



Project Information Document (PID)

Concept Stage | Date Prepared/Updated: 30-Nov-2020 | Report No: PIDC28818



BASIC INFORMATION

A. Basic Project Data

Country Congo, Democratic Republic of	Project ID P173506	Parent Project ID (if any)	Project Name DRC Electricity & Water Access and Governance Project (P173506)
Region AFRICA EAST	Estimated Appraisal Date Oct 04, 2021	Estimated Board Date Dec 07, 2021	Practice Area (Lead) Energy & Extractives
Financing Instrument Investment Project Financing	Borrower(s) DEMOCRATIC REPUBLIC OF CONGO	Implementing Agency Ministère des Ressources Hydrauliques et de l'Electricité (MHRE)	

Proposed Development Objective(s)

The development development objective of the project is to (i) expand access to renewable-based electricity, water and sanitation in targeted cities, (ii) improve SNEL operational performance, and (iii) improve water service operations in Goma and Kananga through decentralization.

PROJECT FINANCING DATA (US\$, Millions)

SUMMARY

Total Project Cost	765.00
Total Financing	765.00
of which IBRD/IDA	500.00
Financing Gap	0.00

DETAILS

Private Sector Investors/Shareholders

Equity	Amount	Debt	Amount
Government Contribution	515.00		
Government Resources	15.00		
IDA (Credit/Grant)	500.00		



Non-Government Contributions	250.00		
Private Sector Equity	200.00		
IFC Equity	50.00		
Total	765.00		0.00

Payment/Security Guarantee

Total		0.00
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Environmental and Social Risk Classification

High

Concept Review Decision

Track II-The review did authorize the preparation to continue

Other Decision (as needed)

B. Introduction and Context

Country Context

1. The Democratic Republic of Congo (DRC), the largest in size and third most populous country in Sub-Saharan Africa, is rich in natural resources. With a total surface area of about 234 million hectares, DRC’s size is equivalent to that of Western Europe, and is divided into 26 provinces (from 11 in 2015). The population, estimated at 80 million inhabitants, is the third largest in Africa after Nigeria and Ethiopia. The country has vast natural resources, including the world’s third largest hydropower potential (behind China and Russia), the world’s second largest tropical forest area, and mineral endowments that fare among the richest and most diverse in the world, including vast deposits of copper, cobalt, coltan, diamonds, gold, tin, iron ore, zinc, and oil.
2. Yet the country is among the poorest in the world and experiences a humanitarian crisis. About 73 percent or 60 million people live below the poverty line of less than US\$1.90 a day, greater than the Sub-Saharan African average. Life expectancy slightly exceeds 60 years (179th over 189 countries, HDI for 2018). Women have less access to education and paid jobs than men, and gender-based violence is high. The country has gone through repeated epidemics, including 11 Ebola outbreaks in 40 years (the last three outbreaks over the past two years), 15 million people in need of humanitarian aid, and 5 million displaced people. Enduring political instability and cycles of conflict—with conflict and violence continuing in parts of the country (mainly the East) twenty years after the “end” of the war and the presence of more than 140 armed groups—have led to weak governance and institutions, at central and decentralized levels, and bred corruption.



3. DRC's formal economy remains highly dependent on mining production and evolves with commodity prices. Mining products (mainly copper and cobalt) accounted for more than 90 percent of total exports and over 25 percent of GDP over the last five years. In that context, economic activity in the DRC moderated in 2019 following the decline in prices of the country's major export products. Real GDP growth reached 4.5 percent in 2019, after peaking at 5.8 percent in 2018, as the expansion in mining production slowed down from 16.9 percent in 2018 to 5.4 percent in 2019, mostly on the back of the decline in cobalt production. The pace of growth remains significantly below the average growth rate of 7.7 percent experienced by the country during the commodity price super-cycle between 2010 and 2015.
4. The poor state of infrastructure is a major constraint on sustainable and inclusive growth in the country. Despite some improvements, the country ranks at the bottom in almost all measures of infrastructure coverage, even by Sub-Saharan African standards. Gaps are particularly large in road transport, internet connectivity, electricity supply, and access to improved water and sanitation services. There are only 58,129 km of national roads, of which 5 percent are paved. 34 percent of households live less than 5 km from the nearest road. The Internet penetration rate is only 1.7 users per 100 inhabitants, and the country is behind most regional counterparts in access to fixed or mobile phone services. These major infrastructure gaps, combined with poor governance, aggravate geographical isolation and socio-economic inequalities across provinces and between urban and rural areas. They also represent a major barrier to doing business, and add significant costs to any large public infrastructure project
5. The Covid-19 pandemic represents an unprecedented challenge and climate change poses an additional threat. The pandemic has already disrupted millions of people's livelihoods, with disproportionate impact on poor households and small and informal businesses. DRC could face weaker growth and the diversion of public resources away from ongoing development efforts. Climate change trends consistently show an increase in daily mean temperature between 1.5 and 2.5°C warmer by 2050. This would lead to more frequent flooding, increased erosion and prolonged dry spells, which would pose challenges in key sectors—such as agriculture, water resources, infrastructure, and human health—and will compound existing risks from conflict and violence.

Sectoral and Institutional Context

6. Despite huge resource potential, the development of both the DRC energy and water supply & sanitation sectors is characterized by very low access, weak regulatory and implementing institutions, and limited sector investment/financing. The country's abundant water resources—including a total hydropower potential of 100 Gigawatt (GW)—and significant solar potential could yield transformative outputs for economic and human capital development. Yet, to date, only 2.6 percent of the hydropower potential is exploited out of which only a little more than half is operational. DRC is, in fact, one of the top 10 least electrified countries in the world, with only 19 percent of the population having access. Similarly, the portion of the population with access to private/at home water supply connections or water sources has dropped dramatically from around 72 percent (MICS 2010) to below 52 percent (MICS 2018). An Electricity Law and Water Law liberalizing/decentralizing the power and water sectors were enacted six and five years ago, respectively, but key institutional provisions of the Law that are needed for private sector participation and further decentralization remain unimplemented. The new Government has created momentum for these important sector developments. The World Bank, complementing its past engagement and building on the ongoing investment lending operation, proposes to support the Government in significantly scaling up electricity and water supply access in line with the private sector engagement and decentralization made possible under these important Laws. The paragraphs below highlight the key energy and water sector challenges, describe the Government of DRC's response and the development community engagement and provide an overview of the proposed project.



Energy Sector challenges

7. SNEL, the vertically integrated state-owned power utility, has been unable to provide reliable power supply or improve stagnating access figures due to its poor financial health, operational inefficiencies, and governance issues. SNEL had been the monopoly operator in the DRC until 2014 and remains, by far, the largest operator. SNEL supplies areas of several DRC's biggest cities through (i) two hydro-powered interconnected grids (the Western-Southern grid interconnected by a high-voltage direct current transmission line, and the Eastern interconnected grid which connects the Ruzizi powerplant to Bukavu and Goma grids); (ii) five hydro-powered decentralized grids; (iii) small thermal-powered grids (less than 1 MW on average), most of which are not operational. SNEL owns 98 percent of the DRC power installed capacity and services about 700,000 customers, with 97 percent of them located in the interconnected Western-Southern grids. SNEL has been operating with tariffs below cost-recovery levels, disadvantageous power sale agreements with mining industries (its highest revenue customer segment), significant payment arrears from the government (estimated at about US\$110 million in March 2020), low bill collection from low voltage customers (51%), significant technical losses (above 35%), and huge debts (close to US\$2 billion). With such governance, operational, and financial challenges, SNEL has been unable to make adequate capital and operational investments to maintain and/or expand the network.
8. Private sector involvement in access expansion, though evolving, remains limited and constrained by high country risk, incomplete regulatory framework, limited commercial financing, and absent risk mitigation instruments. There are five major private mini-grid operators, for a total under 20MW of installed capacity, supplying cities in three provinces: North Kivu (Virunga SARL, SOCODEE, Nuru, Energie du Nord Kivu), Kasai (Electricité Du Congo). In addition, over 17 off grid solar (OGS) companies are registered in the DRC; of which a handful of companies, including Congolese companies such as Altech, GoShop and Weast Energie, or international companies such as BBOXX and Orange Energie, have sold tens of thousands of Verasol certified solar home systems across almost all provinces, but mainly in Kinshasa and the Kivus. Despite the challenging investment climate, mini grids and off-grid solar systems deployment are emerging as a private sector-led solution to provide reliable access to unserved or underserved cities.
9. As a result, access to electricity in the DRC is abysmally low with significant disparities across provinces. No more than 19 percent of the DRC's population has access to electricity according to household surveys reviewed for the 2019 Tracking SDG7 report, while official government statistics place that rate at 9 percent. This makes the country the second largest population in the world without access to electricity. The DRC's access rate remains far below Sub-Saharan Africa's average rate of 42 percent. The average access rate masks differences between provinces. Kinshasa, the capital city-province, stands out with an access rate around 44 percent. It is followed by the Haut Katanga, the Kongo Central, the South Kivu Provinces with access rates between 10 and 30%. Besides these four provinces, the remaining 22 provinces (including many of the CMU targeted provinces¹) have an access rate below 5%. Nonetheless, it should be noted that the few households and businesses with electricity connections receive unreliable service, with daily load shedding in most areas of Kinshasa. Estimates suggest that if business as usual continues, about 84 million people—80% of the population—will still live without access to electricity by 2030.
10. The Covid-19 pandemic is severely worsening SNEL's already precarious financial and operational situation and negatively impacting private mini-grid operators and OGS companies. Before the Covid-19 outbreak, SNEL had been struggling to service its exceedingly large debt burden (about US\$2 billion) and was operating with

¹ Ituri, Kasai, Kasai Centrale, Kasai Orientale, Kinshasa, Kongo Central, Kwilu, Lomami, Nord Kivu, and Sud Kivu. See section on CPF for more details



Government payment arrears, below cost-recovery tariffs, challenges in bill collection and a dilapidated distribution network. To address the spread of Covid-19 and associated socio-economic impacts, the Government decided that low voltage customers (households, health centers, hospitals, SMEs, schools and universities) will not pay their March and April 2020 electricity bills. This represents an estimated revenue shortfall of about US\$34 million for the two months, or about 37% of the average total monthly revenues of US\$45 million revenues collected from all customers. In addition, the implementation of internal confinement measures and global economic contraction has led to a slowdown of commercial and industrial activities, leading to lower electricity consumption and revenues from SNEL's high consuming customers (medium and high voltage) such as mining enterprises and big businesses, that currently represent over half of SNEL's revenues. With monthly cash inflows currently not allowing SNEL to meet its debt service obligations and operational expenditures, a two-month reduction in cash inflows will force SNEL to incur penalties, contract short term debt, and/or reduce needed expenditures. Besides, private mini-grid operators and OGS companies have experienced lower collection of revenues. In addition, OGS companies face supply chain disruptions resulting in product shortage.

Water Sector challenges

11. In DRC urban areas, where approximately 34 percent of the DRC total population live², access to improved water supply was estimated at over 80 percent in the 1990s and has continued to rise in the decades since. However, most of these gains are in shared public water sources³ and the portion of the population with access to private/at home connections or water sources has dropped dramatically from around 72 percent (MICS 2010) to below 52 percent (MICS 2018). This decline is due partly to the high rate of urban growth, but also due to declining size of networks in certain cities (i.e., connections and networks being abandoned). More specifically, access to improved water sources in Nord Kivu and Kasai Central is 68.5 percent and 21.1 percent respectively, according to the latest MICS study (MICS 2018). When it comes to measuring access to basic water services⁴, these figures fall to 34.3 percent and 8.5 for Nord Kivu and Kasai Central respectively, far from the target set by the government (70 percent by 2030). Access to basic water service is significantly constrained by the poor and/or unreliable electricity service in cities in Nord Kivu (Goma, Butembo, Beni) and Kasai Central (Kananga).
12. REGIDESO is the sole public service provider in urban areas across DRC. REGIDESO is responsible for operation of facilities, which are owned by the State. Since the 1990s, the operational performance of REGIDESO has declined considerably due to war, lack of investment and maintenance, and suspension of aid. Nearly 40 percent of water produced is lost. In 2012, the State and REGIDESO signed a Performance Contract to improve the financial and operational performance of REGIDESO, with a provision on the government commitment to pay arrears to REGIDESO. Neither of the parties respected the 5-year contract, and the state arrears have continued to increase, reaching almost \$ 176 million in March 2020. Thus, quality of the water service provision suffers from insufficient public financial resources allocated to the sector. Between 2010 and 2015, only around US\$280.5 million were invested in REGIDESO's activities in the urban sector, with about 1% coming from the government. This amount was far below the sector needs, which were estimated at over US\$1 billion, to reach a water access of 70% during the same period. In the urban water sector, the funding and service bias resulting from the incomplete rehabilitation of REGIDESO is the most pressing institutional problem. While REGIDESO has successfully expanded access in core cities, the population has expanded even faster, service quality remains unsatisfactory and full cost

² World Bank (2017) : République Démocratique du Congo - Revue de la Gestion des Dépenses Publiques et de la Responsabilisation Financière - Accroître l'Efficacité et l'Efficiency du Secteur Public pour Promouvoir la Croissance et le Développement (September 2017)

³ Shared public water sources include standpipes, improved springs and water point which regularly serves 25 or more people daily for at least 60 days out of the year

⁴ Proportion of the population in households with access to basic water services



recovery has remained elusive. The utility's strategy to prioritize investments in core cities to create profit centers that could then finance service expansion in more marginal urban areas has not yet succeeded and has instead created a structural bias against peri-urban zones and minor cities.

13. In Nord Kivu, the provincial government facilitated the involvement of private sector in water supply, in an effort to address service gaps. With financing from USAID, UE and DFID, a pilot was implemented to allow water supply by NGOs/private operators. Today, there are two private water supply operators in Goma (Congo Maji SA and Yme Jibu) and a couple of less elaborated local organizations in Butembo. Yme Jibu is a local private company registered in 2017. It supplies potable drinking water to some areas in Goma (Mugunga, Lac Vert, parts of Kyeshero and Ndosho), with daily water production varying between 800 and 600 m³/day. The PPP arrangement between Yme Jibu and the City Hall of Goma was formalized in the second half of 2019, with the signature of a 25-year delegated management contract with the Goma Town Hall. This contract enables Yme Jibu to operate water infrastructures owned by the City of Goma. Congo Maji sarl was created by Mercy Corps (early 2018) as part of the IMAGINE program, funded by DFID, in order to ensure viable water service delivery upon completion of infrastructure works for improving a noticeable part of the Goma Water System. The contract between Congo Maji sarl and REGIDESOS which was signed in August 2018, can be labeled as a traditional service contract to outsource the commercial and technical (O&M) management function of standpipes. Hence, the primary focus is on standpipe commercial management and bill collection. The contract outsources only a cluster of standpipes (existing 49 plus 51 new standpipes) to the private operator.
14. Climate change will exacerbate energy and water challenges, making the response to the country's pressing development needs even harder. The projected climate change⁵ trends of increased extreme rainfall events and increased temperatures, will worsen the already degraded natural environment. Major expected climate change vulnerabilities in the water and energy sectors include: (i) seriously damaged water treatment infrastructure, (ii) decreased water quality, (iii) damaged power production and transmission infrastructure in erosive areas, and (iv) increased prevalence of water-borne and vector-borne diseases (e.g. cholera and malaria). This would make access to basic services, such as safe drinking water and electricity, even more challenging. With very limited capacity to adapt, the livelihood and income generating activities of DRC's households will be severely impacted.

Government response

15. Recognizing the major investment needs to meet the challenge of accelerating access, the GoDRC has taken initial steps to improve the legal framework and enable private sector involvement and/or decentralization, but more needs to be done. In 2014, the GoDRC approved and the President signed a new Electricity Law in an effort to make the power sector an effective driver of economic growth, increase electricity access, and attract private sector investments. Among others, the law removes SNEL's monopoly status, promotes public-private partnerships, delegates some authority to provincial governments and calls for the creation of an electricity regulatory agency (*Autorité de Régulation de l'Électricité*, ARE) and a rural and peri-urban electrification agency (*Agence Nationale des Services Énergétiques en milieu Rural*, ANSER). Similarly, in the water sector, the GoDRC enacted the Water Law in 2015. While following the 2006 constitution by centralizing water and sanitation policy making and regulation, the Law creates the legal framework for decentralizing the sector by delegating decision making for water supply and sanitation services to provincial authorities, who are then empowered to enter into contractual agreements for service delivery with either REGIDESO or private sector providers. The implementation of the Water Law calls for the creation of a national economic regulator for water supply service provision

⁵ African Development Bank. DRC National Climate Change Profile. October 2018



(*Autorité de Régulation du Service Public de l'Eau - ARSPE*), a national water resources management bureau (*Office Congolais de l'Eau - OCE*), and provincial level water supply offices (*régies provinciales*). Nonetheless, after five years, the water sector institutions are not yet set up, and the management of the power sector institutions were recently appointed (in August 2020).

16. The Ministry of Water Resources and Electricity (*Ministère des Ressources Hydrauliques et de l'Electricité, MRHE*) and the Ministry of Portfolio (*Ministère du Portefeuille, MP*) are the key policy-making institutions for both the water supply and energy sectors. The MRHE is responsible for developing energy and water sector policies, planning access scale up, and overseeing program implementation. To strengthen its oversight and coordination roles, the MRHE established in October 2015 a new unit, UCM (*Unité de Coordination et de Management des Projets du Ministère*), dedicated to managing all donor-financed energy projects, and a similar unit in the water sector (CEP-O). It should be noted that SNEL, a key power sector program implementing arm and REGIDESO, the main water operator in urban areas, do not report to the MRHE but rather to the Ministry of Portfolio (MP). The MP has been leading the reform of state-owned enterprises (including SNEL and REGIDESO), through its key technical agency COPIREP (*Comité de Pilotage de la Réforme des Entreprises du Portefeuille*). Past SNEL and REGIDESO reform initiatives included performance contracts between the State and SNEL / REGIDESO and the delivery of technical assistance via international consultant firms. However, the performance contract led to limited results, failing in sustainably reducing Government arrears from SNEL and REGIDESO and the respective SNEL recovery plan and REGIDESO decentralization plan remains largely unimplemented, in part because of a lack of financing.
17. The energy and water sectors are critical parts of the GoDRC' s response to climate change. As indicated in the country's intended Nationally Determined Contributions (NDC) document, the GoDRC committed to reducing its greenhouse gas (GHG) emissions by 17% by 2030 compared to business-as-usual emissions (430 Mt CO₂e), a reduction of slightly more than 70 Mt CO₂e avoided. Targeted sectors for GHG emissions reduction include the agriculture, forestry, land use, energy and transport sectors. In the energy sector, the main priority actions identified involve the development of renewable energy sources (small and medium-size hydropower and solar). For climate change adaptation, the GoDRC' s main priorities include a focus on improving access to, and resilience of, basic services such as water, sanitation and health services, as well as measures to reduce coastal erosion and promote income generating activities. Therefore, investments in clean energy and water & sanitation would help DRC mitigate and adapt to climate change vulnerabilities and impacts.
18. The new Government of DRC has elevated as a key priority the development of the power and water supply sectors and plans to pursue state-owned enterprises (SOEs) reform. The Government Program, approved by the Parliament in August 2019, sets out the objective of increasing access to both electricity service and water supply. The President of the DRC announced an ambitious target of significantly increasing electricity access to 30% by 2024 and 70% for access to water by 2030. The Government Program also highlights the objective of improving the governance of SOEs, including the need to complete ongoing reforms. The Prime Minister, who was the Head of COPIREP and initiated SNEL and REGIDESO reform under his tenure, is keen to move forward with unfinished reforms of both utilities. The Minister of Portfolio officially requested the Bank assistance in improving SNEL operational and financial performance, including the development of a new performance contract between SNEL and the Government, and the option of refocusing SNEL on its core service perimeters.

Development Community and World Bank Support



19. The World Bank has been a major development partner in the DRC's power and water supply sectors. Past energy investments largely targeted generation and transmission and fewer on access expansion. From 2000 to 2018, the World Bank financing in the DRC power sector totaled US\$1.2 billion, out of which about 60% was dedicated to rehabilitating generation units at Inga 1&2 hydropower plants (Regional and Domestic Power Markets Development - PMEDE, P097201, closed on June 30, 2018) and transmission backbones from Inga to the DRC border with Zambia (Southern Africa Power Market Project - SAPMP, P069258, closed on September 30, 2016). Thanks to these projects, an additional 632 MW is now generated from Inga plants and the power produced is easily supplied to mines in the Katanga Province and to power stations in Kinshasa. Only 10% of the Bank financing was allocated to rehabilitate distribution networks and expand electricity access in secondary cities and in Kinshasa. Thus, to address distribution bottlenecks—the weakest segment of DRC power supply chain and key access enabler—the Bank approved financing for the Electricity Access and Service Expansion (EASE) project, which became effective in February 2018. EASE aims to increase access to electricity through two approaches: (i) a public sector approach by rehabilitating and expanding selected areas of SNEL distribution network in Kinshasa and Gbadolite, and (ii) a private sector approach by providing mini grid and off-grid private operators with grant subsidies (through an electrification fund) and more attractive credits (through a credit line) to expand electricity service.
20. In the water sector, the World Bank's investments focused on potable water production and distribution in three main cities (Kinshasa, Matadi and Lubumbashi). In 2008, the Bank approved financing for the Urban Water Supply Project (*Projet d'alimentation en eau potable en milieu urbain*, PEMU, P091092) and provided additional financing in 2016. The project is implemented through REGIDESO's project implementation unit, CEP-O. PEMU has provided US\$356 million of investments in water supply production and distribution, as well as household connections, in Kinshasa, Matadi and Lubumbashi. To date, the project has resulted in production of an additional 64,000 m³ of treated water per day and new access for nearly 2.4 million people. PEMU also financed a number of activities to improve the operational and financial performance of REGIDESO. Though the targets have not yet been met, REGIDESO has made modest improvements, while still struggling to achieve financial sustainability. The World Bank is also in the process of preparing follow on investments in Kinshasa, as part of the Kinshasa Multisectoral Urban Development and Resilience Project (Kin Elenda, P171141). Kin Elenda will also include the World Bank's first financing of the urban sanitation sector in Kinshasa, with the construction of the city's first fecal sludge treatment plant. The PEMU project has also been used to undertake technical studies in selected cities in North Kivu and Kasai to develop master plans necessary for investment decision making.
21. The EASE and PEMU projects have set a robust foundation for access scale up and are informing sector reforms. After two years of implementation, the EASE project's two-pronged approach has been confirmed to be relevant. The rehabilitation/expansion of selected SNEL distribution grid segments is ongoing, whereas the private sector approach was jumpstarted and is promising. Under EASE's Electrification Subsidy Fund, a US\$ 5.12 million output-based grant was provided to Virunga for a total of 6,000 connections; while approximately US\$ 2.5 million in grant funding is being made available to OGS distributor companies; and further mini grid and off-grid private operators' proposals are being assessed as they are received. In addition, critical sector planning and improvement studies have been initiated to inform a pipeline of future investments and regulatory priorities that will be supported under the proposed project. This includes the development of a national geospatial least-cost electrification plan, prefeasibility studies for the electrification of 21 provincial capitals/cities are ongoing, and a tariff study to inform tariff regulation for future private mini grids and the revision of SNEL's high and medium voltage (HV & MV) tariffs.

Proposed Project Overview



22. The proposed project will build on the foundation, laid by the EASE and PEMU projects to help the government achieve its sustainable development goals (including climate change mitigation and adaptation) and cushion/lessen the severe economic impact from the Covid-19 pandemic. It will significantly ramp up the pace of electrification, powering productive uses (water and agriculture), enhancing human capital development (health and education) and contributing to address gender gaps, while advancing utility reform and improving sector governance. It will improve and scale up the public and private approaches, promoted under the EASE project. The private sector approach will go beyond supporting existing private energy service companies through the grant and credit facilities, to partner with IFC and MIGA to attract new international/regional private sector players for the electrification of selected provincial capitals/major cities, and to pilot private sector-based provision of safe drinking water in the North Kivu. Similarly, the public sector approach will move beyond the rehabilitation of distribution network segments to pilot private sector involvement to better maintain and upgrade distribution network and improve SNEL and provincial REGIDESO governance, management and operational performance. Moreover, the project will contribute to enhance human capital development by providing access to electricity, water and sanitation to health and education facilities (as part of the Covid 19 response). Support to productive uses, such as increasing agricultural yields and products transformation and securing cold chains will also be considered. A comprehensive technical assistance component is also proposed to strengthen Provincial Governments' capacity, support the operationalization of the new agencies (ARE and ANSER), help design bankable concession contracts for private mini-grids, and advance the sector planning and development.
23. The project design incorporates lessons learned from past energy and water sector projects. The implementation of energy and water projects since World Bank's re-engagement in 2001 revealed three major lessons. First, SNEL and REGIDESO reforms were unsuccessful mainly because of lack of commitment from Ministers of Portfolio. In light of this lesson, it is proposed to elevate the reform dialogue and monitoring at the level of the Prime Minister, who was the former Head of COPIREP (which pushed the reform under the Ministry of Portfolio) and has been a champion of both SNEL and REGIDESO reform. Second, the lack of (i) robust technical prefeasibility studies before the SAPMP and PMEDE Board approvals and (ii) private consultations before launching of management contract bid for REGIDESO under the PEMU, has led to significant cost overruns, closing date extensions, and unsuccessful bid over implementation. The proposed rehabilitation investments will be prepared based on currently available EASE and PEMU-financed studies (rehabilitation of Western/Central Kinshasa distribution network, prefeasibility of Kananga and Mbuji-Mayi electrification) and ongoing consultations with private sector (PPIAF-funded consultations). In addition, a Project Preparation Advance is requested to prepare bidding documents, which will help jumpstart disbursement after effectiveness. Third, project implementation arrangements should be anchored within line ministries and supported by Bank TTLs residing in the country. This lesson was considered, as the MRHE's project coordination unit (UCM) will implement the project in close collaboration with COPIREP, SNEL and REGIDESO. Also, two of the project co-TTLs are currently based in Kinshasa and will provide prompt implementation support. The Annex 1 presents the past world Bank portfolio and the lessons learned.

Relationship to CPF

24. The proposed project strongly supports the GoDRC's universal electricity access goal and contributes to enable socio-economic development in unserved and poorly served provincial capitals. As indicated in the sector context, the President set an ambitious electricity access target of 30% by 2024. The new Government's Action Program, through its Pillar 5 and 12, spells out the objectives of (i) improving the governance of SOE through the completion of reforms, (ii) increasing electricity access, and (iii) scaling access to water. The project strongly supports the achievement of these objectives, as it focuses on accelerating access to electricity, water and sanitation from both



the private and public sectors, powering productive uses (water treatment & distribution, agricultural products conservation and commercialization), enhancing human capital development, while improving SNEL & REGIDESO performance and governance. The proposed financing amount will represent the largest access-targeted financing from the multi/bilateral development agencies in the DRC. Thus, the project is expected to be one of the primary vehicles for advancing towards the achievement of the Government's access goals.

25. The project is consistent with the core principles of the proposed World Bank's DRC Country Partnership Framework (CPF), which is expected to be approved by the Board in December 2020. The CPF proposes five new WBG principles of engagement over the FY21-25 period: (i) addressing drivers of fragility, conflict & violence by focusing on human development and governance-related reforms; (ii) applying a spatial lens and providing a comprehensive set of engagements that create synergies, by focusing on 10 out of 26 provinces, accounting for 60 percent of DRC's total population and 55 percent of the poor; (iii) scaling up engagements and bringing resources to those in most need; (iv) shifting the allocation of resources towards human and social capital development and critical reform areas including governance; and (v) working with IFC and MIGA applying MFD to critical reform areas in infrastructure, natural resources (including mining), and service delivery. The project is consistent with all CPF principles. The proposed interventions target the CPF-suggested provinces, include key sector reforms, will improve the regulatory and implementation frameworks, and significantly scale up current Bank engagements on energy and water sectors to expand electricity, water, and sanitation services for enhanced households' livelihoods and human capital development. It will further leverage private sector investments and expertise, working in close collaboration with IFC and MIGA (subcomponent 3.1).
26. The project will help DRC meet its Nationally Determined Contributions and become more resilient to climate vulnerabilities. On climate change mitigation, the project will contribute to achieve DRC's target of reducing GHG emissions of 17% by 2030. It will considerably reduce reliance on (or displacing in some cases) the use of diesel generators (from water/wastewater treatment plants and small & medium businesses), biomass (for household cooking), and kerosene (household lighting) by (i) providing new and/or improved electricity services from renewable sources, and (ii) reducing water losses, through the large-scale deployment of solar home systems, the construction, rehabilitation and/or expansion of solar/hydro-powered mini-grids and grids, and the implementation of nonrevenue water (NRW) reduction activities. On climate change adaptation, the project addresses DRC's main vulnerability—increasing access to water and sanitation services. It will do so by constructing a water treatment & pumping station and a sanitation treatment station, rehabilitating/expanding water distribution network and facilitating household water connections. It will also make power and water infrastructure more resilient to climate risks by adding/enhancing design options to protect power, water, wastewater plants, low voltage substations, and electric poles from flooding and erosion. Finally, by providing households, health centers, schools, and productive user with access to water and energy services, the project strengthens the resilience and adaptive capacity of households by allowing them to perform in healthier condition productive, social and leisure activities.
27. The project is aligned with the World Bank Group Covid-19 response approach. The WBG Covid-19 crisis response is articulated around three stages—Relief, Restructuring, and Resilient Recovery—and across four pillars to save lives (Pillar 1), protect the poor & vulnerable (Pillar 2), ensure sustainable business growth & job creation (Pillar 3), and strengthen policies, institutions and investments for rebuilding better (Pillar 4). The proposed project fits in the Covid 19 restructuring and resilient recovery stages. It will provide provincial hospitals, health centers and laboratories with new or improved access to electricity, water and sanitation, which will contribute to save lives (Pillar 1). It will also provide private mini-grid or OGS operators with subsidies to bring down electricity and water connections costs, enabling access for poorer households (Pillar 2). It will further support private operators with



more attractive credits and SNEL & REGIDESO with increased revenues & improved management and operations, which will contribute to business growth and job creation (Pillar 3). Also, the project will offer comprehensive technical assistance to provincial governments, two central ministries (MRHE, MP), and key sector development agencies (ARE, ANSER, ARSPE, OCE), which will enhance their capacity including resilient operations and growth (Pillar 4).

28. The project will promote expanded use of digital technologies and mainstream citizen engagement and gender dimension. The project will finance the implementation of digital platforms and provide technical assistance to enable SNEL and REGIDESO to offer mobile payment options to customers and digitalize government agencies' bills, as well as help provincial authorities establish asset registries and better monitor infrastructure operation. The project will further support the digitalization of the electricity sector by supporting the private sector mini-grid and off-grid operators, which already deploy remotely controlled meters and mobile communication technologies for energy consumption monitoring and bill payment. To enhance project results monitoring (including connections), the project will promote the use of a geospatial digital platform that will be linked to operators' tools to capture achieved electricity and water connections. In addition, the project will contribute to reduce gender gaps. It will promote women employment in temporary/permanent jobs that will be created through the infrastructure construction/rehabilitation and operation. It will also facilitate electricity and water connections/service for vulnerable female-headed households, and provide comprehensive support (medical, psychologic, legal, and reinsertion) to address gender-based violence. Gender-informed consultations will be undertaken in Kinshasa, Kananga, and Goma over the project cycle to better inform the project design and address community feedback through grievance redress mechanism cells and other platforms.

C. Proposed Development Objective(s)

The development development objective of the project is to (i) expand access to renewable-based electricity, water and sanitation in targeted cities, (ii) improve SNEL operational performance, and (iii) improve water service operations in Goma and Kananga through decentralization.

Key Results (From PCN)

29. The proposed PDO level results indicators are the following:

- People provided with new and improved electricity service in targeted cities – of which female (number);
- People provided with new or improved potable drinking water in targeted cities – of which female (number)
- People provided with new or improved access to sanitation services in targeted cities (number)
- Increase of SNEL bill collection rate (%)
- Increase of water bill collection rate in Goma and Kananga (%)
- Capacity of installed renewable-based electricity generation (MW)

D. Concept Description

30. The project aims to significantly scale up access to electricity, water and sanitation in priority areas of the DRC while improving utility governance and performance and strengthening public institution capacity. It will expand electricity and/or water services in many of the 13 cities in the 10 provinces (referred as provincial cities in this



concept note)⁶, implement required reforms and operational improvements to put both SNEL and REGIDESO in a recovery path, and strengthen the capacity of key national and provincial institutions. Electricity & water access expansion, along with reform and capacity building, will be pursued following the Maximizing Finance for Development (MFD) cascade approach, focusing on tiers 2, 3, and 4. As DRC's energy and water sectors cannot mobilize cost-efficient commercial financing for sustainable infrastructure development, the project components 1 and 2 will address market failures (e.g.: tariffs, regulations), support upstream reforms of SNEL and REGIDESO to a lesser extent, and strengthen institution capacity (MFD Tier 2). To provide essential electricity and water services in cities unserved or very poorly served by state-owned utilities, component 3 will use concessional financing to leverage private sector investments, enhance commercial credits, and set up risk mitigation instruments in close coordination with IFC and MIGA (MFD Tier 3). In selected cities covered by SNEL and REGIDESO with unreliable service, component 4 will finance network rehabilitation and expansion to expand electricity and water service.

31. The project will leverage synergies between the energy and water sectors to provide a package of electricity, water, and sanitation services to households, productive and community users in targeted cities. In Kinshasa, the distribution network in the Western and Central communes will be rehabilitated and its operation and maintenance improved, to enhance the quality of and increase access to electricity for households and small & medium enterprises (SMEs). In Kananga, the project will construct a renewable-based decentralized power grid and a new water treatment plant, rehabilitate and expand water storage facilities and distribution network, facilitate electricity and water connections for households, productive users (new water treatment plant, pumping stations, fish and agricultural product conservation facilities, telecom towers), health centers and schools. In Goma, it will provide private electricity, water, and sanitation operators with subsidies, credits, and technical assistance to expand electricity, water, and sanitation services to households, small and medium enterprises, and productive users. Similarly, currently established private electricity operators in Butembo (Nord Kivu), Beni (Nord Kivu), and Tshikapa (Kasai) will benefit from subsidies, credits and assistance to expand electricity connections. In Gbadolite, the rehabilitation of one generation unit at the Mobayi-Mbongo Hydropower plant, initiated under the EASE project, will be completed and the operation and management of the associated distribution network improved. A number of health centers and schools in some provincial cities will be electrified and provided with improved water and sanitation services. In all targeted cities of the ten provinces, off-grid solar operators will be incentivized to disseminate solar home systems. All ten provincial governments will receive technical assistance to some extent.

Component 1: Power and Water Utility Governance and Management

32. The component seeks to implement critical reforms of SNEL and REGIDESO subsidiaries in provinces, improve the management and operational performance of the two state-owned utilities, and support their longer-term reorganization/restructuring and financial recovery. Targeted reforms include payment of Government arrears to SNEL and provincial REGIDESO subsidiaries, implementation of a sustainable mechanism for timely payment of government entities' bills from SNEL & REGIDESO subsidiaries in selected provinces, public disclosure of audited financial statements and procurement plans, increase of electricity tariffs for high and medium voltage (high-revenue) customers, adoption of REGIDESO decentralization plan, and signature of performance-based water service delegation contracts in two provinces (Nord Kivu and Kasai). The reforms will be pursued through (i) a performance contract between the Government and SNEL and (ii) a performance-based service delegation contract between two provincial governments and either REGIDESO provincial subsidiaries or selected water operators. Both the performance contract and the service delegation contract will constitute performance based

⁶ Bandundu/Kitwit (Kwilu), Bukavu (Sud Kivu), Bunia (Ituri), Goma/Butembo/Beni (Nord Kivu), Kabinda/Mwene Nduku (Lomami), Kinshasa (Kinshasa), Kananga (Kasai Central), Mbuji-Mayi (Kasai Oriental), Tshikapa (Kasai), and (Boma) Kongo Central.



conditions. Complementary water sector reforms will be undertaken under the Kin Elenda project. In addition, performance improvement plans for both SNEL and REGIDESO will be developed based on existing plans [*“Plan de Redressement”* for SNEL and the *“Plan de restructuration”* for REGIDESO] and their key components implemented to improve the management and operational efficiency of the two utilities. Also, assistance will be provided to develop SNEL’s longer-term financial recovery and re-organization/restructuring plan and completion of REGIDESO restructuring plan.

Component 2: Institution Strengthening and Technical Assistance

33. Complementing the utility governance improvement (Component 1), component 2 will enhance the capacity of public institutions targeting governance, regulation, planning, program coordination and oversight. It will provide comprehensive technical assistance to provincial governments, the Ministry of Water Resources and Electricity (MRHE), the Ministry of Portfolio (including COPIREP), central energy and water sector regulators (ARE and ARSPE-*Autorité de Régulation du Service Public de l’Eau*), access expansion planning and coordination agencies (ANSER, OCE, and the Directorate of Sanitation within the Ministry of Environment), and project implementing agencies. Capacity building (training, marketing, sensitization) and technical assistance (including on the adoption/implementation/mainstreaming of safeguard performance standards) will be provided to private energy, sanitation & water operators with a greater emphasis on sanitation operators. Also, the component will enable more coordinated investments development at both national and provincial levels.

Component 3: Private Sector-based Service Expansion in selected Provincial Cities

34. The component will leverage private sector investments and expertise to accelerate access to electricity and water services in provincial cities not served or poorly served by SNEL and REGIDESO. Based on agreed criteria (Provincial Government commitment, private sector attractiveness, synergies with other World Bank-financed projects, security, and transport accessibility), two provincial capitals (Kananga in the Kasai Central and Mbuji-Mayi in Kasai Oriental for a total of 3.6 million people) are selected to be electrified by the private sector. The project will work closely with IFC and MIGA to mobilize a combination of grants, concessional credits and risk mitigation instruments to leverage significant private sector investment through a competitive tender for the development and operation of large-scale mini grids (sub-component 3.1). In addition, financing facilities (Results-based Subsidy Fund, Credit Line, and Risk mitigation scheme) will be enhanced or rolled out to support mini-grid/off-grid operators to make network extension and connections affordable for households and productive users (in agriculture and in the food cold chain sector) in cities where private operators are (or will be) established including Goma (Nord Kivu), Butembo & Beni (Nord Kivu), and Tshikapa (Kasai) (sub-component 3.2). Also, in the water sector, private water operators established in Goma will be supported, through the financing facilities, to expand access to affordable and potable water (sub-component 3.3). The appointment of the Heads of ARSPE, which is a key enabling condition for the water subcomponent, would be required as a performance-based condition.

Component 4: Public Sector-based Electricity and Water Access Expansion

35. The component will improve the quality of and increase access to electricity and water services in selected areas managed by state-owned utilities (SNEL & REGIDESO). It will finance the rehabilitation, densification, expansion and service connections for lower income households (including vulnerable female-headed households) in selected SNEL & REGIDESO distribution network areas in Kinshasa (energy sector), Gbadolite (energy sector), and Kananga (water/energy sector), with a pilot in the energy sector to involve the private sector in power distribution network operation & maintenance (sub-components 4.1 and 4.2). The component will also contribute to promote human capital development in other provincial cities by electrifying and providing potable water and sanitation to selected hospitals, laboratories, health centers, schools and education management offices targeted under World Bank-financed health and education projects (sub-component 4.3). Performance-based conditions (such as



the effectiveness of the maintenance fund and operation & maintenance subcontracts in Kinshasa) will be further identified and included as requirements for disbursing on selected investments.

Component 5: Contingent Emergency Response Component

36. 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. The CERC could also be used to channel additional funds should they become available as a result of said emergency. For the DRC energy sector, emergency conditions may arise subsequent to extreme weather events (including flooding and erosion) and major civil unrest that damages power and water infrastructure. The CERC mechanism will be further defined in a CERC Operational Manual attached to the Project Implementation Manual (PIM), which will include triggers and conditions for the use of funds. This manual will clearly outline the triggers, eligible expenditures, and procedures for tapping into the CERC. Should the CERC be triggered, all expenditures will be made in accordance with paragraph 11 of the Investment Project Financing (IPF) Policy and will be reviewed and accepted by the World Bank before any disbursement is made. In accordance with paragraphs 11 and 12 of the IPF Policy, this component would provide immediate, rapidly disbursing support to finance goods (positive list agreed with the Government), works, and services needed for response, mitigation, and recovery and reconstruction. Operating costs that are eligible for financing would include the incremental expenses incurred for early recovery efforts arising from the impact of a major crisis.

Legal Operational Policies	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No
Summary of Screening of Environmental and Social Risks and Impacts	

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