2	2	3	3	4
Post-secondary inst	tutions implementing Re	gional Enhancement Plan	s (Number)	•	•	•
lan/2024	Jan/2025	Jan/2026	Jan/2027	Jan/2028	Jan/2029	Jan/2030
	0.00	2.00	4.00	4.00	4	4.00



The World Bank

OECS- Skills and Innovation Project(P179210)

Jan/2024	Jan/2025	Jan/2026	Jan/2027	Jan/2028	Jan/2029	Jan/2030
0.00	0.00	20.00	40.00	50.00	60	70.00
Gender gap in gradua	tion rates of National Coll	eges (Percentage)				
Jan/2024	Jan/2025	Jan/2026	Jan/2027	Jan/2028	Jan/2029	Jan/2030
33.00	33.00	30.00	28.00	27.00	26.00	25.00
	C3. Project Management and Technical Assistance					
Students and Teachers satisfaction survey implemented (Text)						
Jan/2024	Jan/2025	Jan/2026	Jan/2027	Jan/2028	Jan/2029	Jan/2030
Not available	Not available	Survey developed	Survey implemented	Survey implemented	Survey implemented	Survey implemented
	C4. Contingent Emergency Response Component (CERC)					

Monitoring & Evaluation Plan: PDO Indicators by PDO Outcomes

Enhance skills	
Students graduating from enhance	ed programs in selected post-secondary institutions (Number)
Description	Cumulative number of students graduating from the programs in TAMCC, NEWLO, SALCC and NSDC that are either developed or enhanced by the Project. Enhanced programs refer to programs revised or developed under the Project according to existing standards for advanced technical skills and/or to the new standards developed under subcomponent 1.1 for transversal skills, and/or improved teaching through integration of transversal skills in pedagogical practices.
Frequency	Annual
Data source	Administrative data from TAMCC and NEWLO in Grenada and SALCC and NSDC in Saint Lucia
Methodology for Data Collection	Data is collected from each selected post-secondary institution, tracking the number of graduates from programs that were enhanced with the support of the project
Responsibility for Data Collection	Ministries of Education of Grenada and Saint Lucia / PIUs
Students graduating from enhance	ed programs in selected post-secondary institutions, female (Number)
Description	Cumulative number of female students graduating from the programs in TAMCC, NEWLO, SALCC and NSDC that are either developed or enhanced by the project. Enhanced programs refers to existing programs in these four institutions, that were revised against existing standards for advanced technical skills and/or to the new standards developed under subcomponent 1.1 for transversal skills and/or improved teaching through integration of transversal skills in pedagogical practices.
Frequency	Annual
Data source	Administrative data from TAMCC and NEWLO in Grenada and SALCC and NSDC in Saint Lucia
Methodology for Data Collection	Data is collected from each selected post-secondary institution, tracking the number of graduates from programs that were enhanced with the support of the project
Responsibility for Data Collection	Ministries of Education of Grenada and Saint Lucia / PIUs
Strengthen regional collaboration	
Common learning standards for p	riority skills endorsed by OECS Member States (Text)
Description	Learning standards for priority skills are developed and endorsed at Ministerial level from at least the countries participating in the Project. Priority transversal skills are defined as foundational and higher-order cognitive, socioemotional, digital, entrepreneurial, and managerial skills. Priority skills will also include advanced technical skills in prioritized sectors (e.g., sustainable agroindustry, blue economy, bioeconomy, circular economy, smart and sustainable tourism, renewable and clean energies, health sciences, and creative industries).
Frequency	Annual
Data source	Regional PIU progress reports
Methodology for Data Collection	Regional PIU reports
Responsibility for Data Collection	Regional PIU
Increased participation of non-nat	cionals from OECS in student and/or teacher exchanges in supported post-secondary institutions (percentage)
Description	Cumulative increase in the share of non-national students and/or teachers from OECS Member States participating in either in-person, hybrid, or virtual programs in TAMCC, NEWLO, SALCC, or NSDC

Frequency	Annual				
Data source	Administrative data from TAMCC and NEWLO in Grenada and SALCC and NSDC in Saint Lucia				
Methodology for Data Collection	Data is collected from each selected post-secondary institution				
Responsibility for Data Collection	Ministries of Education of Grenada and Saint Lucia / PIUs				
Foster collaborative innovation					
Innovations adopted by entrepren	Innovations adopted by entrepreneurs resulting from collaboration with post-secondary education institutions (Number)				
Description	Innovations adopted by entrepreneurs that result from innovation project implemented in consortia between the entrepreneurs, participating post-secondary institutions and other actors (e.g. HEIs, civil society) and supported by competitive matching grants. Innovation definition from Oslo Manual 2018 (i.e. new and improved product/process that differs significantly from previous and is made available or used)				
Frequency	Annual				
Data source	PIU progress reports				
Methodology for Data Collection	PIU reports				
Responsibility for Data Collection	PIU				

Monitoring & Evaluation Plan: Intermediate Results Indicators by Components

Component 1. Foster	Component 1. Fostering a regional vision for youth skills and innovation in the post-secondary space				
Regional strategic fra	Regional strategic framework for post-secondary education endorsed by OECS Member States (Text)				
Description	The regional framework for post-secondary education is developed and endorsed at the Ministerial level from at least the countries participating in the Project.				
Frequency	Annual				
Data source	Regional PIU progress reports				
Methodology for Data Collection	Regional PIU reports				
Responsibility for Data Collection	Regional PIU				
Harmonized standard	s for post-secondary teachers' qualifications developed (Text)				
Description	OECS-wide standards for post-secondary teachers' qualifications are developed.				
Frequency	Annual				
Data source	Regional PIU progress reports				
Methodology for Data Collection	Regional PIU reports				
Responsibility for Data Collection	Regional PIU				
Regionally interoperable architecture for collection of post-secondary education data developed (Text)					
Description	An interoperable architecture enabling real-time access to relevant data from post-secondary institutions to ministries of education and the OECS Commission is developed.				
Frequency	Annual				

Data source	Regional PIU progress reports
Methodology for	regional Fio progress reports
Data Collection	Regional PIU reports
Responsibility for Data Collection	Regional PIU
Firms and entrepreneu	irs actively participating in KTIP (Number)
Description	Number of firms and entrepreneurs actively participating in KTIP. Participation in KTIP can ocur in several forms including online knowledge exchanges, online networking, attendance to online activities, attendance to in-person activities, innovation inducement initiatives.
Frequency	Annual
Data source	Regional PIU progress reports based on data produced by the KTIP and collected from other activities organized through the KTIP (e.g., in-person sessions/events, innovation inducement initiatives). Specific KPI of meaningful online exchanges and online networking will be developed to contribute to measuring online participation based on the design of the platform and online satisfaction survey data.
Methodology for Data Collection	Regional PIU reports
Responsibility for Data Collection	Regional PIU
Component 2. Strengtl	nening post-secondary institutions to deliver priority skills
Students benefiting fro	om direct interventions to enhance learning (Number) ^{CRI}
Description	Cumulative number of students in selected post-secondary institutions in Grenada or Saint Lucia that benefit from improved learning environments and/or improved teacher practices.
Frequency	Annual
Data source	Administrative data from TAMCC and NEWLO in Grenada and SALCC and NSDC in Saint Lucia
Methodology for Data Collection	Data is collected from each selected post-secondary institution
Responsibility for Data Collection	Ministries of Education of Grenada and Saint Lucia / PIUs
Students benefiting fro	om direct interventions to enhance learning - Female (Number) ^{CRI}
Description	Cumulative number of female students in selected post-secondary institutions in Grenada or Saint Lucia that benefit from improved learning environments and/or improved teacher practices.
Frequency	Annual
Data source	Administrative data from TAMCC and NEWLO in Grenada and SALCC and NSDC in Saint Lucia
Methodology for Data Collection	Data is collected from each selected post-secondary institution
Responsibility for Data Collection	Ministries of Education of Grenada and Saint Lucia / PIUs
Laboratories or worksh	nops with improved and/or more climate resilient physical learning environments (Number)
Description	Cumulative number of laboratories or workshops that have improved their facilities and/or equipment and/or made them more climate resilient. Climate-resilient

	physical learning environments are defined as those that include energy-efficient features such as improved drainage, natural ventilation, and use of climate-resilient materials. When possible, low-carbon materials will be preferred for the repairs, and on-site renewable energy generation through wind and solar energy will be
	used and supported, with the objective of reducing CO2 emissions.
	Annual
	PIU progress reports
Methodology for	. 10 p. 60. 000 10po. 00
Data Collection	PIU reports
Responsibility for Data Collection	Ministries of Education in Grenada and Saint Lucia / PIUs
Transformative actions take	en by the National Government to strengthen the innovation ecosystem (Number)
Description	Number of transformative actions taken by the National Governments to strengthen the innovation ecosystem by enabling collaborative innovation according to the HEInnovate assessments and action plans. It is expected that each National Government takes at least 1 transformative action by mid-term and at least 2 by the end of the project.
Frequency	Annual
Data source P	PIU progress reports
Methodology for Data Collection	PIU reports
Responsibility for Data Collection	PIU
Firms participating in spons	sored innovation projects with post-secondary institutions (Number)
Description	Number of firms co-sponsoring (funding or in-kind) a project with final-year individual grant recipient students from the post-secondary institutions to develop an innovative solution to a challenge faced by the firms. Number of individual grants should total 13 percent of number of expected graduates from the post-secondary institutions during the Project. Average 200 grants (50 per institution)
Frequency	Annual
Data source P	PIU progress reports
Methodology for Data Collection	PIU reports
Responsibility for Data Collection	PIU
Post-secondary institutions	implementing Regional Enhancement Plans (Number)
LIESCRIPTION	Cumulative number of selected post-secondary institutions that implement activities in at least two priority areas of their Regional Enhancement Plans, which have been validated by the Regional Steering Committee.
Frequency	Annual
Data source P	PIU progress reports
Methodology for Data Collection	PIU reports
Responsibility for	Ministries of Education in Grenada and Saint Lucia / PIUs

Data Collection	
Post-secondary teacher	ers trained on integrating priority transversal skills in teaching practices, including on aspects related to gender and special educational needs (Number)
Description	Cumulative number of teachers in selected post-secondary institutions who have completed training on pedagogical practices that integrate priority transversal skills into post-secondary teaching, and on how to address specific student needs based on students' gender and/or special educational needs.
Frequency	Annual
Data source	Administrative data from TAMCC and NEWLO in Grenada and SALCC and NSDC in Saint Lucia
Methodology for Data Collection	Data is collected from each selected post-secondary institution
Responsibility for Data Collection	Ministries of Education of Grenada and Saint Lucia / PIUs
Gender gap in graduat	tion rates of National Colleges (Percentage)
Description	Female share of graduates - male share of graduates of both SALCC and TAMCC.
Frequency	Annual
Data source	Administrative data from TAMCC and NEWLO in Grenada and SALCC and NSDC in Saint Lucia
Methodology for Data Collection	Data is collected from each selected post-secondary institution
Responsibility for Data Collection	Ministries of Education of Grenada and Saint Lucia / PIUs
Component 3. Project	Management and Technical Assistance
Students and Teachers	s satisfaction survey implemented (Text)
Description	Cumulative indicator for the implementation of a survey of teachers and students in selected post-secondary institutions. Teachers and students will provide direct feedback on project implementation by recording perspectives of project's impacts on their skills acquisition (students) and teaching practices (teachers). The findings of this survey will be incorporated into the project implementation during mid-term review of the project and will inform project implementation improvements.
IFrequency	Once (in year 3)
Data source	Survey data
Methodology for Data Collection	Ministries of Education of Greanda and Saint Lucia / PIUs administer surveys and record results
Responsibility for Data Collection	Ministries of Education of Grenada and Saint Lucia / PIUs
Component 4. Conting	gent Emergency Response Component (CERC)

ANNEX 1: Implementation Arrangements and Support Plan

Institutional and Implementation Arrangements

Implementing Agency

- 1. The roles and responsibilities of the regional/national PIUs will include: (i) developing and implementing annual activity plans, budgets, and procurement plans; (ii) coordinating implementation with different stakeholders to ensure time-bound attainment of agreed targets; (iii) tracking and reporting on Project fiduciary aspects, including FM, procurement, and E&S requirements, and coordinating external audits; (iv) reporting on M&E activities and updating the Project's results framework; (v) engaging with key stakeholders on Project progress and outcomes; (vi) coordinating with the Bank on project implementation; and (vii) reporting to the Bank through Quarterly Progress Reports.
- 2. The structure of the PIUs for the OECSC, Grenada and Saint Lucia components is shown in Figure A1.1.

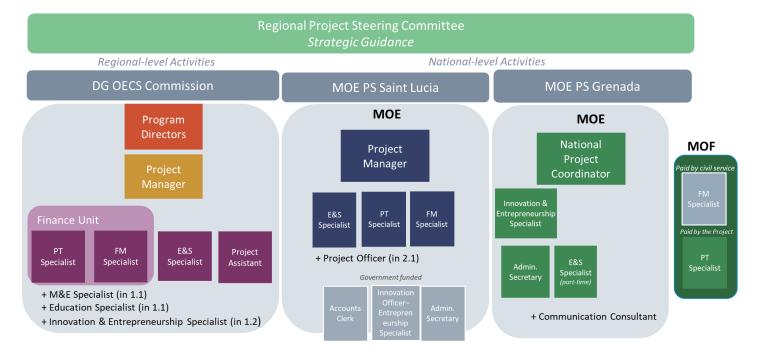


Figure A1.1 Organizational Structure for Project Implementation

3. For the competitive matching grants under subcomponent 2.3 in Grenada, the GIDC will serve as the grants implementing entity. It will conduct administrative and technical functions including: 1) general oversight and management, 2) provision of technical guidance and training in the areas of innovation and entrepreneurship, 3) procurement support related to the implementation of the grants, 4) financial management related to the payments of the grants, 5) payment of the grants, 6) monitoring of the progress of work and activities associated with the grants, 7) communications and promotion of the grants activities and issuing calls for proposals, and 8) fulfilling reporting requirements. GIDC is an economic development corporation and a statutory body of the Government of Grenada established by an Act of Parliament. GIDC has its own Board of Directors and is autonomous, with a reporting responsibility to the Ministry of Finance. GIDC has experience implementing grants programs and entrepreneurship/business support programs with international organizations (ExportDubai, USAID) and serves as an investment promotion agency for

attracting investment to Grenada. Although GIDC has demonstrated experience in this area, an assessment of the capacity of the current staff revealed gaps in the fiduciary and innovation-specific technical capacity, which will be required for the management of the matching grants activities. While GIDC has adequate FM rules, regulations, and checks and balances that will apply to the Project, the assessment also identified gaps due to capacity constraints. The current staffing would not be adequate for accounting and monitoring the activities related to the competitive matching grants in subcomponent 2.3.⁷² To mitigate FM gaps, the Project will finance capacity building activities including complimenting GIDC's existing staff with additional expertise including grants and financial management. Other capacity building activities to be included in that subcomponent for GIDC, are a technical capacity assessment of the GIDC, an action plan for building the required capacity, and funding for the additional required staff identified through the assessment as well as the necessary training on managing grants, entrepreneurship, and innovation. Satisfactory completion of the capacity building recommendations from the action plan, as agreed by the World Bank and Government of Grenada, will be a disbursement condition for the matching grants. To govern the flow of funds from the Project to GIDC and from GIDC to the grantees, a subsidiary agreement will be established between the Government of Grenada and the GIDC. The subsidiary agreement will detail the requirements GIDC will be expected to fulfill, as well as roles, responsibilities, and procedures.

4. The organizational structure for implementation of the competitive innovation grants is shown in Figure A1.2:

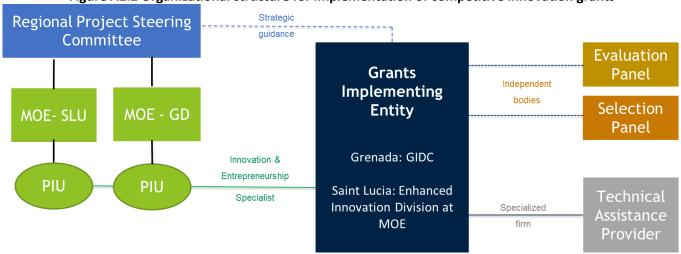


Figure A1.2 Organizational structure for implementation of competitive innovation grants

Financial Management (FM)

5. **To manage project funds, GIDC will open a separate bank account for the project.** GIDC will use their accounting system (QuickBooks) to account for and report on funds received and paid under the Project. GIDC will prepare quarterly reports which will be submitted to the PIU and the Project Accounting Unit in the Accountant General Department. The reports will account for funds received and expenses incurred under the project, reconciliation of the bank accounts, detailed listing of matching grants beneficiaries including amounts committed (signed matching grant agreement), amounts disbursed, etc. Matching grants will be disbursed for eligible expenditures which will be defined in the Regional Grants Manual and grant agreements with the beneficiaries. No cash payments will be transferred to the beneficiaries, but rather, GIDC will be responsible for making payments directly to the suppliers, vendors, etc. GIDC will maintain separate filing and record keeping for this project. Project funds that will be managed by GIDC will be subject to an independent audit, which will be conducted by the office of the Director of Audit. Engagement of the Auditors will be

⁷² Initially, GIDC has identified staffing needs for at least a project coordinator, project officers and a finance officer.

managed centrally by the Accountant General Department and will include an opinion on matching grants managed by GIDC. In addition, GIDC will submit their own annual audit report, which will include project activities and GIDC's own activities. Details on the flow of funds, internal controls, budgeting, reporting, auditing, etc. will be described in the Regional Grants Manual.

6. **Staffing:** The OECSC and the Saint Lucia PIUs will hire FM staff⁷³ assigned to the Project, and Grenada will assign FM staff from the Project Accounting Unit in the Accountant General Department. The position title and supervision will vary by PIU. The FM staff in OECSC PIU will work under the supervision of the organization's Finance Business Partner Manager; in Saint Lucia, this position will work under the supervision of the PIU's Project Manager; and in Grenada, the Accountant General will supervise this post. The functions, responsibilities, and procedures of different stakeholders in the execution of the FM for the Project are outlined in the Project Operations Manual. This ensures that all parties understand their functions and responsibilities to facilitate proper planning, coordination, and seamless execution of activities under the Project.

FM and Disbursement Arrangements

- 7. **Planning and Budgeting:** The respective implementing entities will designate FM staff to undertake the record keeping for the Project. Each implementing entity will prepare an overall budget for the life of the Project, which will be revisited periodically and updated, as needed, to reflect the implementation progress. An annual work plan and annual budget will be derived from this overall budget, which will be agreed with the World Bank and then included in respective ministries' annual budget for approval by the parliament (except for the OECSC, where it will be included in the entity's budget). The agreed expenditure items to be financed through the Project will be duly included in the Financing Agreement.
- 8. **Funds Flow:** Advances will be disbursed by the World Bank to a segregated Designated Account (DA) opened at an agreed bank of each implementing entity. The DA account will be used to finance the US\$ currency expenditures. Funds will be periodically transferred from the DA to a segregated local currency operating account, which will also be maintained at the agreed bank. The local currency operating account will be used to finance local currency expenditures. Disbursement methods available to the Project will be Advance, Reimbursement, and Direct Payment. The overall disbursement arrangements will follow standard disbursement policies and procedures included in the Disbursement and Financial Information Letter (DFIL) and as established in the Disbursement Guidelines for Investment Project Financing, dated February 2017. The minimum application size for Direct Payments and Reimbursements will be recorded in the DFIL.
- 9. **Accounting and Internal Controls:** The respective implementing entities will use their existing FM systems to record and maintain all project transactions. The annual budget for the World Bank Project, once approved, will be the guiding factor for recording all the project transactions. The system will allow capturing of the project transactions by categories, components, subcomponent, and activities, as needed. All the implementing entities will prepare a project financial manual guidance for their Project staff, which will also be an integral part of the Project's Operations Manual, which will be reviewed by the World Bank and agreed before project negotiations.
- 10. **Reporting:** Advances will be disbursed to the respective implementing entities based on a six-month cash forecast. Each implementing entity will submit **semi-annual** unaudited financial reports to the World Bank (Interim Financial Reports, IFR) due within 45 days after the close of each **period**. The IFRs will be generated from the physical accounting records and variance analysis (actual versus budgeted expenditures) will also be included in the IFRs. The IFR format will be agreed on during negotiations and will be included in the DFIL. The World Bank will document expenditures from the

⁷³ This will be a full-time position in Saint Lucia and a part-time position in OECSC.

IFRs, which will also include additional request for funds. The IFRs will include a separate section reporting on the Matching Grants.

- 11. **External Auditing:** The external audit of the Project will be conducted by the agreed audit entities (referred to as external auditors) as briefed in the table below. The project will produce annual financial statements that will be submitted to the external auditors to be audited as per Terms of Reference agreed between the project and the World Bank. The project budget will include the cost of the technical support to be obtained by the Office of the Director of Audit (SAI), if needed. The project will submit the Audit Report along with the Audited Financial Statements and the Management Letter to the World Bank no later than six months after the close of each financial year.
- 12. Table A1.1 provides further details of the agreed FM arrangements at the respective implementing entities:

Table A1.1: Financial Management Arrangements

	Table A1.1: Financial N	Nanagement Arrangements	
FM element	OECSC	St. Lucia (MoE PIU)	Grenada ⁷⁴ (Accountant General, MOF)
Designated US\$ & local currency bank accounts at	First National Bank of St. Lucia	Bank of Saint Lucia	Grenada Cooperative Bank
Accounting software used for record keeping	ERP Software (Line items for the project to be created, which will allow capturing of the project transactions by categories, components, subcomponent, and activities, as needed)	Smart Stream (The system may need to be amended with technical support from the WB to allow including the project's activities using the appropriate coding designed for external funds in accordance with project design {components and activities}). QuickBooks will also be used in parallel.	Smart Stream and QuickBooks (Line items for the project to be created, which will allow capturing of the project transactions by categories, components, subcomponent, and activities, as needed)
Basis of Accounting	Cash basis	Cash basis	Cash basis
IFRs to be submitted semi-annually	July – December January – June	April – September October – March	January – June July – December
Annual external audit reports to be submitted for	July – June	April – March	January – December
Audit report to be submitted to the Bank Selection of external	Project audit report to be submitted by 31 December An audit firm deemed	Project audit report to be submitted by 30 September The Office of the Director of	Project audit report to be submitted by 30 June Auditor General of Grenada
auditor	acceptable to the Bank and appointed as per WB procurement procedures	Audit (SAI)	(SAI)

⁷⁴ Accountant General's Department in the MOF has set up a project accounts unit. While the FM arrangements over there are deemed to be adequate, it is needed that the functions, responsibilities, and procedures of different stakeholders in the project are clearly outlined in the Project Operations Manual. This will ensure that all parties understand their functions and responsibilities; and it would facilitate proper planning, coordination, and seamless execution of activities under the project.

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Procurement

- 13. The PIU will be responsible for the procurement of all goods, works and services financed through the Project. The acquisition of goods, works and services are subject to the Procurement Procedures specified in the Financing Agreement and the procurement requirements of the Governments of Grenada and Saint Lucia and the OECSC.
- 14. **Regional Grants Manual:** A Regional Grants Manual will be prepared to guide the implementation of the grants and technical assistance provided under subcomponent 2.3. The manual must be validated by the RSC and approved by the World Bank as it will be a withdrawal condition for subcomponent 2.3. The guidelines for the manual's content are presented in the description of the subcomponent in Annex 2.

ANNEX 2: Detailed Project Description

- 1. Component 1: Fostering regional collaboration for youth skills and innovation in the post-secondary space (US\$3.8 million).
- 2. **Subcomponent 1.1: Developing regional collaboration in post-secondary education (US\$3.2 million).** The Component will finance technical assistance and operating costs involved in developing and piloting regional collaboration mechanisms as well as training costs.
- 3. First, this subcomponent will support the development of a regional strategic framework for post-secondary education. During the first year of implementation, a comprehensive analysis of the post-secondary sector in the OECS region will be carried out. 75 This assessment will include aspects related to the organization and education service delivery, internal efficiency, equity, costs, financing, results, performance, and equity. The assessment will also cover aspects related to gender gaps, as well as inclusion of learners with disabilities and/or special education needs. In alignment with the OECS Education Sector Strategy, a regional strategic framework for post-secondary education will then be developed. It will include mechanisms to build stronger partnerships between post-secondary institutions, the private sector, and the University of the West Indies (UWI). The framework will also lay the foundations for further specialization of National Colleges in terms of developing deeper technical expertise in particular areas or fields of study, building on the Colleges' existing strengths. This specialization will be driven by a variety of factors, including the local economy, industry needs, and the research strengths of the institution. Specific thematic projects, developed under subcomponent 2.1, could serve as entry points for such specialization of post-secondary institutions in Saint Lucia and Grenada and demonstrate how other OECS countries can follow suit. The programs developed in subcomponent 2.2 could serve as pilots for the development of regional programs. The strategic framework will include a detailed action plan, stakeholder mapping and roles and responsibilities, quantitative and qualitative annual targets, funding mechanisms, and M&E mechanisms. Funding mechanisms will be informed by the studies on financing of post-secondary education supported under Component 3 for Saint Lucia and Grenada. The strategic framework will also provide recommendations for the development of a harmonized regional system for quality assurance and accreditation of OECS post-secondary institutions and their programs. It will also integrate aspects related to climate change, particularly mitigation and adaptation measures, and an M&E framework to follow the implementation of said measures. Support for the framework will also include the development of the REP template, which will be used for institutional strengthening of OECS post-secondary institutions, including by the selected post-secondary institutions supported in subcomponent 2.1. The strategic framework will be developed using a broad-based consultative approach, with active engagement of private sector stakeholders from across OECS Member States and from diaspora to enhance relevance of post-secondary education to regional and global labor markets. The strategic framework will inform the next Education Strategy for the OECS region.
- 4. This subcomponent will also finance the development of common learning standards for priority skills and learning assessment frameworks to measure these skills at entry and track progress over time. For skills with no existing competence standards and/or learning assessment frameworks, such standards and/or frameworks will be developed or adapted from international practice. Technical skills' standards will be aligned with industry standards and consultations with private sector actors will be organized to develop the tools to ensure their relevance. This activity will leverage existing frameworks, such as the CARICOM qualification framework and national qualification frameworks of

⁷⁵ This analysis will build on the efforts undertaken for the development of the OECS Education Sector Analyses and Education Sector Plans (prepared for the Ministries of Education in Dominica, Grenada, Saint Lucia, and SVG with support from the UNESCO International Institute for Education Planning (IIEP) and the World Bank Group) as well as the analysis supported by the Korea-World Bank Partnership Facility on post-secondary education landscape in the OECS).

⁷⁶ An example of a regional framework is the European Union Digital Competence Framework that provides standards and assessment tools on a wide range of digital skills (see here).

OECS Member States, and skills frameworks that are being developed with support of development partners, such as the regional and national frameworks on digital skills.⁷⁷ Support for development or adaptation and piloting of tools to assess the level of students' proficiency in priority skills will also be provided, so that skills could be measured at the beginning of post-secondary education to identify gaps in these skills and to support remediation interventions and teaching at the right level. Measuring skills progression during post-secondary studies will provide students with a sense of learning progress and teachers and institution leaders with relevant information to adjust pedagogy and student services in the short term, and potentially curricula in the medium term. The learning assessment frameworks will follow universal design principles, acknowledging that learners process and express things differently. The assessment tools will be adapted to students with disabilities and/or special education needs, and consultations with relevant stakeholders will be organized during the development phase. A regional communication campaign will be financed to support the launch of the standards and assessment tools for transversal and advanced technical skills, to ensure that employers, students, and institutions are familiar with them. Employers will be involved from the development to the implementation phase, to ensure that the standards and assessment tools send credible skills signals to firms and thus facilitate school-to-work transition. Training on how to use the learning assessment tools will be offered to post-secondary institutions' staff and faculty, starting with the four institutions targeted under subcomponent 2.1.

- 5. Second, support will be provided to develop harmonized standards for qualifications, evaluation, and professional development of faculty/instructors and leadership staff of post-secondary institutions. For instructors, strong emphasis will be put on both pedagogical training and professional/industry experience to ensure that the staff of post-secondary institutions are well prepared to deliver quality and relevant training to students and to engage in research and innovation activities. For leadership staff, emphasis will be placed on building management capacity. Harmonized professional development modules on climate vulnerability and planning and disaster risk management in post-secondary education will be considered for both instructors and leadership staff. These will include how to develop disaster risk management plans at the institution levels in case of natural hazards, and suggestions to implement climate change mitigation campaigns directed at students. The work will build on similar initiatives for harmonized standards for basic education teachers in the OECS region, and will start with an assessment of existing frameworks, including CARICOM standards.
- 6. Third, regional collaboration between faculty and students of post-secondary institutions and entrepreneurs in the OECS region will be promoted through the development of the OECS virtual campus. The subcomponent will support the development and piloting of an online platform that will allow OECS post-secondary institutions to use the metaverse (or 3D learning opportunities using the internet) to offer opportunities for learning, knowledge exchange, and networking between faculty, students, and other stakeholders, such as entrepreneurs, the private sector, and diaspora leaders. The virtual campus will also host a digital platform where post-secondary learners and/or graduates can log their credentials and skills and where employers can view these when they are seeking highly qualified employees in the region, which will also support school-to-work transition by connecting students with potential labor market opportunities. The development of this platform will leverage the regional capacity of four post-secondary instructors (two from Dominica, two from Saint Lucia) in Virtual and Augmented Reality content creation to ensure that the platform incorporates regional

⁷⁷ Under development with the support of the Caribbean Digital Transformation Project (P171528), among others.

⁷⁸ East Asia provides several examples of how to ensure the critical professional / industry experience of post-secondary teachers, from agreements with private sector firms to provide "Meister teachers" in Korea to mandatory work placement of TVET teachers in China using twinning arrangements with firms (WB-ILO-UNESCO, 2023, Building Better Formal TVET Systems: Principles and Practice in Low- and Middle-Income Countries.

⁷⁹ Including the OECS Teacher Performance Appraisal Scheme and CARICOM Standards for Teachers, Educational Leaders & Teacher Educators (2020). ⁸⁰ This will build on the experience in Singapore with the MySkills Future platform, which is a blockchain-based platform used by employees / job candidates to store their qualifications and employers to recruit candidates and verify their qualifications (ILO 2022, Inventory of digital career guidance tools).

specificity in terms of design and user experience.81

- Fourth, this subcomponent will support the development of an EMIS architecture for post-secondary education to gather, share, integrate, and analyze regional data on post-secondary education in OECS member States. This work will complement OECSC's existing efforts to develop an OECS EMIS for all education levels. The subcomponent will finance development or adaptation of EMIS software, training of users, and operational costs for piloting. Activities will involve the development of an interoperable architecture that can enable real-time access to relevant data from post-secondary institutions to ministries of education and the OECSC, ensuring the ability of these stakeholders to query the databases and analyze information needed for policymaking. Configuration of the system to accommodate the data needs at the institutional, national, and regional levels for post-secondary education will also be supported. The architecture will include several education management processes such as student enrollment, attendance tracking, academic performance monitoring, teacher management, and resource allocation and management. Special attention will be given to the collection and analysis of disability-disaggregated data to ensure that diverse educational needs are identified and considered. The EMIS architecture will generate standard reports for each post-secondary institution, including data on enrollment, attendance, learning, teachers, resources and gender and inclusion, and provide reports at the national and regional levels, with appropriate considerations for privacy and confidentiality. Finally, the architecture will include sustainability considerations, in particular in terms of support for maintenance costs and resilience of the EMIS in case of climate-related or other disasters. Training of end-users on the use and maintenance of the new EMIS architecture will also be delivered. Activities will be implemented in synergy with the Caribbean Digital Transformation Project (P171528) and will be aligned to national policies on data privacy and confidentiality.
- 8. Subcomponent 1.2. Fostering regional innovation ecosystems with the participation of post-secondary institutions (US\$1.6 million). This subcomponent will support the creation of a Knowledge, Technology and Innovation Platform (KTIP) to foster knowledge exchanges, networking and collaboration in innovation activities across the OECS region in Project prioritized sectors.
- 9. Through the KTIP, the OECS will coordinate a set of activities to induce collaboration among post-secondary, the private sector, diaspora, and other key ecosystem actors⁸² around innovation in the project's prioritized sectors. The KTIP will leverage existing initiatives and efforts on innovation-led endeavors by members of post-secondary institutions and the private and public sectors.⁸³ Also, the OECSC will build on their network of entrepreneurs and associates to support the development of the KTIP community. The OECSC's implementation of business development and technology adoption programs, such as Greenpreneurs, OECS Techie, among others, will be a valuable starting point.⁸⁴ The KTIP will foster the development of an OECS community around innovations relevant to the region and become a stepping-stone to build a regional innovation ecosystem. A dynamic regional ecosystem is particularly important for supporting and nurturing the talent of youth entrepreneurs and skilled post-secondary graduates who often emigrate when there is a dearth of opportunities for jobs and business development. Also, the KTIP can help bringing global focus

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⁸¹ This capacity was built through a hybrid Master of Science program at the Namseoul University, implemented with the support of the Korea – World Bank Partnership Facility (KWPF) grant.

⁸² Key innovation ecosystem actors include universities, colleges, TVETs, research centers, technology transfer centers, entrepreneurs, enterprises, the diaspora, incubators, accelerators, technology extension providers, business development service providers, and other service providers, metrology and standards institutions, investors, etc.

⁸³ For instance, during the focus groups, participating professors from National Colleges mentioned innovative projects related to energy transition and to sustainable agriculture. Likewise, entrepreneurs discussed their endeavors in solar energy, logistics, technology solutions, health services, agriculture and fisheries, while the public sector mentioned advances in forestry research and the need to join efforts.

⁸⁴ Relevant examples of OECS initiatives that could be leveraged to implement this subcomponent include the Eastern Caribbean Green Entrepreneurship Initiative and the Eastern Caribbean Greenpreneurs Incubator Programme implemented by the OECS Commission, the Strengthening the Entrepreneurship and Innovation Ecosystem in the OECS project financed by the Compete Caribbean Partnership Facility (CCPF) and executed by the OECS Commission, and OECS Techie implemented by GBest Consulting in partnership with the OECS Commission and the CCPF.

to the OECS region, connecting it with other global innovation ecosystems for knowledge exchange and business opportunities.

- 10. The KTIP will host the implementation of the following activities:
 - Knowledge exchange and networking online window: The KTIP will host an online window to allow OECS i. professors, researchers, and students to connect with entrepreneurs, members of the diaspora community, potential investors and other actors of the innovation and entrepreneurship ecosystem with the purpose of exchanging ideas and knowledge content related to their innovation activities. OECS Virtual Campus participants will be encouraged to join KTIP. Through this window, KTIP members will be able to expand their reach to likeminded parties in the region and globally and identify opportunities for collaboration in innovation areas of common interest, ask questions and get ideas to solve challenges related to their innovation activities and to develop ideas for marketable and scalable businesses. Discussions and collaboration on innovative solutions to mitigate, adapt and build resilience to climate change in Project prioritized sectors will be encouraged. Likewise, through this window, KTIP members can potentially find funding or investing opportunities for their innovation endeavors. The KTIP window will be a valuable tool for students and young graduates to connect with the marketplace and engage with potential mentors, employers, and business partners. Additionally, this KTIP window will generate a live directory of members of the OECS innovation ecosystem, including of potential evaluators for the competitive innovation grants in subcomponent 2.3, and an inventory of their innovation projects and initiatives to facilitate the identification of shared interests and potential participants in the OECS region for future interventions. This inventory will also be the base for selecting the projects to be sponsored at the country level under subcomponent 2.3.
 - ii. **Knowledge exchange and collaboration initiatives**: In partnership with the private sector, the diaspora community and willing post-secondary institutions, the OECSC will organize activities to share knowledge and promote collaboration on innovation activities around topics of common interest and relevant to OECS countries, with particular focus on climate action in prioritized sectors. Activities could also include building capacity in areas such as intellectual property rights and others where gaps in knowledge are identified through the broader diagnostic in subcomponent 2.3. At least one in-person knowledge exchange and entrepreneurship roundtable will be organized to bring together KTIP members to interact, work on their innovation initiatives and develop new ideas for collaboration. This type of events will serve to showcase ongoing innovation projects developed by the KTIP community to promote knowledge transfer, business exchanges and attract potential investors. The OECSC, in partnership with the private sector and the diaspora, will also host at least one initiative to induce innovation (prize, competition, or hackathon) in the OECS region to address specific challenges relevant to OECS countries, including climate-related, and within the project prioritized sectors. These KTIP knowledge exchange and collaboration initiatives will generate momentum around innovation-led entrepreneurship, making it a clearer, more reachable career path for youth in the OECS region.

Box 1. Definition of innovation

The definition of innovation used in the project follows the guidelines of the Oslo Manual, 2018, OECD, Guidelines for Collecting, Reporting and Using Data on Innovation. Measurement of innovation while implementing the project will also follow the Oslo Manual, or a revised version if available. Next, selected extracts from the Oslo Manual are presented:

«The term 'innovation' can signify both an activity and the outcome of the activity. This manual provides definitions for both. The general definition of an innovation is as follows:

An **innovation** is a new or improved product or process (or combination thereof) that differs significantly from the unit's previous products or processes and that has been made available to potential users (product) or brought into use by the unit (process).



This definition uses the generic term "unit" to describe the actor responsible for innovations. It refers to any institutional unit in any sector, including households and their individual members."»

- «Innovation activities include all developmental, financial and commercial activities undertaken by a firm that are intended to result in an innovation for the firm. »
- «A business innovation is a new or improved product or business process (or combination thereof) that differs significantly from the firm's previous products or business processes and that has been introduced on the market or brought into use by the firm. »
- «A **product innovation** is a new or improved good or service that differs significantly from the firm's previous goods or services and that has been introduced on the market. »
- «A business process innovation is a new or improved business process for one or more business functions that differs significantly from the firm's previous business processes and that has been brought into use by the firm.»
- Component 2: Strengthening post-secondary institutions and collaborative innovation (US\$27 million; 11. US\$600,000 unguaranteed commercial financing). The component will be implemented by PIUs in Saint Lucia and Grenada.
- 12. Subcomponent 2.1: Developing and implementing Regional Enhancement Plans (US\$ 15.5 million). To inform these REPs, the Project will support the development and implementation of a comprehensive diagnostic for each selected institution. The diagnostics will analyze specific constraints and challenges faced by male and female students and teachers, as well as by learners and teachers with disabilities, in accessing and succeeding in post-secondary institutions as well as in the transition to the labor market. The private sector will be invited to participate in the diagnostic and development of the REPs to ensure relevance of the educational offering. The diagnostics will leverage existing assessments whenever available and supplement them with additional aspects when needed.
- 13. A regional template for the REPs will be developed under the leadership of a RSC, led by the OECSC, and in consultation with Ministries of Education and post-secondary institutions. The template will be part of the regional framework for post-secondary education developed under subcomponent 1.1. This template will ensure that key actors at the regional level are able to provide strategic guidance on the structure of the plans and allocation of funds. This template will include requirements in terms of maintenance to ensure sustainability, safety protocols for laboratories, environmental and social aspects, disaster preparedness mechanisms, collaboration mechanisms between OECS postsecondary institutions, and identification of financing sources to ensure implementation of the plans beyond eligible expenditures and after the end of the Project. Additionally, the development of the REPs will involve discussions by the RSC on specialization of the recipient institutions in areas of comparative advantage, which can move these institutions towards eventually becoming regional centers of excellence, exploiting economies of scale and scope.
- 14. Investments in the purchase of equipment for modern laboratories and workshops included in REPs should (i) enhance students' proficiency-based learning, (ii) supply services and promote entrepreneurship relevant to the local community, (iii) be self-sustainable through revenue-generating activities, and/or (iv) foster research and local development. In addition to investments to modernize traditional laboratories, REPs could support the design and implementation of Virtual Labs (i.e., simulators) that use VR and Augmented Reality in areas where using these labs can be more cost-effective.⁸⁵ The use of simulators in virtual labs can also allow for more energy-efficient use of laboratories, prepare students for more efficient use of waste, and develop students' skills on the sustainable use of natural resources (e.g., industrial fishing, protection of coral reefs, circular economy, among others).
- Subcomponent 2.2: Developing programs to foster priority skills (US\$2.5 million). Technical assistance will be provided to develop the programs' content, including by integrating the teaching of priority transversal skills,

incorporating cutting-edge technologies, and ensuring sufficient practical/work-based learning. The development of the program and teaching modules will include principles of universal design, and program delivery will use a multitude of methods to support learners with disabilities or special educational needs. The subcomponent will also support teacher training to ensure adequate implementation of these programs. Teacher training will also include training in gender-sensitive and inclusive pedagogical practices and raising awareness on SEA/SH policies and protocols. Moreover, it will integrate appropriate climate change adaptation and mitigation strategies.

- 16. To complement the development or adaptation of the above programs, this subcomponent will also provide students and teachers with software licenses for tutoring or courses, to develop or remediate certain priority skills and competencies that OECS post-secondary institutions cannot deliver in-house. This can be done via computer assisted remediation or intelligent tutoring systems in areas such as mathematics and/or by providing access to specialized courses in online platforms such as Coursera).
- 17. Finally, this subcomponent will support the development of career guidance strategies for each developed or enhanced program to facilitate students' school-to-work transition. The Project will, for instance, finance the development of mentoring sessions on professional communication, networking and career exploration and planning, and provide training to relevant staff on the labor market information available in the country and the OECS region. While these strategies will cover general aspects of job search strategies (such as training on how to signal in-demand skills while preparing a Curriculum Vitae and interviewing with potential employers), some aspects will also be tied to the specific programs, to increase students' readiness in their fields. Career fairs for sectors or occupations related to the program supported by the Project will be organized. Students will also be introduced to the opportunities provided by the global Gig Economy and trained on how to identify and apply for relevant opportunities using digital job search platforms. Career guidance services will include specific modules to facilitate integration into the labor market for young women, who experience lower labor force participation and higher unemployment rates, and thus face a significant disadvantage in terms of realizing the returns to post-secondary education.
- 18. Subcomponent 2.3: Enabling the innovation ecosystem and sponsoring collaborative innovation (US\$9 million; US\$600,000 unguaranteed commercial financing). Based on a comprehensive diagnostic, the Project will provide technical assistance to strengthen the innovation potential of post-secondary education institutions and address institutional and regulatory gaps and constraints in participating countries hindering collaboration among post-secondary institutions and with the private sector, the diaspora and other key actors in the regional innovation ecosystems. The assessments will be carried out at two levels: at the post-secondary education institutions and at the national government. Knowledge exchange activities with other countries in the path of promoting innovation in higher education will be facilitated to share lessons and best practices. At the institution level, the Higher Education Institution Innovate (HEInnovate) self-assessment tool will be applied. By using the HEInnovate tool, developed by the European Commission and the OECD, post-secondary institutions will assess, through the innovation lens, aspects in eight key areas: (i) leadership and governance, (ii) organizational capacity, (iii) entrepreneurial teaching and learning, (iv) preparing and supporting entrepreneurs, (v) digital transformation and capability, (vi) entrepreneurial ecosystem and networks, (vii) internationalization and (viii) impact of entrepreneurial institution. HEInnovate will allow post-secondary education institutions exploring their entrepreneurial and innovative potential at the institution, group, and individual level. The HEInnovate assessment will be applied at the beginning of the implementation and can be reapplied during the project implementation to compare trends over time and assess progress. Based on the assessment, an action plan will be developed, and two areas will be prioritized for implementation in a consecutive manner. The RSC will also validate the action plans and monitor its progress and the country PIUs will finance the implementation of the HEInnovate action plans by post-secondary institutions.

- 19. At the national level, the assessment will provide a systemic perspective about the role of post-secondary education institutions on innovation and collaboration with the private sector and other stakeholders in the ecosystem. It will capture the complex interactions and dynamics in the ecosystem and identify obstacles in the current policy, institutional, and regulatory frameworks that may be hindering the establishment of joint research and innovation activities and the development of sustainable collaborative networks across these stakeholders. It will assess complementarities and possible policy synergies as well as political economy of reform challenges. It will be based on a review of legal, operational and policy documents, as well as on interviews and focus groups with representatives of postsecondary institutions, government officials and other stakeholders (e.g., research centers, including those affiliated with UWI, private sector, the diaspora, and other key actors) to understand barriers and gaps hindering collaborative innovation.86 The diagnostics will have both national (Saint Lucia and Grenada) and regional focus so that collaboration can be promoted within participating countries and with other OECS countries. Based on the assessment, the subcomponent will provide actionable recommendations and technical assistance to address prioritized constraints and gaps. The national level assessments complement the ones at the institution level with its systemic perspective considering that the post-secondary education institutions are part of the innovation ecosystem and understanding the dynamics and interactions across stakeholders will contribute to unlocking collaborative innovation. Likewise, these assessments will complement the regional enhancement plans developed in subcomponent 2.1.
- 20. Second, the Project will sponsor collaborative innovation between students and faculty of post-secondary institutions in alliance with entrepreneurs and other innovation ecosystem stakeholders. The subcomponent will support two types of collaborative innovation initiatives, at the individual and consortia level, as described below. The KTIP online window and knowledge exchange events, implemented under subcomponent 1.2, will play a crucial role in connecting members from post-secondary institutions, entrepreneurs, and other prospective partners in the regional innovation ecosystem. Also, the KTIP will be leveraged to identify prospective projects to be sponsored and thematic experts to be invited as evaluators. The pool of candidate projects may be initially composed of pre-identified initiatives run by post-secondary institutions, research centers, or local entrepreneurs through the inventory of activities generated through the KTIP online window and, potentially as well as, during the knowledge exchange events and innovation inducement activities. Entrepreneurship interventions led by the OECSC, with hundreds of applicants for each program from within the region, demonstrate potential demand for this type of interventions and opportunities to finding innovation initiatives. These activities will strengthen the innovation capacities of participating post-secondary institutions and will complement the HEInnovate-based assessments and action plans.

21. The support to collaborative projects will be provided through two types of competitive matching grants:

Individual support: Grants will be provided to finance innovation projects proposed by students from post-(i) secondary education institutions participating in the Project or entrepreneurs from Grenada and Saint Lucia, under academia-industry collaborative engagements in the Project's prioritized sectors. Student applicants will need a faculty member to sponsor and guide them during the formulation and implementation of the project, in collaboration with a sponsoring firm. The proposed innovation project must respond to an actual need, challenge or opportunity faced by the sponsoring firm and its relevance must be demonstrated and signed off by the sponsoring firm. Additionally, to guarantee the sponsoring firm's commitment, a contribution to the innovation project is expected, either with funding or in-kind, as per the guidelines to be established in the Regional Grants Manual. The proposal must include activities for students and their sponsoring faculty and firm to engage in

⁸⁶ During the focus groups that took place in March and April, the private sector highlighted some issues limiting collaboration for skilling and innovation activities including the lack of policies and policy instruments, lack of clarity of rules and knowledge about mechanisms and intellectual property rights reflected in distrust about sharing information, red tape, restrictive regulations (e.g., for youth work), among others (financial constraints and red tape of banking sector was also mentioned). The insurance and security measures on the job is an issue when sending students to internships and to work.

knowledge transfer with other members of the academia. Prospect students that are themselves entrepreneurs can also postulate their projects to receive this individual support, without the requirement of collaborating with a sponsoring firm, conditional on implementing a well-defined knowledge transfer and collaboration plan with the post-secondary education institution to be presented as part of the proposal and with the sponsorship of a faculty member. Entrepreneur applicants from Grenada and Saint Lucia will be eligible to receive individual support to innovation projects that aim at addressing challenges faced by the OECS region in prioritized sectors, conditional on co-financing the project and implementing a knowledge transfer and collaboration plan with postsecondary education institutions participating in the project. The knowledge transfer and collaboration plan must be presented as part of the proposal, in agreement with the post-secondary education institution and can include professorships, workshops, conferences, mentoring of students, contributing to research projects, among others to be defined in the Regional Grants Manual. The objective of this engagement will be to transfer knowledge, to foster entrepreneurial and innovation skills and strengthen the academia-industry collaboration. These competitive individual grants will allow students from participating post-secondary education institutions to develop innovation skills and acquire hands-on experience in innovation-based business activities, improving their work prospectives after graduating. Also, the collaborative component of the grants will facilitate networking and open career and business opportunities. Details on the selection criteria for students, faculty, firms, and entrepreneurs, as well as on call for proposals and other procedures, will be detailed in the Regional Grants Manual. The individual grants will last for maximum one year without the possibility of receiving more than one grant per participating individual. The amount of the individual grant will be between US\$15,000 and US\$30,000. A total of 110 grants are estimated to be allocated along the full span of the Project.87

(ii) <u>Consortia support</u>: Grants will be provided to innovation projects presented in consortia between students and/or faculty of Project participating post-secondary education institutions and entrepreneurs from participating countries. This funding support will be accompanied with technical assistance as described below. Established firms, members of the diaspora and other innovation ecosystem actors (e.g., TVET institutions, universities, research centers, civil society organizations), even from other OECS countries to promote regional collaboration, can also be part of the consortia. To be eligible, projects must address challenges affecting the OECS countries in the Project's prioritized sectors and must demonstrate potential for replicability and scalability in the OECS region. Proposed projects will be evaluated based on the relevance of the solution and expected impact, potential scalability, the commitment of private sector partners, 88 and the soundness of the financial proposal, among other criteria as per the Regional Grants Manual. Participating entrepreneurs must participate in all stages of the sponsored project, including the conceptualization, structuring and implementation of the project. Also, participating entrepreneurs and firms will be required to co-finance the innovation project to ensure commitment and market relevance, as well as to mitigate potential moral hazard and adverse selection risks. Furthermore, private sector co-financing will generate incentives for the sustainability of the projects after the supported intervention. Details on duration of consortia innovation projects, eligibility criteria, funding amounts, cofinancing conditions and technical assistance activities will be defined in the Regional Grants Manual. Beneficiaries of consortia grants cannot benefit from other consortia or individual grants. The consortia grants may span for a maximum of three years, within the full span of the Project (six years). The total amount per innovation project will be between US\$100,000 and US\$200,000 and a total of 12 consortia innovation projects are estimated to be allocated along the full span of the Project.89

22. To ensure effectiveness of the intervention, technical assistance will complement the funding support of

⁸⁷ The estimated total number of individual grants is based on a percentage of the total expected of students graduating from the four participating institutions (1,550) during the Project and information on number of potential entrepreneurs from counterparts.

⁸⁸ Measured, for instance, by the share of the amount invested in the Project.

⁸⁹ It is estimated that three consortia projects will be sponsored in each of the four post-secondary participating institutions.

consortia projects. Acknowledging that managerial and other entrepreneurial skills are critical for innovation (Cirera and Maloney, 2017), the Project will provide training and consulting services to the managers of the collaborative innovation projects being sponsored. The technical assistance will be tailored-made based on an initial and detailed assessment of the mangers' capabilities. Depending on the identification of common needs, group consulting will be provided as it has been found to be more cost-effective than individual consulting (lacovone et al., 2019). The areas of intervention will be clearly defined in the Regional Grants Manual. These will include managerial capabilities such as accounting, developing a business plan, retaining, and recruiting talent, project structuring, businesses development and scaling, as well as consulting services regarding the protection and use of intellectual property rights, technology readiness, effective collaboration, green skills, among other areas. Technical assistance, training and consulting services providers will be procured according to World Bank procurement standards and procedures. Implementation of the selected projects will be closely monitored, and specific support could be provided to solve unforeseen challenges as part of the technical assistance support. Technical assistance activities will amount to a maximum of US\$100,000 per sponsored collaborative innovation project.

- 23. Women's participation and innovations oriented to support climate adaptation, mitigation and resilience will be stimulated. Female students will be encouraged to postulate to the individual support grants and the selection process will incorporate gender preferential criteria at equal quality conditions of the project proposal. Likewise, the Project will favor women-led projects⁹⁰ of equal quality to encourage women entrepreneurship and innovation, considering the low rates of women's business ownership in the region. Furthermore, support provided to women-led projects will incorporate gender-oriented technical assistance and consulting. The Project will also favor projects that contribute to private sector's climate action, such as those that adopt technologies or develop innovative solutions to make production processes and services more sustainable, for instance, introducing circular economy or energy efficient concepts. Details on how this gender and climate-oriented criteria will be applied to the implementation of this subcomponent will be included in the Regional Grants Manual.
- 24. The integration of ancestral and traditional knowledge with science will be encouraged as well as the collaboration with local communities in innovation projects. Ancestral and traditional knowledge can contribute to innovative solutions to challenges faced by OECS countries. For instance, bioeconomy incorporates traditional knowledge of bioinputs with scientific research to produce new ingredients useful to increase productivity and the sustainability of agribusiness, food, and pharmaceutical value chains. Also, nature-based solutions can also benefit from ancestral and traditional knowledge in the blue economy and tourism, key sectors in the OECS region. Furthermore, the conservation, promotion and rejuvenation of tangible and intangible cultural heritage, values and tradition are key elements of sustainable development. Identifying the cultural asset base within communities, and packaging and presenting them in creative ways, can be used not only to sustain the cultural traditions, but, if integrated into innovative entrepreneurial projects, can contribute to livelihoods of Grenadian and Saint Lucian communities. Thus, collaborative innovation with local communities can serve as an instrument for social inclusion and recovery and reconstruction of cultural heritage.
- A Regional Grants Manual will be prepared to guide the final design and implementation of the funding support and technical assistance under this subcomponent. The Regional Grants Manual will be prepared by the management entities, that is, the GIDC in collaboration with the Innovation and Entrepreneurship Specialist at Grenada's PIU and the Innovation Division of the Ministry of Education, Innovation, Science, Technology and Vocational Training in Saint Lucia. Also, the OECSC will provide technical advice. The Regional Grants Manual will be validated by the RSC and approved by the World Bank as it constitutes a withdrawal condition. The resources allocated to each type of grants are indicative and can be reallocated given the actual demand faced in implementation, with validation of the RSC and according to the

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⁹⁰ Women-led projects are defined as those that meet at least one of the following: (i) the main faculty member is a woman; (ii) the lead entrepreneur is a woman; or the lead firm is considered women-led (51 percent owned by women or at least 51 percent of members of executive decision-making bodies are women).

Regional Grants Manual. The list of eligible expenses will be established in the Regional Grants Manual and may include: equipment and durable goods (energy efficient as applicable), software and hardware, directly related to the project; inputs including research materials and supplies; prototyping, testing and validating; costs associated to intellectual property rights; incremental staff and consultants directly required for the implementation of the project; travel expenses to facilitate cross-country collaboration; knowledge transfer and dissemination; bibliographic needs and technical training directly related to the project; consulting services to formally establish consortia. Definition of eligible technical assistance activities and consulting services will also be included in the Regional Grants Manual, as per the guidelines described above. Participation and selection criteria of students, faculty members, entrepreneurs and firms, as well as specific procedures will be detailed in the Regional Grants Manual. Likewise, guidelines for co-financing conditions and amounts, which will vary depending on the size of participating firm (based on annual revenue and number of employees).

- The implementation of grants will be governed by principles of transparency, independence, competitiveness, impartiality and gender inclusiveness. The evaluation and selection of project beneficiaries will be implemented by separate evaluation and selection panels to be structured for each call for proposals. The Evaluation Panel will be constituted by recognized scholars and industry practitioners with demonstrated experience in innovation activities in the project's prioritized sectors. The evaluators will review and evaluate proposals, and make recommendations for improvements as needed, according to Regional Grants Manual. The Selection Panel will be constituted by at least three experts including a researcher or technical expert in proposed innovation areas, an industry representative, and an innovation and entrepreneurship expert (investment, commercialization, startups/spinoffs, academia-industry collaboration). The KTIP will be leveraged to set up a pool of recognized experts, practitioners, and scholars to be invited as evaluators and selectors of project beneficiaries. Hence, this pool of experts will have a regional perspective, and may include international experts with connections to the OECS region.
- The RSC will play a guiding role in the design and implementation of this component, while the experience of OECSC in supporting business development in the region will be leveraged. The RSC will validate the Regional Grants Manual, which will include the selection criteria, the areas of technical assistance, the type of activities, the funding rules, etc. Through the RSC, the OECSC will play a key advising role in the design and monitoring of this subcomponent given their experience and installed capacity. In addition to implementing a regional competitive matching grants component under the World Bank's Unleashing Blue Economy of the Caribbean (UBEC) Project, the OECSC has been providing technical assistance and grants funding to entrepreneurs across the region through previous and ongoing accelerator and incubator programs (e.g., Eastern Caribbean Greenpreneurs Incubator Programme, Eastern Caribbean Green Entrepreneurship Initiative, OECS Techie). Close coordination with the OECSC will increase implementation efficiency and minimize duplication of interventions or of beneficiaries across programs. For instance, the OECSC could refer potential beneficiaries from other programs suited to participating in this project. Finally, as the OECSC is managing the KTIP as well as other regional MSMEs and entrepreneurship programs, the Project can tap into the pools of entrepreneurs participating in to mobilize collaboration between entrepreneurs and the academia, through the KTIP and their potential participation in this component.
- Third, the Project will dedicate funding to build capacity in the grants implementing entities to ensure adequate implementation and sustainability. At effectiveness of the Project, under this subcomponent, current capacity at GIDC in Grenada and at the Innovation Division of the Ministry of Education, Innovation, Science, Technology and Vocational Training in Saint Lucia will be assessed to identify the strengths and needs for enhancement to adequately implement the innovation grants. Specifically, the assessments will map the current state of the implementing and participating entities in terms of size and capabilities and compare with those required for the Project. Based on such assessments, one action plan will be defined and implemented for each entity in the first year of the Project. The action plans will include the hiring

⁹¹ The Project will coordinate with ongoing programs and projects being implemented in the region, including the UBEC project.

and training of staff in the areas of innovation and innovation-led entrepreneurship to meet international best practice standards. Also, the enhanced teams in the grants implementing entities will be dedicated to the drafting of the Regional Grants Manual, the establishment of the pool of experts, and other preparatory activities that will also strengthen their innovation policy capabilities. The full execution of the action plans (which are independent between countries) will be a disbursement condition to start the implementation of the collaborative innovation grants in each of the participating countries.

- 29. **Component 3: Project Management and Technical assistance (Estimated amount: US\$4.2 million).** Detailed arrangements for project management are included in the POM.
- 30. **Component 4: Contingent Emergency Response Component (CERC) (US\$0 million).** Details will be included in the CERC manual.

ANNEX 3: Summary of Climate Actions

- 1. The effects of climate change in this region will likely result in higher temperatures, changing rainfall patterns, rising sea levels, and increased intensity and frequency of natural disasters. Potential loss and damage will result from storm surges and saltwater intrusion into freshwater supplies and agricultural land, frequent flooding and water shortages, which would lead to decreased food availability and security as well as permanent loss of territory due to sea level rise. As stated in Saint Lucia's 2021 NDC, rising water temperatures and sea water CO2 concentration will result in damage to coral reefs and declines in commercially important fisheries stocks, as well as impact tourism, which is dependent on these ecosystems. It is also expected that sea level rise and increased extreme climatic events would result in loss of culturally and spiritually important landscapes and ultimately migration and displacement of coastal communities. Temperature increase will result in increased risk of deaths through direct impacts, such as injuries associated with extreme events, and through indirect impacts via increased water- and vector- borne disease outbreaks.
- 2. The resilience of OECS countries to climate change and other shocks needs to be strengthened. Impacts of extreme weather events are likely to worsen, so the education system is becoming increasingly vulnerable and needs to adapt to observed and anticipated risks. This can be achieved by making strategic choices, adjusting sector planning, climate proofing infrastructure, and increasing training and awareness of students, teachers, parents, education sector staff, and private sector actors on expected climate impacts, adaptation, and mitigation measures. The World Bank is currently providing support to the Eastern Caribbean's climate and disaster risk management, focusing on ex-ante resilience to natural hazards and climate change impacts. This Project supports these efforts by strengthening the resilience of the education system and the private sector to climate change, by promoting mitigation and adaptation activities.
- 3. In the latest NDC submitted to the United Nations Framework Convention on Climate Change (UNFCCC), Grenada committed to a 40 percent reduction of its carbon emissions by 2030, based on its 2010 level. In 2020, the NDC was reviewed, and Grenada committed to the same targets, conditional on receiving external funding.⁹³ Grenada's economy wide target to reduce emissions by 40 percent by 2030 covers the energy, forestry, waste and Industrial Processes and Product Use sectors. Grenada is also implementing its National Climate Change Policy and a NAP for the period 2017-2020. The latter features 12 multi-sectoral programs of action. It considered as an umbrella document, based mainly on prioritized climate change adaptation activities taken from existing sectoral and local area plans that were already developed through larger consultative processes in the past months and years.⁹⁴
- 4. **One of the objectives of Grenada's NAP is to strengthen climate change education.** Climate change is currently part of the secondary school curriculum. Grenada-specific primary school material on climate change was made available and distributed to schools ("Greenz Climate Champion", teacher manual, worksheet collection, student passport, stickers and posters). Grenada plans on continuing to support the use of existing materials, create courses for teachers to use these, and to include climate change projects into the activities done by students at the secondary schools, T.A. Marryshow Community College, and St. George's University.
- 5. In its latest NDC, Saint Lucia committed to 7 percent of emissions reduction by 2030 in the energy sector relative to 2010. The target is a continuation and expansion of efforts listed in the first NDC to meet the targets for 2025 and 2030. Saint Lucia is currently implementing its NAP that has been defined as a 10-year process, starting in 2018 with an expected full implementation by 2028. Priority sectors for adaptation action include tourism; water; agriculture; fisheries;

⁹² Saint Lucia's Updated Nationally Determined Contribution, 2021.

⁹³ Grenada, Second Nationally Determined Contribution, 2020.

⁹⁴ National Climate Change Adaptation Plan (Nap) For Grenada, Carriacou And Petite Martinique, 2017.

infrastructure and spatial planning; resilient ecosystems; education; and health. It is worth noting that Saint Lucia is planning to develop an LTS, and the energy modeling timeframe extending to 2050 that informs this energy focused NDC, is aligned with the long-term pathway for this sector. The LTS will consider all sectors that contribute to greenhouse emissions.⁹⁵

- 6. In the education sector, Saint Lucia is taking actions to encourage the involvement of youth in the decision-making process on climate change. The Government is working on the development of climate change-relevant curriculum material, to be provided to students with print disabilities. Additionally, measures are being implemented in the areas of renewable energy and energy efficiency solutions and technologies in school buildings (GHG emission related activities such as lighting, air conditioning or cooking) as well as renewable energy generation on school sites. Targets include 20 percent reduction in energy consumption and 16 percent reduction of GHG emissions [aligned with NDC target of 16 percent by 2025, 23 percent by 2030] both to be achieved by 2025. School gardening programs are implemented through support programs of the Ministry of Agriculture. Prior to the COVID-19 global pandemic, 70-80 percent of primary schools had functional gardens.
- 7. **Activities supported under this Project support these efforts.** The table below is a summary of climate actions by Project subcomponents and results indicator:

95 https://unfccc.int/sites/default/files/NDC/2022-06/Saint%20Lucia%20First%20NDC%20%28Updated%20submission%29.pdf.

Table A3.1 Summary of Climate Actions under the Project

Indicator	Subcomponent	Climate action
PDOI. Common learning standards for priority skills endorsed by OECS Member States	1.1: Developing regional collaboration in post-secondary education	Adaptation/Mitigation: The regional strategic framework for post-secondary education will integrate aspects related to climate change, particularly mitigation and adaptation measures, and an M&E framework to follow the
IRI. Harmonized standards for teachers' qualifications developed IRI. Operational plan for the	(US\$3.2M)	implementation of said measures. These measures could include, <i>inter alia</i> , GHG emission reduction for post-secondary institution construction and repairs, teacher training modules, and climate awareness modules for students.
regional strategic framework endorsed by OECS Member States IRI. Regional guidelines for quality post-secondary education data developed		Green skills and aspects related to mitigation and adaptation to climate change will be covered under the development of learning standards and assessments, as these skills are part of the priority skills defined under this Project. Prioritized sectors for advanced technical skills include sustainable agroindustry, blue economy, bioeconomy, circular economy, smart and sustainable tourism, renewable and clean energies, health sciences, and creative industries. Standards and assessments would be developed for these prioritized sectors at the regional level.
		Finally, the development of harmonized standards for teachers' qualifications, evaluation, and professional development will include how to develop disaster risk management plans at the institution levels in case of natural hazards, and suggestions to implement climate change mitigation campaigns directed at students.
		Adaptation: The EMIS architecture will include sustainability considerations, in particular in terms of support for maintenance costs in the event of climate-related or other disasters.
		Adaptation/Mitigation: The EMIS architecture will also be adapted to include data on the post-secondary institutions' GHG emissions and their vulnerability to climate change, which would help implement adequate mitigation measures over time.

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IRI: Number of firms and entrepreneurs actively participating in KTIP	1.2. Fostering the participation of post-secondary institutions in regional innovation ecosystems (US\$1,600,000)	Adaptation/Mitigation: The KTIP platform will foster discussions and collaboration on innovative solutions to mitigate, adapt, and build resilience to climate change in Project prioritized sectors. The OECSC will organize activities to share knowledge and promote collaboration on innovation activities around topics of common interest and relevant to OECS countries, with particular focus on climate action in prioritized sectors.
PDOI: Number of students graduating from enhanced programs in selected post-secondary institutions IRI: Students benefiting from direct interventions to enhance learning IRI: Number of laboratories or workshops with improved and more climate resilient physical learning environments IRI: Number of post-secondary institutions implementing Regional Enhancement Plans	2.1: Developing and implementing Regional Enhancement Plans (US\$15.5 million)	Adaptation: The regional template for the Regional Enhancement Plans (to be implemented in post-secondary institutions) will include requirements in terms of sustainability, safety protocols for laboratories, environmental and social aspects, and disaster preparedness mechanisms. Mitigation: The setup and repairs of laboratories and workshops will incorporate energy-efficient features such as improved drainage, natural ventilation, and use of climate-resilient materials. Low-carbon materials will be preferred, when possible, for the repairs. Digital equipment for blended and distance learning will be financed to promote learning continuity in case of natural disasters or other disruptive events and contribute to enhancing the education system's climate resilience. The setup and repairs of laboratories and workshops will incorporate energy-efficient features such as improved drainage, natural ventilation, and use of climate-resilient materials (such as porous surfaces for sidewalks). Strengthened roof covers withstanding storms will also be financed when needed. Low-carbon materials will be preferred, when possible, for the repairs. On-site renewable energy generation through wind and solar energy will be used and supported, when possible, with the objective of reducing CO2 emissions. Maintenance budgets will be included as part of each module, starting in the first year of implementation.
PDOI: Number of students graduating from enhanced programs in selected post-secondary institutions	2.2: Developing programs to foster priority skills (US\$2.5 million)	Mitigation/Adaptation: Programs to be developed or enhanced will be aligned with the areas of specialization defined in the regional strategic framework for post-secondary education developed under subcomponent 1.1. "Green" skills will be emphasized to support the transition to low-carbon

IRI: Number of post- secondary teachers trained on integrating priority transversal skills in teaching practices, including on aspects related to gender and special educational needs		economies, particularly on how to use low-carbon technologies and business models.
PDOI: Number of innovations adopted by entrepreneurs as a result of collaboration with post-secondary education institutions	2.3: Enabling the innovation ecosystem and sponsoring collaborative innovation (US\$9 million)	Mitigation: Projects that contribute to private sector climate actions, such as those that adopt technologies or develop innovative solutions to make production processes and services more sustainable (e.g., introducing circular economy or energy efficient concepts) will be favored in the grant allocation process.
IRI: Number of firms participating in sponsored innovation projects with post-secondary institutions		