

FOR OFFICIAL USE ONLY

Report No: PAD4396

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT

ON A
PROPOSED GRANT
IN THE AMOUNT OF SDR 215.6 MILLION
(US\$300 MILLION EQUIVALENT)

AND
A PROPOSED CREDIT
IN THE AMOUNT OF US\$300 MILLION

TO THE

DEMOCRATIC REPUBLIC OF CONGO

FOR AN

ACCESS GOVERNANCE AND REFORM FOR THE ELECTRICITY AND WATER SECTORS PROJECT

MARCH 9, 2022

Energy and Extractives Global Practice Eastern and Southern Africa Region

This document has a restricted distribution and may be used by recipients only in the performance of their official duties. Its contents may not otherwise be disclosed without World Bank authorization.

CURRENCY EQUIVALENTS

(Exchange Rate Effective January 31, 2022)

Currency Unit = Congolese Franc (CDF)

US\$1 = CDF 2,001.08

US\$1 = SDR 0.72

FISCAL YEAR
January 1 – December 31

Regional Vice President: Hafez M. H. Ghanem

Country Director: Jean-Christophe Carret

Acting Regional Director: Ashish Khanna

Practice Managers: Julia M. Fraser, Maria Angelica Sotomayor

Alain Ouedraogo, Patrick Goy Ndolo,

Task Team Leaders: Thomas Flochel

ABBREVIATIONS AND ACRONYMS

AfDB	African Development Bank				
ANSER	Agence Nationale d'Electrification et des Services Énergétiques en milieux Rural et Péri-				
	Urbain (National Agency for Rural Energy Services)				
ARE	Autorité de Régulation de l'Électricité (Electricity Regulatory Agency)				
ARSPE	Autorité de Régulation du Service Public de l'Eau (Water Regulatory Agency)				
CEP-O	Cellule d'Exécution des Projets				
CERC	Contingent Emergency Response Component				
COPIREP	Comité de Pilotage de la Réforme des Entreprises Publiques (Committee in Charge of				
	Reform of State-Owned Enterprises)				
CPF	Country Partnership Framework				
CSPP	Cellule de Suivi des Programmes et Projets (Programs and Projects Monitoring Unit)				
DA	Designated Account				
DAS	Département d'Assainissement (Department of Sanitation)				
DBO	Design-Build-Operate				
DHS	Demographic and Health Survey				
DRC	Democratic Republic of Congo				
EASE	Electricity Access and Service Expansion				
EIRR	Economic Internal Rate of Return				
ERP	Enterprise Resource Planning				
ESCP	Environmental and Social Commitment Plan				
ESF	Environmental and Social Framework				
ESIA	Environmental and Social Impact Assessment				
ESMAP	Energy Sector Management Assistance Program				
ESMF	Environmental and Social Management Framework				
ESMP	Environmental and Social Management Plan				
ESMS	Environmental and Social Management System				
ESRS	Environmental and Social Review Summary				
FCDO	Foreign, Commonwealth & Development Office of the United Kingdom				
FCV	Fragility, Conflict, and Violence				
FIRR	Financial Internal Rate of Return				
FM	Financial Management				
FSM	Fecal Sludge Management				
GBV	Gender-Based Violence				
GCF	Green Climate Fund				
GDP	Gross Domestic Product				
GHG	Greenhouse Gas				
GIS	Geographic Information System				
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (German Agency for				
	International Cooperation)				
GoDRC	Government of the Democratic Republic of Congo				

GRS Grievance Redress Service HEIS Hands-on Expanded Implementation Support HR Human Resources HV High Voltage ICRC International Committee of the Red Cross IDA International Development Association IFC International Finance Corporation IFC International Financial Institution IFR Internit Financial Report IGF Inspection Générale de Finance (State Audit Inspectorate) IPF Investment Project Financing IVA Independent Verification Agent JMP Joint Monitoring Program KfW Kreditanstalt für Wiederaufbau (German Development Bank) LMP Labor Management Procedures LV Low Voltage M&E Monitoring and Evaluation MEDD Ministère de l'Environnement et Développement Durable (Ministry of Environment and Sustainable Development) MIGFE Ministry of Gender, Family and Children MICS Multiple Indicator Cluster Survey MIGA Multilateral Investment Guarantee Agency MIS Management Information System MoB Ministère du Budget (Ministry of Budget) MOEC Ministère du Budget (Ministry of Finance) MOFE Ministère du Portfeuille (Ministry of Finance) MOF Ministère de l'Enseignement Primaire Secondaire et Technique (Ministry of Education) MOF Ministère de Sessources Hydrauliques et de l'Electricité (Ministry of Water Resources and Electricity) MTR Micterm Review NV Medium Voltage NGO Nongovernmental Organization NPV Net Present Value NRW Nonrevenue Water O&M Operations and Maintenance OCE Office Congolais de l'Eau (Congolese Water Authority) OGS Off-Grid Solar PAD Project Appraisal Document	GRM	Grievance Redress Mechanism
HEIS Hands-on Expanded Implementation Support HR Human Resources HV High Voltage ICRC International Committee of the Red Cross IDA International Evelopment Association IFC International Finance Corporation IFI International Finance Corporation IFI International Financial Institution IFR International Financial Institution IFR International Financial Report IGF Inspection Générale de Finance (State Audit Inspectorate) IFF Investment Project Financing IVA Independent Verification Agent JMP Joint Monitoring Program KfW Kreditanstalt für Wiederaufbau (German Development Bank) Labor Management Procedures LV Low Voltage M&E Monitoring and Evaluation MEDD Ministère de l'Environnement et Développement Durable (Ministry of Environnent and Sustainable Development) MIGFE Ministry of Gender, Family and Children MICS Multiple Indicator Cluster Survey MIGA Multilateral Investment Guarantee Agency MIS Management Information System MoB Ministère du Budget (Ministry of Budget) MoEC Ministère du Budget (Ministry of Budget) MOEC Ministère de l'Environneent Primaire Secondaire et Technique (Ministry of Education) MOF Ministère du Portfeuille (Ministry of Finance) MOU Memorandum of Understanding MP Ministère du Portfeuille (Ministry of Fortfolio) MRHE Ministère du Romances (Ministry of Fortfolio) MRHE Ministère du Romances (Ministry of Fortfolio) MRHE Ministère du Portfeuille (Ministry of Fortfolio) MRHE Ministère du Portfeuille (Ministry of Portfolio) MRHE Ministère du Portfeuille (Ministry of Portfol		
HR Human Resources HV High Voltage ICRC International Committee of the Red Cross IDA International Development Association IFC International Finance Corporation IFI International Financial Institution IFR International Financial Institution IFR International Financial Institution IFR International Financial Report IGF Inspection Generale de Finance (State Audit Inspectorate) IPF Investment Project Financing IVA Independent Verification Agent JMP Joint Monitoring Program KfW Kreditanstalt für Wiederaufbau (German Development Bank) LMP Labor Management Procedures LV Low Voltage M&E Monitoring and Evaluation MEDD Ministère de l'Environnement et Développement Durable (Ministry of Environnent and Sustainable Development) MGFE Ministry of Gender, Family and Children MICS Multiple Indicator Cluster Survey MIGA Multilateral Investment Guarantee Agency MIS Management Information System MOB Ministère du Budget (Ministry of Budget) MOEC Ministère de l'Encomie Nationale (Ministry of Economy) MOED Ministère de l'Enseignement Primaire Secondaire et Technique (Ministry of Education) MOF Ministère des Finances (Ministry of Finance) MOU Memorandum of Understanding MP Ministère des Ressources Hydrauliques et de l'Electricité (Ministry of Water Resources and Electricity) MTR Midterm Review MV Medium Voltage NGO Nongovernmental Organization NPV Net Present Value NRW Nonrevenue Water O&M Operations and Maintenance OCE Office Congolais de l'Eau (Congolese Water Authority) OGS Off-Grid Solar		
HV High Voltage ICRC International Committee of the Red Cross IDA International Development Association IFC International Finance Corporation IFI International Financial Institution IFR Interim Financial Report IGF Inspection Générale de Finance (State Audit Inspectorate) IPF Investment Project Financing IVA Independent Verification Agent JMP Joint Monitoring Program KfW Kreditanstalt für Wiederaufbau (German Development Bank) LMP Labor Management Procedures LV Low Voltage M&E Monitoring and Evaluation MEDD Ministère de l'Environnement et Développement Durable (Ministry of Environment and Sustainable Development) MGFE Ministry of Gender, Family and Children MICS Multiple Indicator Cluster Survey MIS Management Information System MOB Ministère du Budget (Ministry of Budget) MOEC Ministère de l'Economie Nationale (Ministry of Economy) MOEC Ministère de l'Economie Nationale (Ministry of Economy) MOEM Ministère de l'Environnement Primaire Secondaire et Technique (Ministry of Education) MOF Ministère de Sensources Hydrauliques et de l'Electricité (Ministry of Water Resources and Electricity) MP Ministère des Ressources Hydrauliques et de l'Electricité (Ministry of Water Resources and Electricity) MV Medium Voltage NGO Nongovernmental Organization NPV Net Present Value NRW Nonrevenue Water O&M Operations and Maintenance OCE Office Congolais de l'Eau (Congolese Water Authority) OGS Off-Grid Solar		
ICRC International Committee of the Red Cross IDA International Development Association IFC International Finance Corporation IFI International Financial Institution IFR Interim Financial Report IGF Inspection Générale de Finance (State Audit Inspectorate) IFF Investment Project Financing IVA Independent Verification Agent JMP Joint Monitoring Program KfW Kreditanstalt für Wiederaufbau (German Development Bank) LMP Labor Management Procedures LV Low Voltage M&E Monitoring and Evaluation MEDD Ministère de l'Environnement et Développement Durable (Ministry of Environment and Sustainable Development) MGFE Ministry of Gender, Family and Children MICS Multiple Indicator Cluster Survey MIGA Multilateral Investment Guarantee Agency MIS Management Information System MoB Ministère du Budget (Ministry of Budget) MOEC Ministère du l'Economie Nationale (Ministry of Economy) MOEC Ministère de l'Enseignement Primaire Secondaire et Technique (Ministry of Education) MOF Ministère du Finances (Ministry of Finance) MOU Memorandum of Understanding MP Ministère des Ressources Hydrauliques et de l'Electricité (Ministry of Water Resources and Electricity) MTR Midterm Review MV Medium Voltage NGO Nongovernmental Organization NPV Net Present Value NRW Nonrevenue Water OQ&M Operations and Maintenance OCE Office Congolais de l'Eau (Congolese Water Authority) OGS Off-Grid Solar		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
IDA International Development Association IFC International Finance Corporation IFI International Financial Institution IFR Interim Financial Report IFF Inspection Générale de Finance (State Audit Inspectorate) IFF Investment Project Financing IVA Independent Verification Agent JMP Joint Monitoring Program KfW Kreditanstalt für Wiederaufbau (German Development Bank) LMP Labor Management Procedures LV Low Voltage M&E Monitoring and Evaluation MEDD Ministère de l'Environnement et Développement Durable (Ministry of Environment and Sustainable Development) MICS Multiple Indicator Cluster Survey MIGA Multilateral Investment Guarantee Agency MIS Management Information System MOB Ministère du Budget (Ministry of Budget) MOEC Ministère de l'Economie Nationale (Ministry of Economy) MOF Ministère de l'Environnement Primaire Secondaire et Technique (Ministry of Education) MOF Ministère de Perseignement Primaire Secondaire et Technique (Ministry of Education) MOF Ministère des Finances (Ministry of Finance) MOU Memorandum of Understanding MP Ministère des Ressources Hydrauliques et de l'Electricité (Ministry of Water Resources and Electricity) MTR Midtern Review MV Medium Voltage NGO Nongovernmental Organization NPV Net Present Value NRW Nonrevenue Water O&M Operations and Maintenance OCE Office Congolais de l'Eau (Congolese Water Authority) OGS Off-Grid Solar		
IFC International Finance Corporation IFI Interim Financial Report IGF Inspection Générale de Finance (State Audit Inspectorate) IPF Investment Project Financing IVA Independent Verification Agent JMP Joint Monitoring Program KfW Kreditanstalt für Wiederaufbau (German Development Bank) LMP Labor Management Procedures LV Low Voltage M&E Monitoring and Evaluation MEDD Ministère de l'Environnement et Développement Durable (Ministry of Environment and Sustainable Development) MGFE Ministry of Gender, Family and Children MICS Multiple Indicator Cluster Survey MIGA Multilateral Investment Guarantee Agency MIS Management Information System MOB Ministère du Budget (Ministry of Budget) MOEC Ministère de l'Economie Nationale (Ministry of Economy) MOED Ministère de l'Enseignement Primaire Secondaire et Technique (Ministry of Education) MOF Ministère des Finances (Ministry of Finance) MOU Memorandum of Understanding MP Ministère de Portfeuille (Ministry of Portfolio) MRHE Ministère des Ressources Hydrauliques et de l'Electricité (Ministry of Water Resources and Electricity) MTR Midterm Review MV Medium Voltage NGO Nongovernmental Organization NPV Net Present Value NRW Nonrevenue Water O&M Operations and Maintenance OCE Office Congolais de l'Eau (Congolese Water Authority) OGS Off-Grid Solar		
IFI International Financial Report IGF Inspection Générale de Finance (State Audit Inspectorate) IPF Investment Project Financing IVA Independent Verification Agent JMP Joint Monitoring Program KfW Kreditanstalt für Wiederaufbau (German Development Bank) LMP Labor Management Procedures LV Low Voltage M&E Monitoring and Evaluation MEDD Ministère de l'Environnement et Développement Durable (Ministry of Environment and Sustainable Development) MGFE Ministère Gender, Family and Children MICS Multiple Indicator Cluster Survey MIGA Multilateral Investment Guarantee Agency MIS Management Information System MoB Ministère du Budget (Ministry of Budget) MoE Ministère de l'Economie Nationale (Ministry of Economy) MoE Ministère de l'Enseignement Primaire Secondaire et Technique (Ministry of Education) MoF Ministère de l'Enseignement Primaire Secondaire et Technique (Ministry of Water Resources and Electricity) MRHE Ministère de Ressources Hydrauliques et de l'Electricité (Ministry of Water Resources and Electricity)		·
IFR Interim Financial Report IGF Inspection Générale de Finance (State Audit Inspectorate) IPF Investment Project Financing IVA Independent Verification Agent JMP Joint Monitoring Program KfW Kreditanstalt für Wiederaufbau (German Development Bank) LMP Labor Management Procedures LV Low Voltage M&E Monitoring and Evaluation MEDD Ministère de l'Environnement et Développement Durable (Ministry of Environment and Sustainable Development) MIGFE Ministry of Gender, Family and Children MICS Multiple Indicator Cluster Survey MIGA Multilateral Investment Guarantee Agency MIS Management Information System MOB Ministère du Budget (Ministry of Budget) MOEC Ministère de l'Enseignement Primaire Secondaire et Technique (Ministry of Education) MOF Ministère des Finances (Ministry of Finance) MOU Memorandum of Understanding MP Ministère du Portfeuille (Ministry of Portfolio) MRHE Ministère des Ressources Hydrauliques et de l'Electricité (Ministry of Water Resources and Electricity) MTR Midterm Review MV Medium Voltage NGO Nongovernmental Organization NPV Net Present Value NRW Nonrevenue Water O&M Operations and Maintenance OCE Office Congolais de l'Eau (Congolese Water Authority) OGS Off-Grid Solar		·
IGF Inspection Générale de Finance (State Audit Inspectorate) IPF Investment Project Financing IVA Independent Verification Agent JMP Joint Monitoring Program KfW Kreditanstalt für Wiederaufbau (German Development Bank) LMP Labor Management Procedures LV Low Voltage M&E Monitoring and Evaluation MEDD Ministère de l'Environnement et Développement Durable (Ministry of Environment and Sustainable Development) MGFE Ministry of Gender, Family and Children MICS Multiple Indicator Cluster Survey MIGA Multilateral Investment Guarantee Agency MIS Management Information System MOB Ministère du Budget (Ministry of Budget) MOEC Ministère de l'Enseignement Primaire Secondaire et Technique (Ministry of Education) MOF Ministère de Finances (Ministry of Finance) MOU Memorandum of Understanding MP Ministère du Portfeuille (Ministry of Portfolio) MRHE Ministère des Ressources Hydrauliques et de l'Electricité (Ministry of Water Resources and Electricity) MTR Midterm Review MV Medium Voltage NGO Nongovernmental Organization NPV Net Present Value NRW Nonrevenue Water O&M Operations and Maintenance OCE Office Congolais de l'Eau (Congolese Water Authority) OGS Off-Grid Solar		
IPF Investment Project Financing IVA Independent Verification Agent JMP Joint Monitoring Program KfW Kreditanstalt für Wiederaufbau (German Development Bank) LMP Labor Management Procedures LV Low Voltage M&E Monitoring and Evaluation MEDD Ministère de l'Environnement et Développement Durable (Ministry of Environment and Sustainable Development) MGFE Ministry of Gender, Family and Children MICS Multiple Indicator Cluster Survey MIGA Multilateral Investment Guarantee Agency MIS Management Information System MOB Ministère du Budget (Ministry of Budget) MOEC Ministère de l'Economie Nationale (Ministry of Economy) MOED Ministère de l'Enseignement Primaire Secondaire et Technique (Ministry of Education) MOF Ministère des Finances (Ministry of Finance) MOU Memorandum of Understanding MP Ministère des Ressources Hydrauliques et de l'Electricité (Ministry of Water Resources and Electricity) MTR Midterm Review MV Medium Voltage NGO Nongovernmental Organization NPV Net Present Value NRW Nonrevenue Water O&M Operations and Maintenance OCE Office Congolais de l'Eau (Congolese Water Authority) OGS Off-Grid Solar		·
IVA Independent Verification Agent JMP Joint Monitoring Program KfW Kreditanstalt für Wiederaufbau (German Development Bank) LMP Labor Management Procedures LV Low Voltage M&E Monitoring and Evaluation MEDD Ministère de l'Environnement et Développement Durable (Ministry of Environment and Sustainable Development) MGFE Ministry of Gender, Family and Children MICS Multiple Indicator Cluster Survey MIGA Multilateral Investment Guarantee Agency MIS Management Information System MOB Ministère du Budget (Ministry of Budget) MOEC Ministère du Budget (Ministry of Budget) MOEC Ministère de l'Economie Nationale (Ministry of Economy) MOFM Ministère de l'Enseignement Primaire Secondaire et Technique (Ministry of Education) MOF Ministère du Portfeuille (Ministry of Finance) MOU Memorandum of Understanding MP Ministère du Portfeuille (Ministry of Portfolio) MRHE Ministère des Ressources Hydrauliques et de l'Electricité (Ministry of Water Resources and Electricity) MTR Midterm Review MV Medium Voltage NGO Nongovernmental Organization NPV Net Present Value NRW Nonrevenue Water O&M Operations and Maintenance OCE Office Congolais de l'Eau (Congolese Water Authority) OGS Off-Grid Solar		
JMP Joint Monitoring Program KfW Kreditanstalt für Wiederaufbau (German Development Bank) LMP Labor Management Procedures LV Low Voltage M&E Monitoring and Evaluation MEDD Ministère de l'Environnement et Développement Durable (Ministry of Environment and Sustainable Development) MGFE Ministry of Gender, Family and Children MICS Multiple Indicator Cluster Survey MIGA Multiple Indicator Cluster Survey MIS Management Information System MoB Ministère du Budget (Ministry of Budget) MoEC Ministère du Budget (Ministry of Budget) MoEC Ministère de l'Economie Nationale (Ministry of Economy) MoEd Ministère des Finances (Ministry of Finance) MOU Memorandum of Understanding MP Ministère du Portfeuille (Ministry of Portfolio) MRHE Ministère des Ressources Hydrauliques et de l'Electricité (Ministry of Water Resources and Electricity) MTR Midterm Review MV Medium Voltage NGO Nongovernmental Organization NPV Net Present Value NRW Nonrevenue Water		
KfW Kreditanstalt für Wiederaufbau (German Development Bank) LMP Labor Management Procedures LV Low Voltage M&E Monitoring and Evaluation MEDD Ministère de l'Environnement et Développement Durable (Ministry of Environment and Sustainable Development) MGFE Ministère de Gender, Family and Children MICS Multiple Indicator Cluster Survey MIGA Multilateral Investment Guarantee Agency MIS Management Information System MOB Ministère du Budget (Ministry of Budget) MOEC Ministère de l'Economie Nationale (Ministry of Economy) MOED Ministère de l'Enseignement Primaire Secondaire et Technique (Ministry of Education) MOF Ministère des Finances (Ministry of Finance) MOU Memorandum of Understanding MP Ministère des Ressources Hydrauliques et de l'Electricité (Ministry of Water Resources and Electricity) MTR Midterm Review MV Medium Voltage NGO Nongovernmental Organization NPV Net Present Value NRW Nonrevenue Water O&M Operations and Maintenance OCE Office Congolais de l'E		<u> </u>
LMP Labor Management Procedures LV Low Voltage M&E Monitoring and Evaluation MEDD Ministère de l'Environnement et Développement Durable (Ministry of Environment and Sustainable Development) MGFE Ministry of Gender, Family and Children MICS Multiple Indicator Cluster Survey MIGA Multilateral Investment Guarantee Agency MIS Management Information System MOB Ministère du Budget (Ministry of Budget) MOEC Ministère de l'Economie Nationale (Ministry of Economy) MOED Ministère de l'Enseignement Primaire Secondaire et Technique (Ministry of Education) MOF Ministère des Finances (Ministry of Finance) MOU Memorandum of Understanding MP Ministère des Ressources Hydrauliques et de l'Electricité (Ministry of Water Resources and Electricity) MTR Midterm Review MV Medium Voltage NGO Nongovernmental Organization NPV Net Present Value NRW Nonrevenue Water O&M Operations and Maintenance OCE Office Congolais de l'Eau (Congolese Water Authority) OGS Off-Grid Solar		<u> </u>
LV Low Voltage M&E Monitoring and Evaluation MEDD Ministère de l'Environnement et Développement Durable (Ministry of Environment and Sustainable Development) MGFE Ministry of Gender, Family and Children MICS Multiple Indicator Cluster Survey MIGA Multilateral Investment Guarantee Agency MIS Management Information System MoB Ministère du Budget (Ministry of Budget) MoEC Ministère de l'Economie Nationale (Ministry of Economy) MoEd Ministère de l'Enseignement Primaire Secondaire et Technique (Ministry of Education) MOF Ministère des Finances (Ministry of Finance) MOU Memorandum of Understanding MP Ministère du Portfeuille (Ministry of Portfolio) MRHE Ministère des Ressources Hydrauliques et de l'Electricité (Ministry of Water Resources and Electricity) MTR Midterm Review MV Medium Voltage NGO Nongovernmental Organization NPV Net Present Value NRW Nonrevenue Water O&M Operations and Maintenance OCE Office Congolais de l'Eau (Congolese Water Authority) OGS Off-Grid Solar	KfW	
M&E Monitoring and Evaluation MEDD Ministère de l'Environnement et Développement Durable (Ministry of Environment and Sustainable Development) MGFE Ministry of Gender, Family and Children MICS Multiple Indicator Cluster Survey MIGA Multilateral Investment Guarantee Agency MIS Management Information System MoB Ministère du Budget (Ministry of Budget) MoEc Ministère de l'Economie Nationale (Ministry of Economy) MoEd Ministère de l'Enseignement Primaire Secondaire et Technique (Ministry of Education) MOF Ministère des Finances (Ministry of Finance) MOU Memorandum of Understanding MP Ministère du Portfeuille (Ministry of Portfolio) MRHE Ministère des Ressources Hydrauliques et de l'Electricité (Ministry of Water Resources and Electricity) MTR Midterm Review MV Medium Voltage NGO Nongovernmental Organization NPV Net Present Value NRW Nonrevenue Water O&M Operations and Maintenance OCE Office Congolais de l'Eau (Congolese Water Authority) OGS Off-Grid Solar	LMP	Labor Management Procedures
MEDD Ministère de l'Environnement et Développement Durable (Ministry of Environment and Sustainable Development) MGFE Ministry of Gender, Family and Children MICS Multiple Indicator Cluster Survey MIGA Multilateral Investment Guarantee Agency MIS Management Information System MoB Ministère du Budget (Ministry of Budget) MoEc Ministère de l'Economie Nationale (Ministry of Economy) MoEd Ministère de l'Enseignement Primaire Secondaire et Technique (Ministry of Education) MoF Ministère des Finances (Ministry of Finance) MOU Memorandum of Understanding MP Ministère du Portfeuille (Ministry of Portfolio) MRHE Ministère des Ressources Hydrauliques et de l'Electricité (Ministry of Water Resources and Electricity) MTR Midterm Review MV Medium Voltage NGO Nongovernmental Organization NPV Net Present Value NRW Nonrevenue Water O&M Operations and Maintenance OCE Office Congolais de l'Eau (Congolese Water Authority) OGS Off-Grid Solar	LV	
Sustainable Development) MGFE Ministry of Gender, Family and Children MICS Multiple Indicator Cluster Survey MIGA Multilateral Investment Guarantee Agency MIS Management Information System MoB Ministère du Budget (Ministry of Budget) MoEc Ministère de l'Economie Nationale (Ministry of Economy) MoEd Ministère de l'Enseignement Primaire Secondaire et Technique (Ministry of Education) MoF Ministère des Finances (Ministry of Finance) MoU Memorandum of Understanding MP Ministère du Portfeuille (Ministry of Portfolio) MRHE Ministère des Ressources Hydrauliques et de l'Electricité (Ministry of Water Resources and Electricity) MTR Midterm Review MV Medium Voltage NGO Nongovernmental Organization NPV Net Present Value NRW Nonrevenue Water O&M Operations and Maintenance OCE Office Congolais de l'Eau (Congolese Water Authority) OGS Off-Grid Solar	M&E	Monitoring and Evaluation
MGFE Ministry of Gender, Family and Children MICS Multiple Indicator Cluster Survey MIGA Multilateral Investment Guarantee Agency MIS Management Information System MoB Ministère du Budget (Ministry of Budget) MoEc Ministère de l'Economie Nationale (Ministry of Economy) MoEd Ministère de l'Enseignement Primaire Secondaire et Technique (Ministry of Education) MoF Ministère des Finances (Ministry of Finance) MoU Memorandum of Understanding MP Ministère du Portfeuille (Ministry of Portfolio) MRHE Ministère des Ressources Hydrauliques et de l'Electricité (Ministry of Water Resources and Electricity) MTR Midterm Review MV Medium Voltage NGO Nongovernmental Organization NPV Net Present Value NRW Nonrevenue Water O&M Operations and Maintenance OCE Office Congolais de l'Eau (Congolese Water Authority) OGS Off-Grid Solar	MEDD	
MICS Multiple Indicator Cluster Survey MIGA Multilateral Investment Guarantee Agency MIS Management Information System MoB Ministère du Budget (Ministry of Budget) MoEc Ministère de l'Economie Nationale (Ministry of Economy) MoEd Ministère de l'Enseignement Primaire Secondaire et Technique (Ministry of Education) MoF Ministère des Finances (Ministry of Finance) MoU Memorandum of Understanding MP Ministère du Portfeuille (Ministry of Portfolio) MRHE Ministère des Ressources Hydrauliques et de l'Electricité (Ministry of Water Resources and Electricity) MTR Midterm Review MV Medium Voltage NGO Nongovernmental Organization NPV Net Present Value NRW Nonrevenue Water O&M Operations and Maintenance OCE Office Congolais de l'Eau (Congolese Water Authority) OGS Off-Grid Solar		
MIGA Multilateral Investment Guarantee Agency MIS Management Information System MoB Ministère du Budget (Ministry of Budget) MoEc Ministère de l'Economie Nationale (Ministry of Economy) MoEd Ministère de l'Enseignement Primaire Secondaire et Technique (Ministry of Education) MoF Ministère des Finances (Ministry of Finance) MoU Memorandum of Understanding MP Ministère du Portfeuille (Ministry of Portfolio) MRHE Ministère des Ressources Hydrauliques et de l'Electricité (Ministry of Water Resources and Electricity) MTR Midterm Review MV Medium Voltage NGO Nongovernmental Organization NPV Net Present Value NRW Nonrevenue Water O&M Operations and Maintenance OCE Office Congolais de l'Eau (Congolese Water Authority) OGS Off-Grid Solar		
MIS Management Information System MoB Ministère du Budget (Ministry of Budget) MoEc Ministère de l'Economie Nationale (Ministry of Economy) MoEd Ministère de l'Enseignement Primaire Secondaire et Technique (Ministry of Education) MoF Ministère des Finances (Ministry of Finance) MoU Memorandum of Understanding MP Ministère du Portfeuille (Ministry of Portfolio) MRHE Ministère des Ressources Hydrauliques et de l'Electricité (Ministry of Water Resources and Electricity) MTR Midterm Review MV Medium Voltage NGO Nongovernmental Organization NPV Net Present Value NRW Nonrevenue Water O&M Operations and Maintenance OCE Office Congolais de l'Eau (Congolese Water Authority) OGS Off-Grid Solar		·
MoB Ministère du Budget (Ministry of Budget) MoEc Ministère de l'Economie Nationale (Ministry of Economy) MoEd Ministère de l'Enseignement Primaire Secondaire et Technique (Ministry of Education) MoF Ministère des Finances (Ministry of Finance) MoU Memorandum of Understanding MP Ministère du Portfeuille (Ministry of Portfolio) MRHE Ministère des Ressources Hydrauliques et de l'Electricité (Ministry of Water Resources and Electricity) MTR Midterm Review MV Medium Voltage NGO Nongovernmental Organization NPV Net Present Value NRW Nonrevenue Water O&M Operations and Maintenance OCE Office Congolais de l'Eau (Congolese Water Authority) OGS Off-Grid Solar	MIGA	<u> </u>
MoEc Ministère de l'Economie Nationale (Ministry of Economy) MoEd Ministère de l'Enseignement Primaire Secondaire et Technique (Ministry of Education) MoF Ministère des Finances (Ministry of Finance) MoU Memorandum of Understanding MP Ministère du Portfeuille (Ministry of Portfolio) MRHE Ministère des Ressources Hydrauliques et de l'Electricité (Ministry of Water Resources and Electricity) MTR Midterm Review MV Medium Voltage NGO Nongovernmental Organization NPV Net Present Value NRW Nonrevenue Water O&M Operations and Maintenance OCE Office Congolais de l'Eau (Congolese Water Authority) OGS Off-Grid Solar	MIS	· · · · · · · · · · · · · · · · · · ·
MoEd Ministère de l'Enseignement Primaire Secondaire et Technique (Ministry of Education) MoF Ministère des Finances (Ministry of Finance) MoU Memorandum of Understanding MP Ministère du Portfeuille (Ministry of Portfolio) MRHE Ministère des Ressources Hydrauliques et de l'Electricité (Ministry of Water Resources and Electricity) MTR Midterm Review MV Medium Voltage NGO Nongovernmental Organization NPV Net Present Value NRW Nonrevenue Water O&M Operations and Maintenance OCE Office Congolais de l'Eau (Congolese Water Authority) OGS Off-Grid Solar	MoB	
MoF Ministère des Finances (Ministry of Finance) MoU Memorandum of Understanding MP Ministère du Portfeuille (Ministry of Portfolio) MRHE Ministère des Ressources Hydrauliques et de l'Electricité (Ministry of Water Resources and Electricity) MTR Midterm Review MV Medium Voltage NGO Nongovernmental Organization NPV Net Present Value NRW Nonrevenue Water O&M Operations and Maintenance OCE Office Congolais de l'Eau (Congolese Water Authority) OGS Off-Grid Solar	MoEc	Ministère de l'Economie Nationale (Ministry of Economy)
MoU Memorandum of Understanding MP Ministère du Portfeuille (Ministry of Portfolio) MRHE Ministère des Ressources Hydrauliques et de l'Electricité (Ministry of Water Resources and Electricity) MTR Midterm Review MV Medium Voltage NGO Nongovernmental Organization NPV Net Present Value NRW Nonrevenue Water O&M Operations and Maintenance OCE Office Congolais de l'Eau (Congolese Water Authority) OGS Off-Grid Solar	MoEd	Ministère de l'Enseignement Primaire Secondaire et Technique (Ministry of Education)
MP Ministère du Portfeuille (Ministry of Portfolio) MRHE Ministère des Ressources Hydrauliques et de l'Electricité (Ministry of Water Resources and Electricity) MTR Midterm Review MV Medium Voltage NGO Nongovernmental Organization NPV Net Present Value NRW Nonrevenue Water O&M Operations and Maintenance OCE Office Congolais de l'Eau (Congolese Water Authority) OGS Off-Grid Solar	MoF	Ministère des Finances (Ministry of Finance)
MRHE Ministère des Ressources Hydrauliques et de l'Electricité (Ministry of Water Resources and Electricity) MTR Midterm Review MV Medium Voltage NGO Nongovernmental Organization NPV Net Present Value NRW Nonrevenue Water O&M Operations and Maintenance OCE Office Congolais de l'Eau (Congolese Water Authority) OGS Off-Grid Solar	MoU	Memorandum of Understanding
and Electricity) MTR Midterm Review MV Medium Voltage NGO Nongovernmental Organization NPV Net Present Value NRW Nonrevenue Water O&M Operations and Maintenance OCE Office Congolais de l'Eau (Congolese Water Authority) OGS Off-Grid Solar	MP	Ministère du Portfeuille (Ministry of Portfolio)
MTR Midterm Review MV Medium Voltage NGO Nongovernmental Organization NPV Net Present Value NRW Nonrevenue Water O&M Operations and Maintenance OCE Office Congolais de l'Eau (Congolese Water Authority) OGS Off-Grid Solar	MRHE	Ministère des Ressources Hydrauliques et de l'Electricité (Ministry of Water Resources
MV Medium Voltage NGO Nongovernmental Organization NPV Net Present Value NRW Nonrevenue Water O&M Operations and Maintenance OCE Office Congolais de l'Eau (Congolese Water Authority) OGS Off-Grid Solar		
NGO Nongovernmental Organization NPV Net Present Value NRW Nonrevenue Water O&M Operations and Maintenance OCE Office Congolais de l'Eau (Congolese Water Authority) OGS Off-Grid Solar	MTR	Midterm Review
NPV Net Present Value NRW Nonrevenue Water O&M Operations and Maintenance OCE Office Congolais de l'Eau (Congolese Water Authority) OGS Off-Grid Solar	MV	Medium Voltage
NRW Nonrevenue Water O&M Operations and Maintenance OCE Office Congolais de l'Eau (Congolese Water Authority) OGS Off-Grid Solar		
O&M Operations and Maintenance OCE Office Congolais de l'Eau (Congolese Water Authority) OGS Off-Grid Solar	NPV	Net Present Value
OCE Office Congolais de l'Eau (Congolese Water Authority) OGS Off-Grid Solar	NRW	Nonrevenue Water
OGS Off-Grid Solar	O&M	Operations and Maintenance
	OCE	Office Congolais de l'Eau (Congolese Water Authority)
PAD Project Appraisal Document	OGS	Off-Grid Solar
	PAD	Project Appraisal Document

PBC	Performance-based Condition
PCM	Private Capital Mobilized
PDO	Project Development Objective
PEMU	Projet d'alimentation en Eau potable en Milieu Urbain (Urban Water Supply Project)
PFM	Public Financial Management
PIM	Project Implementation Manual
PIP	Performance Improvement Plan
PIU	Project Implementation Unit
PPCGF	Partial Portfolio Credit Guarantee Fund
PPP	Public-Private Partnership
PPSD	Project Procurement Strategy for Development
PS	Performance Standard
PSC	Project Steering Committee
RAP	Resettlement Action Plan
REGIDESO	Régie de Distribution d'Eaux (National Water Utility)
RPF	Resettlement Policy Framework
RPP	Revenue Protection Plan
SCADA	Supervisory Control and Data Acquisition
	Sexual Exploitation and Abuse/Sexual Harassment
SEA/SH SEP	Stakeholders Engagement Plan
SMEs	Small and Medium Enterprises
SMG	Scaling up Mini-Grids
SNEL	Société Nationale d'Electricité (National Electricity Utility)
SOE	State-Owned Enterprise
SRMI	·
STEM	Sustainable Renewables Risk Mitigation Initiative
	Science, Technology, Engineering and Mathematics
STEP	Systematic Tracking of Exchanges in Procurement Terms of Reference
ToR	
TTL	Task Team Leader
UCM	Unité de Coordination et de Management des Projets (Project Coordination and Management Unit)
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VGF	Viability Gap Financing
WASH	Water, Sanitation, and Hygiene
WBG	World Bank Group
WEF	World Economic Forum
WSS	Water Supply and Sanitation
WTP	Willingness to Pay
L	

TABLE OF CONTENTS

DAT	TASH	EET	1
ı.	STR	ATEGIC CONTEXT	10
	A.	Country Context	10
	В.	Sectoral and Institutional Context	12
	C.	Relevance to Higher Level Objectives	20
II.	PRO	DJECT DESCRIPTION	21
	A.	Project Development Objective	21
	В.	Project Components	22
	C.	Project Beneficiaries	31
	D.	Results Chain	32
	E.	Rationale for Bank Involvement and Role of Partners	33
	F.	Lessons Learned and Reflected in the Project Design	34
III.	IMF	PLEMENTATION ARRANGEMENTS	36
	A.	Institutional and Implementation Arrangements	36
	В.	Results Monitoring and Evaluation Arrangements	38
	C.	Sustainability	39
IV.	PRC	DJECT APPRAISAL SUMMARY	40
	A.	Technical, Economic and Financial Analysis	40
	В.	Fiduciary	43
	C.	Legal Operational Policies	45
	D.	Environmental and Social Risk Management	45
٧.	GRI	EVANCE REDRESS SERVICES	50
VI.	KEY	RISKS	50
VII.	RES	ULTS FRAMEWORK AND MONITORING	53
ANI	NEX 1	L: Implementation Arrangements and Support Plan, Fiduciary and Gender	78
		2: PBC and Project Expenditure Composition Table	
		3: Demand Risk Mitigation Instrument for Subcomponent 3.1	
		: Map of Democratic Republic of Congo	100

DATASHEET

BASIC INFORMATION					
Country(ies)	Project Name				
Congo, Democratic Republic of	Access Governance & Refo	rm for the Electricity and Water Sectors Project			
Project ID	Financing Instrument	Environmental and Social Risk Classification			
P173506	Investment Project Financing	High			
Financing & Implementat	ion Modalities				
[] Multiphase Programm	atic Approach (MPA)	[√] Contingent Emergency Response Component (CERC)			
[] Series of Projects (SOP)	[√] Fragile State(s)			
[√] Performance-Based C	onditions (PBCs)	[] Small State(s)			
[] Financial Intermediario	es (FI)	[] Fragile within a non-fragile Country			
[] Project-Based Guarant	ee	[√] Conflict			
[] Deferred Drawdown		[] Responding to Natural or Man-made Disaster			
[] Alternate Procuremen	t Arrangements (APA)	[√] Hands-on Enhanced Implementation Support (HEIS)			
Expected Approval Date	Expected Closing Date				
31-Mar-2022	30-Sep-2029				
Bank/IFC Collaboration	Joint Level				
Yes	Historical Project/Activity implemented in sequence with an IFC activity(Loan/Credit/Guarantee/AAA)				

Proposed Development Objective(s)

The objectives of the Project are to (i) expand access to renewable-based electricity and drinking water services in selected urban and peri-urban areas of the Democratic Republic of Congo, (ii) improve the commercial performance of the public electricity and water utilities, and (iii) strengthen the capacity of selected provincial and national institutions in the electricity and water sectors.

Components

Component Name	Cost (US\$, millions)
Component 1: Power and Water Utility Governance and Performance	66.00
Component 2: Institutional Strengthening and Development Support	47.00
Component 3: Private Sector-based Access Expansion	247.00
Component 4: Public Sector-based Access Expansion with Private Sector Involvement	240.00
Component 5: Contingent Emergency Response	0.00

Organizations

Borrower: DEMOCRATIC REPUBLIC OF CONGO

Implementing Agency: Ministère des Ressources Hydrauliques et de l'Electricité (MHRE)

PROJECT FINANCING DATA (US\$, Millions)

SUMMARY

Total Project Cost	939.00
Total Financing	939.00
of which IBRD/IDA	600.00
Financing Gap	0.00

DETAILS

Private Sector Investors/Shareholders

Equity	Amount	Debt	Amount	
Government Contribution	605.00	IFI Debt	160.00	
Government Resources	5.00	IFC A Loans	51.50	
IDA (Credit/Grant)	600.00	Other IFIs	108.50	
Non-Government Contributions	134.00	Commercial Debt	40.00	
Private Sector Equity	100.00	Guaranteed	40.00	

IDA Posourcos (in LISS Millions)					
Total	739.00		200.00		
Trust Funds	34.00				

IDA Resources (in US\$, Millions)

	Credit Amount	Grant Amount	Guarantee Amount	Total Amount
Congo, Democratic Republic of	300.00	300.00	0.00	600.00
National PBA	300.00	300.00	0.00	600.00
Total	300.00	300.00	0.00	600.00

Expected Disbursements (in US\$, Millions)

WB Fiscal Year	2022	2023	2024	2025	2026	2027	2028	2029	2030
Annual	0.50	24.50	60.00	85.00	105.00	110.00	110.00	105.00	0.00
Cumulative	0.50	25.00	85.00	170.00	275.00	385.00	495.00	600.00	600.00

INSTITUTIONAL DATA

Practice Area (Lead)

Contributing Practice Areas

Energy & Extractives

Water

Climate Change and Disaster Screening

This operation has been screened for short and long-term climate change and disaster risks

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

Risk Category	Rating
1. Political and Governance	• High
2. Macroeconomic	Moderate
3. Sector Strategies and Policies	Moderate
4. Technical Design of Project or Program	Substantial
5. Institutional Capacity for Implementation and Sustainability	Substantial

7. Environment and Social 8. Stakeholders 9. Other 10. Overall • High • High • High	6. Fiduciary	• High
9. Other • Moderate	7. Environment and Social	• High
	8. Stakeholders	High
10. Overall • High	9. Other	Moderate
	10. Overall	High

COMPLIANCE

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 Standards Relevance Given its Context at the Time of Appraisal				
E & S Standards	Relevance			
Assessment and Management of Environmental and Social Risks and Impacts	Relevant			
Stakeholder Engagement and Information Disclosure	Relevant			
Labor and Working Conditions	Relevant			
Resource Efficiency and Pollution Prevention and Management	Relevant			
Community Health and Safety	Relevant			
Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Relevant			
Biodiversity Conservation and Sustainable Management of Living Natural Resources	Relevant			
Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	Not Currently Relevant			
Cultural Heritage	Relevant			
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 Covenants

Sections and Description

IDA Financing Agreement: Schedule II, Section I.A.1.a

The Recipient shall no later than ninety (90) days after the Effective Date, or such other date as agreed by the Association, but in any event prior to the carrying out of any activity in Goma and Kananga, establish a UCM regional office in each of these two cities

Sections and Description

IDA Financing Agreement: Schedule II, Section I.A.1.b.(iii)

The Recipient shall no later than sixty (60) days after the Effective Date, or such other date as agreed by the Association, but in any event prior to the carrying out of any activities in Goma and Kananga, appoint CEP-O staff to be placed within the regional UCM office in each of these two cities.

Sections and Description

IDA Financing Agreement: Schedule II, section I.A.1.d

The Recipient shall cause ARE and ANSER, respectively, to, no later than sixty (60) days after the Effective Date, or such other date as agreed by the Association, appoint, and thereafter maintain throughout Project implementation, a team ("ARE Implementation Team" and "ANSER implementation Team", respectively), responsible for the day-to-day implementation, management, monitoring and evaluation of Component 3.1 and Component 3.2 of the Project, respectively, and for assisting the Recipient in the technical implementation of the activities of Component 2.

Sections and Description

IDA Financing Agreement: Schedule II, Section 1.A.1.f

The Recipient shall no later than sixty (60) days after the Effective Date, or such other date as agreed by the Association, establish, and thereafter maintain throughout Project implementation, a steering committee ("Project Steering Committee"), chaired by the Minister of MRHE, with terms of reference, composition, powers and responsibilities acceptable to the Association and defined in the PIM, to provide overall strategic guidance and Project oversight and approve the Annual Work Programs

Sections and Description

IDA Financing Agreement: Schedule II, Section I.A.5

the Recipient shall, no later than ninety (90) days after the Effective Date, or such other date as agreed by the Association, enter into a Collaboration Agreement with the Participating Province of Nord Kivu and the Participating Province of Kasai Central.

Sections and Description

IDA Financing Agreement: Schedule II, Section I.B.4

No later than thirty (30) days after the Effective Date, or any other date as agreed by the Association, and prior to the provision of any Performance-based Grants under Component 3.2(a)(ii) of the Project, the Recipient shall make part of the proceeds of the Financing available on grant terms to the ANSER under an implementation agreement between the Recipient and the ANSER. ("ANSER Implementation Agreement").

Sections and Description

IDA Financing Agreement: Schedule II, Section I.B. 1

No later than thirty (30) days after the Effective Date, or any other date as agreed by the Association, the Recipient shall enter into a Protocole d' Accord Spécifique with the REGIDESO ("REGIDESO Implementation Agreement") to assist the Recipient in the technical implementation, monitoring and evaluation of the Components 1.3 and 4.2 of the Project

Sections and Description

IDA Financing Agreement Schedule II, Section I.B.3

No later than thirty (30) days after the Effective Date, or any other date as agreed by the Association, and prior to the carrying out of any activity under Component 3.1 of the Project, the Recipient shall make part of the proceeds of the Financing available on grant terms to the ARE under an implementation agreement between the Recipient and the ARE ("ARE Implementation Agreement").

Sections and Description

GCF Financing Agreement: Schedule II, Section I.B.1

To facilitate the carrying out of activities under Components 3.1(b)(i) and 3.1(c) and relevant activities under Component 2.1(d) of the Project, the Recipient shall, no later than thirty (30) days after the Effective Date, or such other date as agreed by the Association, enter into an implementation agreement between the Recipient and ARE, ("ARE Implementation Agreement")

Sections and Description

IDA Financing Agreement: Schedule II, Section 1.B.2

No later than thirty (30) days after the Effective Date, or any other date as agreed by the Association, the Recipient shall enter into a Protocole d' Accord Spécifique with the SNEL ("SNEL Implementation Agreement") to assist the Recipient in the technical implementation, monitoring and evaluation of the Components 1.2 and 4.1 of the Project

Conditions		
Type Effectiveness	Financing source IBRD/IDA	Description The Project Implementation Manual ("PIM") has been prepared and adopted under terms and conditions and in a manner acceptable to the Association
Type Effectiveness	Financing source IBRD/IDA	Description The Memorandum of Understanding has been executed in form and substance acceptable to the Association, and is in full force and effect
Type Effectiveness	Financing source IBRD/IDA	Description The ESMF has been revised, adopted and disclosed in form and substance acceptable to the Association;
Type Effectiveness	Financing source IBRD/IDA	Description The ESIA and the RAP have been revised, adopted and disclosed in form and substance acceptable to the Association;
Type Disbursement	Financing source IBRD/IDA	Description No withdrawal shall be made for payments under Category (2) with respect to each PBCuntil and unless the Recipient has also submitted: (i) evidence, in form and substance satisfactory to the Association, of the Eligible PBC Expenditures paid, as presented in the IFR and verified pursuant to the Verification Protocol; and (ii) supporting documentation confirming the Recipient's achievement of the respective PBC or PBCs in form and substance satisfactory to the Association
Type Effectiveness	Financing source IBRD/IDA	Description The RPF has been prepared, consulted, adopted and disclosed in form and substance acceptable to the Association

Туре	Financing source	Description
Disbursement	IBRD/IDA	No withdrawal shall be made for payments under Category (3), until and unless the Association is satisfied that the following condition has been met, namely that a Service Delegation Contract has been executed between a Participating Province and a Selected-Mini-grid Operator under terms and conditions acceptable to the Association and set forth in the PIM, and is in full force and effect;
Type Disbursement	Financing source IBRD/IDA	Description No withdrawal shall be made for payments under Category (4)(a), until and unless the Association is satisfied that the following conditions have been met: (i) the Mwinda Fund Implementation Arrangements have been adopted in a manner acceptable to the Association; (ii) (A) the Fund Manager has been selected under terms of reference acceptable to the Association; and (B) the Technical Assistance Contract has been executed under terms and conditions acceptable to the Association, and (iii) Results-based Grant Manual has been adopted by the Recipient in form and substance acceptable to the Association;
Type Disbursement	Financing source Trust Funds	Description No withdrawal shall be made for payments made under Category (2), until and unless the Bank is satisfied that the following condition has been met, namely, that the Demand Risk Mitigation Manual has been adopted by the Recipient in form and substance acceptable to the Association.
Type Disbursement	Financing source IBRD/IDA	Description No withdrawal shall be made for payments under Category (4) (b), until and unless the Association is satisfied that the following conditions have been met: (i) OCE is operational, including: (A) the appointment of its Managing Director and Chair of the Board, and (B) the appointment/selection of the OCE Implementation Team; (ii) the Results-based Grant Manual has been adopted by the Recipient in form and substance acceptable to the Association; and (iii)(A) the Fund Manager has been selected under terms of reference acceptable to the Association; and (B) the Technical Assistance Contract has been executed under terms and conditions acceptable to the Association

Туре	Financing source	Description
Effectiveness	Trust Funds	The execution and delivery of this Agreement on behalf of the Recipient has been duly authorized or ratified by all necessary corporate action; and (b) the IDA Financing Agreement has been duly executed and all conditions precedent to its effectiveness — other than the effectiveness of this Agreement- have been fulfilled.
Type Disbursement	Financing source IBRD/IDA	Description No withdrawal shall be made for Emergency Expenditures under Category (6), 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 amounts under Category (6); 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 Democratic Republic of Congo (DRC), the largest and third most populous country in Sub-Saharan Africa, is rich in natural resources. With a total surface area of about 234 million ha, DRC's size is equivalent to that of Western Europe, and it is divided into 26 provinces. The population is estimated at 89.6¹ million inhabitants (though estimates go as high as 116 million²), with about 46 percent living in urban areas.³ The country has vast natural resources, including the world's third largest hydropower potential, the world's second largest tropical forest area, mineral endowments that are the richest and most diverse in the world, and more than half of all freshwater resources in Sub-Saharan Africa.⁴ Since the 2006 elections, the country follows a semi-presidential system, whereby the President is the head of state and the Prime Minister is the head of government, of a pluriform multi-party system. There are 26 provinces and provincial executive power is exercised by elected governors and their provincial ministers.
- 2. Yet, poverty remains widespread and pervasive, with the number of poor increasing. DRC is one of the world's poorest countries, with a per capita gross domestic product (GDP) of US\$545,⁵ almost onethird of the Sub-Saharan Africa average (US\$1,499). Furthermore, GDP per capita has declined by 60 percent between 1960 and 2020. While the poverty rate declined from 94.3 percent to 77.2 percent between 2005 and 2012 (international poverty rate at US\$1.90), projections put poverty at 73.3 percent in 2020, an increase of 0.7 percentage points compared to 2019. Due to high population growth, with an average rate of three percent annually between 1960 and 2020, and subdued economic growth, the number of poor in DRC is increasing by about 1.5 million people every year. Poverty rates and the number of poor vary significantly across provinces, with the highest poverty rates in the central and northwestern provinces, largely covered by forests, while the highest number of poor are found in Kinshasa, Kwilu, Nord Kivu, Sud Kivu, and Grand Kasai region (Lomami, Sankuru, Kasai Central, Kasai Oriental, and Kasai). These areas are also the most affected by past or ongoing conflict or risk of conflict. In 2020, DRC's Human Development Index ranks 175 out of 189 countries and territories, while the 2020 Human Capital Index score was 0.37, which is below the average in Sub-Saharan Africa. Food insecurity and malnutrition are widespread: more than 40 percent, or about 5.6 million children under the age of five, are stunted and 23 percent of children are underweight.⁷
- 3. Conflict and violence continue, particularly in DRC's part of the Great Lakes Region of Africa⁸ and lead to persistent fragility. Over the past decade, continuing violence has affected nearly 40 million Congolese.⁹ Women and girls are especially affected as widespread conflict-related sexual violence compounds other forms of gender-based violence (GBV). Enduring political instability and cycles of conflict have led to weak governance and institutions, hampering reform implementation, service

¹ World Bank (March 2021): MPO (estimate, the latest census took place in 1984).

² National Deployment and Vaccination Plan, Ministry of Health, 2021.

³ World Bank (2020): www.data.worldbank.org.

⁴ Natural Resources Governance Institute. 2015. Country Strategy Note: Democratic Republic of Congo.

⁵ World Bank (2020): www.data.worldbank.org.

⁶ World Bank. 2021: Macro Poverty Outlook, Spring Meetings.

⁷ Demographic and Health Survey (DHS) 2014.

⁸ Countries include Burundi, DRC, Rwanda, and Uganda.

⁹ Office for the Coordination of Humanitarian Affairs data (2021).

delivery, and private sector growth. The three main themes driving fragility and conflict identified in the World Bank's 2021 Risk and Resilience Assessment are (a) elite capture and resource extraction perpetuating a nonresponsive system of governance and a poorly redistributive economy; (b) an increasingly younger population lacking prospects for social mobility due to trauma and exclusion; and (c) the interaction between local, regional, and international conflict systems based on the competition for access to land, minerals, and other natural resources. Conflict and violence risks vary considerably across the geographical areas where the project will be implemented. Eastern DRC continues to be marked by a volatile security situation and the presence of foreign armed groups, yet it also benefits from economic ties to neighboring countries for enormous growth potential. Even though tensions have abated in the Kasais which experienced an intense phase of conflict half a decade ago, the region has seen only limited development with underlying conflict drivers such as access to land remaining unresolved. Finally, the capital city of Kinshasa is set on a path of rapid urban growth, where job opportunities are not keeping pace with an increasingly younger population in search of social mobility and prosperity.

- 4. Congolese women suffer from significant gender inequalities. DRC is ranked 149 out of 153 countries on the World Economic Forum (WEF) Global Gender Gap Index and 175 out of 189 countries on the 2020 Gender Inequality Index. Gender gaps exists across all pillars mentioned in the World Bank Group (WBG) Gender Strategy:¹⁰ (a) human endowments (access to basic services, health outcomes), (b) economic opportunities and jobs, (c) asset control and ownership (business ownership, finance), and (d) voice and agency (decision-making bodies). Women have less access to the education system, graduating four times less frequently than men.¹¹ Furthermore, 61.5 percent of female-headed households live under the poverty line.¹² As a result, women are less involved in the labor market and are also less likely to have skilled jobs, only accounting for 24 percent of professional and technical workers.¹³ In addition, women suffer from high rates of GBV. More than half of all women in DRC have experienced physical violence since the age of 15 (52 percent), and 27 percent of women reported they had been victims to physical violence over the past 12 months,¹⁴ most often by a family member but also by teachers, police, soldiers, and/or armed groups.
- 5. The poor state of infrastructure represents a major constraint to sustainable and inclusive growth and service delivery. Despite some improvements, the country ranks at the bottom in almost all measures of infrastructure coverage, even by Sub-Saharan Africa standards. Gaps are particularly large in road transport, internet connectivity, electricity supply, and access to water supply and sanitation (WSS) services. In a country of 2.345 million km², there are only 58,129 km of national roads, of which five percent are paved. The internet penetration rate is only 1.7 users per 100 inhabitants. These major infrastructure gaps, combined with poor governance, have led to geographic isolation and socioeconomic inequalities across provinces, as well as between urban and rural areas. They also represent a major barrier to doing business and add significant costs to any large infrastructure project.
- 6. Climate change poses a serious threat to the country's weak infrastructure and livelihoods. DRC has a high risk of urban floods and wildfires.¹⁵ With the continued effects of climate change, long-term

¹⁰ World Bank Group Gender Strategy 2016–2023. World Bank, Washington DC.

¹¹ https://databank.worldbank.org/source/world-development-indicators.

¹² https://www.jica.go.jp/english/our_work/thematic_issues/gender/background/c8h0vm0000anjqj6-att/drc_2017.pdf.

¹³ World Economic Forum (WEF). 2020. Global Gender Gap Index.

¹⁴ Government of the Democratic Republic of Congo (GoDRC) DHS (2014).

¹⁵ https://thinkhazard.org/en/report/68-democratic-republic-of-congo.

forecasts show more intense and more frequent rainfall and an increase in daily mean temperature of 1.5–2.5°C warming by 2050. This would lead to more frequent flooding, increased erosion, and prolonged dry spells. Climate change impacts and vulnerabilities already pose significant challenges and risks in key sectors such as agriculture, water resources, electricity, transport, and human health. This compounds existing risks from conflict and violence. The cost of disruption due to natural shocks to the power sector was estimated at 1.9 percent of GDP in 2019.¹⁶

7. The COVID-19 pandemic presents significant socioeconomic challenge and threatens to undo recent progress in curbing poverty and enhancing state institutional capacity. The economic impact of the pandemic added significant stress to an already strained service delivery system and its institutions. As a result, 2020 saw a contraction of the non-mineral GDP by 1.3 percent and a slight increase in the poverty rate from 2019. For instance, Kinshasa, where most of the COVID-19 cases have been reported, has seen a noticeable rise in prices following the outbreak. DRC could face weaker growth and the diversion of public resources away from ongoing development efforts.

B. Sectoral and Institutional Context

8. Despite huge potential, the energy and WSS sectors are characterized by low access, weak regulatory and implementing institutions, and limited sector investment and financing. The following sections highlight the key energy and water sector challenges and describe the Government of the DRC (GoDRC) responses.

Electricity Sector Challenges

- 9. **Electricity access in DRC is low with significant disparities across provinces.** Only 19 percent of the total population have access to electricity services from grid or off-grid providers, ¹⁷ well below the 42 percent Sub-Saharan Africa average. Estimated on-grid access from the vertically integrated state-owned utility (National Electricity Utility [Société Nationale d'Electricité, SNEL]) is a mere 10 percent. As such, DRC has the second largest population in the world without electricity access. Kinshasa stands out with an access rate of around 44 percent, followed by Haut Katanga, Kongo Central, and Sud Kivu province with access rates between 10 percent and 30 percent. The remaining 22 provinces have an access rate below 5 percent. Electricity service remains unreliable, with daily load shedding in most areas of Kinshasa. Under a business-as-usual scenario, around 84 million people—80 percent of the population, will still live without access to electricity in 2030.
- 10. Due to its poor financial health, operational inefficiencies, and persistent governance issues, SNEL has not been able to provide reliable service or increase access to services. SNEL is operating with tariffs below cost recovery, disadvantageous power sale agreements with mining industries (its highest revenue customer segment but also source of debt), significant payment arrears from the Government estimated at about US\$110 million (March 2020), low bill collection (51 percent from lowvoltage [LV] customers), high distribution losses (about 40 percent in 2019), and significant accumulated debt (close to US\$2 billion). While SNEL lost its monopoly status, it remains the largest operator, owning 90 percent

¹⁶ Hallegatte, S., J. Rentschler, and J. Rozenberg. 2019. *Lifelines: The Resilient Infrastructure Opportunity. Sustainable Infrastructure*. Washington, DC: World Bank.

¹⁷ International Energy Agency, International Renewable Energy Agency, United Nations Statistics Division, World Bank, and World Health Organization. 2021. *Tracking SDG 7: The Energy Progress Report*. World Bank, Washington DC.

of the installed power capacity and supplying areas of several large cities through the Western-Southern grid, the Eastern interconnected grid, five hydro-powered decentralized grids, and several small thermal-powered grids (less than 1 MW on average, many not operational). Vast portions of the distribution network are dilapidated and below technical standards. In Kinshasa, many segments of the grid date back to the 1960s, suffering from limited maintenance and without significant investments in expansion. In addition to affecting service provision, this results in safety issues (about 60 deaths from electrocution per year) and unelectrified peri-urban pockets.

	Electricity	Water
Access rate	19%	34% ¹⁹
Installed production capacity	2,600 MW	1,168,500 m ³ /day
Collection rate (households)	51%	70%
Average tariff to households - National utilities	US¢9/kWh	US¢41/m³
Average prices to households - Private operators	~25 US¢/kWh in Goma; ~33 in Butembo, and ~50 in Tshikapa	~1.1–2.0 US\$/m³
Number of billed customers from national utilities	778,171	~ 600,000
Number of major private network/grid operators	5	2
Legal framework	2014 Electricity Law	2015 Water Law
Estimated Government's bills arrears to utilities	US\$110 million	US\$176 million

Table 1. Key Electricity and Water Sector Indicators¹⁸

- 11. Though private sector involvement in access expansion is evolving, it remains limited and constrained by a context marked by fragility, high country risk, an incomplete regulatory framework, and limited commercial financing. The gap in financing for small and medium enterprises (SMEs) in DRC is estimated at US\$9.3 billion (95 percent of the total SMEs finance market size).²⁰ Developers face high credit costs with an interest rate of commercial banks of 27 percent on domestic and 17 percent on foreign currency loans (2019). There are five major private mini-grid operators, with less than 30 MW of installed capacity, supplying cities in the provinces of Nord Kivu, Sud Kivu, Kasai, and Maniema. Moreover, there is a thriving off-grid solar (OGS) market with 17 companies, both Congolese and international, operating in the DRC market. The OGS segment is a growth market due to DRC's large dispersed and unserved population, including in cities.
- 12. The large scale of DRC's decentralized electrification sector will drive competition, as market sounding reveals strong private sector interest. Despite the challenging investment climate, mini-grids and off-grid systems are emerging as a private sector—led solution to provide reliable access to unserved or underserved populations and cities. There is ample potential for competition from developers and operators in the mini-grid sector, where costs can be driven down through economies of scale. Market sounding has revealed strong private sector appetite driven by the size of the market, relatively high payment capacity, a dynamic entrepreneurial environment, and conducive existing regulation (even if incomplete). On regulatory risk, regulation by contract emerges as the preferred solution for private

¹⁸ Equivalent information is not available on sanitation services due to weak monitoring and limited access.

¹⁹ This refers to national-level improved access through piped water services, meaning both household connections and service provision through water kiosks or public tap stands (34 percent, 2020). National improved piped access *available on premises* is lower at 25 percent (United Nations Children's Fund (UNICEF)/WHO Joint Monitoring Program (JMP), 2021; www.washdata.org). ²⁰ www.smefinanceforum.org.

sector investors, as improvements to the legal and regulatory framework help reduce transaction costs in the medium to long term.

13. The COVID-19 pandemic has worsened SNEL's already precarious financial situation and negatively affects private mini-grid operators and OGS companies. The GoDRC's decision to exempt payment for SNEL's LV customers in March–April 2020, represented an estimated revenue shortfall of US\$34 million, without Government compensation for the measure. Lockdowns and a global economic recession slowed down commercial and industrial activities, leading to lower revenues from SNEL's medium-voltage (MV) and high-voltage (HV) customers (mining enterprises and large businesses present over half of SNEL's revenues). This cash flow reduction forced SNEL to incur penalties, contract short-term debt, and curb needed expenditures. Private mini-grid operators and OGS companies also experienced lower revenues as well as supply chain disruptions resulting in product shortages.

Water and Sanitation Sector challenges

- 14. While national access to piped water access stands at 34 percent (2018), rural-urban disparities are stark with rural access levels lagging behind. In urban areas, access to piped water, not necessarily on premises, slightly increased from 63 percent to 67 percent over 2010–2020, and safely managed water supply, with piped connections on premises, reliably available, and good water quality, increased from 35 percent to 40 percent over the same period²¹. This slow progress is due to the high urban population growth, coupled with deteriorating and obsolete networks and low investments. In 2018, access to basic water service was 36.2 percent for Nord Kivu province and 8.5 percent for Kasai Central (including rural and urban areas). For piped water services, access rates are lower at 34.5 percent and 1.2 percent, respectively. There is a high reliance on water points or public tap stands that require more than a 30-minute return trip in these provinces.²² This reality illustrates the large gap to achieve the Government's ambitious targets of reaching 80 percent access to basic water supply by 2030.²³ Moreover, service quality and access are constrained by unreliable electricity services, as well as by affordability constraints of the very poor to pay for household connections.²⁴
- 15. National Water Utility (Régie de Distribution d'Eaux, REGIDESO), the national public water service provider across DRC, is struggling to expand water supply. Since the 1990s, the operational performance of REGIDESO has declined considerably due to war, continued conflict, and lack of investments and maintenance. Nearly 40 percent of water produced is not accounted for, including physical and administrative losses. The quality of water service provision suffers from poor operational and commercial performance and insufficient public financial resources allocated to the sector. Between 2010 and 2015, only around US\$280 million was invested in REGIDESO's activities in the urban sector,

²¹ WHO/UNICEF JMP (2021). Basic water access is defined as access to an improved water source (handpump, tube well, standpipe, protected dug well, or spring) within 30-minutes return trip distance. Safely managed water supply is a much higher level of service, defined by three criteria: (a) access on premises, (b) reliably available when needed, and (c) free of contamination. Access to "piped water", mostly but not necessarily provided on premises, does not include dimensions of reliability of supply and water quality. At least basic access thus encompasses safely managed and basic water access. At national level safely managed water services increased from 14 percent to 19 percent over the period 2010-2020. These low values are influenced by low rates in rural areas. See also www.washdata.org.

²² WHO/UNICEF JMP (2021). Equality file: provincial data include rural and urban areas and are based on MICS (2018).

²³ Targets are expressed in the National Program for Water, Sanitation and Hygiene (*Programme National Eau-Hygiène-Assainissement*, PNHEA, 2016).

²⁴ Access to basic water supply in the poorest national quintile is 18 percent versus 93 percent in the richest quintile; (WHO/UNICEF JMP, 2021).

with about one percent coming from the Government. This is far below the needed investment levels, which were estimated at over US\$1 billion to reach the Government targets.²⁵ In the urban water sector, limited funding, a focus on a few major cities, and the inaction thus far in the long-awaited restructuring of REGIDESO are the most pressing institutional problems. REGIDESO's strategy to finance service expansion through income surpluses generated in a few big cities has not worked. Rather, it led to a bias against expansion to marginal peri-urban areas and smaller towns.

- 16. **REGIDESO operations in Kasai Central and Nord Kivu, target provinces under the project, depict several operational challenges.** In Kasai Central, REGIDESO-Kananga, a branch of the company, operates the water systems with the inability to adequately maintain the assets, nor to expand services. The Kananga water treatment plant is in urgent need of rehabilitation and runs at less than 10 percent of its capacity (design capacity of 40,000 m³/day). Less than 10 percent of Kananga's population has access to water supply service. REGIDESO-Kananga has about 330 customer accounts, a catastrophic decline considering its 17,200 customers in the 1980s. It is now grossly overstaffed (one staff for every eight customers) and has an obsolete distribution system. In the absence of a reliable power supply for pumping, the use of fossil fuels weighs heavily on REGIDESO's operating costs. The government of Nord Kivu province has facilitated the involvement of the private sector in water supply, with the support from development and humanitarian partners. There are two private water supply operators in Goma and several local water operators in Butembo, either private sector or not-for-profit water user associations.²⁶
- 17. Access to basic sanitation has not kept up with population growth and declined from 20 percent to 15 percent at the national level and from 23 percent to 21 percent in urban areas during 2010–2020. In 2020, safely managed sanitation rates were estimated at 15 percent in urban areas.²⁷ While open defecation in urban areas is not common (3 percent), 43 percent of urban dwellers use unimproved sanitation facilities, 20 percent use septic tanks of varying quality, and less than one percent are connected to a sewage network (2020). In Kasai Central and Nord Kivu provinces access to basic sanitation is 4 percent and 14 percent, respectively (2018). Due to the absence of treatment facilities, pit/tank content is buried in situ or dumped illegally, endangering public health.²⁸ In this context, the Government's target of 70 percent basic sanitation access by 2030 seems overly ambitious. The sanitation subsector suffers from underinvestment, institutional fragmentation, and unclear mandates in the sanitation service chain (containment, emptying, transport, and treatment of wastewater and/or fecal sludge). The Government intends to develop a Sanitation Law to clearly assign competencies. At present, municipalities are responsible for sanitation and drainage without adequate infrastructure, while informal operators lack access to business development and financing services for their professionalization.

²⁵ Targets and estimates derived from PNHEA, 2016.

²⁶ Since 2019, Yme Jibu supplies drinking water from Lake Kivu to a selected area in Goma through a 25-year service delegation contract with the city of Goma. Congo Maji SA signed a subcontract with REGIDESO in 2018 to operate and maintain a cluster of standpipes and associated billing services.

²⁷ WHO/UNICEF JMP (2021). Basic sanitation means access to an improved sanitation facility that separates excreta from human contact and is not shared with other households. A limited sanitation service means that improved sanitation is shared among households, and an unimproved service means that the facility is not separating excreta from human contact (for example, latrines without slab, hanging/bucket latrines). Safely managed sanitation access means an improved sanitation facility, where excreta produced should either be treated and disposed off in situ, stored and then emptied and treated off-site, or transported through a sewer system and treated off-site.

²⁸ See WHO/UNICEF JMP (2021). www.washdata.org. Based on country and inequalities file, using MICS (2018).

Institutional reform for urban sanitation, capacity development, and fecal sludge management (FSM) pilots are the next critical steps to improve the performance of this subsector in the long term.

Government Responses and Reform

- 18. The Ministry of Water Resources and Electricity (Ministère des Ressources Hydrauliques et Electricité, MRHE) is the key Government institution for the water supply and energy sectors, whereas the Ministry of Environment and Sustainable Development (Ministère de l'Environnement et Développement Durable, MEDD) oversees the sanitation sector. MRHE is responsible for developing energy and water sector policies, planning access scale-up, and overseeing program implementation. MRHE's permanent secretariat (Secretariat Général) consists of electricity and water departments but suffers from weak capacity. To strengthen project implementation oversight and coordination, in 2015, MRHE established a Project Implementation Unit (PIU), the Project Coordination and Management Unit (Unité de Coordination et de Management des Projets du Ministère, UCM), dedicated to managing all donor-financed energy projects including the International Development Association (IDA)-financed Electricity Access and Service Expansion (EASE) project.²⁹ For the water sector, the *Cellule d'Exécution des* Projets (CEP-O), which implemented the IDA-financed Urban Water Supply Project (Projet d'alimentation en Eau potable en Milieu Urbain, PEMU), was transferred from REGIDESO to MRHE on February 15, 2022.³⁰ Planning was recently improved with the World Bank's support. MRHE recently developed a national geospatial electrification plan associated to a mini-grid electrification program that features top-down and bottom-up private sector investment approaches.31 The GoDRC approved, in 2021, a national framework program for Water Supply, Sanitation and Hygiene (Programme National Eau-Hygiène-Assainissement). The MEDD's Department of Sanitation (Département d'Assainissement, DAS) remains responsible for sanitation planning, while the Ministry of Health (Ministère de la Santé) is responsible for hygiene promotion and on-site sanitation in rural areas.
- 19. The Government has taken initial steps to improve the energy and water legal and institutional framework and enable private sector involvement, but more needs to be done. In 2014, the GoDRC approved a new Electricity Law that removed SNEL's monopoly status, promotes public-private partnerships (PPP), delegates some authority to provincial governments, and called for the creation of an electricity sector regulator (Electricity Regulatory Agency [Autorité de Régulation de l'Électricité, ARE]) and a rural and peri-urban electrification agency (National Agency for Rural Energy Services [Agence Nationale d'Electrification et des Services Énergétiques en milieux Rural et Péri-Urbain, ANSER]). In 2015, the GoDRC promulgated the Water Law, which delegates service authority and decision-making for water supply services to the provinces and calls for the creation of (a) a water supply regulatory agency (Water Regulatory Agency [Autorité de Régulation du Service Public de l'Eau, ARSPE]), (b) a national water resources management agency (Congolese Water Authority [Office Congolais de l'Eau, OCE]), and (c) provincial water supply offices (under the Regies Provinciales d'Infrastructure) to oversee the delegation contracts. However, implementation of institutional reforms has been slow. Management of both ARE

²⁹ This includes the EASE project (P156208) and the Kinshasa Multisector Development and Urban Resilience Project (Kin Elenda-P171141), as well as African Development Bank (AfDB)-financed Governance and Electricity Access Project and the *Kreditanstalt für Wiederaufbau* (KfW)-financed Mini-Hydro Power Plant Development Project (ProHydro).

³⁰ CEP-O implemented the PEMU (P091092).

³¹ Reference documentation linked to this Project Appraisal Document (PAD) on the National DRC Mini-Grid Electrification Program is available in World Bank records.

³² The nature of these contracts can vary, including lease (*Affermage*) or concession contracts, depending on the risk sharing and investment obligation of the operators.

and ANSER was only appointed in August 2020, and both agencies still lack critical financial and human resources to fulfill their mandates. Decrees establishing ARSPE and OCE are awaiting Prime Minister approval and should be followed by their management appointment. Meanwhile, provincial governments' understanding of both the Electricity and Water Laws and their secondary legislation remains limited and PPP development capacity is weak. The development of Provincial Infrastructure Units (*Regies Provinciales d'Infrastructure*) responsible for planning and managing investments and overseeing public service delegation contracts is critical for the reforms to be successful.

- 20. The Ministry of Portfolio (Ministère du Portefeuille, MP) oversees the reform of state-owned enterprises (SOEs), including for SNEL and REGIDESO, though with mixed results. In 2002, the MP set up a dedicated technical agency Comité de Pilotage de la Réforme des Entreprises du Portefeuille (COPIREP) to design, implement, and monitor SOE reforms. The overall SOE reform consists of several phases: (a) modernizing the SOE legal framework; (b) stabilizing SOEs technical, financial, and operational performance; (c) restructuring SOEs; and (d) disengaging the state from SOEs. Only the first two phases have been implemented to date, transforming SNEL and REGIDESO into commercial utilities with the state as the sole shareholder (2018). SNEL has implemented a performance contract signed with the state, alongside technical assistance via a service contract³³ and the development of a Redress Plan (*Plan de* Redressement) but fell short of reducing Government arrears and improving SNEL's financial, commercial, and technical performance. Similarly, REGIDESO implemented a five-year performance contract, which the state supported by a technical assistance contract, but many contract engagements were not fulfilled. However, the REGIDESO restructuring strategy was prepared in 2018 and approved by the Government in September 2021.34 The strategy outlines three phases until 2030, as illustrated in Figure 1: (a) the regionalization of REGIDESO's activities into Regional Directorates³⁵ with increased autonomy, (b) the creation of a REGIDESO holding company and gradually transforming directorates into autonomous REGIDESO subsidiaries (filiales),36 and (c) the opening up of service provision in provincial capitals for various types of PPPs. Beyond the project's horizon, the REGIDESO holding would ultimately be dissolved and the *filiales* would corporatize in autonomous regional/provincial utilities with mixed share capital.
- 21. The Government's Action Program 2021-2023³⁷ approved by the parliament in August 2019, prioritizes expanding access to electricity and water services and the advancement of reforms. The Congolese authorities announced ambitious access targets of 30 percent for electricity by 2024 and 80 percent for water supply by 2030. The administration in place since the spring of 2021 has shown commitment to enhancing governance and implementing critical reforms. In September 2021, the Council of Ministers, chaired by the President, approved a program to complete SOE reform, including the abovementioned REGIDESO restructuring strategy, requesting action plans for each SOE. For SNEL, studies are envisioned to identify restructuring options, develop and implement a road map, while for REGIDESO,

³³ Financed under the Regional and Domestic Power Markets Development Project (*Projet de Développement des Marches d'Electricité pour la Consommation Domestique et à l'Exportation*, P097201).

³⁴ Financed through the DRC Urban Water Supply Project (PEMU, P091092).

³⁵ Regions can cover one or more provinces based on geographical, economic, and physical criteria, for example, in Nord Kivu, the Provincial Directorate covers only Nord Kivu province, while the Regional Directorate Kasai Oriental covers both Kasai Central and Kasai provinces.

³⁶ The autonomous utilities (REGIDESO subsidiaries) could have a service boundary for one province (Nord Kivu), while a regional utility could cover multiple provinces; provinces can also participate in the share capital of the REGIDESO subsidiaries (operational assets such as buildings, vehicles, water meters, and equipment).

³⁷ Programme d'Actions 2021-2023 - Construire un Etat Fort, Prospère et Solidaire. https://economie.gouv.cd/wp-content/uploads/2021/04/PROGRAMME-DACTIONS-DU-GOUVERNEMENT-DE-LUSN-2021-2023-Final.pdf

the next step is to develop the Restructuring Action Plan to investigate modalities and carry out due diligence for the proposed pilots.

Phase 1: Preparation (2020 - 2022) Competitive appointment of Phase 2: First Pilot Subsidiairies (2023 - 2025) General Manager Phase 3 : Restructuring fully Collective bargaining agreement Set up REGIDESO Holding and deployed(after 2025) for all staff categories including Subsidiaries in few Pilot regions Replicating/adapting the process Execute asset transfers to Regie Restructuring Action Plan, to other regions/provinces Provinciale and build capacity including investigation of future Completion of subsidiarization of Implement the public service Subsidiairy areas all Regional Directorates in delegation contracts with Preparare contractual autnomous filiales Subsidiaries and Pilot provinces frameworks for the first Develop new PPP models and Non-pilot Regional Directorates Subsidiary pilots long-term plan for REGIDESO sign delegation contract with Strenghen Regional Directorates phase out provinces (increased autonomy)

Figure 1. Overview of REGIDESO Restructuring

22. The energy and water sectors are critical to implement the Government's response to climate change. As indicated in the Nationally Determined Contributions document, the Government has committed to reducing its greenhouse gas (GHG) emissions by 17 percent by 2030—a reduction of around 70 million tCO_2e compared to business-as-usual emissions (430 million tCO_2e). Targeted sectors for GHG emissions reduction include agriculture, forestry, land use, and energy. In the energy sector, the main priority actions identified involve the development of renewable energy sources (small and medium-size hydropower and solar). Preliminary estimates based on planned generation suggest that renewable energy installed capacity will increase by 236 MW between 2020 and 2030, reaching 98 percent of the total installed electricity capacity. For climate change adaptation, the Government focuses on (a) improving access to and resilience of basic WSS services; (b) reducing the impact of flooding, prolonged dry spells, and coastal erosion; and (c) promoting income-generating activities. Investments in clean energy and resilient WSS infrastructure and services will help the GoDRC mitigate and adapt to climate change vulnerabilities and impacts.

Development Partners Support and World Bank Group Engagement

23. **Development partners support the Government's efforts in the power and water sectors in a coordinated manner.** Development partners' interventions are coordinated through the Energy Donors Coordination Group and the Water Donors Coordination Group, both chaired by the World Bank. In the energy sector, the African Development Bank (AfDB); the United Kingdom's Foreign, Commonwealth & Development Office (FCDO); United States Agency for International Development (USAID); and German Development Bank (*Kreditanstalt für Wiederaufbau*, KfW) are key partners, financing critical investments in hydropower plants and distribution networks, as well as regulatory reform and capacity strengthening. The FCDO-funded Essor program pioneered private sector involvement in mini-grid development. In the water sector, German Agency for International Cooperation (*Deutsche Gesellschaft für Internationale Zusammenarbeit*, GiZ), KfW, AfDB, USAID, International Committee of the Red Cross (ICRC), and others have supported investments in treatment plants, water systems, and master planning, as well as technical

assistance to support the reform and strengthen MRHE, REGIDESO, private operators, and provincial authorities.

- 24. World Bank projects in the power and water sectors (EASE and PEMU) laid a solid foundation to increase access. From 2000 to 2018, IDA financing to the DRC power sector totaled US\$1.2 billion, out of which about 60 percent was dedicated to rehabilitating generation units and critical transmission infrastructure. Over 632 MW was added to the generation capacity (the Inga plants). Distribution and access bottlenecks are partly addressed by the ongoing EASE project, but much remains to be done. Moreover, EASE project generated important lessons for the use of connection subsidies and credit lines to private operators and initiated SNEL governance reforms that require further implementation. In the drinking water sector, investments focused on three main cities totaling US\$356 million, resulting in increased treatment capacity and access for over 2.8 million people (PEMU project). Under the ongoing Kinshasa Development and Urban Resilience (Kin Elenda) project, further investments are ongoing for both water and for the first time, sanitation in Kinshasa, as well as support to REGIDESO restructuring.
- 25. The proposed project will build on the foundation to significantly increase access, advance utility reform, and enhance institutional capacity and governance. On access, it will scale up the private sector approach (promoted under the EASE project) by going beyond connection subsidy provision to attract new international/regional private sector players for the electrification of selected provincial capitals/major cities, in collaboration with International Finance Corporation (IFC), Multilateral Investment Guarantee Agency (MIGA), and the Sustainable Renewables Risk Mitigation Initiative (SRMI) of the Energy Sector Management Assistance Program (ESMAP). It will pilot private sector-based provision of safe drinking water using results-based connection subsidies and facilitating access to commercial lending for private water operators including autonomous water systems.³⁸ It will strengthen the public sector approach by piloting private sector involvement (operations and maintenance [O&M] contract, design-build-operate [DBO] approach) to better maintain and operate distribution networks managed by SNEL and REGIDESO and adding human capital enhancement dimension to provide access to electricity and water, sanitation, and hygiene (WASH) services to unserved health care facilities, schools, and other public places. These engagements also contribute to DRC's ongoing COVID-19 response. Alongside investments to scale up access, the proposed project will support advancement of national utility reform, focusing on operational performance improvement, strengthening sector governance, and restructuring. It will also enhance the capacity of selected provincial governments and recently established agencies (ARE, ANSER, ARSPE, and OCE).
- 26. The project will complement other World Bank engagements in DRC. In Ituri and Nord and Sud Kivu provinces, the project's utility-managed water and energy infrastructure will complement community-driven WASH infrastructure and national road construction under the proposed Stabilization and Recovery in Eastern DRC (P175834) project and the proposed Transport and Connectivity Support Project (P161877). The project, through its strengthening of provincial governments, will contribute to the socioeconomic development and stabilization of the region. In the Kasai provinces (Kasai, Kasai Central, and Kasai Oriental), the proposed project will complement the ongoing Multisectoral Nutrition and Health Project (P168756) and the DRC Eastern Recovery Project (P145196). It will enhance health care and learning by providing combined electricity, water, and sanitation services to health care facilities and schools and include incentives to connect productive users, complementing the National Agriculture

Page 19 of 100

³⁸ Autonomous water systems are under the service authority of provincial (or municipal) governments but are managed (or will be managed) through delegation contracts with private sector providers (or in some cases not-for-profit service providers).

Development Program (P169021). Synergies with the ongoing SME Development and Growth Project (P160806 and P178050) are evident given the opportunities to open an energy and water window under the future Partial Portfolio Credit Guarantee Fund (PPCGF).

C. Relevance to Higher Level Objectives

- 27. The project directly supports socioeconomic development and the Government's electricity and water access goals in underserved provincial capitals and major towns. The project is fully aligned with pillars 5 and 12 of the Government Action Plan through (a) improving the completion of SOE reforms, (b) increasing electricity access, and (c) expanding water access. It is the largest access-targeted financing from the multi/bilateral development partners in DRC and a primary vehicle for advancing access goals.
- 28. The project contributes to the objectives laid out in the WBG's DRC Country Partnership Framework (CPF) for fiscal year 2022–2026 discussed by the Board on February 23, 2022 (Report No. 168084-ZR). According to the CPF's principles, the project will target poor, vulnerable, and conflict-affected populations and promote public and private investments in critical infrastructure to increase people's access to basic services, more specifically, improve interconnectedness between and within communities (objective 1.2), improve access to basic infrastructure services (objective 2.2), strengthen transparency and governance (objective 3.2), and strengthen the foundations for inclusive economic diversification and private sector development (objective 3.3). Investments in power and water infrastructure increase access, and institutional development activities will strengthen governance and capacities of nascent sector entities and develop foundations for private sector growth. Electrification will power telecommunication infrastructure and strengthen interconnectedness between communities, businesses, and people. As per the CPF focus on addressing fragility and conflict, the project will also target provinces affected by conflict and violence.
- 29. The project is aligned with the WBG 2020 Fragility, Conflict, and Violence (FCV) Strategy.³⁹ In addition to targeting areas affected by conflict and violence, the project addresses two drivers of fragility identified in the Risk and Resilience Assessment. First, it will enhance governance and trust in the state (driver 1) by focusing on restoring the social contract between state and citizens and reducing the impact of political elites. This is done through (a) strengthening decentralized governance, (b) creating transparency and accountability of service providers by increasing customer orientation, (c) improving the interaction of citizens with service delivery through citizen engagement mechanisms, and (d) incentivizing the reduction of free water consumption by high-level public officials, building citizens' trust in fair systems. Second, the project contributes to addressing a non-diversified economy (driver 2) by creating jobs in public and private sectors, specifically for women, that are not dependent on natural resources or the state. The project also contributes to inclusion and security, through at-home access to water and electricity and the installation of public lighting and WASH facilities in poor neighborhoods.
- 30. **The project is aligned with the WBG COVID-19 response approach.** The project provides health care facilities with new or improved access to electricity, water, and sanitation (Pillar 1) and supports private operators with subsidies to bring down the cost of electricity and water connections enabling

³⁹ World Bank. 2020. *World Bank Group Strategy for Fragility, Conflict, and Violence 2020–2025*.

⁴⁰ World Bank. 2020. *COVID-19 Crisis Response Approach Paper: Saving Lives, Scaling-up Impact and Getting Back on Track*. The Approach has four pillars: (i) Saving lives; (ii) Protecting poor and vulnerable people; (iii) Ensuring sustainable business growth and job creation; (iv) Strengthening policies, institutions and investments.

access for the poor (Pillar 2). The project will support private operators with financing and business development services, contributing to business growth and job creation (Pillar 3). The project supports provincial governments, central ministries (MRHE and MP), and key sector agencies (ARE, ANSER, ARSPE, and OCE), enhancing their capacity for resilient and sustainable operations and growth (Pillar 4).

- 31. The proposed project contributes to the WBG Action Plan on Climate Change Adaptation and Resilience and will help DRC meet its Nationally Determined Contributions. On mitigation, the project considerably reduces reliance on the use of diesel generators (from water/fecal sludge treatment plants and small and medium businesses), biomass (for household cooking), and kerosene (household lighting) by (a) providing new and/or improved electricity services from renewable sources and (b) reducing water and energy losses, through deployment of solar home systems, the expansion of solar/hydro-powered mini-grids and nonrevenue water (NRW) reduction, and energy efficiency activities. On adaptation, the project will address vulnerabilities through developing climate-resilient power and water infrastructure by enhancing design and protecting power, water, and sanitation infrastructure from flooding and erosion; supporting utilities with business continuity and preparedness measures; and providing households and productive users with water and energy services, increasing adaptive capacities.
- 32. The project supports the implementation of the WBG Gender Strategy (2016–2023) and the digitalization agenda. Project activities contribute to narrowing gender gaps on (a) endowments by increasing access to water and electricity services and (b) access to economic opportunities and jobs through vocational and entrepreneur training programs, human resources (HR) policies, and internships targeted specifically at women. The project contributes to addressing GBV risks through public lighting, in-home water access and water points, and public WASH facilities at closer distance. Digitalization will be promoted through platforms for electronic payment in SNEL and REGIDESO, deployment of smart meters and management information systems (MISs) for provinces and sector agencies to better manage infrastructure operation.

II. PROJECT DESCRIPTION

A. Project Development Objective

PDO Statement

33. The objectives of the Project are to (i) expand access to renewable-based electricity and drinking water services in selected urban and peri-urban areas of the DRC, (ii) improve the commercial performance of public electricity and water utilities, and (iii) strengthen the capacity of selected provincial and national institutions in the electricity and water sectors.

PDO Level Indicators

- 34. The proposed Project Development Objective (PDO)-level results indicators are the following:
 - (a) People provided with new or improved electricity service (number, disaggregated by gender) (corporate results indicator)
 - (b) People provided with access to at least basic drinking water supply services (number, disaggregated by gender, basic and safely managed water services)

- (c) SNEL bill collection rate (percentage)
- (d) Operating ratio for REGIDESO subsidiaries in Nord Kivu Kasai Central (number)
- (e) Nord Kivu and Kasai Central Provincial Infrastructure Units responsible for water and electricity established and operational
- (f) Water sector regulator (ARSPE) capacity strengthened
- (g) Electricity sector regulator (ARE) capacity strengthened.

B. Project Components

- 35. Aligned with the FY22-26 CPF for DRC, the project promotes the Mobilizing Finance for Development approach to expand electricity and water services, improve utility performance, and strengthen institutional capacity. It will target the 10 provinces selected in the CPF. 41 Project Components 1 and 2 will address market failures (for example, tariffs and regulations); support upstream SNEL reform and REGIDESO restructuring; and strengthen governance, regulatory, and implementing capacity of provincial and national institutions (tier 2). To provide electricity and water services in cities almost unserved by state-owned utilities, Component 3 will use grants to leverage private sector investments and set up risk mitigation instruments in close coordination with IFC and MIGA (tier 3). The combined IDA and Green Climate Fund (GCF) financing and the use of guarantee instruments outside the project (MIGA) are expected to mobilize US\$140 million of private capital through commercial loans and equity financing (Table 2). In selected cities serviced by SNEL and REGIDESO, Component 4 will finance network rehabilitation and expansion to increase and/or improve electricity and drinking water services. Given the underdevelopment of the sanitation sector, the project will install small-scale fecal sludge treatment plants, professionalize FSM by informal enterprises, and improve regulatory oversight in two preliminary identified cities. 42 Component 4 also includes the provision of electricity and WASH facilities in social institutions and public places in selected provinces.⁴³
- 36. The project will leverage synergies between the energy and water sectors to extend services to households and productive and community users in targeted cities. Figure 2 illustrates the main interventions in the targeted cities. All investments and technical assistance will be climate-proofed and include specific measures to mitigate and/or adapt to climate change, based on recommendations from a climate resilience and environmental sustainability study.⁴⁴ There will be no water or sanitation investments in Kinshasa given such investments under Kin Elenda (P171141). Sanitation investments under the Project remain modest given the need to first develop a better institutional and legal framework.

⁴¹ The 10 provinces have been selected based on several criteria: (a) densely populated with a high number of poor people, (b) poor access and connectivity, and (c) conflict and fragility.

⁴² FSM activities are initially focused in Bukuva and Goma.

⁴³ Kananga, Goma, Beni, Butemba, Bukavu, and other cities selected in coordination with the Ministry of Education (*Ministère de l'Enseignement Primaire Secondaire et Technique*, MoEd) and Ministry of Health.

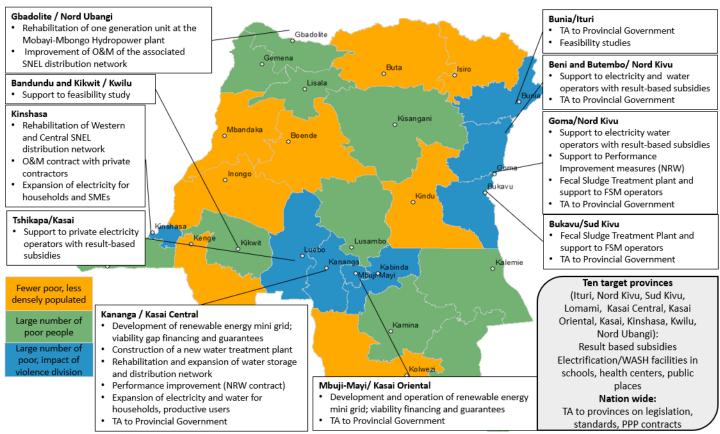
⁴⁴ Reference documentation includes information on climate hazard and specific climate resilience measures for this project.

Table 2. Project Cost and Financing, including Private Capital Mobilized (US\$, millions)

Components	Project Financing including PCM	Project Cost excluding PCM	IDA Financing	GCF	Gov. Financing	IFC and other IFIs	Private Capital Mobilized
1: Power and Water Utility	66.0	66.0	66.0	0.0	0.0	0.0	0.0
Governance and							
Performance							
2: Institutional	54.5	54.5	47.0	2.5	5.00	0.0	0.0
Strengthening and							
Development Support							
3: Private Sector-based	578.5	438.5	247.0	31.5	0.0	160.0	140.0
Access Expansion							
4: Public Sector-based	240.0	240.0	240.0	0.0	0.0	0.0	0.0
Access Expansion with							
Private Sector Involvement							
5: Contingent Emergency	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Response Component							
Total	939.0	799.0	600.0	34.0	5.0	160.0	140.0

Note: IFI = International financial institution; PCM = Private capital mobilized.

Figure 2. Overview of Interventions under the Project



Component 1: Power and Water Utility Governance and Performance (IDA: US\$66 million)

- This component will support the Government plan to advance reforms of SNEL and REGIDESO while improving performance, using Performance-Based Conditions (PBCs). In the electricity sector, advancing SNEL reform while improving its performance will involve supporting restructuring option studies and implementing a performance contract between SNEL and the State that will target critical aspects such as tariff setting/adjustment, government agencies' bill payment, commercial operations and customer payment options, distribution network maintenance, and accountability/transparency. In the water sector, advancing reform and improving performance will require the adoption and implementation of REGIDESO's restructuring action plan, which includes the establishment of two autonomous regional/provincial water utilities under public service delegation contracts with their provincial governments as well as implementing performance improvement plans (PIPs) for the two utilities to ensure their sustainability from the start. Reflecting lessons learned from past reform support, the component includes PBCs to reward achievement of key reform/performance improvement actions by responsible entities upon verification. Section VII includes a PBCs matrix with allocated amounts and a verification protocol table, while annex 2 summarizes the eligible expenditure for each PBC.
- 38. Subcomponent 1.1: SNEL Governance Improvement (IDA: US\$11.0 million) will support the implementation of key reforms under a new State-SNEL performance contract and assist in SNEL's restructuring. The new performance contract will constitute a high-level framework agreement between the GoDRC and SNEL. This will enhance governance through a number of reforms (using PBCs) including (a) enhancing the efficacy of SNEL's management board and the performance of SNEL department directors reporting to the Managing Director; (b) adopting a methodology to set and adjust electricity tariffs as well as applying the methodology to revise SNEL's HV and MV tariffs through an interministerial arrêté (PBC 1); (c) putting in place a sustainable mechanism (permanent payment order signed by the MoF) to timely pay bills from Government agencies (or instances officielles) and address free electricity and water consumption by high-level Government officials (or right holders), through a ministerial arrêté (PBC 2); and (d) making timely informed decisions on SNEL restructuring. To facilitate reform implementation, consultant services (on PPPs, databases, independent verification, and training), goods (vehicles and relevant equipment), and non-procurable operational costs will be provided to participating entities such as Committee in Charge of Reform of State-Owned Enterprises Comité de Pilotage de la Réforme des Entreprises Publiques, COPIREP); ARE; and cabinet offices of MRHE, Ministry of Economy (Ministère de l'Economie Nationale, MoEc), MoF, and Ministry of Budget (Ministère du Budget, MoB). A study to audit energy use at selected government buildings and analyze the option of autonomous supply through rooftop solar installation will be conducted and provide recommendations and implement a pilot. In addition, the subcomponent will provide comprehensive technical assistance (studies, knowledge exchange tours, restructuring road map preparation, asset inventory, human resource optimization, and communication campaigns) for SNEL restructuring.
- 39. Subcomponent 1.2: SNEL Commercial Performance Improvement (IDA: US\$37 million) will implement key components of SNEL's Redress Plan and pilot private sector involvement in the O&M of selected perimeters. Key redress plan components to be financed comprise (a) a Revenue Protection Plan (RPP), (b) incorporation and systematic use of MISs to support efficient operations, and (c) deployment of meters in Kinshasa. The RPP will target SNEL's highest electricity consuming (HV, MV, and large LV) customers and will consist of (a) installing meters for these customers; (b) setting up a metering control center (for continuous consumption monitoring); (c) training a dedicated team (encouraging women

involvement) to monitor, detect, and correct frauds; and (d) making necessary organizational arrangements for effective implementation. Installing and using new MISs will involve (a) assessing and improving procedures and practices targeting key functions, (b) installing and using an integrated information management software (PBC 3), and (c) digitalizing bills and enabling customers to pay through electronic/digital platforms (including mobile money) (PBC 3). Meter purchasing and installation (about 300,000) will be financed in batches based on satisfactory performance on PBCs 3. The implementation of these three critical performance improvement components will be accompanied by staff training, organizational rearrangements, and funding for independent verification of the PBCs and operational costs (including relevant equipment and vehicles) for COPIREP. Finally, the subcomponent will study and pilot the involvement of the private sector in the O&M of selected rehabilitated perimeters in the Kinshasa and Gbadolite distribution networks, along with the setting up of a dedicated distribution maintenance fund (PBC 3). The installation of prepaid meters will lead to more efficient electricity use, which will contribute to optimize generation and thereby mitigate climate change.

40. Subcomponent 1.3: REGIDESO Restructuring and Performance Improvement (IDA: US\$18 million) will support the establishment of two utilities under public service delegation contracts with relevant provinces, performance improvement measures, and tariff adjustments to ensure sustainable operations. This subcomponent is financed through US\$18 million PBC-linked expenditures (PBCs 4 and 5) and will incentivize Government adoption of REGIDESO's Restructuring Action Plan. As part of this plan, in at least two pilot provinces (Nord Kivu and Kasai Central), asset inventories/valuation will be carried out and the state will transfer ownership of public water supply assets from REGIDESO to the provincial governments. REGIDESO will transform into a holding, with legally autonomous subsidiaries, created for Nord Kivu and Kasai Occidental⁴⁵ (PBC 4).⁴⁶ Debt restructuring will ensure that newly created provincial/regional utilities will start with a clean slate. The public service delegation contracts will include measures for bill payment by centrally funded Government agencies and reduction of free water consumption (see PBC 1) and bill payment by provincial government agencies (required for PBC 5), accompanied with consumer audits, communication programs, and metering programs. Utilities will formulate PIPs and will ensure satisfactory implementation of the service delegation contract (PBC 4). The subcomponent finances PIP implementation, including consulting services and equipment, minor works for customer registries, billing, accounting, and asset management system and NRW programs, possibly contracted through third-party performance based NRW contracts, energy efficiency programs, and climate resilience measures, contributing to climate change mitigation and adaptation. Citizen feedback will be integrated in the annual review of the public service delegation contracts and remedial actions identified. Tariff revisions, based on ARSPE-approved methodology, using cost-reflective principles, will be approved before the end of the project to ensure sustainable operation (PBC 5). The subcomponent will also finance verification costs (PBCs 4 and 5), and operational costs of COPIREP for this subcomponent, as well as workshops and communication campaigns by COPIREP for the Restructuring Plan.

Component 2: Institutional Strengthening and Development Support (IDA: US\$47 million; GCF grant: US\$2.5 million)

41. This component bolsters the capacities of key public institutions at the national and provincial levels to play an effective role in accordance with the 2014 Electricity Law and 2015 Water Law.

⁴⁵ Kasai Occidental includes the provinces of Kasai Central and Kasai.

⁴⁶ The proposed subsidiary is envisioned to cover Kasai Central and Kasai, formerly the Kasai Occidental province.

- strengthen the operational, PPP, and planning capacity of selected provincial governments. It will finance the operationalization of infrastructure units in selected provinces (*Régie Provinciale d'Infrastructure*), starting with two provinces (Nord Kivu and Kasai Central) and later replicating to other two provinces (Ituri and Sud Kivu) based on local government commitment and funding availability. Within the framework of the collaboration agreements that will be signed with each province, the support involves (a) developing HR plan, hiring staff, and preparing operational manuals; (b) training officials and availing hands-on consultancy support (for example, on legal and regulatory framework); (c) providing office equipment and office space in Goma and constructing an office in Kananga; (d) developing MISs for power and water infrastructure and for the sanitation sector; (e) preparing water supply plans for selected provinces; and (f) developing provincial electrification plans (other than Nord Kivu and Kasai Central) and providing just-in-time assistance to provinces in the operation phase of the decentralized grids (using both IDA and GCF grant of US\$2.5 million).
- 43. Subcomponent 2.2: Central Sectoral Agencies (IDA: US\$8.75 million) will support agencies, directorates, and cabinet offices within MRHE, MEDD, and the Ministry of Gender, Family and Children (MGFE). Within MRHE, the assistance targets (a) ARSPE and OCE (recently created but not operational), (b) ARE and ANSER recently operational, (c) MRHE's General Secretariat and Cabinet Office. For ARSPE and OCE, the subcomponent will help develop HR plan, recruit and train core staff, prepare operational manuals, provide limited office equipment, and develop several regulatory tools and systems (tariff method, standard PPP contracts, water fund, MIS for abstraction permits, and river basin management plans). For ARE, it will fund several activities: (a) develop remaining relevant implementing decrees and standard PPP contracts and support MRHE in law dissemination, (b) take stock of and publish all approved PPP contracts in DRC, and (c) address complaints and conflicts from operators and customers. For ANSER, the subcomponent funds, among others, the development and dissemination of an investment portfolio to promote peri-urban electrification. For the General Secretariat of MRHE, it will support dissemination of the Electricity and Water Laws, new program development, operational improvements (reorganization to enhance efficiency), and training. The MEDD will be supported to (a) prepare the National Sanitation Law and a priority investment plan and (b) monitor the implementation of environmental and social instruments in the targeted cities through its environmental agency, Agence Congolaise de l'Environnement (ACE). The MGFE and its technical agency, Maison de la Femme, will be assisted to carry out GBV prevention, sensitization, and training; monitoring cases; and assist victims of sexual violence and exploitation.
- 44. Subcomponent 2.3: Planning and Investments Development Support (IDA: US\$12 million) supports the development of national electrification and WSS policy, plans, and portfolio and provides tailored assistance to private operators and commercial banks. It will provide funding to update sector policies (as needed), refine central planning considering climate change adaptation and resilience, and conduct prefeasibility/feasibility (including environmental and social (E&S) aspects) studies for follow-on projects. In addition, it will offer relevant services to various types of private electricity, water, and sanitation operators. Private entrepreneurs and user associations operating small power and/or water production and distribution infrastructure will be assisted in developing proposals and business plans to access results-based subsidies and/or commercial loans. 47 Demand assessments for the scope/scale of commercial lending in the water and energy sectors will be conducted, and participating PPCGF

⁴⁷ Under the forthcoming DRC SME Growth project (P178176), a PPCGF will be established, possibly including a dedicated window for water and energy operators.

Page 26 of 100

commercial banks will receive technical assistance to carry out due diligence. Sanitation operators will be supported with business development, services, and equipment support (vacuum trucks, sludge gulpers, and so on). All private electricity, water, and sanitation operators will be trained on the World Bank Environmental and Social Framework (ESF), IFC performance standards, and SEA/SH and will be assisted in the development or mainstreaming of the Environmental and Social Management System (ESMS) and associated relevant instruments. Citizen engagement activities, including behavior change communication, will be funded to promote, among others, sanitation behavior change and efficient electricity and water use.

45. Subcomponent 2.4: Project Management (IDA US\$18.5 million; GCF grant: US\$0.5 million) will fund project management costs for the two project fiduciary agencies (UCM and CEP-O), as well as ANSER and OCE, and provide limited support to Programs and Projects Monitoring Unit (Cellule de Suivi des Programmes et Projets, CSPP). UCM will be the overall project coordinating entity, while CEP-O will be responsible for the public water access expansion (Subcomponent 4.2), and CSPP will support the general supervision of the project for Ministry of Finance (Ministère des Finances, MoF). UCM and CEP-O offices are currently established in Kinshasa, and additional staff (procurement, private sector support, engineering, GBV, and communication) will be hired. In addition, two regional offices will be established in Goma and Kananga, each staffed with a power engineer, a water supply engineer, an environmental specialist, a community engagement/social development specialist, a monitoring and evaluation (M&E) assistant, and a driver. ANSER and OCE will be supported with procurement specialists and training on financial management (FM). The subcomponent includes a dedicated implementation and monitoring budget for Environmental and Social Standards (ESS), sensitization/training on GBV, and assistance to GBV survivors. The subcomponent will enable grievance redress mechanism (GRM) committees (at the community, commune, provincial, and central levels) and implement citizen engagement activities (for example, beneficiary feedback surveys with focus on women). Expenditures will also include (a) external auditing; (b) office space, equipment, vehicles, and supplies; (c) incremental operational costs; and (d) training. GCF funding will contribute (US\$0.5 million) to UCM operating cost as fiduciary agency for the grant.

Component 3: Private Sector-based Access Expansion (IDA: US\$247 million; GCF grant: US\$31.5 million, of which US\$30 million reimbursable grant)

46. The component will support the implementation of a national DRC mini-grid program that will leverage private sector investments to accelerate access in cities underserved by SNEL. The program will provide a platform for other donors to support DRC electrification, through mini-grids or OGS products, with the World Bank taking the leading role in supporting its operationalization. The program will promote two approaches. The first approach (top-down) will competitively select mini-grid developers that will bring complementary financing to construct and run decentralized renewable-based grids (large mini-grids) in selected provincial capitals (Subcomponent 3.1). Based on agreed criteria (such as access rate, provincial government commitment, private sector attractiveness, synergies with other World Bankfinanced projects, and security and accessibility), two provincial capitals (Kananga in the Kasai Central and possibly Mbuji-Mayi in Kasai Oriental) are being considered. The top-down approach will include a reimbursable GCF grant under the SRMI program. The second approach (bottom-up) will help expand mini/off grids/networks for increased electricity and water services by providing private electricity and water operators with results-based subsidies (Subcomponent 3.2 on electricity and Subcomponent 3.3 on water).

- 47. Subcomponent 3.1: Top-down Electrification of Selected Provincial Capitals (IDA: US\$160 million; and GCF: US\$31.5 million grant, of which US\$30 reimbursable grant) will significantly increase electricity access rate in Kananga and Mbuji-Mayi by competitively leveraging private investments to build and operate decentralized grids. 48 The subcomponent will mainly fund capital subsidies (from IDA) to buy down the cost of equity and debt raised by private developers and improve affordability of electricity for customers. Developers will be competitively selected based on the lowest required capital subsidy to build and operate two large mini-grids (decentralized) for at least 25 years through public service delegation contracts. The GCF grant (US\$1.5 million) will provide transaction advisory services (complemented by IDA), and the remaining IDA financing will fund owner engineering services, online mini-grid design, procurement, and monitoring platform (such as Odyssey) and other required technical assistance. The services will help the GoDRC consult potential developers, prepare comprehensive tender packages, evaluate bids, negotiate contracts and agreements, facilitate financial closure, and oversee the construction phase until electricity service delivery to households and productive and administrative users. The tender package will explicitly establish the opening average electricity tariff and include a draft public service delegation contract (incorporating industry's feedback) and potentially IFC lending term sheet and MIGA guarantee coverage term sheet. To help mitigate revenue risks associated with lowerthan-expected energy consumption during the initial years of mini-grid operation, a US\$30 million GCF reimbursable grant is used to put in place a demand risk mitigation instrument (referred in the GCF agreement as Viability Gap Financing, VGF) (see annex 3). In the event of a revenue shortfall in relation to pre-agreed business plan projections, the private developer will submit a claim for the difference in revenues. Upon validation by a verification agent, the funds will be disbursed.
- 48. Subcomponent 3.2: Financing Support for Bottom-up Electrification by Eligible Electricity Operators (IDA: US\$72.0 million) will support the bottom-up electrification of cities by providing private sector operators with streamlined financial facilities for access scale-up. MRHE, with World Bank support, is expanding the EASE project-initiated bottom-up subsidy fund into a multi-donor fund known as *Mwinda* Fund that will be managed by ANSER (with UCM involvement in urban areas) with technical assistance from an international fund manager with a proven track record. In light of this development, the subcomponent will fund (a) the technical assistance from the *Mwinda* Fund manager, (b) other activities necessary to make the *Mwinda* Fund operational including a result-based subsidy manual, and (c) provision of mini-grid and OGS operators with results-based subsidies to expand electricity service to households and productive users. The results-based subsidies will be channeled through the Mwinda Fund and be a vehicle for crowding in additional donor funding to support electrification in peri-urban and rural areas not targeted in the AGREE project.
- 49. Subcomponent 3.3: Financing Support for Water Access Expansion by Eligible Water Operators (IDA: US\$15 million) will extend results-based subsidies to private water operators to expand water access and improve services. This subcomponent will mainly fund result-based subsidies for water operators, including private water operators and not-for-profit operations (water user associations), based on eligibility criteria and a viable business plan. The result-based subsidies will be managed by OCE with technical assistance from an international fund manager, funded through the project (expected to be the same manager as for the *Mwinda* Fund). It will finance an online processing and monitoring platform to support verification. The result-based subsidies will fund rehabilitation/expansion of water distribution networks; augment water production capacity; install more energy-efficient pumps; fund

⁴⁸ Pending fund availability, a third city would be included.

household water connection costs; upgrade and expand water points in poor neighborhoods; reduce water losses; and augment water treatment and storage facilities. The subcomponent will initially target existing water operators in Nord Kivu province and will be expanded to other provinces, depending on fund availability. A Result-Based Grant Manual will be developed to this end.

Component 4: Public Sector-based Access Expansion with Private Sector Involvement (IDA: US\$240 million)

- 50. The component will increase access to and improve the quality of electricity and WSS services in selected cities managed by SNEL and provincial/regional water utilities. It will finance the rehabilitation and expansion of power, water, and sanitation infrastructure, including service connections for households, businesses, and public facilities in selected areas in Kinshasa (energy sector), Gbadolite (energy sector), Kananga (water/energy sector), Goma (water and sanitation), Bukavu (sanitation), Butembo (water), and Beni (water). Where feasible, private sector involvement in the O&M of infrastructure will be sought to improve performance (Subcomponents 4.1 and 4.2). The component will contribute to human capital development by providing electricity and basic WASH services in selected health care centers, schools,⁴⁹ and public places and by increasing job opportunities, specifically for women, in the water and energy sectors (Subcomponent 4.3).
- Subcomponent 4.1: Rehabilitation of Selected SNEL Distribution Perimeters (IDA: US\$106.5 million) will rehabilitate and expand segments of the Kinshasa and Gbadolite grids and promote private sector involvement in the O&M. This entails strengthening the generation capacity and dam safety of the Mobayi-Mbongo hydropower plant and rehabilitating and expanding selected segments of the Kinshasa distribution network. The latter includes works, goods, and consultant services to rehabilitate power substations and associated MV and LV distribution lines, upgrade and balance overloaded LV transformer cabins, install prepaid meters, connect households, and facilitate in-house wiring for vulnerable households. Equipment will be installed in the Goma grid to facilitate interconnection with private operators' grids. The rehabilitation is expected to reduce technical electricity losses in the targeted perimeter by approximately 50 percent. The new and rehabilitated substations, the LV transformer cabins, the electric poles, and other critical electric installations will be protected against flooding and erosion, strengthening the resilience of the power infrastructure to climate vulnerabilities. The distribution network maintenance fund setup and private sector involvement (under Subcomponent 1.2) will help ensure sustainability of the investments.
- Subcomponent 4.2: Water Supply and Sanitation Rehabilitation in Selected Cities (US\$105.50 million) will improve access to water services in Kananga, Goma, Butembo, and Beni, as well as access to sanitation services by installing fecal sludge treatment capacity in Bukavu and potentially in Goma. In Kananga, the subcomponent will finance (a) rehabilitation of the Tshibatshi water intake station and water treatment plant, (b) construction of the Lubi water intake and water treatment plant, (c) rehabilitation and new construction of water storage and pumping facilities, (d) replacement and rehabilitation of transmission and distribution mains (specifically asbestos pipes), (e) expansion of the distribution network in new neighborhoods, (f) electromechanical-equipment and Supervisory Control and Data Acquisition (SCADA) systems, (g) water connections for households and public water points, and (h) related technical supervision costs of the civil works contracts. In Butembo and Beni, the project will finance installation of two compact water treatment stations, expansion of networks, house connections,

Page 29 of 100

⁴⁹ In synergy with other World Bank-financed health and education projects.

and water points in disadvantaged neighborhoods with water shortages and security risks (such as Mutiri in Butembo). In Goma-West, the project will, in close collaboration with ICRC, finance a water treatment plant, distribution network, and water connections while exploring a DBO contract with the private sector). In Bukavu and potentially Goma, the project supports FSM by financing the design and construction of small-scale fecal sludge treatment plants including sludge transfer stations and sludge disposal/reuse measures. The water and sanitation infrastructure will be powered by renewable-based grids, and their design, construction, and operation will incorporate climate resilience features to protect from flooding and erosion.

53. Subcomponent 4.3: Promoting Human Capital Development in Selected Cities (IDA: US\$28 million) will invest in electrification and WASH facilities of health centers, schools, and public places and increase job opportunities through vocational and entrepreneurship training in selected cities. It will finance the installation and maintenance of solar home systems, solar public lighting, and WASH facilities at selected health centers, schools, communal facilities, public places, and street segments (for public lighting) in selected cities. To sustain O&M, the subcomponent will study and establish mechanisms such as subcontracting private entrepreneurs and encouraging female-run businesses. Education interventions will be implemented on correct usage, handwashing, and hygiene. In addition, the subcomponent will fund vocational training and support job placement and micro business development for women (and men to a lesser extent) on WASH facility and water kiosk management, electricity wiring, plumbing, and other related jobs in Kananga, Goma, and other cities. This will provide private and public operators with qualified labor and personnel reducing gender gaps and result in more female-led entrepreneurs in the management of WASH facilities and other water and energy micro-businesses. The subcomponent will also provide assistance to SNEL and REGIDESO subsidiaries to develop and implement women empowerment activities including (a) training on leadership and management and other relevant training; (b) carrying out of mentoring/coaching activities; (c) sensitization activities for female students and pupils on science, technology, engineering, and mathematics (STEM); (d) HR development activities to attract trained women and female students in new job openings; and (e) the implementation of an internship program specifically targeting women.

Component 5: Contingent Emergency Response

A Contingent Emergency Response Component (CERC) with zero allocation may be used to contribute to an emergency response through the timely implementation of activities in response to an eligible national emergency. A CERC is included in the project in accordance with Investment Project Financing (IPF) Policy, paragraphs 12 and 13, for Situations of Urgent Need of Assistance and Capacity Constraints. This will allow for rapid reallocation of credit/grant uncommitted funds in the event of an eligible emergency as defined in OP 8.00. An Emergency Response Manual will be prepared as an annex to the Project Operations Manual (CERC Annex). The environmental and social instruments required for the CERC are prepared, disclosed, and adopted in accordance with the CERC Manual and the Environmental and Social Commitment Plan (ESCP). For the CERC to be activated, and financing to be provided, the Government will need (a) to submit a request letter for CERC activation, and the evidence required to determine the eligibility of the emergency, as defined in the CERC Annex, an Emergency Action Plan, including the emergency expenditures to be financed; and (b) to meet the environmental and social requirements as agreed in the Emergency Action Plan and ESCP.

C. Project Beneficiaries

- AGREE's direct beneficiaries are households, productive users, health centers' patients, and school students in targeted urban and peri-urban areas, as well as institutional beneficiaries such as SNEL, REGIDESO, provincial governments, regional/provincial water utilities, private water and energy operators, private mini-grid developers, and key national ministries (MRHE and MP) and agencies (ARE, ANSER, COPIREP, and OCE).
- 56. Around 6 million people will receive new (first time) or improved electricity services and around 0.7 million people will gain access to at least basic drinking water through investments under Components 3 and 4. Households, productive users, and government facilities in Kananga, Mbuji-Mayi, Goma, Butembo, Beni, and other cities will receive new or improved renewable electricity and/or drinking water services through public and privately provided services (Components 3 and 4). In Bukavu and Goma, households will be able to benefit from safely managed sanitation services with the construction of fecal sludge treatment plants (Subcomponent 4.2) and the professionalization of private sanitation operators (Subcomponent 2.3). In Kinshasa, many households will receive better quality of electricity service (less outages and better voltage) as the distribution network will be rehabilitated (Subcomponent 4.1). Women will benefit from public lighting in dark streets, public places, and neighborhoods and closer-to-home waterpoints or yard connections, contributing to their safety. Patients and students in selected cities will receive better quality of care and a more conducive learning environment due to the provision of electricity and WASH services in health centers and schools (250 in total). Public and communal WASH facilities in poor neighborhoods (500 in total) will enhance quality of life and offer employment opportunities, specifically for women (Subcomponent 4.3).
- 57. SNEL and REGIDESO, and its future subsidiaries, are expected to benefit from commercial and operational performance improvements (Component 1). SNEL's revenues (before taxes, interest, and depreciation) are expected to increase from higher tariffs from the largest consumers and improved collection rate due to timely payment of the Government's electricity bills and implementation of the revenue protection plan. In addition, SNEL commercial operations will be improved with the use of information management, implementation of metering program, and the use of electronic means for bill payments. The performance of REGIDESO's autonomous subsidiaries is expected to improve through decentralization and the creation of debt-free provincial/regional utilities in pilot provinces (subsidiaries). They will improve their operating ratio due to increased revenues from Government and domestic customers, tariff adjustment, use of information management systems, NRW programs, and other efficiency measures.
- 58. National water and energy sector entities will be significantly strengthened, and provincial governments empowered to oversee services. In the water sector, ARSPE and OCE will receive assistance to become fully operational (staff recruitment/training, information systems, regulatory tools, and river basin management tools). Foundational improvements in the sanitation sector are realized with the preparation of legislation and plans. In the electricity sector, ARE and ANSER's capacity will be enhanced through direct involvement in the project implementation and support in the execution of their mandates. COPIREP will benefit from technical and financial resources linked to PBCs to implement utility reform and performance improvement activities together with various other ministries. At the provincial level, authorities in Nord Kivu and Kasai Central will benefit from new, trained, and equipped infrastructure units (*Régies Provinciales de l'Infrastructure*), empowered to promote and oversee water and electricity

infrastructure development with increased involvement of the private sector and closer engagement of citizens. Other provincial governments will benefit from regulatory procedures, standard PPP contracts, and other tools.

D. Results Chain

59. The theory of change underpinning the proposed project is presented in Error! Reference source not found.. Expanding electricity and water access will be achieved through the project financial and technical support to both private operators and national and provincial/regional utilities. Sanitation services will improve in selected cities due to public investments in sludge treatment and support to private sanitation operators. With the subsidies, concessional financing, and technical assistance, private operators, SNEL, and provincial/regional water utilities will construct power and water distribution networks, sell more OGS systems, and provide affordable services to households, productive and community users. National and regional/provincial utility performance will improve due to increased bill collection, use of electronic payments, revenue protection and NRW programs, and cost-reflective tariff. Governance will be enhanced through (a) operationalization of ARSPE and OCE in the water sector, (b) strengthening of ARE and ANSER's capacities to implement their mandates in energy, (c) establishment and equipping of provincial infrastructure units (Régies Provinciales de l'Infrastructure), and (d) preparation for a sanitation law. Underlying critical assumptions are that households will be able to afford service usage (power and water tariffs) from private operators and that the GoDRC will continue to champion and facilitate the implementation of reforms.

Intermediate Results Project Outcomes Higher Level Outcomes Outputs Activities KMs of distribution/transmission Component 1: Power and Water Utility Households, productive and Improved human capital People provided with lines installed community (schools, health outcomes, health and well Governance: new or improved Renewable energy capacity clinics) connected to: SNEL governance and commercial being electricity services installed SNEL networks, private performance improvement People provided with at Water treatment capacity and REGIDESO Restructuring mini-grids or OGS; Sustainable energy and least basic drinking water fecal sludge capacity installed REGIDESO or private water Performance Improvement water services leading to KMs of water network connections and tapstands reduced tensions and rehabilitated social conflict Component 2: Institutional Strengthening PBC 1: Tariff method and Public Electrification & WASH Commercial and Development Support: SNEL's tariffs revised facilities built performance of SNEL · Assistance to Provincial and Central Increased citizen trust in PBC 2: Electricity/water bills of Business plans developed by improved (bill collection Agencies capable government government agencies paid: private water and energy ratio) Planning and Investment Development authorities and utilities free consumption reduced operators Performance of Support PBC 3: SNEL uses MIS with Private developers sign VGF-REGIDESO subsidiaries in · Project Management electronic payments: financing agreements Growth of private sector in Nord Kivu and Kasai SNEL sets up Distribution Water / energy operators sign energy and water Central improved Network Maintenance Fund Component 3: Private Sector based Access subsidy agreements (operating ratio) and signs PPP contract Expansion: Private operators capable on ESF PBC 4: REGIDESO subsidiaries Top-down electrification of provincial Jobs created for men and Nord Kivu / Kasai Central capitals operate with delegation especially women Provincial Infrastructure Arêtes and permanent payment contracts in Nord Kivu and Financing support for bottom-up Units established and orders prepared Kasai Central electrification by eligible energy Climate change mitigated ARE/ARSPE issue tariff methods operational PBC 5: Tariff adjustments and Electricity regulator (ARE) and climate resilient SNEL performance contract; and water bill payment of Financing support for water access livelihoods strengthened smart meter program provincial govt agencies to expansion by eligible water operators Water regulator (ARSPE) implemented REGIDESO subsidiaries capacity strengthened REGIDESO Restructuring approved; Component 4: Public-sector based access PIPs for subsidiaries implemented expansion with private sector involvement: Staff recruited, trained, Rehabilitation of selected SNEL Critical Assumptions: SNEL, REGIDESO and sector MIS systems installed in Households able to afford in-house connection costs and distribution network perimeters provincial infrastructure entities trained Water supply and sanitation River Basin Management Plan and units, ARSPE, ARE and OCE power and water tariffs from public and private operators rehabilitation in selected cities SNEL has sufficient generation capacity to avoid load Sanitation law submitted OCE Water Fund prepared Promoting human capital development shedding in targeted areas Sanitation law drafted Trained women finding in selected cities Government agencies continue to pay water and energy bills Vocational program targeting jobs in water and energy New water utilities initiated without debt on balance sheet women delivered

Figure 3. Theory of Change

E. Rationale for Bank Involvement and Role of Partners

The WBG is a long-standing and strategic partner to the GoDRC in the energy and water sectors and has gained valuable in-country lessons; together with the WBG's global experiences, this represents a significant comparative advantage. Since 2003, the World Bank engagement has shifted from initial large-scale emergency infrastructure toward more comprehensive projects that tackle access bottlenecks and institutional dimensions (see also paragraph 18). The WBG, combining its comparative advantages of IDA, IFC, and MIGA, is well placed to assist the GoDRC in the implementation of an at-scale electricity and water access program. Within DRC's FCV context, the World Bank combines a post-humanitarian development response with the ability to harness technological and financial innovations for a green, resilient, and inclusive development process. The World Bank will work with IFC and MIGA, and other complementary IDA projects, to design and support the implementation of scalable electrification and water projects that leverage private sector financing and expertise in an unprecedented manner in DRC. In addition, the World Bank has extensive experience supporting utilities in all Sub-Saharan African countries to improve their governance and commercial operations through reforms and the implementation of PIPs to deliver better quality service to its customers.

- 61. The AGREE project complements other development partners' interventions and will continue to coordinate and mobilize sector financing through instruments and/or funds established under the project. The top-down electrification approach will build on and refine regulatory tools and contracts that were developed through the FCDO-funded Essor program and USAID's technical assistance. The Kinshasa power distribution network rehabilitation and bottom-up electrification in Tshikapa will complement the AfDB-financed Power Sector Improvement and Governance Support project that rehabilitates SNEL's northern Kinshasa distribution network and supports an operator in Tshikapa. In the water sector, the REGIDESO restructuring and sector reform are supported by several partners such as FCDO, ICRC, GiZ/KfW, AfDB, and USAID. In Kasai Central and Nord Kivu, 50 the project will operationalize provincial infrastructure units, expand services, and support private water operators, complementing ongoing support from ICRC, FCDO, and AfDB. The construction of the sludge treatment plant in Bukavu will complement financing from the French Development Agency (Agence Française de Développement) in the water systems.
- 62. The World Bank and ICRC are working in collaboration to develop the West Goma water supply project. The collaboration will deliver synergies between ICRC's long-term humanitarian engagement in Goma and its intended transition to a development approach, and the World Bank's expertise and resources to develop a DBO for a greenfield water system in West Goma. ICRC's preparatory studies, knowledge of the private sector landscape in Nord Kivu, and relationship with the provincial government will be instrumental, and it is envisaged that the collaboration will help crowd in (parallel) co-financing of other partners.

F. Lessons Learned and Reflected in the Project Design

- 63. The project design incorporates lessons learned from past energy and WSS sector projects. The implementation of energy and WSS projects since World Bank's reengagement in 2001 revealed three major lessons. First, previous SNEL and REGIDESO reform efforts were unsuccessful in large part due to lack of commitment from the highest level in MP. In response, the project involves the Prime Minister and the President's Offices in the reform oversight committee and uses PBCs to reward key reform milestones. Second, (a) lack of technical pre-feasibility studies before Board approvals and (b) late engagement with the private sector have contributed to implementation delays, cost overruns, and unsuccessful PPP bidding processes. Reflecting this lesson, selected project investments are based on EASE and PEMUfinanced (pre-)feasibility studies, thorough assessment of regulatory/institutional environment (with Public-Private Infrastructure Advisory Facility funding), and private sector consultations led by IFC under the Scaling up Mini Grids (SMG) program. Third, project implementation arrangements should be anchored in line ministries and supported by country-based task team leaders. This lesson was considered, as MRHE's Project Coordination Units (UCM and CEP-O) will take the overall project coordination role and the reform component will be led by MP's COPIREP. Also, two of the project's co-TTL positions are based in the DRC and, the World Bank will further facilitate implementation support through hands-on expanded implementation support (HEIS) on procurement.
- 64. Pursuing parallel and well-coordinated public and private approaches coupled with institutional strengthening have proved to be effective in accelerating access and are followed under the project. The project includes a two-pronged approach (top-down and bottom-up) for private sector expansion and

⁵⁰ FCDO has invested in the rehabilitation of the publicly owned water system in Goma; hence, the public support will focus on operational improvement measures and private sector–led development in autonomous water systems.

complementary public investments, combined with reforms, institutional strengthening, and enabling private sector growth. The project is informed by the lessons from EASE result-based financing, feedback from private operators, and other experiences from domestic private sector participation in developing countries (specifically in Benin, Senegal, and Cambodia⁵¹) and analysis from IFC's SMG program, ESMAP's Global Facility for Mini-Grids, and GCF's SRMI. Component 4 supports a public sector approach, recognizing the critical role of national utilities in improving and expanding service within their service areas, building on multiple IDA-financed projects. Building on experiences in Kenya, Ghana, India, and Brazil, PBCs have been designed and adapted to the DRC context to strengthen governance reform and utility restructuring.

- Global lessons and best practices in the WSS sector are mainstreamed into the project design and implementation. World Bank experiences in several countries, including Angola, among others, indicate that the financial viability of large water utilities is typically undermined by inefficient operations and high dependence on unreliable fiscal transfers from the Central Government eroding local accountability. The project addresses such systematic governance weaknesses by (a) providing incentives (PBCs) to advance decentralization through the restructuring of REGIDESO, transfer of assets, and creation of provincial/regional utilities; (b) empowering provincial governments to implement public service delegation contracts; (c) supporting a suite of commercial and efficiency improvements; (d) strengthening independent regulation through ARSPE with cost-reflective tariffs framework; and (e) improving accountability though citizen engagement. Building on the lessons from the PEMU project, behavioral and financial barriers to connect will be addressed through extensive citizen engagement activities and supporting household connection fees. On sanitation, the project supports the development of the sanitation service chain, including FSM for a city-wide inclusive approach.⁵²
- General Private sector-based, top-down electrification approach stems from a strengthened regulatory framework and appropriate contractual risk mitigation, as integrated in the project design. The project will support ARE to strengthen the regulatory framework, including adopting tariff review methodologies, publishing all PPP contracts, addressing conflicts and complaints, and developing enhanced standard service delegation/concession contracts. The concession contract, in the tender documents, will include a fixed opening tariff (based on willingness to pay [WTP] and social considerations) as well as tariff adjustment mechanisms. This will facilitate acceptability and allow long-term viability. The parallel implementation of top-down and bottom-up approaches combines the benefits of both: rapid implementation for priority cities under top-down, and flexibility for local private initiatives and innovations under bottom-up. Involvement of IFC and MIGA in the design and preparation of the top-down electrification approach will enhance attraction of capable international private developers and facilitate both IFC lending and MIGA's provision of guarantee coverage to the competitively selected private developers. A reimbursable grant from GCF will be used as a demand risk mitigation instrument to mitigate the risk related to expected demand or revenue from users.

⁵¹ https://pppknowledgelab.org/sectors/small-scale-water-sanitation#lessons--analysis.

⁵² https://www.worldbank.org/en/topic/sanitation/brief/citywide-inclusive-sanitation.

III. IMPLEMENTATION ARRANGEMENTS

A. Institutional and Implementation Arrangements

- 67. The project will be anchored within MRHE and chaired by a project steering committee (PSC) that includes supporting ministries and selected provincial governments. As line ministry for both the water and energy sectors, MRHE will oversee project implementation. It will set up and chair a PSC to provide strategic guidance, approve annual work plans, and facilitate collaboration, meeting at least annually to assess implementation progress. As the project involves aspects outside of MRHE mandate—such as reforming national utilities, developing sanitation law, reducing gender gaps, developing human capital, and engaging citizens, the PSC will comprise representatives from the MP; the Ministry of Finance; the Prime Ministry; MRHE; the Ministry of Gender, Family and Children; MoEd; the Ministry of Public Health; selected provincial governments; and key civil society and citizen organizations. The composition, roles, and responsibilities of the PSC will be detailed in a ministerial *arrêté* and indicated in the Project Implementation Manual (PIM).
- 68. MRHE's project implementing units—UCM (electricity sector) and CEP-O (water sector)—will be the fiduciary agencies, with UCM taking the overall project coordination role. UCM has been implementing the IDA-financed EASE project (P156208) and the IDA-financed energy subcomponent of the Kin Elenda project (P171141). CEP-O implemented the IDA-financed Urban Water Supply Project (PEMU, P091092) from 2009 to June 2021 and is implementing the water component of the Kin Elenda project (P171141), which became effective on September 8, 2021. The performance of both UCM and CEP-O in project monitoring, FM, procurement, and ESS have been assessed in all aspects as Moderately Satisfactory. The two units are the most experienced implementing agencies in the electricity and water sector in DRC. Given the larger scope of the project in the energy sector, UCM will be responsible for the overall project coordination and reporting.
- 69. To strengthen capacity of key sectoral agencies, COPIREP, ARE, ANSER, and OCE will be responsible for implementing subcomponents; SNEL and REGIDESO will provide technical inputs. COPIREP will lead the implementation of Component 1, engaging effectively with the President and Prime Minister's Offices, the Ministry of Finance/Budget, UCM/MRHE, SNEL, and REGIDESO to improve utility governance and performance. UCM, besides its overall project coordination role, will implement Component 2 and Subcomponents 4.1 and 4.3, working closely with provincial governments, central sectoral agencies, private operators, and SNEL. Similar to the current arrangement under the EASE project, SNEL will participate in the procurement of Subcomponent 4.1 and will supervise works on its distribution network. ARE will lead the selection of private developers under the Subcomponent 3.1 and will be supported by UCM in the delivery and monitoring of capital subsidies/grants. ANSER will lead the electricity subsidy scheme (through the Mwinda Fund) of Subcomponent 3.2 with the involvement of UCM on urban areas. Once the newly established OCE becomes operational, it will handle the water subsidy scheme of Subcomponent 3.3 with CEP-O assuming a transitional preparatory role. CEP-O will be responsible for the implementation of Subcomponent 4.2, working closely with provincial governments' infrastructure units (Régies Provinciales de l'Infrastructure) and REGIDESO in Nord Kivu and Kasai Central, and with municipalities of Bukavu and Goma with respect to the FSM interventions. A Memorandum of Understanding (MoU) between the implementing entities was prepared and will be signed by project

effectiveness. Provincial collaboration agreements (that detail the roles and responsibilities of the selected provinces) will be prepared and signed within 90 days after effectiveness.

- 70. IDA financing will enable works and delivery of goods and services through direct payments and other payments that will flow from Designated Accounts (DAs) or from subaccounts. The Ministry of Finance will authorize the opening of three DAs for the IDA financing and one for the GCF financing. UCM will manage three DAs: DA-A for non-PBC components, DA-B for Component 1 with PBCs, and DA-D for the GCF financing. CEP-O will manage one DA (DA-C) for activities under its responsibility (see annex 1). Under DA-B, a subaccount will be opened to enable COPIREP to implement Component 1 with PBCs and facilitate tracking of PBC-eligible expenditures. Under DA-A, three subaccounts will be set up to enable ARE, ANSER, and OCE to implement Subcomponents 3.1, 3.2, and 3.3, respectively.
- The capacity of UCM and CEP-O will be strengthened with two decentralized offices and a dozen 71. additional staff to better implement the project in targeted provincial cities. Two regional offices will be opened: one in Goma to cover Eastern provinces and the other one in Kananga to cover the Central provinces. Each regional office will be staffed with a power engineer, a water and sanitation specialist, an environmental specialist, a social development specialist with community engagement experience and GBV knowledge, a project assistant, and a driver. Though the regional office staff will report to both UCM and CEP-O, they will work closely with the provincial governments' infrastructure units and liaise with citizen organizations and the communities, with support from nongovernmental organizations (NGOs) as needed. At UCM and CEP-O headquarters (HQ) in Kinshasa, an accountant, a procurement specialist, an internal audit firm, a power engineer, a water and sanitation specialist, and a GBV and gender specialist will be hired to reinforce FM, technical management, and E&S oversight. Procurement will be further enhanced through Hands-on Expanded Implementation Support (HEIS), training on contract management, and inclusion of procurement assistance in owners engineer contracts. A dedicated E&S budget will be earmarked, under the project management Subcomponent 2.4, to enable adequate E&S supervision, provide holistic assistance to GBV survivors, and facilitate the operationalization of GRM committees that will be established in selected provincial cities.

Table 3. Fiduciary Agencies and Supporting Implementing Agencies (Subaccount Holders)

Project Comp	onent/Subcomponent	Fiduciary Agency	Implementing Agencies with Subaccounts
Overall Project (Coordination	UCM	
Component 1	Subcomponent 1.1		
	Subcomponent 1.2	UCM	COPIREP
	Subcomponent 1.3		
Component 2	Subcomponent 2.1		
	Subcomponent 2.2	LICNA	Nana
	Subcomponent 2.3	UCM	None
	Subcomponent 2.4		
Component 3	Subcomponent 3.1	UCM	ARE
	Subcomponent 3.2		ANSER
	Subcomponent 3.3		OCE
Component 4	Subcomponent 4.1	UCM	
	Subcomponent 4.2	CEP-O	None
	Subcomponent 4.3	UCM]

72. Similarly, the capacity of ARE, ANSER, OCE, and COPIREP will be strengthened. ARE and ANSER are hiring their core staff with support from a recruitment firm (hired under the EASE project). It is expected that the two agencies will receive adequate Government budget support and key staff will be in place by project effectiveness. OCE leadership and key staff are expected to be in place by 2023 as the management team is not yet appointed. The fiduciary assessment revealed that (a) ANSER and ARE being newly established agencies have no experience in managing donors-funded projects and (b) COPIREP had managed World Bank-financed projects in the past but not over the last five years. No evaluation can be performed at this stage for OCE as the management team is still to be put in place. Based on the assessment findings, the project will strengthen their capacity. It will recruit a procurement expert and an FM expert to help the three agencies set up their procurement and FM units. In addition, the project will fund the services of three procurement specialists and accountants as needed who will work within ANSER, ARE, and OCE over the project implementation. In contrast, COPIREP has dedicated fiduciary staff, and the assessment recommended further enhancement. Thus, a procurement specialist will also be recruited and work within COPIREP to facilitate procurement. Technical expertise on PPP and information management system will be provided to COPIREP through the Component 1.

B. Results Monitoring and Evaluation Arrangements

- OCM will coordinate and oversee the overall monitoring and reporting of project progress with inputs from CEP-O, COPIREP, ARE, ANSER, SNEL, REGIDESO, and associated engineering firms and fund managers. CEP-O will be responsible for monitoring the water infrastructure in Kananga, Goma, Butembo, and Beni as well as the construction of fecal sludge treatment plants in Bukavu and Goma (Subcomponent 4.2) with the support of REGIDESO subsidiaries, owner's engineering firms, and provincial infrastructure units. COPIREP will be responsible for monitoring progress of utility governance and performance improvement activities (Subcomponent 1.1, Subcomponent 1.2, and Subcomponent 1.3) and will work closely with SNEL and REGIDESO. ARE, ANSER, and OCE will monitor implementation progress on Subcomponents 3.1, 3.2, and 3.3 based on inputs from the transaction advisory firm and the international subsidy fund manager. Besides its coordination role, UCM will be responsible for directly monitoring progress on Component 2 and Subcomponents 4.1 and 4.3, with inputs from provincial authorities, SNEL, owner's engineers, and contractors. SNEL will supervise the rehabilitation of its infrastructure distribution network.
- 74. **Project implementation progress, results, and outcomes will be documented and communicated to the World Bank through regular progress reports.** A project monitoring system will be developed under Project Preparation Advance funding to provide robust data, templates, and guidance to track outputs and results (including disaggregation by sex). The project's M&E system⁵³ will incorporate key data from operational procurement and FM tools/software (Systematic Tracking of Exchanges in Procurement [STEP] and TOMPRO⁵⁴) and from specialized software such as the mini-grid and off-grid monitoring platforms under Subcomponents 3.1 and 3.2. Sample templates will be developed from the M&E platform and will be shared with all entities (CEP-O, COPIREP, ARE, ANSER, OCE SNEL, REGIDESO, and fund managers), which will use them to collect data in cities and at utilities. In addition, contractors, owner's engineers, and private electricity/water operators will be trained on the use of the geographic information system (GIS)-based monitoring platforms, so that they can map and record electricity and

⁵³ Project360 will be considered as the platform to be used for M&E and project management for clients and task team, allowing integration with other systems such as STEP, Kobo-Toolbox, Geo-Enabled Monitoring Systems.

⁵⁴ TOMPRO is a financial management systems.

water connections facilitating remote monitoring. The entities will send/upload completed templates/data along with progress notes to UCM, which will add M&E data and information on its components and consolidate. On this basis, UCM will prepare semiannual progress reports and submit them to the World Bank no later than 45 days after the end of the period covered by the reports. The real-time status of the GIS-enabled platform will facilitate real-time monitoring. When relevant, information will be disaggregated by sex to monitor gender-specific targets. The project will carry out beneficiary surveys at regular intervals to measure satisfaction with the citizen engagement process. *Regies Provinciales de l'Infrastructure* will monitor customer satisfaction with services and discuss findings with relevant stakeholders including citizen organizations. The project M&E findings will be communicated to GCF's SRMI facility.

75. A Midterm Review (MTR) will be conducted within three years after project effectiveness. The MTR will assess overall project performance in achieving the development objectives and ensure that lessons learned are fully applied. Particular attention will be paid to the reform elements with PBCs, the top-down electrification approach, and the result-based subsidies to water and sanitation operators. The MTR will also assess the performance of each implementing agency (UCM, CEP-O, COPIREP, ARE, ANSER, and OCE) and the effectiveness of the collaboration between agencies. Based on the MTR findings, the project may be restructured to improve performance by implementing necessary changes that could cover project scope, funding reallocation, more implementation autonomy for high-performing entities (for example, opening DAs instead of subaccounts and transforming high-performing agencies to full fiduciary agencies), and other implementation arrangements.

C. Sustainability

- 76. The project promotes institutional, financial, and operational sustainability. On institutional sustainability, the project enables key entities to become sufficiently capacitated to continue the reform and access agendas. The project will operationalize ARSPE (water sector regulator), OCE (water resource management agency), and provincial infrastructure units, as well as strengthen ANSER and ARE (electricity sector regulator), through training and provision of key regulatory tools such as standardized concession contracts, public service delegation contracts, tariff-setting mechanisms, regulatory procedures, and MIS. The project will enhance governance by improving state-SNEL performance contract and provincial government-water utility delegation contracts framework and promoting the promulgation of a new law on sanitation.
- 77. The project addresses financial sustainability by promoting cost-reflective and affordable tariffs. The project will provide incentives for the sector regulator(s)/MoEc/MoB to adopt cost-reflective tariff-setting mechanism (PBC 1 and PBC 5). Furthermore, the top-down electrification approach involves setting up front an opening affordable tariff (based on WTP) that can later be adjusted under the regulator oversight to enable sustained and affordable use of the electricity service. The project supports private electricity and water operators in preparing bankable investment proposals and technical advisory services to commercial banks to support due diligence process and underscores the necessity of financially viable proposals, leveraging grants and guarantees where possible to reduce risk.
- 78. Operational sustainability is addressed through promoting O&M arrangements with private sector involvement. To ensure that SNEL and REGIDESO-Kananga will adequately operate and maintain rehabilitated distribution networks beyond the project time frame, the project promotes performance-

based O&M or NWR subcontracts with private parties (PBC 3 and PBC 4) and includes the setup of a maintenance fund by SNEL. Private sector—based access to electricity from off-grid solar home systems already incorporates sustainability, as the pay-as-you-go business model used by operators ensures adequate maintenance. The project will implement sustainable O&M arrangements for public-based OGS and WASH facilities, including local entrepreneurship models in partnership with the public institutions that last beyond project implementation.

IV. PROJECT APPRAISAL SUMMARY

A. Technical, Economic and Financial Analysis

Technical Analysis

- 79. The proposed electricity access investments consider existing generation capacity and connection constraints and are reasonably costed. As installed power generation capacity is largely insufficient in Kananga and Mbuji-Mayi, the project will incentivize investment in both generation and distribution. In Kinshasa, new investments are planned in areas supplied by power stations with available surplus capacity. The investment cost estimates are based on prices obtained from international competitive bidding processes under the EASE project, adjusted for increases due to the COVID-19 pandemic. The cost estimates include electrical accessories (protection circuit breakers and ready boards) to facilitate in-house wiring, as EASE experience showed this allows poorer households to afford in-house wiring.
- 80. The rehabilitation and expansion of water supply production and distribution facilities is based on existing master plans. The proposed water infrastructure investments are based on master plans prepared by development partners and were validated during stakeholder workshops with national and provincial authorities. Cost estimates are based on prices from competitive bidding under PEMU, adjusted for increases due to the COVID-19 pandemic. The project includes connection costs for households (inspection holes, connection to yard, and water meter), so that connection fees for low-income customers remain affordable. Proposed sanitation solutions are aligned with best practice and reflect the Citywide Inclusive Sanitation principles of cost-effective, culturally appropriate, resilient, and adaptable solutions. WASH facilities for schools and health centers will follow good practice in design, developed jointly by the Water, Education, and Health Global Practices.

Economic Analysis56

81. An economic analysis has been carried out to assess the economic viability of the project based on a simple cost-benefit framework. The economic evaluation considers project activities that generate benefits for which an economic value can be quantified. Notable economic benefits associated with activities financed under Components 3 and 4 include the reduction in unserved demand due to better reliability of electricity supply and consumer surplus from increased access to electricity and water

⁵⁵ Mitendi and l'Université Pédagogique Nationale stations built under the EASE project and Kimbanseke and Kinsuka stations constructed with AfDB and Chinese financing.

⁵⁶ A reference document linked to this PAD is available in the World Bank official records with the full details of the economic and financial analysis.

services. This consumer surplus is derived from the estimated WTP and/or the estimated avoided costs of alternatives (electricity/lighting alternatives and alternative means of buying clean water) as well as health benefits associated with increased access to safe water. The analysis considers separately the benefits from net avoided GHG emissions related to replacing fossil fuel-based lighting and electricity generation with renewables (with two different estimates based on low and high assumptions for CO_2 equivalent avoided emissions).

82. Overall, the project has a solid economic justification with a net present value (NPV) of US\$482 million and an economic internal rate of return (EIRR) of 17.5 percent (Table 4). The estimates are based on a discount rate of 6 percent. Inclusion of GHG mitigation benefits increases the NPV to US\$629 million and the EIRR to 21 percent (with the low assumed value of reduced CO_2 emission per ton). A total of 6.7 million tCO_2 e is avoided over a period of 20 years. The GHG emission reductions are due to the lower emission factor of OGS and mini-grids, compared to diesel generation and traditional lighting sources. Most project activities will not directly emit GHGs due to the use of solar technologies. Only mini-grids under Component 3, which include backup diesel generators, involve CO_2 emissions. However, these additional emissions are minimal as the emission intensity of the electricity generated from mini-grids is substantially lower compared to the emissions intensity of alternative lighting sources. A sensitivity analysis on the project NPV was conducted, and the results remain robust.

Financial Analysis of Project Investments

- A financial analysis of the investment subcomponents has been carried out from the 83. perspective of the relevant operators and utilities. The investments under Component 4 are expected to have a positive financial NPV for SNEL and REGIDESO with financial internal rates of return (FIRRs) of 11.0 percent and 12.4 percent, respectively, with a discount factor of 10 percent. Under all modelling scenarios, the direct financial impact of the project investments on the two utilities would be minimal because the size of the proposed investments is small in comparison to their total operations.⁵⁷ In contrast, the potential benefits from governance and operational performance improvement under Component 1, even with small improvements, would have a greater impact on the cash flow of both utilities. A scenario analysis for mini-grid operators under Component 3 was conducted to test the impact of the capital subsidies on the average tariff at which power would be commercialized allowing a reasonable rate of return to the private developers and assuming a given post-grant financing structure. In the baseline case with a US\$160 million grant allocated to Subcomponent 3.1, allowing to subsidize capital expenditure at around 48 percent, the final tariff would be below US¢30 per kWh on average. The demand studies will allow verifying assumptions on the WTP and determine the total grant envelope needed to cover the projected 60 percent of the population in the target areas within the project time frame.
- 84. The water investments are expected to have a positive but modest impact on REGIDESO's cash flow. The impact of water sector investments under Subcomponent 4.2 has been modelled from the perspective of REGIDESO cash inflows and outflows related to the project investments and subsequent operations (independently from the financing of the assets). This results in a positive NPV of US\$13 million

⁵⁷ Detailed economic and financial analysis will be performed for the ringfenced REGIDESO operations in Nord Kivu and Kasai Central, to inform the feasibility of the restructuring and set the tariffs under the future public service delegation contracts in these provinces.

at 10 percent discount rate and an FIRR of 12.4 percent, under conservative assumptions regarding tariff levels and high levels of revenue collection.

Table 4. Results of Economic and Financial Analysis

Ec	Economic Analysis										
EIRR (percent)	Overall Project	Energy	Water								
EIRR (excluding GHG mitigation benefits)	17.5	16.1	24.4								
EIRR (including GHG mitigation low benefits)	21.1	20.4	24.5								
EIRR (including GHG mitigation high benefits)	25.0	25.2	24.7								
NPV (US\$, millions)											
NPV (excluding GHG mitigation benefits)	482	351	131								
NPV (including GHG mitigation low benefits)	629	497	132								
NPV (including GHG mitigation high benefits)	806	673	133								
GHG Mitigation (tCO₂ millions)	6.72	6.69	0.03								
F	inancial Analysis										
FIRR (percent)	Overall Project	Energy	Water								
FIRR SNEL	n.a.	11.0	n.a.								
FIRR mini-grid operators	1	33.1	n.a.								
FIRR REGIDESO	1	n.a.	12.4								
NPV (US\$, millions)											
Financial NPV SNEL (@10%)	n.a.	3.0	n.a.								
Financial NPV mini-grid Operators (@10%)]	272.1	n.a.								
Financial NPV REGIDESO (@10%)	Ţ <u> </u>	n.a.	13.0								

SNEL Financial Analysis

- 85. Based on the annual financial statements, SNEL was profitable over 2014–2019, albeit with a low profitability compared to the value of the assets or equity. However, the annual financial statements do not provide a reliable picture of the company's finances. In addition to shortcomings identified by the auditors, SNEL's financial performance is influenced by several factors without much relevance from a cash flow perspective. The primary driver for the increase in SNEL's collected revenues⁵⁸ is higher volumes and increased collection rates from HV clients that represented two-thirds of its collected revenue from sales in 2020. SNEL now needs to address the persistently high distribution losses and low collection rates from residential customers (barely above 50 percent). In 2019 and 2020, about 57 percent of the energy delivered to the distribution network was collected, indicating total commercial and technical losses of 43 percent. Within the revenue from distribution customers, more than 60 percent comes from MV clients. Over the last five years, the energy volume delivered to the distribution network has increased by 20 percent, but the revenue derived from LV clients decreased slightly between 2016 and 2020.
- 86. Improving revenue collection from the public sector and from residential consumers, increasing tariffs, and reducing technical losses will enable SNEL to achieve financial viability and to sustainably

⁵⁸ SNEL revenues are US\$647 million in 2020, an increase of 31 percent since 2016 and an increase of 42 percent excluding collection from the state agencies which is erratic.

expand services. Many activities supported by the project will contribute to the SNEL financial viability: smart and/or prepaid meter installation; payment discipline from government agencies; electronic payment mechanisms; adjusted HV and MV tariffs; MIS usage; innovative technical, organizational, and contractual approaches for managing and O&M of distribution networks; and distribution network rehabilitation in targeted areas. On tariffs, with demand growing at a minimum rate of 5 percent, foreseen tariff adjustments (PBC 1) to reflect costs and inflation will significantly improve the debt service coverage ratio and contribute to SNEL's financial health. On the other hand, absorbing project investments is expected to have a small direct impact on SNEL's cash flow.

REGIDESO Financial Analysis

- 87. **REGIDESO's financial performance is characterized by a low level of cash flow generation in comparison with the company's revenue and assets.** Based on available financial data, the positive cash flow from current operations is below 10 percent of sales, which is not aligned with cost recovery in a capital-intensive sector such as water supply. For this reason, the company's operating and net ordinary incomes are structurally in the red. Of great concern is REGIDESO's inability to adequately finance maintenance and rehabilitation of its existing infrastructure, let alone expand service. The main causes are the low level of water tariffs (below US\$0.5 per m³ on average for water), high NRW (~40 percent), and poor revenue collection. While revenue collection for residential connections has improved over the last five years from ~60 percent to ~80 percent, key problems for REGIDESO's financial health remain: (a) erratic payment by Government agencies, (b) the high volume of authorized free water consumption (right holders), and (c) accumulation of payment arrears from Government agencies.
- 88. Since the company is not creditworthy and as a result does not have access to long-term debt, REGIDESO's total debt level is in fact low. The company's financial liabilities are mostly short term (mostly arrears) toward suppliers (mostly SNEL for electricity) and the state (taxes, social contributions, and debt service for on-lending). In turn, the bulk of receivables correspond to unpaid bills from the state and Government agencies. The project supports several measures to improve sector governance and the restructuring of REGIDESO through regionalization. The creation of autonomous provincial/regional water utilities as REGIDESO subsidiaries is intended to serve as a pilot for the reform to demonstrate that financial sustainability of services is within reach if debt is restructured, Government bills are paid, free water consumption is reduced, tariffs are adjusted on a cost-reflective basis, and a PIP is systematically implemented including commercial and technical measures to improve performance.

B. Fiduciary

(i) Financial Management⁵⁹

89. The project will be implemented in accordance with applicable World Bank FM requirements and with regard to the capacity of implementing agencies. Applicable World Bank requirements include directives, guidance notes, and the FM Manual for World Bank IPF Operations issued on February 10, 2017, and the supporting guidance note (February 28, 2017). The World Bank assessed the FM capacity of implementation agencies to determine whether they have adequate FM arrangements in place to ensure that (a) project funds will be used for the purposes intended in an efficient and economical way;

⁵⁹ A reference document is available in official World Bank records, including detailed FM analysis; annex 1 provides further details.

- (b) the project's financial reports will be prepared in an accurate, reliable, and timely manner; (c) the project's assets will be safeguarded; and (d) the project is subjected to a satisfactory auditing. The World Bank team assessed the FM capacity of UCM and CEP-O as main fiduciary agents and of ANSER, COPIREP, and ARE as they would manage subaccounts.⁶⁰
- 90. The residual FM risk is assessed as High and upon satisfactory implementation of the FM action plan the risk may be downgraded. The fiduciary environment of the country is weak, and fiduciary risk including fraud and corruption is High. In addition, several agencies, including some at the provincial level, will be involved to support implementation. This project includes PBCs, adding to the FM risk in case results are not achieved and expenditures remain ineligible. The assessment found that UCM and CEP-O have acceptable FM arrangements and suggested that UCM coordinates the overall project FM reporting. UCM and CEP-O have FM specialists with acceptable skills and experience in managing World Bank-funded projects and have acceptable FM arrangements in place to meet the World Bank's requirements. The existing FM arrangements of ongoing World Bank-funded activities implemented by CEP-O and UCM will be largely maintained under the project, with any differences reconciled. Subject to implementing the FM action plan, the FM arrangements are adequate to implement the proposed project. The proposed FM arrangements, including the risk mitigation measures, are considered adequate to comply with the provisions of the applicable World Bank directives.

(ii) Procurement⁶¹

- 91. **Procurement activities will be carried out in accordance with the World Bank's procurement directives.** This includes World Bank Procurement Regulations for IPF Borrowers Goods, Works, Non-Consulting and Consulting Services as of July 1, 2016, 4th Edition, as of November 2020 and the provisions stipulated in the Financing Agreement. Further, the Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants, dated October 15, 2006 and revised in January 2011 and as of July 1, 2016 will apply.
- 92. A Project Procurement Strategy for Development (PPSD) sets out the selection methods to be followed by the borrower in the procurement of goods, works, non-consulting and consulting services financed by the World Bank. The PPSD describes the overall operational context, market situations, implementing agencies' capacity, and possible procurement risks. The main risks are related to delays in the project implementation, the poor quality of deliveries, GBV, the insecurity in the project area, and the reputation of the country regarding fraud and corruption. Local and regional markets exist but have limited financial and technical capacity to implement several high-value and complex contracts that the project will finance. Appropriate and proportional market approach and procurement methods have been identified in the PPSD and the initial Procurement Plan has been prepared for the first 18 months of implementation. The Procurement Plan will be updated at least annually or as required to reflect the actual project implementation needs and improvements in institutional capacity. The project will use STEP, a planning and tracking system that will provide data on procurement activities, establish benchmarks, monitor delays, and measure procurement performance.

⁶⁰ An FM assessment for OCE is expected in advance of the opening of sub-accounts.

⁶¹ A reference document is available in official World Bank records, including detailed procurement analysis; Annex 1 has further details.

93. Procurement activities will be carried out by UCM, CEP-O, COPIREP, ARE, ANSER, and OCE, with the latter four working under the oversight and quality control of UCM, resulting in a procurement risk of Substantial. A procurement capacity and risk assessment were carried by out by the World Bank for all the implementing agencies. The review included procurement systems such as procurement legislation, procurement organization and staffing, procurement strategies, procurement operations, procurement performance monitoring and measurement, and procurement control and oversight mechanisms. The assessment found that UCM and CEP-O have, overall, good experience in implementing World Bankfinanced projects. UCM's and CEP-O's performance on procurement under the EASE, and the PEMU project, respectively, has been moderately satisfactory. As COPIREP, ARE, ANSER, and OCE will be implementing subcomponents, their procurement capacity was also assessed, except for OCE's whose staff is not yet in place. COPIREP implemented World Bank-financed projects in the past, while ARE and ANSER, established in July 2020, have not yet implemented any World Bank-financed project. The Procurement Risk Assessment and Management System has been finalized and based on the assessment and the roles and responsibilities of the agencies responsible for procurement, the risk is deemed Substantial. The GoDRC has requested the World Bank to provide HEIS.

C. Legal Operational Policies

	Triggered?
Projects on International Waterways OP 7.50	Yes
Projects in Disputed Areas OP 7.60	No

94. The policy for Projects on International Waterways (OP/BP 7.50) is triggered because the project includes a set of water supply and energy investments that involve the use of waters in the Congo River, Nile River, and Lake Kivu basins. The scale and nature of the activities will not cause appreciable harm to the interests of other riparian countries or be appreciably harmed by other riparian countries' possible water use. According to the policy notification requirement, riparian countries were notified on October 19, 2021. No responses or comments were received by the deadline of November 18, 2021. The Africa East Regional Vice President approved the memo summarizing the riparian notification process on February 2, 2022.

D. Environmental and Social Risk Management

95. The overall environmental and social categorization under OP 4.03 WBG Performance Standards (PSs) for Private Sector Activities is Category A (High Risk). This is related to the concessionaires' proposed portfolio that may include substantial financial exposure to business activities with potential significant adverse environmental or social risks or impacts that are diverse, irreversible, or unprecedented. PSs will apply to private sector—financed activities, including relevant WBG Environment, Health, and Safety Guidelines, under Subcomponent 3.1 in lieu of the World Bank ESS for project activities carried out by the borrower under the ESF. The ESS apply to activities under Component 1, Component 2, Subcomponent 3.2, Subcomponent 3.3, Component 4, and Component 5. These (sub)components will be implemented by UCM and CEP-O, supported by OCE, ANSER, ARE, and COPIREP. Under Subcomponent 2.3, technical assistance to private water and energy operators is provided in support of technical design and preparation of required ESS instruments for investments under Subcomponents 3.2 and 3.3.

- 96. Private companies/concessionaires developing subprojects under Subcomponent 3.1 will be responsible for the subprojects' design, construction, installation, and O&M, including the environmental and social assessments, assurance of legal compliance, and risk management. They will undertake a 'risk and impact identification and assessment process' and develop an ESMS that includes a policy, identification of legal and regulatory requirements, and measures to manage risks (and reassess risk as needed), along with monitoring, reporting, and management review. In addition, the winning bidders/concessionaires will prepare Environmental and Social Impact Assessment (ESIA)/Environmental and Social Management Plan (ESMP) reports based on the existing information available for the project.
- 97. The combined categorization and environmental risk classification for the project is High, based on the geographic spread and the multifaceted aspects of the project, potential downstream environmental implications that may arise if technical assistance leads to future investments, and the capacity of the key stakeholders. The following ESS and PSs are relevant to the proposed investments: ESS1/PS1, ESS2/PS2, ESS3/PS3, ESS4/PS4, ESS5/PS5, ESS6/PS6, ESS8/PS8, and ESS10. The main considerations grouped by relevant ESS are described in the Environmental and Social Risk Summary and reflected in annex 1
- 98. Key anticipated direct, indirect, and cumulative environmental risks and impacts associated with electricity, water, and sanitation investments including associated facilities were identified. These risks entail traffic safety, occupational health and safety (for example, unexploded/abandoned ordinance risk and trenching and ditching), resource efficiency and pollution (mainly due to the disposal and management of hazardous waste such as asbestos and used batteries), and cumulative impacts of water use on communities. During rehabilitation and operation, disposal of hazardous chemicals used in transformers within substations (such as mineral insulating oils, polychlorinated biphenyl, sulfur hexafluoride), use of chemicals to preserve wood poles, and disposal of chemically processed poles may also pose environmental, health, and safety risks. Construction and operation of water supply production, fecal sludge treatment facilities, water supply transmission and distribution networks, and WASH facilities in schools and health care facilities will entail other direct, indirect, and cumulative environmental risks (risk of disposal of final effluent/sludge, impacts on drainage and hydrology at intake sites, pollution from gray water and backwash water, handling of chemicals used for water treatment, and management of incidents affecting drinking water supply and waste/water treatment plants).
- 99. The implementation of the project is expected to have potential negative social impacts on the population. Components 3 and 4 will finance civil works located in urban and peri-urban areas, characterized by high population density and high level of poverty. The main social risks are those related to (a) land acquisition needs, (b) loss of property or assets, (c) restricted access to sources of income due to economic displacement, (d) sexual exploitation and abuse or sexual harassment (SEA/SH), (e) lack of social inclusion of vulnerable groups in terms of project-related employment and other project benefits (including equitable access to electricity and water supply services), (f) the potential for conflict if project benefits are not perceived to be distributed equitably to all key stakeholder groups or due to other community tensions or conflicts exacerbated by project activities, (g) exposure to communicable diseases, and (h) exposure to hazardous materials (asbestos). These risks and impacts will be site specific and will be managed systematically throughout the project cycle, with mitigation measures commensurate with the nature and magnitude of the impact. According to the ESS, the project will need to ensure that it protects vulnerable people such as female-headed households living in extreme poverty and without

assistance, people living with disabilities and without any assistance, people of advanced age, survivors of GBV, and migrant workers.

- 100. To manage environmental and social risks and impacts, the borrower has prepared risk management instruments. An Environmental and Social Management Framework (ESMF), including an annex on SEA/SH with a Sexual Harassment Action Plan was prepared, consulted upon, and a draft version was disclosed on November 08, 2021. The revised version will be disclosed by effectiveness. An Environmental and Social Impact Assessment (ESIA) and associated Environmental and Social Management Plan (ESMP) and Resettlement Action Plan (RAP), for the rehabilitation and expansion of Kinshasa's Western and Central distribution network under Subcomponent 4.1, were prepared, consulted upon, and a draft version disclosed on November 8, 2021. Revised versions will be redisclosed by effectiveness. A Resettlement Policy framework (RPF) was drafted and will be disclosed by effectiveness. A Stakeholder Engagement Plan (SEP) and Labor Management Procedures (LMP) were prepared, and final versions disclosed. A Security Due Diligence Assessment was conducted.
- 101. The ESIA/ESMP for the Western and Central Kinshasa's distribution network subproject and the ESMF were consulted and disclosed in their preliminary versions on November 8, 2021, contributing to the ongoing public consultations and stakeholder engagement process of local government officials and communities. A Resettlement Action Plan (RAP) for Western and Central Kinshasa subproject was drafted. The draft ESMF covers all the project's components and addresses risks and impacts that will become known once private operators' activities, sites, and detailed engineering are available including for ancillary works that are unlikely to be determined until implementation. The World Bank review of the ESMF, Resettlement Policy Framework (RPF), ESIA, and RAP identified gaps that will be addressed before finalization. Final versions of the framework instruments shall reflect project design changes and ancillary investments. The revised ESIA, the revised RAP, the revised ESMF, and the RPF will be adopted and disclosed by the effective date.
- 102. In addition, the MRHE disclosed the SEP and LMP on December 15, 2021, and December 03, 2021, respectively. Following MRHE's disclosure, the World Bank disclosed both the SEP and LMP on its external website on December 17, 2021. The code of good practice for COVID-19 activities has been incorporated into these instruments. Terms of reference (ToR) and final deliverables for any technical assistance, including feasibility studies to be carried out under the project, will be prepared in form and substance satisfactory to the World Bank and considering the relevant ESS. The ESCP was disclosed on February 17, 2022, on the Bank external website as well as the Appraisal Environmental and Social Review Summary (ESRS).
- 103. In relation to solar panel/system supply chains and ESS2 on forced labor, specific risk mitigation arrangements will be established. Where there is a risk of forced labor related to primary supply workers, the borrower requires the primary supplier to identify those risks and, if forced labor cases are identified, the borrower will require the primary supplier to take appropriate steps to remedy them. Where remedy is not possible, the borrower will, within a reasonable period, shift the project's primary suppliers to suppliers that can demonstrate that they are meeting the relevant requirements of ESS2. Before beginning the procurement process, the borrower will undertake market analysis to identify the possible sellers of solar panels for the project. The bidding documents will emphasize forced labor risks in solar panels and components and will require that sellers of solar panels will not engage or employ any forced labor among their work force. Bidders will be required to provide two declarations: a Forced Labor Performance

Declaration (which covers past performance) and a Forced Labor Declaration (which covers future commitments to prevent, monitor, and report on any forced labor, cascading the requirements to their own subcontractors and suppliers). In addition, enhanced language on forced labor will be included in the procurement contracts. The World Bank will prior review procurements of solar panels and components to ensure that enhanced provisions are used by the borrower.

104. **SEA/SH mitigation and response and other gender aspects.** A preliminary SEA/SH risk screening has rated the project's risk as Substantial. In DRC, the prevalence of GBV, including intimate partner and sexual violence is higher than the regional average, 50.7 percent, and 27 percent, respectively⁶². The project implementation areas will cover humanitarian settings and areas where conflict exists, enhancing SEA/SH risks. The project will entail major infrastructure and rehabilitation works, requiring foreign qualified workers. Following the recommendations of the World Bank's *Good Practice Note for Addressing Sexual Exploitation and Abuse in Investment Project Financing involving Major Civil Works*⁶³ an Action Plan (as annex to the ESMF) has been developed, including a set of prevention, mitigation, and response measures to address SEA/SH risks such as (a) an accountability and response framework, (b) worker's Codes of Conduct addressing and sanctioning SEA/SH behaviors in case of noncompliance, and (c) SEA/SH awareness-raising activities for workers and communities. The ESMF specifies how allegations of SEA/SH will be handled in an ethical and confidential manner, following a survivor-centered approach, as well as the GBV response protocols, with details on service providers to which SEA/SH survivors will be referred to. Given the context and the project's SEA/SH level of risk, a GBV specialist will be recruited within UCM.

Gender. The project will focus on reducing gender gaps in electricity and water access 105. (endowment) and access to jobs (economic opportunity), aligned with the WBG Gender Strategy (see annex 1).⁶⁴ First, it will promote inclusive electricity and water connections by reducing connection costs for poor female-headed households through facilitating in-house electricity wiring, lowering water connection fees, and monitoring progress. 65 The project will support women to access jobs, specifically in the water and electricity sectors, by (a) offering vocational and entrepreneurship training on in-house electricity wiring, plumbing, management of water standpipes, and O&M of public WASH facilities; (b) supporting trained women in job search and small business development; and (c) providing water and electricity operators (including SNEL and REGIDESO) with HR female empowerment policies, gender sensitization training, and other relevant activities. This will help recruit, retain, and advance women, specifically in technical, administrative, and customer outreach as well as engineer and management positions (see annex 1 for data). Gender indicators are included in the Results Framework to monitor the outcomes: (i) Share of new positions/jobs within electricity and water entities that are taken by women (public and private) (baseline: 0; target 30 percent), out of which in technical positions (baseline: 0; target 15 percent); (ii) Share of public WASH facilities rehabilitated/constructed with electricity and a private O&M arrangement that are managed by female entrepreneurs (baseline; 0; target 50 percent). Activities will benefit from good practices developed as part of ESMAP's Gender and Energy program as well as the Equal Aqua platform.⁶⁶ Other gender activities, such as women's participation in citizen engagement and

⁶² Ministère du Plan et Suivi de la Mise en œuvre de la Révolution de la Modernité - MPSMRM/Congo, Ministère de la Santé Publique - MSP/Congo and ICF International. 2014. Enquête Démographique et de Santé en République Démocratique du Congo 2013-2014. Rockville, Maryland, USA: MPSMRM, MSP, and ICF International.

⁶³ World Bank (2020). Good Practice Note on Addressing Sexual Exploitation and Abuse and Sexual Harassment (SEA/SH) in Investment Project Financing involving Major Civil Works. Second Edition. Washington DC

⁶⁴ A reference document with the Gender Action Plan is available in World Bank records.

⁶⁵ This additional indicator will be included in the M&E section of the PIM.

⁶⁶ https://www.worldbank.org/en/topic/water/brief/inclusive-water-institutions-platform.

satisfaction surveys have been included. The project supports investments that contribute to reduced risks of GBV (street lighting and in-home water access) and that enhance girls' school retention due to the provision of WASH facilities in schools. All activities will be part of the Gender Action Plan that will be carried out during project implementation. The Gender Action Plan will be submitted to SRMI, together with a socioeconomic framework that supports the development of local industries, skills development, long-term job creation, and increased resilience and better livelihoods of local communities.

106. Citizen engagement. The project incorporates a citizen engagement approach aiming for regular and two-way engagement with local organizations, communities, and customers of public and private electricity and water service providers throughout the project life cycle. During project preparation, consultation meetings with local institutions and civil society organizations took place and will be continued during implementation. Citizens will be involved in the project oversight and informed of implementation progress. Key representatives of civil society, consumer organizations, and citizen movements will be invited to participate in the PSC and/or participate in quarterly meetings to review project progress. In addition, the project will support a range of activities including (a) development and implementation of communication and outreach activities on issues such as construction scheduling, tariffs, and connection plans/fees; (b) beneficiary feedback surveys (online and face-to-face) during implementation to ensure feedback from citizens is used to report concerns and improve the project interventions; (c) establishment of platforms/mechanisms facilitated by the Régies Provinciales de l'Infrastructure to review customer feedback (for example, roundtables, scorecards, and online surveys). A Citizen engagement indicator has been incorporated in the Results Framework: Share of beneficiaries in the project areas satisfied with feedback opportunities and grievance resolution (gender disaggregated; baseline: 0; target 80 percent).

Climate Co-Benefits. The project includes both mitigation- and adaptation-related Climate Co-Benefits.⁶⁷ Mitigation Co-Benefits relate to reduction in GHG emissions resulting from a shift to renewable-based energy sources for electricity generation and power supply, the use of clean energy for provision of water services, and implementation of energy efficiency and NRW improvements (Components 3 and 4). In terms of adaptation, the project will construct resilient infrastructure, specifically to floods and landslides, in both the water and electricity sectors. WSS service providers will prepare resilience and contingency plans, aligned with water resource management planning in pilot basins (Component 2). Through provision of electricity and water access, community and households' resilience to extreme climate events will be improved and new WASH facilities in schools, health centers, and public places will reduce the exposure to environmental health risks (Components 3 and 4). Through institutional strengthening and capacity building under Components 1 and 2, climate change and adaptation planning will be integrated into development of planning, policy, legislative, and monitoring instruments and performance improvement measures. Co-Benefits indicators have been included in the Results Framework: (i) Renewable energy capacity constructed or rehabilitated (baseline: 0; target 25MW); (ii) Annual GHG emissions reduced resulting from mini-grid development and operation (baseline: 0; target: 0.3 million tons CO2e/year).

⁶⁷ Reference documentation linked to this PAD on the Climate Co-Benefits and resilience considerations is available in World Bank records.

V. GRIEVANCE REDRESS SERVICES

Communities and individuals who believe that they are adversely affected by a World Bank (WB) 108. supported project may submit complaints to existing project-level grievance redress mechanisms or the WB'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 WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

VI. KEY RISKS

- 109. The overall project risk is High because of the weak governance, the multifaceted project design, institutional coordination challenges, high environmental and social risks, and potential challenges in attracting private sector players and the wide range of stakeholders involved. Key risks and mitigation measures are discussed in the following paragraphs.
- 110. **Political and Governance: High.** Weak governance and political economy dynamics may negatively affect the project objectives. Lack of accountability and transparency and mismanagement in the public sector remain a major issue in DRC. Commitment to reforms at the Central Government level may vary as political economy dynamics evolve. The 2014 Electricity Law and 2015 Water Law are poorly understood by provincial governments that also lack capacity in developing sustainable PPPs. This raises the prospect of negative political patronage, which can adversely affect reforms and PPP implementation in targeted provinces and thereby affect access scale-up. To mitigate these risks, PBCs have been included to incentivize reforms. The aforementioned sector laws and their implementing decrees will be disseminated in all provinces, and technical assistance provided in targeted provinces. PPP procedures establishing clear roles for the regulators will be developed in collaboration with the Central Government and the provincial governments and disseminated. A roster of PPP experts will be availed to the provincial governments, and MRHE will be assisted to address emerging issues.
- 111. **Technical Design of Project: Substantial.** The multi-faceted project activities combined with the novelty of some schemes may pose implementation challenges. To holistically address the significant energy, water, and sanitation challenges, the project design embraces many dimensions such as governance reform, utility decentralization and performance improvement, private sector—based electrification approaches, and institutional strengthening of recently created entities. To mitigate the risk, comprehensive technical assistance is provided to agencies and private stakeholders. Moreover, the combined expertise of the World Bank, IFC, and MIGA is leveraged to support the preparation of PPPs that will allocate private and public sector risks appropriately and enhance the chances of leveraging private investments. Also, the World Bank team will provide strong implementation support to monitor progress and proactively help address shortcomings.

- 112. **Institutional Capacity for Implementation and Sustainability: Substantial.** Many agencies will be involved in the project implementation, posing coordination challenges and risk of delays. The nature of the project activities, the institutional setup, and the need to build capacities of recently created sector entities in the long term⁶⁸ call for the involvement of many agencies (UCM, CEP-O, COPIREP, ARE, ANSER, OCE, SNEL, REGIDESO, and provincial governments). Though the project will strengthen the capacities of various agencies, coordinating various interventions on time to avoid delays may be a challenge. To mitigate the risk, the project design includes both UCM and CEP-O (for Subcomponent 4.2) to act as fiduciary agencies, while other agencies implement subcomponents through subaccounts under UCM's oversight (OCE, ARE, ANSER, and COPIREP). In addition, the lead and supporting implementing agencies will be strongly assisted by highly capable transaction advisory firms, fund managers, and owner's engineering firms that will be selected through international competitive processes and will support key procurement and implementation activities. The roles and responsibilities of agencies are clarified in an MoU and will be reflected in the PIM. A longer implementation time frame of seven years was adopted, and implementation arrangements will be reviewed at MTR.
- 113. **Environmental and Social: High.** The overall environmental and social categorization under OP 4.03 World Bank Group Performance Standards for Private Sector Activities is Category A (high), as the private sector operators' activities may present significant adverse environmental or social risks or impacts that are diverse, irreversible, or unprecedented. The environmental and social risk rating for public sector project elements covered under the ESF is High and will be mitigated by placing fully staffed environmental and social teams in each of the fiduciary agencies both at the national and in the regional offices. Environmental and social risks are mitigated by earmarking a dedicated ESF budget under Subcomponent 2.4 and ensuring that the borrower and contractors prepare and implement all relevant additional ESF instruments according to the guidelines provided in the ESMF and RPF. Given the lack of experience with the new ESF, the residual risk remains High.
- 114. **Stakeholders: High.** Attracting international/regional private developers/operators for the electrification of provincial cities carries a high risk given the high country risk, the uncertain regulatory environment, and the weak implementing framework at the provincial level. To address the risk, the World Bank team worked closely with IFC and MIGA under the SMG initiative to prepare for the top-down electrification approach. Technical studies to evaluate electricity demand and potential generation sites in Kananga and Mbuji-Mayi were conducted. IFC-led consultations on risk allocation mechanisms were then embedded in standardized tender documents and concession contract, which will be revised by the transaction advisor and the GoDRC agencies. This is expected to facilitate IFC's lending and MIGA's guarantee coverage after the private developer/operator is competitively selected. Moreover, a demand risk mitigation instrument (the VGF) has been incorporated with GCF financing. If the top-down approach does not lead to significant private investment commitment and timely financial close, an alternative option will be considered, using IDA finance to construct mini-grids and bringing in the private sector for O&M. Stakeholder risks will also be carefully managed to ensure that private and public service perimeters are well carved out and do not overlap.
- 115. **Fiduciary: High.** In DRC, fiduciary risks, including fraud and corruption, are high and ubiquitous, notwithstanding Government commitment to combat corruption. As a result, and despite the implementation of tailored fiduciary oversight, the fiduciary risk exposure of the World Bank DRC portfolio

-

⁶⁸ As officially requested by MRHE's Minister.

remains significant, including for this project. Several agencies will be involved in the project implementation, posing coordination and capacity challenges. In addition, the operation includes PBCs, a new approach in DRC, increasing the risk of occurrence of ineligible expenditures. The proposed implementing agencies assigned with fiduciary responsibilities (UCM and CEP-O) have track records in managing World Bank-financed projects with the fiduciary performance of such projects assessed as overall moderately satisfactory, while others are new (or less experienced) in World Bank procurement (ARE, ANSER, OCE, and COPIREP). Due to the complexity of some packages (including PPP options) and the need for on-the-job training of various entities, the GoDRC has requested HEIS. Once the risk mitigation measures spelled out in annex 1 are satisfactorily implemented, the residual risk may be downgraded to Substantial in the future.

VII. RESULTS FRAMEWORK AND MONITORING

Results Framework

COUNTRY: Congo, Democratic Republic of Access Governance & Reform for the Electricity and Water Sectors Project

Project Development Objectives(s)

The objectives of the Project are to (i) expand access to renewable-based electricity and drinking water services in selected urban and peri-urban areas of the Democratic Republic of Congo, (ii) improve the commercial performance of the public electricity and water utilities, and (iii) strengthen the capacity of selected provincial and national institutions in the electricity and water sectors.

Project Development Objective Indicators

Indicator Name	PBC	Baseline		Intermediate Targets						
			1	2	3	4	5	6		
Expand access to renewa	able-ba	sed electricity &	water services i	n selected urban and p	eri-urban areas					
People provided with new or improved electricity service (CRI, Number)		0.00	0.00	180,000.00	900,000.00	2,100,000.00	3,600,000.00	4,800,000.00	6,000,000.00	
People provided with new or improved electricity service - Female (CRI, Number)		0.00	0.00	90,000.00	450,000.00	1,050,000.00	1,800,000.00	2,400,000.00	3,000,000.00	
People provided with access to at least basic water supply services (Number)		0.00	0.00	30,000.00	85,000.00	230,000.00	375,000.00	490,000.00	680,000.00	
out of which female (Number)		0.00	0.00	15,000.00	42,500.00	115,000.00	187,500.00	245,000.00	290,000.00	

Indicator Name	PBC	Baseline	Intermediate Targets							
			1	2	3	4	5	6		
of which basic water services (Number)		0.00	0.00	15,000.00	40,000.00	105,000.00	175,000.00	225,000.00	305,000.00	
of which safely managed water services (Number)		0.00	0.00	15,000.00	45,000.00	125,000.00	200,000.00	265,000.00	375,000.00	
mprove the commercial	perfo	rmance of the public	electricity and wate	er utilities						
SNEL bill collection rate (Percentage)		60.00	60.00	62.00	64.00	66.00	70.00	75.00	80.00	
Operating ratio for REGIDESO subsidiaries (Number)		0.00	0.00	0.00	0.80	0.90	1.00	1.10	1.10	
Operating ratio for REGIDESO Nord Kivu (Number)		0.00	0.00	0.00	0.80	0.90	1.00	1.10	1.10	
Operating ratio for REGIDESO Kasai Occidental (Number)		0.00	0.00	0.00	0.00	0.80	0.90	1.00	1.10	
Strengthen the capacity	of sele	cted provincial and r	national institutions							
Nord Kivu and Kasai Central Provincial Infrastructure Units responsible for water and electricity established and operational (Text)		infrastructure oversight and	creating the Provincial	Operational manuals of the provincial units adopted; staff trained	Information and Management System set up, including customer satisfaction system	MIS used to oversee public service delegation contracts and record public assets	Provincial infrastructure plans being updated	Provincial infrastructure units operational and customer satisfaction polls executed	Provincial infrastructure un operational in Kasai Central and Nord Kivu with trained staff, operational manuals, and MIS tools.	
Water sector regulator		ARSPE not	ARSPE structure,	ARSPE staff	ARSPE standard	ARSPE MIS	ARSPE operational	ARSPE MIS in use;	ARSPE with train	

Indicator Name	РВС	Baseline		End Target					
			1	2	3	4	5	6	
(ARSPE) capacity strengthened (Text)		operational	budget and minimum staffing in place;	trained; tariff model/methodolog	contracts and regulatory procedures approved	system/database developed;	manual issued	sector reports issued;	staff, tariff model, standard contracts and utilized MIS
Energy regulator (ARE) capacity strengthened (Text)		limited staff, no tariff model and database/MIS	ARE approved tariff model	recruitment	ARE' standard PPP contracts adopted	ARE's standard PPP contracts and tariff model disseminated		ARE approves concession contracts; uses MIS	ARE with trained staff, tariff model, standard contracts and utilized database

Intermediate Results Indicators by Components

Indicator Name	Baseline	Intermediate Targets						End Target		
			1	2	3	4	5	6		
ower and Water Utility Governance and Performance										
Tariff adjustment methodology approved and SNEL's tariffs adjusted (Yes/No)	PBC 1	No	No	No	Yes	Yes	Yes	Yes	Yes	
Electricity/water bills of government agencies are paid timely; free electricity/water consumption by public officials is reduced (Yes/No)	PBC 2	No	No	No	Yes	Yes	Yes	Yes	Yes	
SNEL uses MIS with electronic payment, establishes a Network	PBC 3	No	No	No	No	No	Yes	Yes	Yes	

Indicator Name	PBC	Baseline	Intermediate Targets						
			1	2	3	4	5	6	
Maintenance Fund and signs a PPP contract for Network O&M (Yes/No)									
Two REGIDESO subsidiaries operational under public service delegation contracts with provinces of Nord Kivu and Kasai Central (Yes/No)	PBC 4	No	No	No	No	Yes	Yes	Yes	Yes
Tariff adjustments for REGIDESO subsidiaries approved and satisfactory government agencies' bill payment to REGIDESO subsidiaries in Nord Kivu and Kasai Central (Yes/No)	PBC 5	No	No	No	No	No	No	Yes	Yes
Institutional Strengtheni	ng and	Development Supp	oort						
Water Resources Management Agency (OCE) operational and branch in Kasai Central established (Text)		OCE created Nov 2021, but not operational	Structure, internal statutes, staff and operating budget of OCE defined (including Kasai branch)	OCE staff recruited, budget allocated and roadmap for its development	with investments plan for Lubi and	water permits established and tested by Central	River Basin management plan for Lubi and Tchibachi basin approved by OCE and Central Kasai stakeholders	Water Fund collecting water abstraction fees approved and established	OCE strengthened (including Kasai branch, with Water Fund and Water Abstraction Permit MIS operational
Draft Sanitation Act is proposed for government review and parliamentary approval (Yes/No)		No	No	No	Yes	Yes	Yes	Yes	Yes
Share of beneficiaries in the project areas satisfied with feedback		0.00	0.00	70.00	75.00	75.00	80.00	80.00	80.00

Indicator Name	PBC	Baseline		Intermediate Targets						
			1	2	3	4	5	6		
opportunities and grievance resolution (Percentage)										
among females (Percentage)		0.00	0.00	70.00	75.00	75.00	80.00	80.00	80.00	
Annual GHG emissions reduced resulting from mini-grid development and operation (Metric tons/year)		0.00	0.00	0.00	100,000.00	300,000.00	600,000.00	800,000.00	800,000.00	
Private Sector-Based Acc	ess Ex	pansion								
On/off-grid household electricity connections from private operators (Number)		0.00	0.00	10,500.00	52,500.00	122,500.00	210,000.00	280,000.00	350,000.00	
On/off-grid productive and community user connections (Number)		0.00	0.00	90.00	450.00	1,050.00	1,800.00	2,400.00	3,000.00	
Renewable energy capacity constructed or rehabilitated (Megawatt)		0.00	0.00	5.00	8.00	12.00	15.00	20.00	25.00	
Battery storage for renewable energy installed (Megawatt hour(MWh))		0.00	0.00	0.00	0.00	25.00	50.00	75.00	100.00	
Households provided with access to at least basic water services by private operators (Number)		0.00	0.00	2,000.00	56,000.00	15,000.00	24,600.00	32,100.00	44,300.00	
out of which households with basic		0.00	0.00	1,200.00	3,200.00	8,400.00	14,000.00	18,000.00	24,400.00	

Indicator Name	PBC	Baseline			Intern	nediate Targets			End Target
			1	2	3	4	5	6	
water services (Number)									
out of which households with safely managed water service (Number)		0.00	0.00	800.00	2,400.00	6,650.00	10,600.00	14,100.00	19,500.00
Private capital mobilized from private mini-grid developers through risk mitigation instrument (Number (Thousand))		0.00	0.00	0.00	0.00	60,000.00	80,000.00	100,000.00	120,000.00
Public Sector-Based Acce	ss Exp	ansion with Priva	ate Sector Involv	ement					
New household electricity connections (Number)		0.00	0.00	2,400.00	12,000.00	28,000.00	48,000.00	64,000.00	80,000.00
mproved household electricity connections (Number)		0.00	0.00	9,600.00	48,000.00	112,000.00	192,000.00	256,000.00	320,000.00
Households provided with at least basic water services by public operators (Number)		0.00	0.00	3,000.00	86,000.00	23,300.00	37,900.00	49,600.00	69,000.00
out of which basic water services (Number)		0.00	0.00	1,300.00	3,500.00	9,100.00	15,200.00	19,500.00	26,450.00
out of which safely managed water services (Number)		0.00	0.00	1,700.00	5,100.00	14,200.00	22,700.00	30,100.00	42,550.00
Fecal sludge delivered to creatment plants and disposed safely (Cubic meters/year)		0.00	0.00	0.00	0.00	10,000.00	20,000.00	40,000.00	60,000.00

Indicator Name	PBC	Baseline		End Target					
			1	2	3	4	5	6	
Health centers and schools with electricity and WASH facilities installed (Number)		0.00	0.00	0.00	30.00	70.00	130.00	200.00	250.00
Public WASH facilities rehabilitated/constructed with electricity and a private O&M arrangement (Number)		0.00	0.00	125.00	175.00	225.00	300.00	400.00	500.00
Including share managed by female entrepreneurs (Percentage)		0.00	0.00	40.00	40.00	45.00	45.00	45.00	50.00
Share of new positions/jobs within electricity and water entities that are taken by women (public and private) (Percentage)		0.00	0.00	0.00	5.00	8.00	12.00	20.00	30.00
Out of which in technical positions (Percentage)		0.00	0.00	0.00	3.00	4.00	6.00	10.00	15.00

	Monitoring & E	valuation Plan:	PDO Indicators	5	
Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
People provided with new or improved electricity service		semi annual	progress reports	GIS tools and surveys	UCM
People provided with new or improved electricity service - Female		semi-annual	progress reports	assumed 50%	UCM
People provided with access to at least basic water supply services	A basic service is an improved water source within less than 30 minutes roundtrip. A safely managed service is available in the yard, reliably available (16hr/d) and compliant with water quality standards	semi-annual	progress reports	GIS tools/ field surveys	CEP-O, OCE
out of which female	women benefiting	semi-annual	progress reports	assumed 50%	CEP-O, OCE
of which basic water services	basic water service as per the JMP definition	semi-annual	progress reports	GIS tools / field surveys	CEP-O, OCE
of which safely managed water services	safely managed service as per the JMP definition	semi annual	progress reports	GIS tools/field surveys (including sample- based water quality)	CEP-O; OCE
SNEL bill collection rate	total volume of bills collected over total volume of bills issued by SNEL for all customers (high voltage,	annual	progress reports / SNEL data	SNEL billing system	UCM with SNEL/COPIREP

	medium voltage, low				
	voltage)				
Operating ratio for REGIDESO subsidiaries	Average operating ratio for REGIDESO subsidiary utilities in Nord Kivu and Kasai Central/Kasai; calculated as operating revenues from water sales over operating costs (use of IWA definitions)	annual	REGIDESO accounts	accounts ringfenced for REGIDESO regional directorates before the set-up of subsidiaries	COPIREP with CEP- O/REGIDESO
Operating ratio for REGIDESO Nord Kivu	operating revenues over operating costs	annual	REGIDESO No rd Kivu	Financial records; baseline based on REGIDESO ringfenced data for Nord Kivu Provincial Directorate	COPIREP and REGIDESO
Operating ratio for REGIDESO Kasai Occidental	operating revenues over operating costs	annual	REGIDESO Kasai Occidental	financial records; ringfenced data from REGIDESO Kasai Regional Centre will be used to establish baseline	COPIREP with REGIDESO
Nord Kivu and Kasai Central Provincial Infrastructure Units responsible for water and electricity established and operational	-	annual	progress reports	records from provincial governments	UCM and CEP-O
Water sector regulator (ARSPE) capacity strengthened	-	annual	progress reports	ARSPE records	UCM and ARSPE
Energy regulator (ARE) capacity strengthened	-	annual	progress reports	ARE records	UCM and ARE

Monitoring & Evaluation Plan: Intermediate Results Indicators							
Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection		
Tariff adjustment methodology approved and SNEL's tariffs adjusted	PBC protocol	annual	PBC protocol	PBC protocol	COPIREP		
Electricity/water bills of government agencies are paid timely; free electricity/water consumption by public officials is reduced	PBC protocol	annual	PBC protocol	PBC protocol	COPIREP		
SNEL uses MIS with electronic payment, establishes a Network Maintenance Fund and signs a PPP contract for Network O&M	PBC protocol	annual	PBC protocol	PBC protocol	COPIREP		
Two REGIDESO subsidiaries operational under public service delegation contracts with provinces of Nord Kivu and Kasai Central	PBC protocol	annual	PBC protocol	PBC protocol	COPIREP		
Fariff adjustments for REGIDESO subsidiaries approved and satisfactory government agencies' bill payment to REGIDESO subsidiaries in Nord Kivu and Kasai Central	PBC protocol	annual	PBC protocol	PBC protocol	COPIREP		
Water Resources Management Agency (OCE) operational and branch in Kasai Central established		annually	OCE	progress report	OCE		
Draft Sanitation Act is proposed for government review and parliamentary	The Law Committee approved the draft	annual	Notification letter	-	UCM		

approval	Sanitation Law and notified the General Secretariat of the Government for review				
Share of beneficiaries in the project areas satisfied with feedback opportunities and grievance resolution	measures satisfaction of beneficiary population with i) information access and opportunity for feedback/dialogue with implementing agencies, iii) responses to grievances reported, including those on Gender Based Violence	semi- annual	Rapid surveys (supported by mobile tools) carried out in "active" project areas; "active" means when community consultation has started; construction is ongoing, or six months post construction;	Survey sample at least 2 percent of the population in the active project areas, of which at least 50 percent are women	UCM supported by NGOs
among females	-	semi annual	rapid surveys	50 percent of sampled survey to be female	UCM
Annual GHG emissions reduced resulting from mini-grid development and operation	Annual CO2 emission reductions resulting component 3.1 investments	annual	various data and assumptions	to be developed in year	UCM

On/off-grid household electricity connections from private operators	households connected to an electricity service through mini-grid networks or solar home systems	annual	progress reports	GIS tools; platforms	UCM with ANSER
On/off-grid productive and community user connections	connections to an electricity service for businesses and social institutions by both public and private operators	annual	progress reports	GIS tools/platforms	UCM with ANSER
Renewable energy capacity constructed or rehabilitated	cumulative installed capacity	annual	progress reports	project records (as built drawings)	UCM with ANSER and private operators
Battery storage for renewable energy installed	amount of energy the newly installed battery systems can store from renewable sources (solar, wind) in MWh.	annual	progress reports	GIS tools/operator data	UCM and ARE
Households provided with access to at least basic water services by private operators	basic and safely managed access; private operators include companies and not-for-profits managing autonomous water systems	annual	progress reports	operator contract documentation/MIS	OCE with UCM
out of which households with basic water services	as per JMP definition	annual	progress reports	GIS tools/surveys/operator date	OCE with UCM
out of which households with safely managed water service	as per JMP definition	annual	progress reports	GIS/field surveys/operator data	OCE with UCM
Private capital mobilized from private mini-grid developers through risk mitigation instrument	private capital mobilized under subcomponent 3.1 from mini-grid developers resulting from risk	annual	progress reports	from developer business plans and accounts	ARE and private developers

	mitigation tools (including GCF grant)				
New household electricity connections	number of households with new electricity connections through SNEL network (Kinshasa and Gbadolite)	annual	progress reports	GIS tools/data from owners' engineering firm	UCM and SNEL
Improved household electricity connections	households with improved electricity service, due to increased hours of electricity supply and/or quality of electricity voltage (SNEL in Kinshasa and Gbadolite)	annaul	progress reports	GIS tools/Owners' engineers data	UCM and SNEL
Households provided with at least basic water services by public operators	Includes basic and safely managed access; access based on JMP definitions	annual	progress reports	GIS tools, and field surveys; owners' engineer reports	CEP-O and utilities
out of which basic water services	as per JMP definition	annual	progress report	GIS tools, and field surveys; owners' engineer reports	CEP-O with support of utilities
out of which safely managed water services	households with a safely managed water service provided by a public utility (Goma/Kanaga), i.e. a yard connection with reliable supply (16 hrs/day) and water quality meeting national standards due to adequate water treatment at the sources	annual	progress reports	GIS tools, field surveys and owners' engineers reports	CEP-O with utilities

Fecal sludge delivered to treatment plants and disposed safely	annual volume of fecal sludge that has been disposed and treated at the fecal sludge treatment plants in Bukavu and Goma	annual	progress reports	data from plant operators	CEP-O
Health centers and schools with electricity and WASH facilities installed	the number of health center and schools with new or improved access to electricity and basic water, sanitation and hygiene services (JMP definition)	annual	progress reports	GIS tools/contractor data	UCM with local governments
Public WASH facilities rehabilitated/constructed with electricity and a private O&M arrangement	Public facilities at markets, commercial centers, transport hubs, as well as communal neighborhood facilities	annual	progress reports	GIS tools/contractor data	UCM and local governments
Including share managed by female entrepreneurs	facilities under management by a female entrepreneur; or under community management through a committee under female leadership/with majority female membership	annual	progress reports	management contracts	UCM
Share of new positions/jobs within electricity and water entities that are taken by women (public and private)	jobs within public utilities in target provinces, jobs with private water and energy operators involved in the project; and jobs created by micro- enterprises resulting from the vocational and entrepreneurship training program	annual	progress reports	records of participating utilities/operators and follow-up interviews of participants in vocational program	UCM , REGIDESO, SNEL, operators, Maison de la Femme

Out of which in technical positions share of women in techni jobs created	al annual	progress reports	data collected to be gender disaggregated	UCM, REGIDESO/SNEL/op erators
---	-----------	---------------------	---	-------------------------------

	Performance-Based Conditions Matrix			
PBC 1	Interministerial decree (" methodology	Interministerial decree ("arrêté") approving revised SNEL's High Voltage and Medium Voltage tariffs based on an approved methodology		Noltage tariffs based on an approved
Type of PBC	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount
Intermediate Outcome	No	Text	3,000,000.00	
Period	Value		Allocated Amount (USD)	Formula
Baseline	ARE does not have an approved methodology to adjust tariffs; SNEL's tariffs have not been adjusted since 2012			
Year 1	tariff model has been approved by the Recipient's competent authorities		500,000.00	1/6
Year 2	Interministerial arrêté has been published in the Official Gazette approving revised tariffs for SNEL's High Voltage and Medium Voltage customers based on approved tariff model		2,500,000.00	5/6
Year 3	-		0.00	-
Year 4	-		0.00	-
Year 5	-		0.00	-

Year 6	-		0.00	-
Year 7	-		0.00	-
PBC 2		Ministerial "arrêté" redefining payment criteria for and reducing number of Right Holders published; Permanent payment order for electricity/water bills from national govt. agencies implemented		
Type of PBC	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount
Intermediate Outcome	No	Text	3,500,000.00	0.00
Period	Value		Allocated Amount (USD)	Formula
Baseline	/instances officielles) do not and water bills. High-level go (right holders/ayant droits) a	Government agencies (official institutions /instances officielles) do not timely pay electricity and water bills. High-level government officials (right holders/ayant droits) are entitled to free electricity and water consumption		
Year 1	A ministerial "arrêté" redefining the eligibility criteria for payment by the Public Treasury of the water and electricity bills of Right Holders with a view to reducing their number was published in the Official Journal; and the revised list of Right Holders in Kinshasa has been published		500,000.00	1/7
Year 2	A permanent payment order signed by MoF is placed at the Central Bank of Congo, and a first monthly payment is made to REGIDESO for water bills of national-level government agencies.		500,000.00	1/7
Year 3	A permanent payment order placed at the Central Bank of	•	500,000.00	1/7

	monthly payment is made to SNEL for electricity bills of national-level government agencies.			
Year 4	Execution of the permanent payment order for 12 months of water bills of the national-level government agencies to REGIDESO.		500,000.00	1/7
Year 5	Execution of the permanent payment order for 12 months of electricity bills of the national-level government agencies to SNEL.		500,000.00	1/7
Year 6	Execution of the permanent payment order for an additional 12 months of consumption as reflected in the water bills of the national-level government agencies to REGIDESO.		500,000.00	1/7
Year 7	Execution of the permanent payment order for an additional 12 months of consumption as reflected in the electricity bills of the national-level government agencies to SNEL.		500,000.00	1/7
PBC 3	SNEL uses an integrated information management system with electronic payment methods, establishes a network maintenance fund and implements a PPP contract for O&M of distribution network			nethods, establishes a network
Type of PBC	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount
Intermediate Outcome	No	Text	30,000,000.00	1.63
Period	Value		Allocated Amount (USD)	Formula
Baseline	No integrated MIS with electronic payment options; no network maintenance fund and no experience with PPP for the O&M of network			

Year 1	The following contracts have been awarded for: PBC#3.1(a) the design and installation of an information management system ("ERP") in SNEL; PBC#3.1(b) a study to design a distribution network maintenance fund; and PBC#3.1(c) a study to design PPP options for operation and maintenance of a selected distribution network perimeter	5,000,000.00	for a), b) and c) each 1/18
Year 2	A distribution network maintenance fund has been established within SNEL	5,000,000.00	1/6
Year 3	The ERP has been installed at SNEL, including functional electronic payment platforms	5,000,000.00	1/6
Year 4	a subcontract for the O&M of a selected perimeter of the Kinshasa distribution network has been signed between SNEL and a private service provider and is in full force and effect.	5,000,000.00	1/6
Year 5	At least 20% of SNEL customers in Kinshasa have used electronic payment means	5,000,000.00	1/6
Year 6	Satisfactory implementation of the O&M Subcontract during the first year following its effectiveness	5,000,000.00	1/6
Year 7	-	0.00	-

PBC 4	Autonomous public water utilities (REGIDESO subsidiaries) operating under public service delegation contracts with the provincial governments of Nord Kivu and Kasai Central			
Type of PBC	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount
Intermediate Outcome	No	Text	16,000,000.00	1.42
Period	Value		Allocated Amount (USD)	Formula
Baseline		REGIDESO subsidiaries do not exist; no public service delegation contracts in place signed by provinces		
Year 1	REGIDESO Restructuring Action Plan adopted by the Government		2,000,000.00	2/16
Year 2	REGIDESO Nord Kivu has been established and is operational under a public service delegation contract signed between REGIDESO Nord Kivu and the provincial authorities of Nord Kivu, including a PIP		5,000,000.00	2/16
Year 3	REGIDESO Kasai Occidental has been established and is operational under a public service delegation contract signed between REGIDESO Kasai Occidental and the provincial authorities of Kasai Central, including a PIP		5,000,000.00	5/16
Year 4	At least 75% of commercial, financial and operational targets in the public service delegation contract with REGIDESO Nord Kivu has been achieved by the second year of implementation of the contract		2,000,000.00	2/16

Year 5	At least 75% of commercial, financial and operational targets in the public service delegation contract with REGIDESO Kasai Occidental has been achieved by the second year of implementation of the contract		2,000,000.00	2/16
Year 6	-		0.00	-
Year 7	-		0.00	-
PBC 5	Approval of tariff adjustments and satisfactory water bill payment by provincial level govern Kasai Central		government agencies of Nord Kivu and	
Type of PBC	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount
Intermediate Outcome	No	Text	2,000,000.00	0.46
Period	Value		Allocated Amount (USD)	Formula
Baseline	Financial sustainability of new utilities is at risk if tariffs are not timely adjusted and government agencies at provincial level do not pay bills			
Year 1	-		0.00	-
Year 2	-		0.00	-
Year 3	-		0.00	-
Year 4	At least 70 percent of 12 mor provincial level government a Kivu is paid to REGIDESO Nor	gencies in Nord	500,000.00	1/4

Year 5	At least 70 percent of 12 months water bills of provincial level government agencies in Kasai Central is paid to REGIDESO Kasai Occidental	500,000.00	1/4
Year 6	Inter-ministerial arrêté published updating cost reflective tariffs for the service delegation contract with REGIDESO Nord Kivu based on approved methodology by the Recipient.	500,000.00	1/4
Year 7	Inter-ministerial arrêté published updating cost reflective tariffs for the service delegation contract with REGIDESO Occidental based on approved methodology by the Recipient.	500,000.00	1/4

	Verification Protocol Table: Performance-Based Conditions
PBC 1	Interministerial decree ("arrêté") approving revised SNEL's High Voltage and Medium Voltage tariffs based on an approved methodology
Description	PBC 1.1: ARE approves a tariff model and methodology for setting and adjusting tariffs; PBC 1.2: Interministerial arrêté published approving revised tariffs for SNEL's HV and MV customers based on approved model
Data source/ Agency	Official Gazette, ARE
Verification Entity	COPIREP
Procedure	PBC 1.1 Informed by tariff study, ARE adopts tariff model/methodology for tariff adjustments. PBC 1.2: ARE submits a draft inter-ministerial "arrêté" for revision of SNEL's HV and MV tariff s based on the tariff model. MRHE and MoEc sign the interministerial arrêté, which is published in the Official Gazette.

PBC 2	Ministerial "arrêté" redefining payment criteria for and reducing number of Right Holders published; Permanent payment order for electricity/water bills from national govt. agencies implemented
Description	PBC 2.1 MoBudget issues a ministerial "arrêté" that redefines the eligibility criteria for payment by the Public Treasury of the water and electricity bills and that aims to reduce the number of Right Holders (Right Holders are entitled to authorized unbilled consumption, also referred to as "free water consumption"). The revised list of Right Holders for Kinshasa is published and SNEL and REGIDESO implement the decree and transform the accounts of ex-Right Holders into regular customer accounts. PBC 2.2 A Permanent Payment Order, signed by MoF, is placed at the Central Bank and first payment executed to REGIDESO for the water bills of national-level government agencies (official institutions) (all agencies country wide that are financed by the national budget). PBC 2.3 A Permanent Payment Order is placed at the Central Bank and first payment executed to SNEL for the electricity bills of national-level government agencies. PBC 2.4 and PBC 2.6 Payment equivalent each of 12 months of water consumption of national government agencies is executed by to the account of REGIDESO. This also includes respective payments for national government agencies to REGIDESO subsidiaries in Nord Kivu and Kasai Central once they are set-up. PBC 2.5 and 2.7. Payment equivalent each of 12 months of electricity consumption of national government agencies is executed to the account of SNEL.
Data source/ Agency	Official Gazette; SNEL and REGIDESO customer accounts and financial records
Verification Entity	COPIREP and Verification Agent
Procedure	PBC 2.1: A committee, with representatives from COPIREP, SNEL, REGIDESO, MP, MoF, MoBudget, Prime Ministry, validates a technical assessment report and COPIREP drafts an "arrêté" that redefines the eligibility criteria for payment by the Public Treasury with the aim of reducing the national list of Right Holders (or "ayant droits"). The revised list of Right Holders for Kinshasa is published. MoBudget signs the "arrêté", which is published in the Official Gazette. Verification agent verifies that the revised list of Right Holders has been used by SNEL and REGIDESO in Kinshasa, transforming ex-Right Holders accounts into regular customer accounts. PBC 2.2 and PBC 2.3. Committee decides on the monthly amount (based on billed consumption) of the Permanent Payment Order(s) for SNEL and REGIDESO, based on nation-wide consumption audits of nationally funded government agencies (official institutions or "instance officielles"). MoF requests the Permanent Payment Order and places it through the Public Treasury at the Central Bank of Congo. A Verification Agent submits the evidence of the first monthly execution of the payments to SNEL and REGIDESO. PBC 2.4, PBC 2.5, PBC 2.6 and PBC 2.7: Public Treasury systematically pays billed electricity and water consumption of nationally funded government agencies to SNEL and REGIDESO (and its subsidiaries). A Verification Agent verifies SNEL and REGIDESO financial records to be equivalent to billed electricity and water consumption over 12 months, and an additional period of 12 months. From

	time to time the Permanent Payment Order is amended (for example if national agencies change, if REGIDESO sets up its subsidiaries or <i>filiales</i>).
PBC 3	SNEL uses an integrated information management system with electronic payment methods, establishes a network maintenance fund and implements a PPP contract for O&M of distribution network
Description	Contract award of for: PBC#3.1(a) design, installation and training related to SNEL's MIS, including platforms for electronic payments; PBC#3.1(b) design study for the Network Maintenance Fund; and PBC#3.1(c) study for PPP options for network maintenance and preparation for a first sub-contract for a selected perimeter in Kinshasa. PBC 3.2 SNEL Distribution Network Maintenance is established. PBC 3.3 SNEL has installed ERP including functional electronic payment platform in Kinshasa. PBC 3.4 O&M sub-contract signed and effective between SNEL and a private company for a selected perimeter of the Kinshasa network. PBC 3.5 At least 20% of SNEL customers in Kinshasa have used electronic payment means. PBC 3.6 Satisfactory implementation of the O&M Subcontract during the first year following its effectiveness.
Data source/ Agency	UCM contract documents; SNEL records (MIS, Maintenance Fund); PPP contract documents
Verification Entity	COPIREP and Verification Agent for ERP installation, electronic payments, PPP contract implementation
Procedure	PBC 3.1 COPIREP, with support of UCM and technical input of SNEL, competitively procure mentioned contracts; contract award document submitted (three payments; one for each contract) 3.2 COPIREP submits evidence of commercial bank statement for endowment of the Network Maintenance Fund, as well as Fund operational manual. PBC 3.3 Verification Agent verifies the installation and functionality of the ERP, including electronic payment options in Kinshasa. PBC 3.4 COPIREP submits the SNEL PPP contract award and effectiveness documentation. PBC 3.5 Verification Agent provides report showing that at least 20% of Kinshasa customers use electronic payment means. PBC. 3.6 Verification Agent provides report showing that expected results at year 1 are achieved.
PBC 4	Autonomous public water utilities (REGIDESO subsidiaries) operating under public service delegation contracts with the provincial governments of Nord Kivu and Kasai Central
Description	PBC 4.1 REGIDESO Restructuring Action Plan consulted and adopted by Government PBC 4.2 REGIDESO subsidiary is legally established and operational in Nord Kivu (REGIDESO Nord Kivu) with separate account and no debt on its balance sheet; Nord Kivu provincial authorities have signed a public service delegation contract with REGIDESO Nord Kivu with a Performance Improvement Plan with target indicators; PBC 4.3 AREGIDESO subsidiary is legally established and operational in Kasai Central and Kasai (REGIDESO Kasai Occidental) with a separate account and no debt on its balance sheet; Kasai

Data source/ Agency	Central provincial authorities have signed a public service delegation contract with REGIDESO Kasai Occidental including a Performance Improvement Plan with target indicators; PBC 4.4 Satisfactory implementation by REGIDESO Nord Kivu of the public service delegation contract with Nord Kivu province, achieving at least 75% of commercial, financial and operational targets after the first two years following its effectiveness PBC 4.5 Satisfactory implementation by REGIDESO Kasai Occidental of the public service delegation contract with Kasai Central province, achieving at least 75% of commercial, financial and operational targets after the first two years following its effectiveness Official Gazette; REGIDESO records; provincial public service delegation contracts and PIPs, REGIDESO subsidiary records
Verification Entity	COPIREP and Verification Agent
Procedure	PBC 4.1 REGIDESO Restructuring Action Plan is widely consulted and endorsed by the Ministry of Portfolio. It includes the decision to decentralize REGIDESO and establish autonomous utilities as subsidiaries under a national holding structure, indicating Nord Kivu and Kasai Occidental as a pilot (while transforming other REGIDESO Centers to REGIDESO Regional Directorates with increased autonomy); COPIREP drafts a Government Decree (Council of Ministers) approving the Restructuring Plan; Government Decree is published in the Official Gazette. PBC 4.2 and 4.3 Verification Agent verifies: a) REGIDESO subsidiaries are legally established, with separate account and no debt; b) REGIDESO Holding's public water supply assets have been transferred to Nord Kivu, respective Kasai Central provincial authorities (<i>Regie Provincial d'Infrastructure</i>); c) REGIDESO Holding has transferred relevant staff and assets (equipment, company building, meters, vehicles) to the subsidiaries; d) Public Service Delegation Contracts are signed between REGIDESO subsidiaries and provincial governments, including a Performance Improvement Plan, and annual targets for technical, commercial, and operational performance indicators. PBC 4.4 and PBC 4.5: Verification Agent verifies, based on REGIDESO subsidiary records, the achievement of the 75 percent of the annual performance targets in the Public Service Delegation Contract within two years following the the contract effectiveness
PBC 5	Approval of tariff adjustments and satisfactory water bill payment by provincial level government agencies of Nord Kivu and Kasai Central
Description	PBC 5.1 and PBC 5.2: At least 70 percent of 12 months of billed water consumption by selected provincial level government agencies in Nord Kivu, respectively Kasai Central is paid to REGIDESO Nord Kivu, respectively REGIDESO Kasai Occidental This concerns all government agencies funded through provincial and local budgets. Payment can be achieved through direct payment by the government agencies, or through payment by the provincial and local authorities on behalf of the government agencies. PBC 5.3 and PBC 5.4:Informed by tariff studies, REGIDESO subsidiaries, in coordination with the

	Provincial Governments submit application for tariff adjustment, as per ASPRE approved tariff methodology following principles of cost reflective tariffs. ARSPE drafts the interministerial "arrêté" (to be signed by MRHE and MoEconomy) for the approval of the tariff revisions. Interministerial "arrêtés "are published in the Official Gazette.
Data source/ Agency	Implementation reports of Public Service Delegation Contracts by REGIDESO Subsidiaries; Official Gazette
Verification Entity	COPIREP and Verification Agent
Procedure	PBC 5.1 and PBC 5.2 Verification Agent verifies whether 70 percent of billed water consumption of provincial and local government agencies in Nord Kivu and Kasa Central were collected/paid to REGIDESO Nord Kivu and REGIDESO Kasai Occidental for a period of 12 months. PBC 5.3 and PBC 5.4 COPIREP submits published interministerial "arrêtés" for tariff revision under the Public Service Delegation contracts of the respective REGIDESO subsidiaries in Nord Kivu and Kasai Central

ANNEX 1: Implementation Arrangements and Support Plan, Fiduciary and Gender

COUNTRY: Congo, Democratic Republic of DRC Electricity & Water Access and Governance Project

Implementation Arrangements

- 1. Under the strategic guidance of a steering committee, UCM will coordinate the overall project implementation, carry out the Component 2 and the Subcomponents 4.1 and 4.3, and support COPIREP, ARE, ANSER, OCE that will execute the Component 1, the Subcomponent 3.1, the Subcomponent 3.2, the Subcomponent 3.3. CEP-O will have fiduciary responsibility for implementing Subcomponent 4.2 (and partly for project management costs under Subcomponent 2.4). As detailed in the Financing Agreement, implementing entities will sign an MoU; the recipient will sign collaboration agreements with participating provinces and implementing agreements with ARE, ANSER, and OCE. Table 1.1 shows the implementation arrangements and Figure 1.1 the flow of funds.
- 2. **Implementation Agreements.** In addition to signing the overall MoU between the various entities, there are several implementation agreements that detail the respective roles and responsibilities of agencies involved in implementation that also will be managing the sub-accounts. This entail: ARE Implementation Agreement, OCE Implementation Agreement and ANSER Implementation Agreement.⁶⁹
- 3. **Provincial Collaboration Agreements**. Collaboration agreements with the participating provinces will be signed that indicate the roles, responsibilities of the provinces in the implementation of the various components of the project. Collaboration agreements will be tailored to the proposed investments and involvement of the provincial authorities (for example, they may be different for Nord Kivu, Kasai Central with a focus on water supply investment as for other provinces where only energy investments will be implemented).
- 4. **Service Delegation Contract:** Under the Subcomponent 3.1 a contract not financed by the Association, between the Selected Mini-grid Developer and the Participating Province for the implementation of a Mini-grid Subproject will be prepared.
- 5. **SNEL Implementation Agreement:** *Protocole d' Accord Spécifique* with SNEL will be used to indicate SNEL's roles and responsibilities in the technical implementation, monitoring and evaluation of the Subcomponents 1.2 and 4.1.
- 6. **REGIDESO Implementation Agreement:** *Protocole d' Accord Spécifique* with REGIDESO will be used to indicate REGIDESO's roles and responsibilities in the technical implementation, monitoring and evaluation of the Subcomponents 1.3 and 4.2.
- 7. **Sub-Financing Agreements**: Under Subcomponent 3.1, a Sub-Financing Agreement will be signed between the Mini-grid developer and the UCM to determine the Capital subsidies to be provided to the

⁶⁹ Since COPIREP forms part of MP, no implementation agreement is required for the implementation of Component 1 (ARE, ANSER, and OCE are independent legal entities from MRHE).

developer. UCM will also enter into a **Viability Gap Financing Agreement** with the respective Mini-Grid developers for the provision of the Demand Risk Mitigation measures.

- 8. **Mwinda implementation arrangements** will be specified in the Result-Based Grant Manual for the governance and management of the Mwinda Fund.
- 9. **Result-based Grant Agreements** will be signed between energy operators and UCM (in urban) and ANSER (in peri-urban and rural) areas; as well as between water operators and OCE (Subcomponents 3.2 and 3.3)
- 10. **Overall Implementation Support Plan:** the multi-faceted and innovative nature of the project calls for an intensive project implementation support over the first four implementation years. Senior energy and water task team leaders will be based in Kinshasa and supported by locally recruited, Kinshasa-based energy and water specialists and short-term energy and water consultants based in satellite offices in Goma and Kananga. These energy and water specialists will benefit from critical support from environment, social safeguards, SEA/SH, procurement, FM, and financial sector staff and specialized consultants on mini-grid and off grid to adequately oversee project implementation. At least three full team missions and continuous hand-holding support are anticipated in the first three years. As required, additional technical and thematic missions could also be organized to further support the PIUs and associated agencies on specific new areas such as capital subsidies for water sector operators, and sanitation operator professionalization. During project support missions, the team will use the PDO and the Results Framework as primary lenses for monitoring progress, evaluating performance, and adjusting level of support when necessary. Table 1.2 and 1.3 below outline the expected skills mix and staff weeks and travel required to make sure the actions and schedule are appropriately resourced.

Table 1 1. Implementation Arrangements Responsibilities

Comp	onent	Fiduciary Agency	Implementation Agency and Subaccount Holder	Supporting Agencies
	II proje ination	ect	Prepare and lead implementation and monitoring of annual plan and budget Consolidate progress notes and draft implementation progress reports, interim financial reports (IFRs), E&S reports	MRHE – Project Steering Committee Provide strategic guidance and oversight of project Facilitate decision and implementation of reforms COPIREP, ARE, ANSER, OCE, CEP-O Implement respective subcomponents and provide progress notes Provide inputs into the annual plan and budget
Component 1	Per		 COPIREP Lead the procurement of goods and services Monitor (and report on) the implementation of the State-SNEL performance contract and SNEL performance improvement activities Monitor (and report on) REGIDESO restructuring Act as the secretariat of the steering committee on reforms 	UCM, SNEL, MoB, MoEc, MoF, MP Participate in procurement and service delivery (provide inputs to ToR, participate in proposal evaluation, participate in contract negotiation, comment on deliverables and progress notes) SNEL Implement RPP, use information management system, implement mobile money and digital payments, sign PPP contract on O&M, and publish key financial and operational documents REGIDESO, provincial governments Set up autonomous regional REGIDESO subsidiaries and sign public service delegation contract with respective Provincial
Component 2			Collect technical assistance needs and lead procurement in close collaboration with provincial governments,	Governments Provincial Governments Specify needs and participate in procurement of goods and services, hire staff of provincial infrastructure units, use simple information system to manage power and water infrastructure

Comp	onent Fiduciary Agency Implementation Agency and Subaccount Ho		Implementation Agency and Subaccount Holder	Supporting Agencies
	2.2	UCM/	 Oversee the implementation of, and report on, capacity building and technical assistance activities Perform fiduciary tasks 	MRHE/ARE/ANSER/OCE/ARSPE/MEDD (DAS and ACE)/Ministry of Gender, Family and Children (Ministère du Genre de la Famille et des Enfants) • Participate in procurement of goods and services • Develop Sanitation Law and disseminate Electricity/Water Law provisions • Operationalize the Mwinda fund Operators/OCE/MRHE • Develop and prepare projects UCM/CEP-O/ARE/ANSER/OCE/COPIREP/CSPP
		CEP-O		 Project management Monitoring
Component 3	3.1	UCM	 ARE Develop tender documents and lead/chair procurement with assistance from transaction advisory firm Propose tariffs and adjustment of tariffs Recommend preferred bidder Supervise performance of the contract Set and enforce service standards 	 Plan and determine, in close collaboration with ANSER, the list of cities to be competitively tendered, adopted as a policy by MRHE (urban cities) Report on the status of program implementation to various stakeholders Manage the Odyssey platform for DRC Evaluate program performance and recommend improvements Provincial Governments Sign contract for projects in a province and supervise performance

Component		Fiduciary Agency	Implementation Agency and Subaccount Holder	Supporting Agencies
	3.3	Agency	 ANSER Plan and determine the list of peri-urban areas/cities and rural areas to be competitively tendered, adopted as a policy by MRHE Analyze private operators' subsidy proposals with assistance from Fund Manager and in coordination with provincial governments, ARE, and MRHE/UCM Promote peri-urban and rural electrification Ensure consistency between transactions Report, evaluate, and improve program OCE In collaboration with UCM and ANSER develop and implement the water subsidy scheme Oversee and report on subsidy implementation 	 UCM Report on program implementation status (for urban areas) to various stakeholders and coordinate Manage the SMG Odyssey platform for DRC Provincial Governments Sign contract for projects in a province Supervise performance of the contract ARE Set tariffs and adjustments Set and enforce service standards UCM Assist OCE in developing operational manual and other tools to run the subsidy scheme on the water sector Provincial Governments Sign contract for projects in a province Supervise performance of the contract ARSPE Set tariffs and adjustments
	4.1	UCM	UCM	Set and enforce service standards SNEL
Component 4			 Lead procurement of works, goods, and services in collaboration with SNEL Monitor implementation and report on progress 	 Participate in all steps of procurement Oversee contractor's works with assistance from owner's engineer Incorporate new customers; detect and correct electricity theft

Component	Fiduciary Agency	Implementation Agency and Subaccount Holder	Supporting Agencies
4.2	CEP-O	CEP-O	Provincial Governments, Municipalities
		 Lead procurement of works, goods, and services in collaboration with SNEL Monitor implementation and report on progress 	 Oversee contractor's works with assistance from owner's engineer REGIDESO subsidiaries Incorporate new customers; detect and correct illegal customers Sign contracts with provinces Implement PIPs
4.3 UCM		UCM	Min of Health/Min of Education/CEP-O
		Lead procurement of works, goods, and services	Provide technical inputs for procurement
		Oversee and report on implementation progress	Implement sustainable maintenance mechanisms

IDA World Bank Financing GCF Grant and Reimbursable DA - C DA - A DA - D DA - B CEP-O **UCM UCM UCM** Consultant Sub-account Sub-account services Sub-account Sub-account COPIREP ARE Consultant OCE ANSER services Direct Payments Technical Assistance Planning Implementation Support Transaction Owner Owner Advisor Water Fund Mwinda Fund Engineers Engineers Fund Manager Capital PBC **VGF** Non-PBC subsidies financing Works Works Water Electricity Subsidies Subsidies Contractors Contractors Provincial Governments, **Electricity and Water operators** ARE, COPIREP, MoE, MoEc, Private developers selected through top -Water Electricity ARE, ANSER, OCE, MGFC, bottom-up approach MRHE, SNEL, Regional REGIDESO Santation **Human Capital** down approach MEDD, UCM, CEP-O Sub-Component Sub-Component Sub-Component Component 1 Component 2 Sub-Component 3.1 4.1 + 4.33.2 and 3.3

Figure 1.1. Flow of Funds

Table 1.2. Overall Implementation Support Plan

Time	Focus	Skills Needed	Annual Budget Estimate (US\$)
Years 1 – 4	 Establish working arrangements Capacity building (E&S, FM, procurement) Finalize investments design, terms of references, and bidding documents Technical and institutional implementation support Procurement Safeguard assessments and implementation Gender and SEA/HS action plans (training, baseline assessment and data collection, and enhancing productive and social services) 	Utility reform/performance improvement specialists, power and water supply engineers, project finance specialist (for mini-grid tendering with IFC and MIGA), mini-grid/off-grid subsidy specialist, sanitation/behavior change specialist, procurement, FM, environmental, social, and GBV specialists	500,000
Years 5 – 7	 Technical implementation support E Environmental and Social including SEA/SH safeguard implementation support, Gender and GBV activities M&E implementation support FM and procurement Implementation support 	Power and water supply engineers, utility performance improvement specialist, procurement, FM, environmental, social, and SEA/SH	350,000

Table 1.3. Team Skills Mix

Skills Needed	Annual Number of Staff Weeks	Annual Number of International Trips	Comments
Senior Energy Specialist (Task Team Leader)	12	0	IRS based in Kinshasa
Senior Water and Sanitation Specialist (Co-TTL)	10	0	IRS based in Kinshasa
Energy specialist	15	0	LRS based in Kinshasa
Water and Sanitation Specialist	13	0	LRS based in Kinshasa
Senior Consultant on Utility Reform	5	2	IRS - HQ
Senior Infrastructure Finance Specialist	5	2	IRS - HQ
Senior Financial Sector Specialist	8	0	IRS based in Kinshasa
Mini-grid/Off-grid subsidy fund Consultant	8	2	IRS - HQ
Power Engineer Consultant based In Goma	20	0	LRS based in Goma
Water Supply Engineer Consultant based in Goma	20	0	LRS based in Goma
Power Engineer Consultant based in Kananga	20	0	LRS based in Kananga
Water Supply Engineer Consultant based in Kananga	20	0	LRS based in Kananga
Procurement Specialist	10	0	Field based
Financial management Specialist	5	0	Field based
Social Specialist	7	0	Field based
Environmental Specialist	7	0	Field based
Gender consultant	3	0	Field based
SEA/SH consultant	7	0	Field based

Note: IRS = Internationally recruited staff; LRS = Locally recruited staff

- 11. **Financial management:** The proposed project is a multisectoral and multi-donors funded project (IDA, IFC, GoDRC and Private sector equity) with a US\$600 million contribution from IDA. There are six implementation agencies and fiduciary management will be handled by two entities, existing PIUs under MRHE: (a) UCM electricity sector- and (b) CEP-O -water sector. UCM will assume the overall coordination of project FM activities. The other implementation agencies namely COPIREP, ANSER, ARE, and OCE will have limited FM and will not directly manage a DA. The overall FM risk is considered **High**. The proposed FM risk mitigation measures are considered adequate. The residual risk remains High until the mitigation measures are implemented and may be downgraded to Substantial in the future. Risk mitigation measures comply with the provisions of World Bank Directive: Financial Management Manual for World Bank Investment Project Financing Operations, and World Bank Guidance: IPFs with Performance-Based Conditions (PBC).
- 12. **Country public FM situation and use of country systems**: the overall fiduciary environment of the country is weak and fiduciary risk including fraud and corruption is High and hence a project FM system will be set up. DRC's governance ratings are among the lowest in the world. The GoDRC has undertaken a series of reforms to strengthening public FM and accountability. Several Bank-financed projects (that is, Enhancing Collection of Revenue and Expenditure Management Project—P171762) include a governance component to improve existing public FM systems. Risk assessment and mitigation measures are included in Table 1.4 and 1.5.
- 13. **Staffing.** CEP-O and UCM PIU will be responsible for fiduciary aspects of the project, each has an FM specialist with acceptable skills and experiences. However, an accountant will be recruited for each PIU in addition to a chief accountant for UCM.

Table 1.4. FM Risks and Mitigation Measures

Risk	Risk rating	Risk Mitigating Measures Incorporated into Project Design	Residual Risk
INHERENT RISK	Н		Н
Country level Poor governance and weak public financial management (PFM) systems. Very limited experience in managing complex operations (Mwinda Fund)	Н	Some ongoing PFM reforms supported by World Bank financed projects: Commitments at the Government top level to tackle Corruption as evidenced by the investigations conducted by State Audit Inspectorate (Inspection Générale de Finance (IGF)). Close implementation support from the Bank FM staff.	Н
Entity level First PBC type of operations in the sector. SNEL, REGIDESO, ANSER, ARE have no knowledge of World Bank policies and procedures; and COPIREP did not manage any world bank projects in the past 5 years	Н	PBC manual of procedures will be developed PIM will be developed, and will clarify roles and responsibilities of the various stakeholders; including funds flow arrangements. Only UCM and CEP-O will have full FM responsibilities. All agencies FM capacity will be strengthened.	S

Risk	Risk rating	Risk Mitigating Measures Incorporated into Project Design	Residual Risk
Project level Project design complex with multiples sectors/entities Performance-based grants new to the sectors PBC: Expenditures occurred followed the Bank fiduciary procedures but may be ineligible due the nonachievement of PBCs	Н	All the PIU staff capacity will be strengthened Roles and responsibilities – UCM, CEP-O, COPIREP, ANSER, ARE and OCE; institutional arrangements, controls procedures, and arrangement for PBC and performance-based grants, and Mwinda funds will be documented in the PIM, and Mwinda fund manual. An international funds manager and private fund manager will be recruited to manage the Mwinda funds	Н
CONTROL RISK	Н		S
Budgeting The budget preparation, execution, and monitoring processes may be delayed and of poor quality given the number of stakeholders involved in the project implementation (multiple sources of data)	Н	Budgeting arrangements will be developed in the PIM. Quarterly IFR will provide information on budgetary control and analysis of variances between actual and budget estimates. World Bank staff to provide implementation support if needed. Close follow-up on the planning of PBC related activities	S
Accounting Weak capacity and inadequate tool may undermine ability to produce accurate and reliable information on time. Difficulty to track expenses tied to PBCs Wrong recording of expenditures	S	PIUs FM staff capacity will be strengthened The existing PIU's accounting software (multiple projects and multisite) will be used but upgraded first for some PIUs and customized to identify expenditures linked with the PBC The PIM will define the payment, recording and reporting process, and will include a detailed project accounting plan.	М
Internal Controls and Internal Audit Internal control system failure to identify material risks; Internal auditors lack capacity to assess the effectiveness of risk management and control over the uses of the project funds (Mwinda funds, performance- based grant, and PBCs)	Internal audit unit will be strengthened, and the audit plan will be reviewed by the World Bank; an independent firm will be recruited to perform the internal audit function IGF or an Independent verification agent (IVA) to carry out verification of PBCs and VGF conditions winda funds, performance- World Bank FMS to carry out periodic reviews of the		S
Funds Flow Delayed payment of suppliers due to delayed achievement of the PBCs Complexity of the VGF and Mwinda funds flow design	Н	Funds flow arrangement (PBC, VGF, result based grants) will be described in the PIM, and the project's staff will be trained on the World Bank's disbursement procedures. PBC will be clearly defined as well as the verification protocol	S

Risk	Risk rating	Risk Mitigating Measures Incorporated into Project Design	Residual Risk
Financial Reporting Delays in submitting consolidated IFRs Delays in submitting PBC reports because of poor quality of inputs from beneficiaries	S	PIUs with qualified and experienced staff; The capacity of the PIU staff will be strengthened to prepare PBC report and management of performance-based grant PBC will be described in the PIM and the capacity of beneficiaries involved in providing inputs will be strengthened	S
External Auditing Weak capacity of the State Audit Inspectorate (Inspection Génerale des Finances) Audit not carried out in compliance with acceptable audit standards, Delays in submitting the audit reports and implementing audit recommendations	S	Audit ToR and short list of firms will be subject to the World Bank's review IFR will be reviewed to enable the project to improve its quality Close monitoring of the audit recommendations during FM supervision.	S
Fraud and Corruption Possibility of circumventing the internal control system with colluding practices and corruption during project execution	Н	Implementation of the action plan resulting from the Functional review of each PIU including risk management Internal audit risk- based approach	Н
Overall FM risk	Н		S

Table 1.5. FM Action Plan

Action	Responsible	Deadline and conditionality
Draft and adopt the PIM including the FM component ands	UCM	By effectiveness date
Draft and adopt result-based grant manual and recruit a fund	UCM/ANSER/O	before any disbursement is
manager for performance-based grants (Mwinda Fund and	CE	made under Component 3.2
OCE)		and 3.3
Appoint the internal auditor	UCM	No later than 6 months after
		the effectiveness date
Draft and adopt a PBC manual for Component 1	UCM/COPIREP	before any disbursement is
		made for PBC eligible
		expenditures
Draft and adopt a Demand Risk Mitigation manual for the VGF	UCM/ARE	before any disbursement is
		made for VGF financing
Recruit an IVA responsible for verifying the data and other	UCM	No later than 4 months after
evidence supporting the achievement of one or more PBCs as		the effectiveness date
set forth in the PBC Manual		
Recruit an independent external auditor (financial audit) in	UCM	No later than 6 months after
line with ToR approved by the Bank		the effectiveness date

14. **Accounting, reporting, budgeting:** The transactions tied to the PBCs can be easily tracked as a separate disbursement category. UCM and CEP-O will prepare quarterly IFRs to be submitted to the World Bank 45 days after the close of each quarter. UCM will compile and prepare the project annual work program and budget based on information gathered from the other implementation agencies. UCM will

be responsible for consolidating the project budget. Budget execution will be monitored through quarterly IFRs.

- 15. Disbursement and flow of funds arrangements. Disbursements will be made in accordance with the World Bank Disbursement Guidelines for Projects, dated February 1, 2017. The Project will disburse based on Statement of Expenditures and report based for PBC activities as they are result oriented. Four DAs in US dollars will be opened at an acceptable Commercial Bank: (a) UCM will manage DA- A, DA-B and DA-D⁷⁰. DA-A will finance the advances to the subaccounts for ANSER ARE and OCE as needed and activities under UCM responsibilities; (b) DA-B will finance the advance to the subaccount for COPIREP for eligible PBC expenditures; (c) DA-D will finance activities related to GCF Grant (both the reimbursable and the regular grant); and (d) DA-C will be managed by CEP-O. The ceiling of the DAs will be stated in the disbursement letter as well as the disbursement methods available to the Recipient (such as Direct payments). The subaccounts will be set up for small expenditures. ANSER, ARE, and OCE will justify the use of funds no later than 15 days after every two months. Most expenditures will be made through direct payments for large contracts (civil work contractors, suppliers of meters and IT equipment, supervision/owner's engineers, transaction advisory firms, and other developing/installing management information systems).
- 16. **Disbursements against PBCs**: A certain amount of the proceeds will be allocated to each PBC which is the amount that the recipient can claim as disbursements against eligible expenditures if the relevant PBC has been achieved and verified. Prior to achieving most of the PBCs, the project would have disbursed against several transactions. Such expenditures will only be considered eligible once the PBCs are fully achieved. In case of a partial achievement of a scalable PBC, expenditures occurred will be eligible up to the concerned PBC achievement rate.
- 17. **Mwinda funds/result-based grants and VGF financing:** A manual will be developed for each (Result-based Grant Manual and Demand Risk Mitigation Manual)) to provide procedures and conditions to be met prior to disbursements of respective IDA and GCF financing.
- 18. **Internal controls and Internal audit.** The internal control arrangements will be detailed in the PIM and the result-based grant, and demand risk mitigation manual. Since UCM has already a financial controller, an independent audit firm will be recruited for this role.
- 19. **Eligible expenses to the PBC and IVA.** Only well-identified expenditures under the Component 1 are tied to the PBC, so as the dedicated account (DA-B). Expenditures incurred prior to the verification of the PBCs are treated as advances to PBC until results are achieved and verified. An IVA with acceptable experience to the Bank will be recruited for the verification of some PBC activities. A verification agent will also be recruited to validate the payment related to VGF. The verification protocols will be defined in the PIM and the Demand Risk Mitigation Manual.
- 20. **Unaudited IFRs and External Audit.** The FM team of the PIUs will be required to prepare an IFR on a quarterly basis. The consolidated IFR reports will be submitted to the World Bank 45 days after the close of each quarter. The project will be subject to annual audits by an independent external auditor that must be submitted not later than June 30 of each fiscal year. The ToR and short list of audit firms will be

⁷⁰ DA-D will be used as the Reflow account for GCF reimbursable grant, as defined in the GCF Financing Agreement and according to procedures outlined in the Demand Risk Mitigation Manual

reviewed by the Bank. The Bank may require separate entity audit reports of some implementation agencies such as ARE, ANSER, COPIREP, OCE, or for Mwinda fund.

- 21. **Implementation Support and Supervision Plan.** FM implementation support missions will be consistent with a risk-based approach. The implementation support missions will take place at a minimum twice per year, with more frequency foreseen during the first 18 months of implementation.
- 22. **Procurement:** Procurement activities will be carried out in accordance with the World Bank's procurement directives. This includes World Bank's procurement regulations for IPF Borrowers (Goods, Works, Non-Consulting and Consulting Services as of July 1, 2016, 4th Edition, as of November 2020 and the provisions stipulated in the Financing Agreement. Further, the Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants, dated October 15, 2006 and revised in January 2011 and as of July 1, 2016 will apply.
- 23. Procurable items under this project included works, goods, non-consultant, and consultants' contracts. Components 1, 2, and 4 would include activities related to (a) consultant services to prepare documents to meet the PBCs requirement and conduct some studies; (b) technical assistances; (c) transactional advisory; (d) works supervision; (e) supply and installation of prepaid meters and remote reading meters for HV, MV and LV customers; (f) supply and installation of information system; (g) rehabilitation and extension of the power distribution network; (h) Construction of a drinking water treatment plant including the construction of reservoirs, supply and installation of water distribution pipes; (i) Supply and assembly of two (02) compact water treatment units; (j) a DBO contract for a water treatment system; (k) Installations of solar street lighting; and (l) PPPs for the Electrification of two Provincial Capitals.
- 24. **PPSD.** As per the requirement of the Procurement Regulations, the PPSD sets out the selection methods to be followed by the Borrower during project implementation in the procurement of goods, works, and non-consulting and consulting services financed by the World Bank. The PPSD describes the overall project operational context, market situations, implementing agencies capacity and possible procurement risks. The main risks are related to the delays in the project implementation, the poor quality of deliveries, GBV, the increase insecurity in the project area and the reputation of the country regarding Fraud and Corruption. A local and regional market exist but has limited financial and technical capacity to implement some high value and complex contracts that the project will be financed. Appropriate and proportional market approach and procurement methods have been identified in the PPSD and the initial procurement plan has been prepared for those activities that are identified at the project negotiation stage. The underlying Procurement Plan will be updated at least annually or as required to reflect the actual project implementation needs and improvements in institutional capacity. The proposed project will use STEP, a planning and tracking system that will provide data on procurement activities, establish benchmarks, monitor delays, and measure procurement performance.
- 25. The procurement activities will be carried out by six implementing agencies: UCM, CEP-O, COPIREP, ARE, ANSER and OCE. A procurement capacity and risk assessment has been carried out by the World Bank for all the implementing agencies. The review included procurement systems such as procurement legislation, procurement organization and staffing, procurement strategies, procurement operations, procurement performance monitoring and measurement, and procurement control and oversight mechanisms. UCM, CEP-O and COPIREP have already implemented IDA projects and have procurement arrangement acceptable to implement the project. ANSER, ARE and OCE are quite new

entities and have not sufficient existing procurement capacity. UCM will carry out the procurement oversight and quality review of ARE, ANSER, OCE and COPIREP, while they are building their capacity.

- 26. The Procurement Risk Assessment and Management System has been finalized and based on the assessment and considering the roles and responsibilities of the agencies responsible for procurement, the procurement risk rating is 'Substantial'. The main risks and mitigation measures are identified in the Table 1.6.
- 27. **Operating Costs**. Operating Costs means the reasonable costs set forth in each Annual Work Plan and Budget for the incremental expenses incurred by the Recipient's implementing entities on account of the Project implementation, monitoring and evaluation, consisting of, among others, vehicle O&M, communication and insurance costs, banking charges, rental expenses, office (and office equipment) maintenance, utilities, document duplication/printing, consumables, travel cost and per diem for Project staff for travel linked to the implementation of the Project, and incremental salaries of contractual staff for the Project(but excluding salaries of officials of the Recipient's civil service).
- 28. **Fiduciary oversight by the World Bank.** The World Bank shall prior review contracts according to prior review thresholds set in the PPSD/Procurement Plan. All contracts not covered under prior review by the World Bank shall be subject to post review during implementation support missions and/or special post review missions, including missions by consultants hired by the World Bank. To avoid doubts, the World Bank may conduct, at any time, independent procurement reviews of all the contracts financed under the credit/grant. Table 1.6 includes the Procurement Action Plan.

Table 1.6. Procurement Action Plan

No.	Issue/Risk	Recommended Mitigation Measures	Owner and Time Frame
1	ANSER, ARE and OCE have no procurement capacity	UCM will carry out the contract on behalf of ANSER, ARE and OCE.	UCM/OCE, ARE, ANSER. Three months after effectiveness.
2	CEP-O and UCM are already implementing many projects financed by the World Bank and other donors. The important workload may result in delays in the procurement process	Procurement additional resources for UCM and CEP-O. One (1) Procurement Specialist for CEP-O and two (2) for UCM	UCM and CEP-O. Three months after the effectiveness
3	COPIREP procurement staff never implement a project under the Bank Regulations. Staff from other implementing agency has limited experience with the Bank procedures.	Training and familiarizing with the World Bank's Procurement Regulations and training on the use of STEP	World Bank/UCM. Six months after effectiveness
4	ARE lacks adequate experience of designing and procuring PPP contracts	A transactional advisor will select to support ARE to prepare the bidding documents for PPP and provide technical assistance during the process	UCM/ARE. One year after effectiveness
5	Local market has limited capacity to implement high value and complex contracts	Design the procurement package and documents to interest the local market and attract international firms.	All Implementation Agencies.

No.	Issue/Risk	Recommended Mitigation Measures	Owner and Time Frame
6	Limited capacity of some	Training on contracts management	World Bank/UCM. Six
	implementing agencies on		months after
	contracts management		effectiveness
7	Poor quality of Biding documents	Involve the competent technical expertise	All Implementation
		to provide technical inputs	Agencies.
8	GBV	Use the Bank Standard Procurement	UCM and CEP-O
		Documents with clauses on GBV	
9	Increase of Insecurity in the project	Described Security issues in procurement	All Implementation
	geographic area	documents and ask the	Agencies.
		Bidders/Consultants to propose a plan to	
		manage it. Increase the Collaboration with	
		Local Authorities	
10	Fraud Corruption	Training on Identification and Mitigation of	World Bank/UCM. Six
		Fraud and Corruption in the Bank-financed	months after
		Operations	effectiveness.

- 29. **Filing and records keeping.** All records pertaining to award of tenders, including bid notification, register pertaining to sale and receipt of bids, bid opening minutes, bid evaluation reports and all correspondence pertaining to bid evaluation, communication sent to/with the World Bank in the process, bid securities, and approval of invitation/evaluation of bids will be retained by respective agencies and uploaded in STEP.
- 30. **Procurement plan.** A Procurement Plan has been prepared for the first 18 months of the project. The Procurement Plan includes the various procurement methods, the estimated costs, prior review requirements, and time frames.

31. The relevant ESS are as follows:

- (a) ESS1 (Assessment and Management of Environmental and Social Risks and Impacts): This standard is relevant as the proposed Project will result in a range of environmental and social risks and impacts, which will need to be mitigated. While these impacts may vary depending on investment type and area, they will be managed during project implementation and irreversible impacts are expected.
- (b) ESS2 (Labor and Working Conditions): This standard is relevant as the proposed Project is expected to hire different categories of workers, including direct workers, contractors, and primary supply workers. Most workers are expected to be from targeted, except for specialized international labor that a contractor may bring in. All these workers will be subject to the requirements of ESS2.
- (c) **ESS3 (Resource Efficiency and Pollution Prevention and Management).** The proposed Project is expected to result in large-scale use of resources, or their pollution. About 12,000 m³ of water will be abstracted from Lake Kivu, and 30,000 m³ of water will be abstracted from the Tabi -Luhule and Talihiya rivers. A detailed water balance will be prepared during implementation.
- (d) ESS4 (Community Health and Safety): Labor influx is expected in some project areas and measures to protect communities from harm will need to be taken. Potential conflicts may arise because of external workers being recruited as opposed to local staff. ESIA/ESMPs should also include measures related to traffic and road safety. The GRM identifies the types of complaints that will be

- managed, the channels of management, as well as methods of recourse if necessary. Furthermore, it identifies potential NGO partners that have been mobilized to provide management of SEA/SH related complaints through a GRM sensitive to SEA/SH incidents.
- (e) ESS5 (Land Acquisition, Restrictions on Land Use and Involuntary Resettlement): Land acquisition is expected during project implementation. The proposed Project's risks and impacts related to land acquisition, restrictions on land use and involuntary resettlement are expected to be both direct and indirect. Exact sites for the project intervention and the scope are not known for all the activities, therefore the proposed Project has prepared a Resettlement Policy Framework to approved by the effective date.
- (f) ESS6 (Biodiversity Conservation and Sustainable Management of Living Natural Resources): Water use and sanitation investments will affect Lake Kivu and sections of rivers (Tshibatshi river, Tabi-Luhule and Talihiya rivers). Environmental and social due diligence including consultation with relevant stakeholders will determine if sections of the lake and the rivers (upstream and downstream) within assessment areas are sites for breeding of aquatic animals, spawning of fish or zoned for any beneficial use. A Biodiversity Management Plan will be prepared as part of the ESIA/ESMP in a manner acceptable to the World Bank. It will fully reflect the mitigation hierarchy, long-term biodiversity monitoring and evaluation program, with capacity-building plan and budget estimates committed.
- (g) ESS8 (Cultural Heritage): The standard is relevant since the activities of end-borrowers and contractors may involve construction works and excavations or other activities that may have impacts on the cultural sensitivities of communities. A chance find procedure has been developed and incorporated into the ESMF.
- (h) ESS10 (Stakeholder Engagement and Information Disclosure). A SEP has been developed prior to appraisal to ensure that the views and interests of all stakeholders including the population in the surrounding of implementing zones, are taken into consideration throughout the proposed Project. The SEP includes a GRM for all stakeholders, which considers disclosure and consultation processes before and during implementation, a budget for its implementation, as well as roles and responsibilities of the various actors and stakeholders.
- 32. **Institutional capacity:** The project will be anchored in MRHE. MRHE's implementing unit—UCM—will lead the implementation with UCM taking the overall project coordination role. UCM has experience implementing Bank-financed energy projects including the IDA-financed EASE project (P156208) and the IDA-financed energy subcomponent of the Kin Elenda project (P171141). Similarly, CEP-O under REGIDESO implemented the IDA-financed Urban Water Supply Project (PEMU, P091092) from 2009 to June 2021 and is implementing the water component of the Kin Elenda project (P171141). Other key stakeholders include COPIREP concessionaires/developers, private electricity and water operators, ARE, ANSER, OCE, REGIDESO, and SNEL. An MoU between the implementing agencies—UCM, CEP-O, COPIREP, ANSER, ARE and OCE—will be prepared and signed by effectiveness (of OCE is not fully established, it will sign an MoU with UCM after effectiveness).
- 33. The following capacity-building approach has been agreed: (a) a dedicated ESF budget will be earmarked, under Subcomponent 2.4 to enable adequate ESS and PS supervision, provide private operators with training and assistance on ESF, provide holistic assistance to GBV survivors, and facilitate activation of GRM committees to be established in many provincial capitals and (b) additional capacity

needs assessment of the above listed entities, including the Mwinda Fund Manager, ANSER, OCE, the private electricity and water operators, will be conducted, and a capacity-building plan developed no later than 3 months from the Effective Date. The relevant PSs are included in the Appraisal ESRS and apply to Subcomponent 3.1.

- 34. **Gender Diagnostic and Action Plan:**⁷¹ The project activities, in alignment with the World Bank Gender Strategy, and as agreed with the government, will be articulated in a Gender Action Plan. These include (a) increasing access of women to services and to vocational and business trainings, (b) outreach and mentoring activities that propel women to jobs and support career advancement, (c) social mobilization for more women in citizen engagement/community platforms, (d) recruitment of local experts to support the implementation of gender activities, and (e) monitoring.
- 35. **DRC's gender equality index is among the worst in the world, and GBV is high**. In all dimensions, Congolese women experience more significant difficulties than men to fully enjoy opportunities and to exit poverty. The WEF⁷² ranks DRC at the 151st position overall out of 156 countries, and with a score 0.576. 52 percent of women aged 15-49 have experienced physical violence while 27 percent have experienced sexual violence. Rates of intimate partner violence are higher: 57 percent of married women have experienced domestic violence.⁷³
- 36. The water and energy sectors show important gender gaps that inhibit women's freedom and potential. In DRC, 25 percent of households are female headed:⁷⁴ 13.3 and 97.5 percent of female-headed households use polluting fuel for lighting and cooking respectively, in comparison to 9.3 and 95.1 percent for male-headed households⁷⁵ exacerbating health and social issues. 85 percent of the times women and girls are in charge of collecting water (including a 67 percent of women under the age of 18), putting them at GBV risks⁷⁶ and inhibiting their opportunities to access education and/or jobs due to the time burden.
- 37. Women have less opportunities to access technical jobs, including for electricity and water sectors. Women have a lower tertiary enrollment rate than men (5 percent vs. 8 percent) and a lower labor participation (61 percent vs. 66 percent). Only 9 percent of female workers have a salary (vs. 28 percent for men). Women represent less than a fifth of the permanent full-time workers. Only 11 percent of women that attend to superior education are enrolled in a STEM career. Most of female students at universities study business administration, law and health and welfare careers (22 and 24 percent respectively). A 2017 assessment, indicates that women represent 1.7 percent of all students in electrician courses at the National Institute for Professional/Vocational Training (Institut National de Préparation Professionnelle).

⁷³ GBV rates vary across provinces; they are particularly high in Kasai Occidental and Kasai Oriental where the prevalence of physical and sexual violence is respectively of 30.5 percent and 57.4 percent. The main drivers of GBV include social tolerance to violence against women, poverty, and the lack of a protective legal framework. DRC has the highest level of acceptance of intimate partner violence in the region: 74.8 percent of women and 59.5 percent of men aged 15-49 approve the practice of husbands beating their wives to discipline them.

⁷¹ A detailed analysis is available in reference documentation linked to this PAD and available in World Bank records.

⁷² (WEF, 2021).

⁷⁴ (Ministère du Plan et Suivi de la Mise en œuvre de la Révolution de la Modernité (MPSMRM), 2014).

⁷⁵ https://www.unicef.org/drcongo/media/3646/file/COD-MICS-Palu-2018.pdf.

⁷⁶ https://gbvguidelines.org/wp/wp-content/uploads/2015/09/TAG-wash-08_26_2015.pdf.

⁷⁷ Enterprise Surveys www.enterprisesurveys.org, The World Bank.

⁷⁸ (JICA, 2017)

- 38. Female employees are underrepresented in the water and energy sector, in particular as engineers. Based on administrative data (2021), SNEL has only 7 percent of female workers (400 out of 5,593 employees), of which only 5.5 percent (22 out of 400 women) are engineers and less than 2 percent (7 women) hold a command position. Only one woman holds a management position. At REGIDESO: 21 percent of workers are women (692 women out of 3,254 employees), and less than 1 percent are engineers (4 women). There are no women holding a managerial position. These occur along all phases of the career lifecycle, from attracting, to recruiting, retaining, and advancing females in the water and electricity sectors.⁷⁹
- 39. DRC's Female entrepreneurship is low: Only 15.1 percent of the firm has female participation in ownership, this number is almost half of the Sub-Saharan Africa region (27.9 percent). Firms with majority female ownership reach about 8 percent (13.2 percent for the region). Only about 1 in 10 top managers in a Congolese company is represented by a woman.

The Project addresses several identified gender gaps and indicators:80 40.

- (a) Increase women access to electricity and water: Within selected project areas, special measures will target female-headed households to remove barriers to gain access to electricity and water services. Social mobilization and consultation activities will be tailored to the needs of women, specifically female-headed households, so that they are reached and not excluded to access the new service. (Indicators: People provided with new or improved electricity service – Female; People provided with access to at least basic water supply service- out of which female)
- (b) Improve women's employability, access to jobs and income generating opportunities: Project training and capacity-building activities that will improve the capacity and skill of personnel should consider the participation of women.81 Activities to attract, retain, and promote will be implemented. The project includes the implementation of training activities apply innovative approaches to attract and train women in technical vocational subjects such as electrician education, plumbing, O&M of managing public WASH facilities, including basic entrepreneurship training (Indicators: Public WASH facilities with lighting and basic access to WASH and a private O&M arrangement (newly constructed and rehabilitated) – managed by female entrepreneurs; share of newly created positions/jobs within electricity and water entities that are taken by women (public and private); technical positions for females)
- (c) Increase women's access to information and voice: beneficiary feedback surveys will be implemented to understand the satisfaction of citizens with the engagement process: the level of access to information, opportunities for feedback, and the satisfaction with the resolution of grievances (including GBV). These surveys will specifically target and report on female beneficiaries to ensure that approaches can be improved during the seven-year implementation. (Indicator: Share of beneficiaries in the project areas that are satisfied with information access, feedback opportunities and grievance resolution (including GBV) among female beneficiaries).

⁷⁹ See also World Bank (2019). *Breaking the Barriers: Women in Water Utilities*. Washington DC, World Bank.

⁸⁰ Some are included in the Results framework; the majority will be included in the PIM.



ANNEX 2: PBC and Project Expenditure Composition Table

	Of Which, PBC-Based and Input-Based	Description and Amount of Expenditures		
Subcomponent		Procurable Inputs	Non-Procurable Inputs	
1.1 SNEL Governance Improvement (US\$11 million)	PBC 1: US\$3.0 million 1.1: US\$0.5 million 1.2: US\$2.5 million	 Consultant services (design of tariff methodology/model and application to SNEL, initial support to help ARE analyze tariff requests, individual experts from other regulators) (US\$0.5 million) Consultant services for database on tariffication (ARE), M&E database on energy projects (MRHE Cabinet) (US\$0.5 million) Purchase of vehicles and equipment for COPIREP, MRHE Cabinet Office, MoEc Cabinet Office (US\$0.75 million) 	Training/study tours on economic regulation and PPP for MRHE Cabinet, Training on economic regulation for MoEc (US\$0.25 million) Operational costs for ARE (US\$1.0 million)	
	PBC 2: US\$3.5 million 2.1: US\$0.5 million 2.2: US\$0.5 million 2.3: US\$0.5 million 2.4: US\$0.5 million 2.5: US\$0.5 million 2.5: US\$0.5 million 2.6: US\$0.5 million 2.7: US\$0.5 million	 Consulting services for drafting right holders decree and assessing list of right holders for SNEL and REGIDESO (US\$0.1 million) Consultancy services for consumer audit of national budget government agencies of REGIDESO (outside Kinshasa) and SNEL (nation-wide) (US\$1.4 million) Purchase of equipment for COPIREP, Cabinet Office of MoF, and Cabinet Office of Ministry of Budget (US\$2.0 million) 		
	Non-PBC Input-based: US\$4.5 million	 Consulting services for development and monitoring of the performance contract between the GoDRC and SNEL (US\$1.0 million). Consulting services for SNEL Restructuring Roadmap, public asset inventories, Board and HR optimization, and communication campaigns (US\$1.0 million) Consulting services and goods for Official Institutions building efficiency study and pilot (for example, rooftop solar systems (US\$0.5 million) Consultancy services for COPIREP, including for PPP, state-of-the art metering, internal audit, accounting software (US\$0.5 million) 	COPIREP operational costs for implementation of PBC 1,2,3 (US\$1.5 million)	

	of Which, PBC-Based and Input-Based	Description and Amount of Expenditures		
Subcomponent		Procurable Inputs	Non-Procurable Inputs	
Subcomponent	PBC 3: US\$30 million	Goods (including consulting services) for development, installation, training on	Capitalization of the	
1.2 SNEL	3.1: US\$5 million	MIS, including digitalizing customer registry and electronic payment platforms	O&M fund (US\$2.0	
Performance	3.2: US\$5 million	(US\$6 million)	million)	
Improvement	3.3: US\$5 million	 Goods – procurement for LV meters (first contract) (US\$10 million) 		
(US\$37 million)	3.4: US\$5 million	• Consulting services to establish SNEL Distribution Network O&M Fund, prepare		
	3.5: US\$5 million	O&M contract with private sector, and network zoning (US\$0.5 million)		
	3.6: US\$5 million	O&M contract(s) for targeted parts of SNEL distribution network in Kinshasa (PPP miles) (USC4 million)		
		pilot) (US\$1 million)		
		Goods - procurement for LV meters (second contract) (US\$10 million) (US\$0.5 million)		
		IVA costs (US\$0.5 million)		
	Non-PBC Input-based:	Consultancy services for PIP for SNEL, debt restructuring, improve procurement		
	US\$7 million	and accounting processes (US\$1.0 million)		
		 Procurement of new HV meters and repair services for existing HV and large LV customers (US\$1.0 million) 		
		Metering diagnostics for Official Institutions and MV customers; supply,		
		installation of pre-paid MV meters and repair (US\$2 million)		
		• IT system diagnostics; installation of PRACDIS management software and other		
		applications (for HV and MV) (US\$2 million)		
		Goods, equipment, and consulting services to improve call center operations;		
		equipment for SNEL Inspection teams (US\$1.0 million)		

	Of Which, PBC-Based and Input-Based	Description and Amount of Expenditures		
Subcomponent		Procurable Inputs	Non-Procurable Inputs	
Subcomponent 1.3 REGIDESO Governance and Performance Improvement (US\$18 million)	PBC 4: US\$16 million 4.1 US\$2 million 4.2 US\$5 million 4.3 US\$5 million 4.4 US\$2 million 4.5 US\$2 million	 Consultancy services to develop REGIDESO Restructuring Action Plan, support consultation process and expenditures for communication and outreach campaigns including on the Water Law (US\$1.0 million) Equipment and vehicles and software (customer registries, billing and accounting system, asset management systems) for two autonomous water utilities (US\$1.5 million) Consulting services for public water supply asset inventories and valuation in Nord Kivu, Kasai Central and Kasai to transfer water supply assets to provincial authorities in Nord Kivu and Kasai Central (US\$2.5 million) Consulting and legal services during REGIDESO restructuring implementation, a.o. for the creation of Regional Directorates, the establishment of the two autonomous utilities (filiales), debt restructuring, the preparation of the PIP, the preparation of the affermages contracts, the transfer of assets and staff from REGIDESO to the autonomous utilities ("filiales") (US\$1.5 million) Technical Assistance service contracts to support the utilities in the implementation of the PIP measures during at least 3 years (including a.o. NRW diagnostics, District Metering Area-set-up, training on NRW, implementation of financial and commercial improvement measures (US\$4.5 million) Goods, equipment, minor works to implement NRW program and PIP measures for two utilities (bulk meters, household water meters, SCADA installation, leak 	COPIREP organized workshops for Subcomponent 1.3 on restructuring plan (US\$0.5 million)	
	PBC 5 US\$2.0 million PBC 5.1: US\$0.5 million PBC 5.2: US\$0.5 million PBC 5.3: US\$0.5 million PBC 5.4: US\$0.5 million	 detection equipment) (US\$4.5 million) Consumer audit for provincial government agencies in Nord Kivu and Kasai Central and communications campaign (US\$0.5 million) Water meters for provincial government agencies (US\$0.5 million) Verification agency costs for PBC 4 and 5 (US\$0.5 million) Consulting services to carry out tariff study and prepare application for adjustment of tariffs for the autonomous provincial and regional utilities in Nord Kivu and Kasai Central (US\$0.5 million) 		

ANNEX 3: Demand Risk Mitigation Instrument for Subcomponent 3.1

- 1. Funding has been secured from the GCF in the form of a reimbursable grant to provide financing for demand risk mitigation in the early years of operations for the competitively selected private renewable energy mini-grid project developers (or Special Purpose Vehicles). The reimbursable grant will provide the mitigation of critical cashflow risks related to private sector investment for renewable energy off-grid/mini-grid projects, particularly demand risk and revenue uncertainty in the early years of operations, in accordance with the rules established under the Demand Risk Mitigation Manual.
- 2. The renewable energy private sector project developers will be required to submit a business plan during the bidding and selection process. This business plan will indicate the project financial structure and projected cashflows to support mini-grid operations, debt repayment, and equity returns (equity internal rate of return). The reimbursable grant will be sized for each project based on the projected cashflows submitted as part of the business plan and be available for a pre-agreed number of years in the initial stage of operations during which demand/revenues are ramping up and downside fluctuations may not be sufficient for project financial viability. In the event of a revenue shortfall vis-a-vis the business plan projections, the private developer will submit a claim to ARE, as the implementing agency of Subcomponent 3.1, under the VGF Agreement for the difference in the revenues. The verification agent will assess the validity of this claim in terms of coverage, amount, and timing and submit a verification to the World Bank (as the Accredited Entity for GCF). The World Bank will then disburse the funds in accordance with the GCF Financing Agreement. Once the project passes the initial stage of operations and meets or exceeds financial viability, the private developer will be required to reimburse the funds to the World Bank. Figure 3.1 shows the indicative structure of the reimbursable grant.

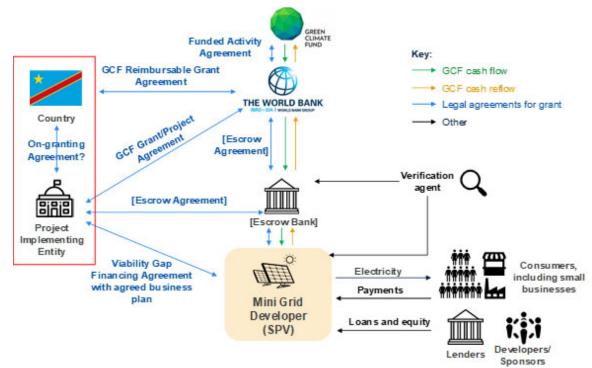


Figure 3.1. GCF Reimbursable Grant for Private Sector Developed Mini-Grid Tenders

• Water: Kananga, Butembo, Beni



ANNEX 4: Map of Democratic Republic of Congo CENTRAL AFRICAN REPUBLIC SOUTH SUDAN CAMEROON Gbadolite @ [m] BAS-UELE HAUT-UELE SELECTED CITIES AND TOWNS Buta Kunguo ⓐlsiro o Mungbere PROVINCE CAPITALS SUD-UBANGI Akula Lisala Wambao NATIONAL CAPITALS MONGALA UGANDA PROVINCE BOUNDARIES o Bongandanga Banalia o o Basankusu TSHOPO Bafwasende o INTERNATIONAL BOUNDARIES ÉQUATEUR WW Butembo o Mbandaka Boende REP. OF o Ubundu NORD GABON Lubutu Bikoro TSHUAPA Lake CONGO lkelao Victoria EnWS Pf Inongo Kutuo NDOMBE **En S Pf** Kindu ⊙ Bandundu o Oshwe SUD-KIVU Uvira KINSHASA Lodja o © Bagata SANKURU ATLANTIC * KINSHASA OCEAN o Bulungu Lulimba Lusambo KASAÏ CENTRAL Olnkisi
MbanzaNgungu Kikwito Lueboo KASAÏo Kongolo KWILU TANZANIA (ANGOLA) LOMAMI ORIENTAL Matadi Kananga Kalemie o Mbuji-Tshikapa⊚ TANGANYIKA KWANGO Pf Mayi KASAÏ-CENTRAL Mwel o Manono COMPONENT 1 — POWER AND WATER UTILITY GOVERNANCE AND PERFORMANCE · Kinshasa, Nord-Kivu, Kasaï-Central HAUT-COMPONENT 2 — INSTITUTION STRENGTHENING AND DEVELOPMENT SUPPORT LOMAMI o Kapanga • Kinshasa, Nord-Kivu, Kasaï-Central, Ituri, Sud-Kivu (optional) Kamina⊙ COMPONENT 3 - PRIVATE SECTOR-BASED ACCESS EXPANSION Kilwa 🔇 Energy: Sandoa o HAUT-ZAMBIA - Bottom-up approach: Kwilu, Sud-Kivu, Ituri, Nord-Kivu, Lomami, Kinshasa, LUALABA KATANGA Kasaï-Central, Kasaï-Oriental, Kasaï, Kongo-Central Kolwezi 🍮 o Kasomeno - Top-down approach: Kasaï-Central, Kasaï-Oriental, Sud-Ubangi, Mongala, Haut-Uélé · Water: Goma, Butembo, Beni ⊚ Lubum bashi COMPONENT 4 - PUBLIC SECTOR-BASED ACCESS EXPANSION ANGOLA IBRD 46265 | MARCH 2022 • Electrification and WASH provision for public facilities: Kwilu, Sud-Kivu, Ituri, Nord-Kivu, Lomami, Kasaï-Central, Kasaï-Oriental, Kasaï ZAMBIA • Energy: Kinshasa, Gbadolite information shown on this map do not imply, on the part of the World Bank Group, any judgment on the legal status of any territory, prany endorsement or acceptance of such boundaries. · Sanitation: Butembo, Goma

Page 100 of 100