

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

CHILE

RAPA NUI WATER AND ELECTRICITY SERVICES SUSTAINABILITY PROGRAM

(CH-L1182)

LOAN PROPOSAL

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ABBREVIATIONS

CCCAP	Climate Change Communal Action Plan
CO ₂ e	Carbon dioxide equivalent
DIPRES	Budget Office of the Government of Chile
ESMP	Environmental and social management plan
ESMS	Environmental and social management system
ESPF	Environmental and social policy framework
ICAP	Institutional Capacity Assessment Platform
ICB	International competitive bidding
ILO	International Labour Organization
INE	National Institute of Statistics
LGBTQ+	Lesbian, gay, bisexual, transgender, queer or questioning, and more
MWh	Megawatt-hour
MWp	Megawatt peak
NCB	National competitive bidding
O&M	Operation and maintenance
SASIPA	Sociedad Agrícola y Servicios Isla de Pascua SpA
SEP	Public Company System
SISS	Superintendency of Sanitary Services
SOFR	Secured Overnight Financing Rate
SPA	Joint stock company
SUBDERE	Subsecretaría de Desarrollo Regional y Administrativo (Office of the Undersecretary of Regional and Administrative Development)

EXECUTIVE SUMMARY
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Financial Terms and Conditions				
Borrower:			Flexible Financing Facility^(a)	
Sociedad Agrícola y Servicios Isla de Pascua SpA (SASIPA)			Amortization period:	25 years
Executing agency:			Disbursement period:	4 years
SASIPA			Grace period:	5 years ^(b)
Guarantor:			Interest rate:	SOFR-based
Republic of Chile			Credit fee:	(c)
Source	Amount (US\$)	%	Inspection and supervision fee:	(c)
IDB (Ordinary Capital):	15 million	100	Weighted average life:	15 years
Total:	15 million	100	Approval currency:	U.S. dollar
Program at a Glance				
Program objective: The program's general objective is to contribute to the environmental sustainability of Rapa Nui by improving water and electricity services. Its specific objectives are to: (i) increase the operational efficiency of water services; (ii) reduce dependence on fossil fuels for power generation; and (iii) strengthen SASIPA's business management.				
Special contractual conditions precedent to the first disbursement of the loan: As special contractual conditions precedent to the first disbursement, the borrower will present evidence, to the Bank's satisfaction, of: (i) the approval and entry into effect of the program Operating Regulations , under the terms previously agreed on with the Bank, which will include the environmental and social requirements established in the environmental and social management system and the environmental and social action plan; and (ii) the hiring and/or appointment, as appropriate, of the following members for the specialized program team: (a) program coordinator; (b) procurement specialist; (c) financial specialist; (d) environmental and social specialist; (e) electrical specialist; and (f) hydraulics specialist (paragraph 3.8). See also the special contractual conditions precedent to the first disbursement and execution in Annex B of the environmental and social review summary.				
Special contractual conditions precedent for program execution: Prior to commencing a program works project, the borrower undertakes to ensure and inform the Bank, to the Bank's satisfaction: (i) that the requisite legal permissions to access, occupy, and/or use the land or premises required for that work have been secured; and (ii) the relevant environmental permits and other licenses need to carry out such work have also been secured (paragraph 3.9). See also the special contractual conditions precedent to the first disbursement and execution of the loan in Annex B of the environmental and social review summary (required link 3).				
Exceptions to Bank Policies: The Board of Executive Directors is requested to approve a partial exception to the Bank's policy on guarantees required from the borrower (document GP-104-2, OP-303) so that the Bank would only have the sovereign guarantee of the Republic of Chile on the borrower's financial obligations (including payment of principal, interest, and fees), thus waiving the guarantee of the Republic of Chile in relation to the borrower's obligations to perform and any local counterpart obligations (paragraph 3.6).				
Strategic Alignment				
Objectives:^(d)	O1 <input type="checkbox"/>		O2 <input checked="" type="checkbox"/>	
Areas of operational focus:^(e)	OF1 <input type="checkbox"/>	OF2-G <input checked="" type="checkbox"/>	OF3 <input checked="" type="checkbox"/>	OF4 <input type="checkbox"/>
		OF2-D <input checked="" type="checkbox"/>	OF5 <input type="checkbox"/>	OF6 <input checked="" type="checkbox"/>
			OF7 <input type="checkbox"/>	

- (a) Under the terms of the Flexible Financing Facility (document FN-655-1), the borrower has the option of requesting changes to the amortization schedule, as well as currency, interest rate, and commodity conversions. The Bank will take operational and risk management considerations into account when reviewing such requests.
- (b) Under the flexible repayment options of the Flexible Financing Facility, changes to the grace period are permitted provided that they do not entail any extension of the original weighted average life of the loan or the last payment date as documented in the loan contract.
- (c) The credit fee and inspection and supervision fee will be established periodically by the Board of Executive Directors as part of its review of the Bank's lending charges, in accordance with the applicable policies.

- (d) O1 (Reduce poverty and inequality); O2 (Address climate change); and O3 (Bolster sustainable regional growth).
- (e) EO1 (Biodiversity, natural capital, and climate action); EO2-G (Gender equality); EO2-D (Inclusion of diverse population groups); EO3 (Institutional capacity, rule of law, and citizen security); EO4 (Social protection and human capital development); EO5 (Productive development and innovation through the private sector); EO6 (Sustainable, resilient, and inclusive infrastructure); EO7 (Regional integration).

I. DESCRIPTION AND RESULTS MONITORING

A. Background, problems addressed, and rationale

- 1.1 **Context.** Rapa Nui, also known as Easter Island, is a volcanic island located in the middle of the Pacific Ocean, about 3,700 kilometers off the coast of Chile.¹ According to data from the National Institute of Statistics (INE), the island has a population of about 8,700. In addition to this resident population, there is a floating population that varies between 4,000 (April-October) and 6,500 (November-March). Most of Rapa Nui's residents are concentrated in Hanga Roa, the only populated sector of the island with urban characteristics. According to INE data, Indigenous peoples account for 51.3% of the total population.² Income poverty is 11.8%, 1 percentage point above the national average (10.8%).³
- 1.2 **Basic service provision.** The provision of basic services on Easter Island, including water⁴ and electricity,⁵ is the responsibility of Sociedad Agrícola y Servicios Isla de Pascua SpA (SASIPA), the only entity authorized to provide these services on the island. SASIPA is a public company of the Chilean State, incorporated in 1980 as a Limited Liability Corporation. In 2012, SASIPA became a joint stock company (SpA), with the Chilean State as its sole shareholder through the Production Development Corporation (CORFO).⁶ SASIPA is subject to oversight by the Office of the Comptroller General of the Republic and the Public Enterprise System (SEP), the Chilean government's technical advisory body tasked with management oversight of public companies. SASIPA currently has approximately 3,815 water and electricity customers—which amounts to a level of coverage of about 95% of the island—and a staff of approximately 100 employees, distributed among the three main services it provides: drinking water, electricity, and maritime loading/unloading. At the sector level, SASIPA's water service is regulated by the Office of the Superintendent of Sanitary Services (SISS), which sets the rates and monitors compliance with sector regulations. With respect to electricity service, SASIPA is regulated by the National Energy Commission (CNE), which defines regulated rates and prepares indicative power generation plans, and by the Office of the Superintendent of Electricity and Fuel (SEC), which oversees and monitors compliance with laws, regulations, and technical standards.

¹ Administratively, Easter Island is part of Valparaíso, Region V, and is made up of a single province and commune of the same name.

² According to data of the 2017 Census, INE.

³ National Socioeconomic Characterization Survey (Casen), 2020.

⁴ In accordance with Law 19.293, SASIPA is authorized to pursue business activities in the drinking water and sewerage sector.

⁵ In accordance with Ministry of Economy Decree 353, SASIPA has a definitive concession to establish, operate, and use public service facilities for the distribution of electric power for an indefinite term.

⁶ SASIPA is a private entity created by the Chilean State, which are known as "State corporations" or "majority-owned enterprises of the State."

- 1.3 **Problems to be addressed.** According to the United Nations Environment Program (UNEP), Rapa Nui has an isolation index of 149, the maximum possible on the scale.⁷ Classified as one of the world's most remote places, Rapa Nui's geographic vulnerability complicates the sustainable provision of basic services. The causes of this vulnerability are structural in nature, including the limited availability of water sources and the island's current dependence on diesel fuel transported from the mainland for power generation; and institutional, associated with SASIPA's business management, such as the low operational efficiency of the water system, the company's lack of investment to diversify its energy generation sources and reduce water losses, poor investment planning to meet current and future demand, the lack of integrated financial, accounting, and commercial management systems, and the low participation of women in its workforce. Each year, SASIPA purchases more than 4 million liters of fuel for power generation. In 2023, this expenditure amounted to approximately US\$4.3 million and 40% of the company's operating costs. The high costs associated with power generation affect SASIPA's ability to cover its operating costs with service rates (62% of its operating costs are covered by rates (paragraph 1.23)), preventing it from freeing up investment resources to provide sustainable water and electricity services to its customers.
- 1.4 **Water system challenges: limited availability of water sources and low operational efficiency.** Sources of drinking water to supply the island are very limited. Rapa Nui's main source of water is a subterranean volcanic aquifer with availability that varies between 30 and 50 million cubic meters. The water SASIPA distributes is supported by a series of wells (six in all) that, through a pumping system, extract some 1.74 million m³ of water annually and consume around 10% of the electricity generated by the company. In this context, the main challenge facing the SASIPA in terms of water supply is the increasing salinization of the volcanic aquifer due to marine intrusion phenomena.⁸ This is reflected in the chloride levels observed in the five wells that supply Hanga Roa, which increased by an average of 137% between 2018 and 2024, endangering the company's ability to provide water service to the population. Particularly critical is the situation of Well 25,⁹ which accounts for 21% of water production, whose chloride levels recently exceeded the permitted standard of 400 parts per million.¹⁰ The mandatory shutdown of Well 25 is forcing the company to over-exploit the remaining wells in order to minimize supply restrictions, an operationally unsustainable situation,

⁷ [Determinación del riesgo de los impactos del cambio climático en las costas de Chile](#), Volumen 8: Vulnerabilidad en Rapa Nui y Archipiélago Juan Fernández. Ministerio del Medio Ambiente. 22 October 2019.

⁸ The increasing salinization of the aquifer from seawater intrusion is due to a series of variables such as the overuse of wells, the increase in sea level, the drop in precipitation levels, and the increase in average temperatures, which accelerate evaporation and reduce groundwater recharge volumes. The aquifer in the southern part of the island, which is currently being used by SASIPA, is particularly vulnerable to seawater intrusion due to its lower elevation. *Estudio de Capacidad de Carga*, Pontificia Universidad Católica de Chile, 2017. According to the report of the Ministry of Environment *Determinación del riesgo de los impactos del cambio climático en las costas de Chile* (Determination of the risk of climate change impacts on the coasts of Chile) (Ministry of Environment, 2019), among the coastal impacts associated with climate change identified in Rapa Nui is the reduction of groundwater availability due to marine intrusion phenomena.

⁹ SASIPA's current six supply wells are: wells 23, 25, 27, 28, 29, and 31.

¹⁰ Chilean Standard 409, for which the Ministry of Health is the enforcement authority.

even in the short term, which may contribute to further increasing the salinization levels of the rest of the wells and eventually force them to shut down. Another operational efficiency challenge facing the company is the high level of nonrevenue water (nonrevenue water).¹¹ Of the 1.74 million m³ of water that SASIPA produces each year, 45% is lost as a result of low hydraulic efficiency (lack of sectorization) and the age and precariousness of the distribution network.¹² According to information furnished by SASIPA, reducing nonrevenue water levels would require sectoring and replacing 30 kilometers of network (out of a total of 72 km), including 5 km of asbestos cement pipe.¹³ Another problem that negatively affects nonrevenue water levels is the age of micrometers. Although micrometering coverage is 100%, more than 30% of the meters are 10 or more years old, resulting in higher levels of losses and lower billing by the company.

1.5 Challenges of the power grid: high dependence on imported fossil fuels.

Rapa Nui's electrical system is isolated, since it is not interconnected to Chile's national transmission system.¹⁴ Power generation is almost entirely (99%) based on the use of liquid fuel (diesel) imported from the mainland. In 2023, electricity demand was approximately 15,400 MWh, supplied by five thermal generators—with total capacity of 4,560 kW—at the Mataverí Power Plant (in operation since 1967 and located near the airport). These generators consume approximately 4.1 million liters of fuel annually, accounting for 40% of the company's operating costs and generating some 11,000 tons of CO₂ emissions each year. Given their age and the logistical difficulties involved in performing preventive and corrective maintenance, the thermal generators frequently fail (23 failures were recorded between 2022 and 2023), forcing the company to lease alternative equipment to meet the electricity demand of its customers. Another difficulty SASIPA faces is a lack of equipment (flow meters) needed to facilitate exhaustive monitoring and efficient management of diesel that supplies each thermal generator. Currently, fuel consumption is recorded manually. This high dependence on diesel transported from the Chilean mainland, which is also contributing to environmental pollution and CO₂ emissions, represents a constant threat to electricity service, exposing it to: (i) the volatility of liquid fuel prices; (ii) climate phenomena that may affect the arrival of inputs (fuel) to the island; and (iii) supply reliability risks due to generator failure. SASIPA also has a small photovoltaic plant comprised of 10 solar panels with capacity of 128 kWh at the Mataverí Power Plant, which has

¹¹ Nonrevenue water is the difference between the quantity of drinking water supplied to the system and the quantity billed. It is composed of physical and commercial losses. In the case of SASIPA, it is estimated that about 60% of nonrevenue water corresponds to physical losses and 40% to commercial losses.

¹² SASIPA, 2018.

¹³ SASIPA has a pipe replacement rate of 3 km per year.

¹⁴ As an isolated system, Easter Island's rate regime is not the same as that of Chile's interconnected system. SASIPA sets its rates based on service costs and its customers' ability to pay. Under this framework, the rate stabilization schedule recently established by the Chilean government did not apply to SASIPA's users.

enabled the company to acquire some capacity to monitor, operate, and maintain this type of technology.^{15,16}

- 1.6 **Business management challenges.** SASIPA also faces a number of business management challenges that affect its ability to provide sustainable water and electricity services. The company's accounting, financial, and commercial management is based on information systems that lack integration and pose limitations for information management, resulting in inefficient operational and financial management. Another challenge is the lack of medium- and long-term investment planning, especially in a context of high population growth. According to INE projections, between 2002 and 2023, the island's population grew by 131%, from 3,791 to 8,700, and this growth is expected to continue in the coming years. Against this backdrop, SASIPA needs to plan investments to ensure the sustainability of its current services and meet future demand for water and electricity on the island.
- 1.7 **Gender and diversity challenges at the company.** In recent years, the participation of women in SASIPA's workforce has increased from 5% in 2015 to 20% by 2024. This increased participation has been particularly high at the managerial level. Nearly a quarter (24%) of managerial positions, including the company's CEO, are held by women.¹⁷ Despite the progress made on gender issues, the share of women on the company's workforce remains low—most of whom work in administrative and nontechnical jobs.¹⁸ In terms of diversity, most SASIPA employees—with the exception of some management positions—self-identify as Rapa Nui. Moreover, 3% of its employees have a disability, exceeding the requirements of Law 18.575, which establishes that for institutions with a staff of 100 or more employees at least 1% must be persons with disabilities. However, SASIPA does not currently have internal regulations to ensure universal accessibility to its facilities, which affects not only its employees but also its customers. Moreover, the company has no regulations in place to promote the professional and inclusive development of LGBTQ+ people.¹⁹
- 1.8 **General strategy of the program.** The proposed investments and activities for the program are aimed at contributing to the sustainability of Easter Island's water and electricity services. This is expected to be achieved by: (i) improving the water

¹⁵ The existing solar photovoltaic plant was funded by a grant from Acciona. It began operating in November 2018 and was funded on a demonstration basis.

¹⁶ In addition to the aforementioned challenges, Rapa Nui's power grid faces others. While the high dependence on fossil fuels is the most relevant, SASIPA also faces financial constraints in order to expand and improve electricity distribution networks, the integration of digital technologies for monitoring and comprehensive supervision of the service (generation and distribution), the optimization of investment planning, and operation and maintenance expenses. In this sense, the decarbonization of power generation is only a first step in building a sustainable electricity service.

¹⁷ Importantly, four of the five seats on the board of directors are held by women.

¹⁸ Part of this low participation rate is due to structural issues on the island. According to data of the 2017 Census, 74% of women over age 15 on Rapa Nui are employed, while the corresponding rate for men is 83%. Peralta, Gandhi (2022). [*Hogares con jefatura femenina y su relación con la pobreza en América Latina: una revisión sistematizada*](#). Revista Gestionar, 2(3): 51-61.

¹⁹ There is evidence that LGBTQ+ people are 7% less likely to be employed and earn 4% less than heterosexual and cisgender people, confirmed by data of the Organisation of Economic Co-operation and Development (OECD) found in nearly 50 representative studies conducted in OECD member countries. Source: Open Knowledge Repository. [*Equality of Opportunity for Sexual and Gender Minorities*](#).

system's operating efficiency; (ii) reducing dependence on fossil fuels for power generation; and (iii) strengthening SASIPA's business management capacity in order to provide these services. The planned investments are also expected to enable the company to reduce its operating expenses and increase revenues.

- 1.9 **Program strategy for water service.** In order to improve the water system's operational efficiency and avoid over-exploiting the existing wells, the program will finance the construction of a desalination plant with reverse osmosis technology, production capacity of 42.4 m³ per hour (for an input flow of 53 m³ per hour), and 80% efficiency (recovery). This plant will treat the flows from the company's Well 25, whose chloride levels exceed the Chilean standard, thus increasing the available water supply. The desalination plant will also include the design and financing of an environmentally acceptable solution for the disposal and/or treatment of reject brine containing excess salts from the desalination process. With a view to boosting the company's operating efficiency, a series of investments will be financed aimed at reducing nonrevenue water. Specifically: (i) the rehabilitation of 8 km of water network pipes in which the highest levels of loss are concentrated, including the replacement of 2 km of asbestos-cement pipes; (ii) the replacement of more than 660 micrometers that are between 10 and 15 years old, which will reduce physical and commercial losses and improve billing due to better quantification of water consumption and metering accuracy; (iii) the installation of three pressure reducing valves, which will improve the hydraulic efficiency of the network and reduce physical losses; and (iv) the procurement of equipment to detect and repair invisible leaks. These actions are expected to reduce nonrevenue water by more than 8 percentage points. In addition, a program will be financed to improve the operational efficiency of pumps used to extract water from subterranean sources (wells) with the aim of improving their energy efficiency, thus reducing pressure on electricity service.
- 1.10 **Program strategy for electricity service.** To reduce dependence on fossil fuels for power generation, investments aimed at diversifying primary energy sources will be financed. Specifically, the construction of a solar photovoltaic plant will be financed, with maximum capacity of 2.9 to 2.99 MWp, which will operate synchronously with the existing thermal park.²⁰ The solar photovoltaic plant is expected to reduce the operating time of thermal generators and, hence, their probability of failure, thus contributing to reducing CO₂ emissions generated by SASIPA. The plant will include a battery storage system with 2 MWh of capacity, which will ensure that the system's operation is safe, stable, continuous, and that service is not affected by power outages associated with the pros and cons that characterize solar generation. The program provides for the connection of the solar photovoltaic plant and batteries to the medium voltage grid, as well as the integration of the plant and batteries (via fiber optics) into the existing control system of the thermal generation plant. With the commissioning of the solar photovoltaic plant, an estimated annual generation of 4,700 MWh is expected, which would: (i) supply 23% of the island's annual demand;²¹ (ii) reduce annual

²⁰ The solar photovoltaic plant option was the result of a SASIPA consultation process. In this sense, the technology is in line with the expectations of the inhabitants of Rapa Nui *vis-à-vis* the challenges faced by the power grid.

²¹ Panel degradation is estimated to be 0.4% per year, meaning a slight reduction in efficiency and savings over time.

diesel consumption by 1.3 million liters (per year), which represents about 30% of current total consumption;²² and (iii) reduce SASIPA's CO₂ generation by 3.4 tons annually. These estimates are consistent with the evidence found in similar projects, for example, the reduction in diesel consumption observed in rural electrification programs in Bolivia ([2460/BL-BO](#)) and in programs that increased the share of solar photovoltaic energy in Nicaragua's energy matrix ([2342/BL-NI](#), [2342/BL-NI-4](#), and [2342/BL-NI-5](#)). The plant's construction will be carried out by the firm selected in an international public bidding process and will include financing for the first two years of monitoring and maintenance of the plant and its battery storage system, as well as training for SASIPA employees. In addition, flow meters will be installed in the thermal generators to digitally control fuel consumption, thus facilitating a more accurate measurement of generator performance and energy efficiency gains in diesel consumption. This measure is expected to reduce fuel consumption by an additional 0.48%.

- 1.11 **Program strategy to strengthen business management.** In order to strengthen SASIPA's business management, the program will finance the implementation of a computer system to integrate the accounting, financial, and commercial data of the three services provided by the company (water, electricity, and maritime loading/unloading), in order to boost operational efficiency, streamline decision-making, and positively impact billing levels. To address the challenge of the lack of investment planning, the program will finance a water services development plan,²³ to include a water source protection plan, with a view to avoiding crises such as the salinization of water sources currently facing the island. The program will also finance an electricity services development plan, which will facilitate planning of the investments needed to meet future demand for this service.²⁴ To further deepen SASIPA's gender and diversity policies, financing will be provided to design and implement an action plan resting on four pillars: (a) attraction; (b) recruitment; (c) retention; and (d) professional development. One of the major challenges service providers face in increasing the share of women in their workforces is their ability to attract and retain them. To ensure a positive impact on attraction, the plan anticipates actions such as technical training for women, with a view to increasing their employment opportunities on the island, and the use of inclusive, nonsexist language in job postings. To influence retention, campaigns will be launched to raise awareness on gender equality and diversity and inclusion, to include persons with disabilities and members of the LGBTQ+ community. Moreover, the mechanism for preventing and addressing sexual harassment and gender-based violence will be reviewed. Training will also be provided in trades in which women have not traditionally participated, such as

²² In 2023, SASIPA's diesel fuel consumption was 4,162,000 liters.

²³ The water services development plan will include the preparation of a roadmap of the investments required to increase access to safe water (through the distribution network) in the town of Hanga Roa. It is estimated that 5% of households in Hanga Roa are not SASIPA customers and are supplied with water through individual solutions or the purchase of bottled or bulk water from the company (up to a maximum of 120 m³ per month per household). The plan will also identify new sources of water to supplement the current ones and meet future demand.

²⁴ The electricity services development plan will include the preparation of a roadmap of the investments required on the island to achieve carbon neutrality in the long term. Under this framework, decarbonization alternatives will be evaluated on the electric power generation side, as well as the investments needed to strengthen distribution networks and digitalize operations, with the ultimate end of evaluating energy efficiency alternatives on the customers' side.

repairing water leaks and operating heavy machinery. This training is expected to attract, retain, and facilitate the professional development of greater numbers of women in these jobs. Some of the benefits associated with women's participation in nontraditional trades include: reduced workplace absenteeism, greater ability to manage and follow up on tasks, learning curve growth, and a more balanced and harmonious work environment. According to the International Labour Organization (ILO), when a company has a more diverse work team, the probability of improving profitability and productivity increases by 62% and its creativity and innovation, by 60%.²⁵ Regarding work with Indigenous peoples, the operation's area of influence is Easter Island, which is predominantly inhabited by members of the Rapa Nui ethnic group. The operation's interventions have been planned in close collaboration with this community. After a process of consultation and consensus, it was determined that solar energy was the most appropriate option for the island (paragraph 2.5). The program therefore plans to continue this intensive public consultation process for its water service improvement projects, thus ensuring that working together with the Rapa Nui ethnic group is an integral part of the design and implementation of all interventions.

- 1.12 **The Bank's additionality.** The Bank has in-depth knowledge of the challenges the Rapa Nui face in gaining access to basic services. In 2018, the Office of the Undersecretary of Regional and Administrative Development (SUBDERE) requested a fee-for-service (FFS) consulting arrangement from the Bank to develop an investment agenda for the sustainable development of Rapa Nui (CH-R1007). This arrangement identified priority actions that reflected the needs and priorities of various authorities, public services (including SASIPA), and the community. Importantly, these included the need to increase the resilience and reliability of water and electricity services. Under this framework, the Bank identified a series of priority actions associated with these services, to include: installing a photovoltaic plant, combatting the salinization of water sources, and reducing physical water losses.²⁶ The Bank also has experience in small-scale solar energy development in isolated systems in countries such as Suriname ([3059/OC-SU](#), [GRT/FM-13774-SU](#), and [4931/OC-SU](#)); Honduras ([GRT/SX-17123-HO](#)); Bolivia ([GRT/NV-14258-BO](#), and [5801/OC-BO/5802/KI-BO](#)); and El Salvador ([5799/OC-ES](#)). It also has experience in planning energy decarbonization processes for islands and in contexts with characteristics and challenges similar to those of Rapa Nui, such as the development of the energy transition plan for the Galapagos Islands, which was developed under the operation [ATN/OC-19248-EC](#), and Iquitos ([ATN/OC-20257-PE](#)), the largest off-grid city in the Americas that is 100% sustained by fossil fuels. These operations highlight the need for diversifying generation sources in non-interconnected areas, such as Easter Island, in order to increase the reliability of the energy supply. The Bank is also providing support to the Chilean government for the country's energy transition and the decarbonization of its economy ([5548/OC-CH/5278/OC-CH](#), and [3821/OC-CH](#)), in the form of technical cooperation aimed at promoting renewables, the modernization of transmission systems, and

²⁵ ILO (2019). Women in Business and Management: The Business Case for Change. To address challenges of the LGBTIQ+ people, evidence indicates that diversity training in the workplace is a promising avenue for combatting prejudice towards this population.

²⁶ SUBDERE, 2020. [Agenda de Inversiones para el Desarrollo Sostenible de Rapa Nui](#).

the incorporation of storage and other initiatives aimed at achieving carbon neutrality by 2050. With respect to desalination, the Bank, through program [2732/OC-CO](#), supported the rehabilitation of a desalination plant with capacity of 11 cubic liters per second (similar to the one planned for Easter Island), located on Colombia's Guajira Peninsula, which was having trouble operating due to inadequate maintenance. Moreover, in coordination with the Municipal Government of Easter Island and the Ministry of the Environment, the Bank will support the development of a communal climate change action plan (CCCAP) for the island, which will identify additional climate change adaptation and mitigation measures.²⁷

- 1.13 **Lessons learned applicable to the program.** This operation takes into account the lessons learned during the preparation and execution of similar operations,²⁸ namely: (i) the need to develop multisectoral approaches (in this case, water and electricity) to comprehensively address the different environmental and operational challenges involved in the provision of basic services; (ii) the importance of integrating the interests and needs of multiple stakeholders when defining investment priorities, ideally through intensive and culturally appropriate public consultation processes; (iii) the importance of estimating the real costs of investments, considering the additional costs associated with the transfer of inputs to the island; (iv) the importance of allocating a percentage of the budget for contingencies; (v) the need to implement innovative technologies that are environmentally friendly; and (vi) the importance of strengthening the operational management of service operating companies in order to support the sustainability of investments.

B. Objectives, components, and cost

- 1.14 **Objectives.** The program's general objective is to contribute to the environmental sustainability of Rapa Nui by improving water and electricity services. Its specific objectives are to: (i) increase the operational efficiency of water services; (ii) reduce dependence on fossil fuels for power generation; and (iii) strengthen SASIPA's business management.
- 1.15 **Component 1. Investments in drinking water service (US\$2,433,100).** This component will finance investments aimed at improving the operational efficiency of water service. Specifically, it will finance activities such as: (a) detailed engineering designs for a desalination plant, its construction, commissioning, monitoring, and maintenance for two years, to include infrastructure and equipment for the environmentally appropriate treatment of reject brine from the desalination process; (b) rehabilitation of the water distribution network in sectors with high levels of nonrevenue water; (c) replacement of micrometers that are 10 to 15 years old; (d) procurement and installation of equipment to reduce physical

²⁷ The CCCAP are climate planning instruments mandated by the Climate Change Framework Act (Law 21.455), which seeks to incorporate the contribution of the municipal government level in achieving the mitigation and adaptation goals established in Chile's Nationally Determined Contribution. Within the framework of the program, the solar photovoltaic plant represents a mitigation measure. In turn, the desalination plant and nonrevenue water reduction works represent climate change adaptation measures ([operational link 4](#)). The CCCAP for Easter Island is one of the 17 communal plans expected to be developed within the framework of the Program for Transition Towards a Carbon-neutral and Resilient Economy (CH-L1179), a programmatic policy operation currently in preparation.

²⁸ Operations 4413/BL-BO, 2845/OC-DR, and 2358/OC-EN.

water losses; and (e) an operational efficiency program for the pumps used to extract well water.

- 1.16 **Component 2. Investments in electricity service (US\$11,297,400).** This component will finance investments aimed at reducing dependence on fossil fuels imported from the mainland. Specifically, it will finance activities such as the detailed engineering designs for a photovoltaic plant, and battery storage system, its construction, commissioning, monitoring, and maintenance for two years.²⁹ This component will also finance the implementation of an energy efficiency program based on the installation of flow meters that will make it possible to digitalize and reduce diesel fuel consumption for each MW of energy generated.
- 1.17 **Component 3. Strengthening business management (US\$400,000).** This component will finance actions aimed at strengthening SASIPA's business management. Specifically, it will finance the implementation of a new information system for financial, accounting, and commercial management; and a series of plans aimed at strengthening SASIPA's institutional capacity, namely: (a) a water services development plan, to include a water source protection and conservation plan; (b) an electricity services development plan; and (c) a gender and diversity business action plan (paragraph 1.11). It will also finance an energy efficiency training program for SASIPA employees.
- 1.18 **Program administration, audits, and evaluation (US\$869,500).** The costs of program administration will also be financed, including the financial audits and evaluations.

C. Key results indicators

- 1.19 **Beneficiaries.** The direct beneficiaries of the program are SASIPA's customers, estimated at 3,815 households as of December 2023, whose quality of life will be improved with access to more sustainable water and electricity services. By contributing to the sustainability of essential services for any economic activity, the indirect beneficiaries of the program are expected to be all commercial enterprises on the island, which, in most cases, depend on tourist flows that would be harmed if the sustainable provision of these services were not guaranteed, as well as the floating population, which reaches peaks of 6,500 people per month.
- 1.20 **Performance indicators.** The program's investments are expected to generate a cumulative reduction of CO₂ emissions on the order of 7,900 tons, mainly as a result of the construction of the solar photovoltaic plant and the investments to reduce nonrevenue water. In terms of electricity service, the share of renewables in annual power generation is expected to increase from 1% to 23%. In terms of water service, it is expected that safe water will be guaranteed to 100% of the more than 3,815 of the company's customers and a reduction of nonrevenue water by more than 8 percentage points. At the corporate level, it is expected that the coverage of operating costs by the rates charged will increase from 62% to 75%.

²⁹ The choice of solar energy as an option was a decision made through a consultation process with the original Rapa Nui population, who decided that it would be the most appropriate option for the island, versus other alternatives such as wind energy, mainly due to the high visual and environmental pollution that characterize such plants.

and that the share of women on SASIPA's workforce will increase from 20% to 23%.

D. Program feasibility

- 1.21 **Technical feasibility of water service investments.** Based on information gathered from similar plants established in the country, for populations of less than 10,000 inhabitants, during the design of the program, a desalination plant was designed to reduce chlorides in Well 25. Reverse osmosis will be the technology used, as it is the most frequently used and the most available on the market. The plant would be of a modular type, allowing for the installation of more units in the future to increase treatment capacity. The size of the plant would allow it to be transported in 20-foot containers, which is the maximum unloading capacity available on the island. Operating costs were obtained from an analysis of similar plants, and include costs for electricity, membrane replacement, cartridge filter replacement, chemicals, and labor (operators). The analysis of alternatives concluded that the construction of the desalination plant is the most cost-efficient option to meet short-term demand, compared to the alternative of building new wells, which would involve the construction of new, extensive adduction lines that would be more expensive per cubic meter. Considering the need to meet short-term demand, nonrevenue water reduction measures are the best alternative, since immediate results are achieved with positive short-term financial returns. Regarding the management of reject brine from the desalination plant, a series of alternatives, not mutually exclusive, were analyzed at the prefeasibility level, including: (i) chlorine extraction through an electrolysis process; (ii) the conveyance of wastewater to an existing drain for the disposal of rainwater from the Mataverí airport runway; and (iii) the procurement of water trucks for watering the roads.³⁰ The waste management alternative will be determined as part of the feasibility studies and will be validated by the environmental authority (Environmental Evaluation Service).
- 1.22 **Technical feasibility of investments in electricity service.** The construction of a solar photovoltaic plant is the most cost-efficient alternative for the diversification of primary sources of power generation on the island and was the alternative validated by the island's main stakeholders after an intensive public consultation process carried out by SASIPA (paragraph 2.5). It should be noted that Chile has an attractive market for solar generation and experience in the use of this technology. The country has 9,916 MW of installed solar capacity and 2,177 MW under construction. The photovoltaic plant will have a maximum installed capacity of 2.99 MWp in order to gain experience in the management of this type of technology. The program also incorporates a 2-MWh battery storage system to ensure that the operation of the power system is safe, stable, continuous, and meets the quality of service levels established by the standard. The sizing of the storage system was based on the island's peak demand in 2023, which was 2.8 MW, but it is expected to increase year by year. The minute-scale power generation records of the small photovoltaic plant that is in service show that there

³⁰ Most desalination plant projects for populations of less than 10,000 inhabitants on the Chilean mainland consider shore discharge, since the emission standard that regulates pollutants associated with liquid waste discharges to marine and continental surface waters does not limit the concentration of chlorides that can be discharged. Although possibly the most cost-effective solution, this may not be viable in a context such as Easter Island.

are power generation dips of more than 80% due to cloud cover and that the start-up and synchronization time of the current generators is 3 minutes per unit. In this sense, a 2-MWh battery can respond instantaneously and compensate potential generation dips of more than 80%, giving the operator (SASIPA) enough time to put thermal generation into service in the event of a dip at times of peak demand. The installation of flowmeters in each thermal generator will allow better control of diesel fuel consumption, thus facilitating accurate measurement of generator performance and the implementation of energy efficiency measures through a real-time performance indicator.

- 1.23 **Financial viability.** The financial analysis of SASIPA and the program included a historical analysis of the company, based on audited financial statements and a projected analysis that included the preparation of a long-term financial model for the utility. Currently, SASIPA covers its costs with a combination of rate-based revenues and transfers received periodically and transparently³¹ from the Ministry of Finance of the Republic of Chile³² through the Budget Office of the Government of Chile (DIPRES), following efficiency and accountability criteria, as established in the SEP Code of public companies of the Chilean State.³³ The program's investments are focused on improving the company's sustainability and financial autonomy. In this sense, the program investments are expected to generate a positive impact on SASIPA's operating margin³⁴ as a result of the savings achieved in fuel purchases from the construction of the photovoltaic plant and increased revenues from higher volumes of drinking water billed for the replacement of micrometers and improvements in the distribution network, among other investments ([optional link 2](#)).
- 1.24 **Economic viability.** A cost-benefit analysis was performed to determine the economic viability of the program's projects. The main benefits of the drinking water interventions are: avoidance of drinking water service rationing, reduction of nonrevenue water, and monetization of avoided emissions. Investment and incremental operating costs were used. Using a discount rate of 12%, the investments for the water service are economically viable with a net present value (NPV) of US\$1.2 million, and an internal rate of return (IRR) of 17.7%. The main economic benefits of the photovoltaic plant are annual fuel savings, monetization of avoided emissions, and operation and maintenance savings. The program is economically viable, with an NPV of US\$458,219 and an economic internal rate of return of 12.7%. Both analyses were complemented by the corresponding sensitivity analysis, confirming the robustness of the results ([optional link 3](#)).
- 1.25 **Institutional viability.** SASIPA, as a majority-owned enterprise of the Chilean State, complies with the guidelines contained in the SEP Code that provide a framework of good corporate governance practices, regulations, and policies to the company, including: (i) efficient use of resources; (ii) separation of the roles of

³¹ SASIPA currently covers 62% of its operating costs with rates, and the rest through annual transfers from DIPRES, which makes it difficult to obtain private financing.

³² The annual transfers SASIPA receives from DIPRES for operation and investment are detailed in the Chilean government's Annual Public Sector Budget Law, prioritizing investment projects based on those that present the best return indicators and contribute to the company's growth.

³³ Sistema de Empresas (SEP). [Qué hacemos](#).

³⁴ In this way, the program is expected to enhance the financial sustainability of the company and the likelihood of obtaining private financing going forward.

the state as business owner and regulator; (iii) competitive conditions for access to financing; (iv) equitable treatment of shareholders; (v) transparency and information; and (vi) board accountability. Furthermore, during program preparation, SASIPA's capacity as an executing agency was analyzed. The result of this assessment, based on the Bank's Institutional Capacity Assessment Platform (ICAP), corroborated that SASIPA has no significant institutional, technical, or fiduciary weaknesses, and that its human resources are qualified and have the experience necessary to manage the program satisfactorily. Nonetheless, a series of recommendations were identified, including: (i) the creation of a specialized program team; (ii) training for the executing agency in Bank fiduciary and monitoring and evaluation aspects; and (iii) approval of the program [Operating Regulations](#) defining the mechanisms of institutional coordination, the execution strategy for each component, and the roles and responsibilities of the different functional areas of the company, including those of the specialized program team.

E. Program alignment

- 1.26 **Alignment with the Bank's country strategy with the country.** The operation is aligned with the IDB Group Country Strategy with Chile 2022-2026 ([GN-3140-3](#)), specifically, with its strategic objectives of: (i) "Improve[ing] the efficiency and quality of Chilean institutions," by promoting the strengthening of SASIPA's business management; and (ii) "Increase[ing] the economy's environmental and social sustainability through decarbonization of the productive and consumption matrix, and the growth of the circular economy," by financing interventions that will contribute to reducing CO₂ emissions and increasing the share of renewables in the annual generation of electricity on the island. It is also aligned with the crosscutting area of "natural disasters and climate change," as it will reduce dependence on fossil fuels for power generation.
- 1.27 **Alignment with the IDB Group's Institutional Strategy.** The operation is consistent with the IDB Group's new Institutional Strategy: Transforming for Scale and Impact (CA-631), through its core objectives of: (i) Addressing climate change, as the investments to be financed will contribute to the reduction of CO₂ emissions by reducing fossil fuel consumption; and (ii) Bolstering sustainable regional growth through investments in infrastructure, including a photovoltaic plant that will contribute to the decarbonization of the electricity matrix. Along the same lines, it is aligned with the operational focus areas of: (i) biodiversity, natural capital, and climate action; (ii) gender equality and inclusion; (iii) institutional capacity, rule of law, and citizen security; and (iv) sustainable, resilient, and inclusive infrastructure.
- 1.28 **Alignment with sector strategies and frameworks.** The program is consistent with the IDB Infrastructure Strategy: Sustainable Infrastructure for Competitiveness and Inclusive Growth ([GN-2710-5](#)), particularly with the priority area of "support[ing] the construction and maintenance of an environmentally and socially sustainable infrastructure," by promoting access to basic infrastructure services; and with the following Sector Framework Documents: (i) Water and Sanitation ([GN-2781-13](#)), in particular with the premise that "projects and programs are environmentally and socially sustainable and incorporate climate change and environmental and cultural sustainability considerations"; (ii) Energy ([GN-2830-8](#)) and the IDB Integrated Strategy for Climate Change Adaptation and Mitigation, and Sustainable and Renewable Energy (GN-2609-1) by supporting zero carbon

technologies, incorporating nonconventional renewable energies as well as energy efficiency measures; (iii) Climate Change ([GN-2835-13](#)), specifically with the dimension of success 4 which makes explicit that the programs and services promoted take into account climate change and risks related to natural disasters and promote water security; and (iv) Gender and Diversity ([GN-2800-13](#)), promoting gender equality and women's empowerment and with the Employment Action Framework with a Gender Perspective ([GN-3057](#)) as it contemplates actions to promote the equal participation of women and persons with disabilities within the company.

- 1.29 **Alignment with the Paris Agreement.** This operation has been analyzed using the IDB Group's [Joint Multilateral Development Banks' Framework](#) for Paris Agreement Alignment Analysis and the IDB Group Paris Alignment Implementation Approach (PAIA) ([GN-3142-1](#)) and has been determined to be: (i) aligned with the Paris Agreement adaptation goal; and (ii) aligned with the Paris Agreement mitigation goal based on a specific analysis. The alignment was based on consideration of the following elements: the desalination plant will be connected to the island's power grid; a photovoltaic plant will be financed to contribute to the renewable capacity of the grid; other alternatives to cover drinking water demand were considered; and infrastructure for the environmentally sound treatment of the desalination process reject brine will be financed.
- 1.30 **Climate Finance.** According to the [joint methodology of the multilateral development banks](#), the operation has 85.54% of climate finance in terms of mitigation and adaptation, through activities for increasing the efficiency of water and electricity services and reducing dependence on fossil fuels in power generation. Additionally, according to the IDB Group's Green Finance Tracking Methodology (GN-3101), the operation also contributes to the environmental sustainability objective of "sustainable use and protection of water and marine resources" and, therefore, the total sum of climate and green finance is 97.74% of the operation ([optional link 4](#)).
- 1.31 **Alignment with the Public Utilities Policy (Public Utilities Policy).** The operation is consistent with the principles of the Public Utilities Policy ([GN-2716-6](#)) and satisfies the conditions of financial sustainability and economic evaluation of the same, as SASIPA covers its operating costs through a combination of tariffs and transfers received transparently and periodically from the national government. In addition, the program's investments will contribute to increasing operating revenues and reducing the company's operating costs, thus improving its financial sustainability. Moreover, the program's works are socioeconomically viable. Chile's water and sanitation and energy sectors have advanced regulatory frameworks and separation of roles that promote efficiency and transparency in the provision of these services ([optional link 6](#)).

II. FINANCING STRUCTURE AND MAIN RISKS

A. Financing instrument

- 2.1 **Financing modality.** The program will be structured as an investment loan under the project-specific loan modality, since the logic of its components cannot be separated without affecting the nature of the program, and its cost and preliminary design are already defined.

- 2.2 **Loan amount.** The loan amount will be up to US\$15 million to be financed with resources from the Bank's Ordinary Capital. No cofinancing or local contribution is anticipated. The preliminary budget is shown in Table 1.

Table 1. Estimated Program Costs (US\$)

Components	IDB (US\$)	%
Component 1. Investments in drinking water service	2,433,100	16.2
1.1 Desalination plant and brine reject management	1,500,000	10.0
1.2 Network improvement and loss reduction	785,500	5.2
1.3 Replacement of micrometers	94,000	0.6
1.4 Pump operational efficiency	53,600	0.4
Component 2. Investments in electricity service	11,297,400	75.3
2.1 Photovoltaic Plant	11,050,000	73.7
2.2 Flowmeters for energy efficiency	57,000	0.4
2.3 Photovoltaic plant supervision	190,400	1.3
Component 3. Strengthening business management	400,000	2.7
3.1 Financial, accounting, and commercial management system	220,000	1.5
3.2 Operational efficiency training program	50,000	0.3
3.3 Development plan for water services	40,000	0.3
3.4 Development plan for electricity services	40,000	0.3
3.5 Gender and diversity action plan	50,000	0.3
Program administration, audits, and evaluation	869,500	5.8
Total	15,000,000	100.0

- 2.3 **Disbursement schedule.** The disbursement period for the loan proceeds will be four years from the effective date of the loan agreement. The annual disbursement schedule is shown in Table 2.

Table 2. Estimated disbursement schedule (US\$)

Item	Year 1	Year 2	Year 3	Year 4	Total
IDB	6,448,135	6,694,615	954,250	903,000	15,000,000
Total	6,448,135	6,694,615	954,250	903,000	15,000,000
%	43	45	6	6	100

B. Environmental and social risks

- 2.4 According to the environmental and social policy framework (ESPF), and based on existing information, the operation is classified as Environmental and Social Impact Category "B," since its activities could cause, during construction, potential adverse environmental and social impacts that are generally localized and short-term, such as the removal of vegetation cover, temporary impacts on pedestrian and vehicular traffic associated with the works, as well as the potential impact on cultural heritage, for which effective known and readily available mitigation measures are included in the environmental and social management

- plan (ESMP), which is part of the program's environmental and social management system (ESMS). The environmental and social risk of the operation is "substantial" due to: risks to archaeological heritage, occupational health and safety risks, risks to the health and safety of communities, potential indirect impacts from possible risks in the solar panel supply chain, contextual risks from local institutional governance arrangements that require approval to develop the projects, and performance risks associated with the lack of socioenvironmental specialists at SASIPA. During the operational phase, risks associated with inadequate management and disposal of desalination reject brine from the plant could occur, while during the abandonment phase potential impacts could be generated by inadequate management and disposal of lithium ion batteries and solar panels when they reach the end of their useful life. With respect to latter, their disposal is especially concerning since there are no hazardous waste managers on Rapa Nui, and hazardous waste is stored temporarily on the island until it can be shipped to the mainland for final disposal, which entails high costs that make it difficult to properly and expeditiously manage this waste. For all these risks, measures were established in the ESMP, the environmental and social action plan (ESAP), and other loan instruments, including a specific budget for hiring a socioenvironmental specialist for the specialize program team, as well as an archaeological advisory service.
- 2.5 No impacts are anticipated due to loss of biodiversity in natural habitats, no physical displacement of housing or economic displacement is foreseen, and no negative impacts are expected on the Rapa Nui Indigenous community. Regarding archaeological heritage, no negative impacts associated with the construction of the photovoltaic plant are expected, according to the results of archaeological prospecting conducted. As regards drinking water projects, guidelines for action will be established in the event of chance discoveries. Prior to the 3 April 2024 analysis mission, disclosure-ready versions of the environmental and social analysis with its ESMP for the program's three projects and the stakeholder engagement plan were published on the Bank's website.³⁵ This plan provides continuity to the stakeholder engagement process initiated by SASIPA in 2020,³⁶ developing various sources of information and consultation. In that regard, the consultation with the Rapa Nui Council of Elders figured prominently,³⁷ which validated the proposed solar photovoltaic plant as the socio-culturally appropriate alternative.
- 2.6 During the months of April and June 2024, a new series of consultations with institutional stakeholders representing the Rapa Nui community was carried out, which were structured according to its governance and decision-making model.

³⁵ See the program's [environmental and social management plan](#) and [stakeholder engagement plan](#).

³⁶ In 2020, SASIPA led a series of meetings in which the solar photovoltaic plant project was presented to and obtained the approval of various local stakeholders such as the Municipal Government of Rapa Nui, the National Commission for Indigenous Development of Easter Island (CONADI), the Rapa Nui Council of Elders, and national institutions, including the Ministry of Energy. SASIPA also led open meetings where the Rapa Nui population was presented with the plant project, its location, and main characteristics.

³⁷ The Rapa Nui Council of Elders is a consultative body in matters that affect or are related to the protection and respect for the traditions of the people, their language, their culture, and their natural environment. Article 51 of the Indigenous Act (Law 19.253) explicitly recognizes the Council as a pillar of the Rapa Nui culture, as the moral and spiritual authority of the people whose mission is to watch over their identity, traditions, and beliefs.

The participants in this new round of consultations included the Easter Island Development Commission and Subcommission, the Mayor and environmental authorities of the Rapa Nui Municipal Government, the Local Council of the Sea, the National Forestry Commission, and the Easter Island Provincial Presidential Delegation. In addition, a prior, free, and informed consultation was held with the Rapa Nui Council of Elders, representing the island's 35 traditional families. All the institutions consulted expressed their support for greenlighting the projects, both during the consultations and by sending notes, in which they submitted a series of recommendations to be taken into account in designing the projects. Prior to the start of construction, additional information was shared and other consultations were held, which will continue during the construction and operating phases of each project. Drawing on the results of these efforts, the consultation report was published on the Bank's website as an annex to the final version of the stakeholder engagement plan and a preliminary version of the ESMS, in accordance with the contents previously agreed on with SASIPA. Since SASIPA will not directly control the supply chain of construction materials for the solar photovoltaic plant, the Bank will perform a due diligence review in the bidding process, which provides for a declaration in the bidding documents—to be submitted by the bidder—stating that no forced labor, child labor, or practices that entail noncompliance with labor laws or human rights violations were used in the manufacture of the solar panels and their main components.³⁸

C. Fiduciary risks

- 2.7 SASIPA has no prior experience applying the Bank's fiduciary policies (procurement and financing) in the execution of loan operations. However, the findings of the institutional capacity assessment performed using the ICAP concluded that SASIPA has no significant institutional, technical, or financial weaknesses, and that its human resources are skilled and have the necessary experience to manage the operation. A high-level fiduciary risk and a medium-high risk have been identified: (i) failure to train the staff of SASIPA, the executing agency, in Bank policies and tools could result in delays in the issuance of periodic progress reports and noncompliance with contractual requirements. As a mitigation measure, the Bank will provide support to strengthen SASIPA's team and train its members in Bank policies, in the monitoring tools of the monitoring and evaluation plan, and in preparing the program's fiduciary tools and reports; and (ii) if SASIPA does not have sufficient qualified staff to manage the volume of activities, the implementation of each of the components' outputs could be delayed, resulting in delays of up to three months in the program outcomes. To mitigate this, SASIPA will form a program execution unit with a coordinator and qualified professionals to handle with the volume of activities associated with the program's components.

³⁸ These guidelines will be in accordance with: (i) the document "IDB Group Measures to Address the Risk of Forced Labor in the Supply Chain of Solar Panels with Silicon Components" (GN-3062-1); (ii) the Environmental and Social Policy Framework (GN-2965-3); and (iii) the IDB's procurement and contracting policies (GN-2349-15 and GN-2349-15); and (iv) the IDB's procurement and contracting policies (GN-2349-15 and GN-2350-15).

D. Other risks and key issues

- 2.8 During program preparation, additional risks were identified, namely: (i) difficulties in accessing the island due to weather conditions (medium-high), which will be mitigated through operational planning to avoid scheduling deliveries of equipment and supplies during months of adverse weather; (ii) lack of trained personnel for the operation and maintenance (O&M) of infrastructure to be financed by the program, which could affect the continuity of water and electricity services (medium). To mitigate this risk, the program includes resources for training SASIPA personnel in the O&M of infrastructure and equipment. In addition: (a) SASIPA will commit to adopting the necessary measures for the appropriate O&M of the program works (paragraph 3.10); and (b) the bidding documents for the two main works (solar photovoltaic plant and desalination plant) will include the maintenance of that infrastructure for a period of 24 months; (iii) lack of a mechanism for managing inquiries and complaints, which could cause delays affecting the fulfillment of the program's objectives (medium-high). To mitigate this risk, SASIPA will hire a socioenvironmental specialist to ensure that the Bank's policies are applied and the program's ESMS is implemented; and (iv) the design of a socially unacceptable alternative for the treatment of reject brine produced by the desalination plant could negatively impact the viability of this investment (medium). To mitigate this, various alternatives used in other desalination projects will be identified and a public consultation process will be held to identify an alternative or alternatives, which will then be validated by the national environmental authority.

III. IMPLEMENTATION AND MANAGEMENT PLAN

A. Summary of implementation arrangements

- 3.1 **Borrower, executing agency, and guarantor.** SASIPA will be the borrower and executing agency of the program. The Republic of Chile will be the guarantor of the financial obligations (paragraph 3.6) under the loan agreement to be signed between SASIPA and the Bank (paragraph 3.3).
- 3.2 **Program execution mechanism.** As the executing agency, SASIPA will be responsible for the program's technical, administrative, socioenvironmental, fiduciary, and operational execution, including general coordination and resource management. To execute the program's activities, SASIPA will form a specialized program team comprised of the members mentioned in paragraph 3.8. This team will coordinate with and rely on SASIPA's functional areas, specifically the finance and administration, power generation, and drinking water departments.
- 3.3 **Sovereign guarantee of the Republic of Chile.** The sovereign guarantee to be issued by the Republic of Chile (paragraph 3.1) will be established and formalized through: (i) a supreme decree issued by the President of the Republic, authorizing the issuance of the joint guarantee for the financial obligations under the loan agreement, to be signed between SASIPA and the Bank, and authorizing the General Treasurer of the Republic and the Minister of Finance to sign the instruments stipulated in the following subparagraph; (ii) a unilateral surety bond to be issued by the General Treasurer of the Republic and countersigned by the Comptroller General of the Republic, whereby the Republic of Chile unconditionally and irrevocably becomes joint guarantor of all financial obligations incurred by SASIPA (paragraphs 3.6 and 1.22) as a result of the loan agreement with the

Bank³⁹; and (iii) a supplementary letter of agreement to be signed between the Bank and the Republic of Chile, represented by its Minister of Finance.⁴⁰

- 3.4 In view of the legal nature and the formalities by which the Republic of Chile will guarantee this operation,⁴¹ it will not be subject to the provisions governing the pledge on liens.⁴² The fact that the guarantee is not subject to the encumbrance commitment represents a low risk for the Bank, since, in accordance with Chilean law, limitations and restrictions exist that prevent or curb the power of the Republic of Chile to grant liens to third parties on its assets or tax revenues.
- 3.5 Moreover, given the particular structural characteristics of the sovereign guarantee to be provided by the Republic of Chile, as described in paragraph 3.3, in the event that the Republic of Chile does not fulfill its payment obligation under the guarantee, the Bank will not have the contractual power to suspend disbursements, declare debtor balances due in advance, and/or cancel undisbursed balances in other loan agreements of the Bank's portfolio with Chile (cross-default) and, therefore, will not be able to apply the corresponding rules and procedures on arrears (CS-4189), a power that is standard in the Bank's other sovereign guaranteed operations. In the event of a potential breach by the Republic of Chile as guarantor of its payment obligations under this guarantee, the Bank may only exercise such contractual penalties in relation to the loan agreement with SASIPA for this operation. Considering Chile's history of compliance and credit rating with respect to its financial obligations, the probability of a default by the Republic of Chile as guarantor of this operation is low.
- 3.6 **Partial exception to the policy on guarantees from the borrower (GP-104-2).** The Board of Executive Directors is requested to approve a partial exception to the Bank's policy on guarantees required from the borrower (document GP-104-2, OP-303) so that the Bank would only have the sovereign guarantee of the Republic of Chile on the borrower's financial obligations (including payment of principal, interest, and fees), thus waiving the guarantee of the Republic of Chile in relation to the borrower's obligations to perform and any local counterpart obligations. This request is justified on the grounds of local regulations of the Republic of Chile, specifically, by Article 1 of Law 19.847 and Article 2 of Law 21.640,⁴³ which state that the guarantees granted by the Chilean State extend only to payment obligations of a financial nature (loan service payment). Also, the obligations to

³⁹ In the event of any breach by SASIPA, whether total or partial, of any guaranteed obligation, the Bank, at its sole discretion, may demand the corresponding payment from the Republic of Chile as guarantor.

⁴⁰ By means of this letter of agreement, the Republic of Chile commits to the following conditions, *inter alia*, with the Bank: (i) any dispute related to the interpretation, execution, or application of the guarantee is unconditionally and irrevocably subject to the Bank's arbitration procedure; (ii) the rights and obligations related to the sovereign guarantee are valid and enforceable in accordance with its terms, without regard to the legislation of any particular country; and (iii) the guarantee is exempt from any tax, fee, or duty applicable to its execution, registration, or enforcement.

⁴¹ The structure and specific features of this guarantee are applicable for the purposes of this operation in view of the characteristics and specific context of the program.

⁴² Commitment whereby the guarantor undertakes that, if a lien is placed on its tax assets or income to secure a long-term external debt on behalf of a third party, it should also grant an equivalent lien on behalf of the Bank, under equal conditions.

⁴³ Law 19.847 empowers the President of the Republic to grant State guarantees. Law 21.640 is the Public Sector Budget Law for year 2024.

perform and those to make any local contribution, are in the sphere of SASIPA's authority, which is a "Sociedad por Acciones" (joint stock company) (paragraph 1.2). As such, SASIPA has legal personality and its own assets, and therefore has the institutional and legal authority to comply with the operation's nonfinancial obligations. Lastly, the risks associated with this partial exception are low given that SASIPA has financial capacity, secured through a combination of tariff revenues and transfers received periodically and transparently from the Ministry of Finance of the Republic of Chile through DIPRES. (paragraph 1.23).

- 3.7 **Program Operating Regulations.** Program execution will be governed by the provisions established in the loan agreement, and by the program Operating Regulations, which will include, at minimum: (i) the organizational structure for program execution, including the roles and responsibilities of the specialized program team; (ii) guidelines for the financial, auditing, procurement, and environmental and social processes; and (iii) a description of the mechanisms for coordination, monitoring, and evaluation of the program's physical and financial progress. The program Operating Regulations will also contain the environmental and social impact management arrangements based on, *inter alia*, compliance with applicable national or local laws, exclusion criteria, eligibility criteria, and the actions required to implement the ESMS and ESAP.
- 3.8 **Special contractual conditions precedent to the first disbursement of the loan:** The borrower will present evidence, to the Bank's satisfaction, of: (i) the approval and entry into effect of the program Operating Regulations, under the terms previously agreed on with the Bank, which will include the environmental and social requirements established in the ESMS and ESAP; and (ii) the hiring and/or appointment, as appropriate, of the following members for the specialized program team: (a) program coordinator; (b) procurement specialist; (c) financial specialist; (d) environmental and social specialist; (e) electrical specialist; and (f) hydraulics specialist. These two conditions are essential to guarantee the adequate execution and coordination of the program.
- 3.9 **Special contractual conditions precedent for program execution:** Prior to commencing a program works project, the borrower undertakes to obtain and inform the Bank, to the Bank's satisfaction: (i) that the requisite legal permissions to access, occupy, and/or use the land or premises required for that work have been secured; and (ii) the relevant environmental permits and other licenses needed to carry out such work have also been secured. This condition is necessary to reduce delays in the start of works and ensure the proper completion of each work financed with loan proceeds.
- 3.10 **Operation and maintenance.** SASIPA will undertake to ensure that the works and equipment included in the program are properly maintained in accordance with generally accepted technical standards. The borrower will submit, beginning the year following the completion of the first of the program's works and up to two years after the completion of the last (either during the disbursement period or thereafter),⁴⁴ in the first quarter of each calendar year, an annual maintenance plan and a report on the status of O&M of the program's works and equipment. If the

⁴⁴ In the event that the term extends beyond the project closing period, O&M-related costs will be borne by SASIPA, which will maintain its obligation to the Bank to submit the required O&M plans and reports.

Bank's inspections or the reports it receives determine that maintenance is below agreed standards, the borrower will take the necessary steps to ensure that any deficiencies are fully corrected. Moreover, to ensure the operational sustainability of the investments, bids associated with the photovoltaic plant and desalination plant will include: (i) maintenance of the works for a period of two years; and (ii) training activities for the company's personnel.

- 3.11 **Procurement.** Procurement financed, in whole or in part, with loan proceeds will be carried out in accordance with the Policies for the Procurement of Goods and Works Financed by the IDB (GN-2349-15) and the Policies for the Selection and Contracting of Consultants Financed by the IDB (GN-2350-15). All procurement must be included and executed in accordance with the procurement plan. The executing agency defined a procurement plan with the contracting and procurement needs for the first 18 months of execution ([required link 4](#)), in which it has anticipated some stages of the international public bidding for the procurement under way and the maintenance of the solar photovoltaic plant.
- 3.12 **Disbursements.** Loan proceeds may be disbursed in the form of advances of funds, reimbursement of expenditures, and direct payment to the supplier. Advances of funds will be made on the basis of expenditure projections for up to 180 days. They will be governed by the Financial Management Guidelines for IDB-financed Projects ([OP-273-12](#)), or the version in effect during execution. Advances of funds subsequent to the first will be subject to substantiating 80% of the accumulated balances pending justification.
- 3.13 **Retroactive financing.** The Bank may retroactively finance from the loan proceeds up to US\$200,000 (1.3% of the proposed loan amount) in eligible expenditures incurred by the borrower prior to the loan approval date for hiring the staff of the specialized program team, provided that substantially similar requirements to those set forth in the loan agreement have been met. Such expenditures will have been incurred on or after 27 March 2024, but will under no circumstances include expenditures incurred more than 18 months prior to the loan approval date. The specific expense identified is for the hiring of staff for the specialized program team.
- 3.14 **Financial audits.** During the loan disbursement period or any extensions thereof, the borrower will submit to the Bank, within 120 days after the close of the fiscal year, the program's annual audited financial statements. The audit will be performed by an independent auditing entity acceptable to the Bank, including the Office of the Comptroller General of the Republic. The determination of the scope of the audits and other related considerations will be governed by the Financial Management Guidelines for IDB-financed Projects ([OP-273-12](#)), or any subsequent version thereof in effect during execution, and the Guidelines for the Preparation of Financial Statements and Independent Audit Requirements. The program's final audited financial statements will be submitted no later than 120 days after the expiration of the original disbursement period or any extensions thereof.

B. Summary of arrangements for monitoring results

- 3.15 **Monitoring.** The monitoring structure will include the procurement plan, the [multiyear execution plan](#), the [annual work plan](#), the [results matrix](#), the progress monitoring report, and the risk management report. The borrower will submit

semiannual reports to the Bank no later than 60 days after the end of each six-month period, reporting the progress made and the results obtained, and an action plan for the next six months ([required link 2](#)).

- 3.16 **Evaluation.** The borrower will submit to the Bank a midterm evaluation report 90 days after 50% of the loan proceeds have been disbursed or 50% of the disbursement period has elapsed (whichever occurs first), and a final evaluation 90 days after the expiration of the original disbursement period or any extensions thereof ([required link 2](#)). In addition, the borrower will conduct an ex post economic evaluation of the operation as detailed in the monitoring and evaluation plan ([required link 2](#)), which will be submitted with the final evaluation. Based on the final evaluation, the Bank, with support from the executing agency, will prepare the project completion report.

Development Effectiveness Matrix		
Summary		CH-L1182
I. Corporate and Country Priorities		
Section 1. IDB Group Institutional Strategy Alignment		
Operational Focus Areas	<div>-Biodiversity, natural capital, and climate action</div> <div>-Gender equality and inclusion of diverse population groups</div> <div>-Institutional capacity, rule of law, citizen security</div> <div>-Sustainable, resilient, and inclusive infrastructure</div>	
[Space-Holder: Impact framework indicators]		
2. Country Development Objectives		
Country Strategy Results Matrix	GN-3140-3	(i) Improvement of the efficiency and quality of Chilean institutions; and (ii) Increase the economy's environmental and social sustainability through decarbonization of the productive and consumption matrix, growth of the circular economy, naturebased solutions, and enhancement of natural capital.
Country Program Results Matrix	GN-3207	The intervention is included in the 2024 Operational Program.
Relevance of this project to country development challenges (If not aligned to country strategy or country program)		
II. Development Outcomes - Evaluability		
3. Evidence-based Assessment & Solution		Evaluable
3.1 Program Diagnosis		7.4
3.2 Proposed Interventions or Solutions		2.5
3.3 Results Matrix Quality		1.6
4. Ex ante Economic Analysis		3.4
4.1 Program has an ERR/NPV, or key outcomes identified for CEA		10.0
4.2 Identified and Quantified Benefits and Costs		1.5
4.3 Reasonable Assumptions		3.0
4.4 Sensitivity Analysis		2.5
4.5 Consistency with results matrix		2.0
5. Monitoring and Evaluation		1.0
5.1 Monitoring Mechanisms		9.5
5.2 Evaluation Plan		4.0
III. Risks & Mitigation Monitoring Matrix		
Overall risks rate = magnitude of risks*likelihood		5.5
Environmental & social risk classification		Medium Low
IV. IDB's Role - Additionality		
The project relies on the use of country systems		
Fiduciary (VPC/FMP Criteria)	Yes	External Control, Internal Audit.
Non-Fiduciary		Procurement: Information System, Price Comparison, Contracting Individual Consultant, National Public Bidding.
The IDB's involvement promotes additional improvements of the intended beneficiaries and/or public sector entity in the following dimensions:		
Additional (to project preparation) technical assistance was provided to the public sector entity prior to approval to increase the likelihood of success of the project		

The general objective of this program is to contribute to the environmental sustainability of Rapa Nui through the improvement of water and electricity services. The specific objectives are: (i) to increase the operational efficiency of water services; (ii) to reduce dependence on fossil fuels in electricity generation; and (iii) to strengthen SASIPA's business management.

This project presents a complete diagnosis and a precise description of the specific challenges involved in drinking water production and electricity generation in Rapa Nui. Outcome indicators included in the results matrix are SMART and have means of verification.

Economic analysis was carried out through two cost-benefit analyses (CBA), one for the drinking water intervention and another one for the photovoltaic plant. Both conclude that the interventions are economically viable with an IRR of 17.7% and 12.7%, respectively. The main benefits from the drinking water intervention are: avoiding drinking water service rationing, reduction of non-revenue water and monetization of avoided emissions. For the photovoltaic plant the following benefits are considered: annual fuel savings, monetization of avoided emissions, and savings in operation and maintenance costs. The cost-benefit analyses have reasonable assumptions and appropriate sensitivity tests.

The monitoring and evaluation plan proposes to measure the effectiveness of the intervention through an ex post cost-benefit and a before-after comparison.

RESULTS MATRIX

Program objective:	The program's general objective is to contribute to the environmental sustainability of Rapa Nui by improving water and electricity services. Its specific objectives are to: (i) increase the operational efficiency of water services; (ii) reduce dependence on fossil fuels for power generation; and (iii) strengthen the business management of Sociedad Agrícola y Servicios Isla de Pascua SpA (SASIPA).
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GENERAL DEVELOPMENT OBJECTIVE

Indicator	Unit of measure	Baseline value	Baseline year	Expected year achieved	Target	Means of verification	Comments
General objective: Contribute to the environmental sustainability of Rapa Nui by improving water and electricity services							
CO ₂ emissions avoided	Tons of CO ₂ e	0	2024	End of program	7,900	SASIPA's annual power generation report	This calculation takes into account the annual emissions avoided from electric power generation attributable to the solar photovoltaic plant and implementation of improvements to the water system (mostly by reducing nonrevenue water). It considers the average performance of the thermal generators (272.7 liters/MWh) and a diesel emission factor of 2.68 kg/liter. It includes the total emissions avoided during the program life cycle.

SPECIFIC DEVELOPMENT OBJECTIVES

Indicator	Unit of measure	Baseline value	Baseline year	Year 1	Year 2	Year 3	Year 4	End of program	Means of verification	Comments
Specific development objective 1. Increase the operational efficiency of water services										
SASIPA customers with access to safe water	%	100	2024				100	100	Water quality reports reported by SASIPA and validated by the regulator	Safe water is defined as water that complies with the parameters established in national regulations. The company's 3,815 current customers are considered.
Nonrevenue water	%	45.6	2024		43.7 ¹		36.7	36.7	SASIPA annual report on nonrevenue water	Difference between the amount of drinking water supplied to the system and the amount billed
Energy consumption of the drinking water system (energy efficiency index)	kWh/m ³ produced	0.55	2024				0.49	0.49	SASIPA annual report on water production	Calculated as the ratio of electricity consumed by the water system to the volume produced. It will be calculated for the installations targeted by the program.
Specific development objective 2. Reduce dependence on fossil fuels for power generation										
Share of renewables in annual power generation	%	1.12%	2024				23%	23%	SASIPA annual generation record	This indicator represents the proportion of renewable generation registered annually over total generation registered in the same year. It is calculated as the percentage of anticipated demand that is expected to be met by renewable generation in year 4 of the program.
Specific development objective 3. Strengthen SASIPA's business management										
Coverage of operating costs with rate revenues	%	62%	2023			73%	75%	75%	SASIPA annual audited financial statements	Before transfers from the Budget Office of the Government of Chile (DIPRES). Includes all company services.
Women in the company's workforce (all levels)	%	20%	2024				23%	23%	Semiannual execution report	Calculated as the percentage of women out of the total number of employees in the company's workforce.

¹ Represents the reduction in nonrevenue water associated with the replacement of micrometers (reduction of commercial losses).

OUTPUTS BY COMPONENT

Indicators	Unit of measure	Baseline value	Baseline year	Year 1	Year 2	Year 3	Year 4	End of program	Means of verification	Comments
Component 1. Investments in drinking water service										
1.1 Desalination plant built and operating	Plant	0	2024				1	1	Contract completion certificate	The plant is considered operational when 24 months of maintenance are completed. The native Rapa Nui population will participate in and validate the plant's design to ensure that the process is carried out in a culturally appropriate manner.
1.2 Final disposal system for desalination plant reject brine built	System	0	2024				1	1	Contract completion certificate	
1.3 Drinking water distribution networks rehabilitated	Kilometer	0	2024			6	2	8	Contract completion certificate	Includes rehabilitation of the Orito sector and replacement of the asbestos cement pipe network.
1.4 Program for identifying and reducing physical water losses implemented	Program	0	2024				1	1	Semiannual execution report	Includes the procurement of equipment and leak detection and repair services.
1.5 Water micrometers installed	Micrometer	0	2024	300	361			661	Semiannual execution report	Includes the replacement of all micrometers between 10 and 15 years old.
1.6 Pressure valves installed	Valve	0	2024		3			3	Semiannual execution report	
1.7 Water pump operational control program implemented	Program	0	2024		1			1	Semiannual execution report	The program is considered implemented when the telemetry of Well 23 and variable frequency drives in 4 pumps are installed.
Component 2. Investments in electricity service										
2.1 Solar photovoltaic plant built and operating	Plant	0	2024				1	1	Contract completion certificate	The plant is considered operational when the 24-month maintenance period is completed. The native Rapa Nui population participated in and validated the plant's design to ensure that the process was carried out in a culturally appropriate manner.
2.2 Energy efficiency flowmeters installed	Flowmeter	0	2024		8			8	Semiannual execution report	Includes 5 flowmeters in the generation plant and 3 in the medium voltage system.

Indicators	Unit of measure	Baseline value	Baseline year	Year 1	Year 2	Year 3	Year 4	End of program	Means of verification	Comments
Component 3. Strengthening business management										
3.1 Computerized business management system implemented	System	0	2024		1			1	Semiannual performance report	
3.2 Energy efficiency training program implemented	Program	0	2024			1		1	Semiannual performance report	
3.3 Development plan for water services prepared	Plan	0	2024				1	1	Semiannual execution report	The development plan includes a water source conservation plan.
3.4 Development plan for electricity services prepared	Plan	0	2024				1	1	Semiannual execution report	
3.5 Gender and diversity action plan developed and in implementation	Plan	0	2024			1		1	Semiannual execution report	When at least one of the activities identified in the plan has been carried out, the plan is considered to be in implementation.

Country: Chile

Division: WSA

Operation No.: CH-L1182

Year: 2025

FIDUCIARY AGREEMENTS AND REQUIREMENTS

Executing agency: Sociedad Agrícola y Servicios Isla de Pascua SpA (SASIPA)

Operation name: Rapa Nui Water and Electricity Services Sustainability Program

I. FIDUCIARY CONTEXT OF THE EXECUTING AGENCY

1. **Use of country systems in the operation** (Any system or subsystem that is subsequently approved may be applicable to the operation, in accordance with the terms of its validation by the Bank).

<input type="checkbox"/> Budget	<input type="checkbox"/> Reports	<input checked="" type="checkbox"/> Information systems	<input type="checkbox"/> National Competitive Bidding (NCB)
<input type="checkbox"/> Treasury	<input checked="" type="checkbox"/> Internal audit	<input type="checkbox"/> Shopping	<input type="checkbox"/> Other
<input type="checkbox"/> Accounting	<input checked="" type="checkbox"/> External control	<input type="checkbox"/> Individual consultants	<input type="checkbox"/> Other

2. Fiduciary execution mechanism

<input checked="" type="checkbox"/>	Specific features of fiduciary execution	<p>SASIPA will be the borrower and executing agency for the program. The Republic of Chile will be the guarantor of SASIPA's financial obligations under the loan agreement. SASIPA, as executing agency, will be responsible for technical, administrative, socioenvironmental, as well as financial, procurement, and operational management of the program, including overall coordination and resource management.</p> <p>For the operation's governance, and based on the recommendations of the institutional capacity assessment, SASIPA will form a specialized program team comprised of the following members: (a) program coordinator; (b) procurement specialist; (c) financial specialist; (d) social and environmental specialist; (e) electrical specialist; and (f) hydraulics specialist. This team will coordinate with and rely on SASIPA's functional areas, specifically the finance and administration, power generation, and drinking water departments.</p>
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3. Fiduciary capacity

Fiduciary capacity of the executing agency	<p>The Institutional Capacity Assessment Platform (ICAP) was used to conduct the assessment of the executing agency, which confirmed that it has a satisfactory degree of development for execution of the program. The findings of this assessment substantiated that SASIPA has no significant institutional, technical, or fiduciary weaknesses, and its human resources are qualified and have the necessary experience to satisfactorily manage the program's technical quality. Nonetheless, a series of recommendations were made to improve program execution capacity. The main recommendations are: (i) the creation of a specialized program team tasked with the program's</p>
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	<p>general coordination that will be provided with the tools and resources it needs to assume that role; (ii) training for the executing agency in Bank fiduciary and monitoring and evaluation aspects; and (iii) the inclusion in the program Operating Regulations of the institutional coordination mechanisms, the execution strategy for each program component, the evaluation and monitoring mechanisms, and the procedures for identifying the roles and responsibilities of each stakeholder with respect to technical quality management, procurement management, and management of specific financial aspects of the program.</p>
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4. Fiduciary risks and risk response

Risk taxonomy	Risk	Risk level	Risk response
Human resources	If the staff of SASIPA (as executing agency) are not trained in Bank policies and tools, delays could occur in issuing periodic progress reports, leading to noncompliance with contract requirements.	High	The Bank will provide support to strengthen the SASIPA team and train them on IDB policies, in the monitoring tools of monitoring and evaluation plan, and in preparing the program's fiduciary tools and reports.
Human resources	If SASIPA lacks qualified staff to ensure program governance and to manage the volume of activities, the execution of the outputs for each component could be delayed, leading to delays of up to three months in the program's outcomes.	Medium-high	SASIPA will provide a program coordinator and qualified professionals for program governance and to manage the volume of Component 1 and Component 2 activities.

5. **Policies and guidelines applicable to the operation:** For the contracting of works, nonconsulting services, and goods procurement, policies GN-2349-15, approved by the Bank on 2 July 2019, will apply. Moreover, for the contracting of consulting services, policies GN-2350-15, will apply. For the program's financial management, the Financial Management Guidelines for IDB-financed Projects (GN-2811-1 and OP-273-12) or its updates will be used for the program's financial management.
6. **Exceptions to policies and guidelines:** Not applicable.

II. CONSIDERATIONS FOR THE SPECIAL CONDITIONS OF THE LOAN CONTRACT

<p>Special contractual conditions precedent to the first disbursement: (i) the approval and entry into force of the program Operating Regulations, under the terms previously agreed on with the Bank; and (ii) the hiring and/or appointment, as appropriate, of the following members of the specialized program team: (a) program coordinator; (b) procurement specialist; (c) financial specialist; (d) social and environmental specialist; (e) electrical specialist; and (f) hydraulics specialist.</p>
<p>Exchange rate: For the purposes of Article 4.10 of the General Conditions, the parties agree that the exchange rate to be used will be the rate stipulated in Article 4.10(b)(i). For the purpose of determining the equivalency of expenditures incurred in local currency chargeable against the local contribution or the reimbursement of expenditures chargeable against the loan, the agreed exchange rate will be the rate on the effective date on which the borrower, the executing agency, or any other person or corporation with delegated authority to incur expenditures makes the respective payments to the contractor, vendor, or beneficiary.</p>
<p>Type of audit: During the loan disbursement period, within 120 days after the close of the fiscal year, the borrower, through the executing agency, will submit the program's annual audited financial statements to the Bank. The audit will be conducted by an independent auditing entity acceptable to the Bank, including the Office of the Comptroller General of the Republic. The determination of the scope of the audits and other related aspects will be governed by policy OP-273-12, or the version in effect during execution, and the Guidelines for Financial Statements and External Audits. The program's final audited financial statements will be submitted no later than 120 days after the expiration of the original disbursement period or extensions thereof.</p>

III. AGREEMENTS AND REQUIREMENTS FOR PROCUREMENT EXECUTION

<input checked="" type="checkbox"/>	<p>Bidding documents</p>	<p>Works, goods, and nonconsulting services procured under the Bank's procurement policies (GN-2349-9) and subject to international competitive bidding (ICB) will use the Bank's standard bidding documents or those agreed on between the executing agency and the Bank for the specific procurement. The selection and contracting of consulting services will be conducted in accordance with the consultant selection policies (GN-2350-15) and use the standard request for proposals issued by the Bank or another agreed on between the executing agency and the Bank for the specific selection.</p> <p>For procurement, implementation, and maintenance of both the solar photovoltaic plant and the desalination plant, a procurement document will be prepared and agreed on between the country's competent authority and the Bank. The sector specialist is responsible for reviewing the technical specifications and the terms of reference for procurement during the preparation of selection processes. This technical review may be ex ante and is independent of the procurement review method.</p>
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☒	Recurring expenses	Any recurring expenses subject to financing that are required to implement the program, once approved by the Project Team Leader, will be incurred in accordance with the executing agency's administrative procedures. These procedures will be reviewed and accepted by the Bank, provided that they do not violate the principles of economy, efficiency, and competition (see Guidelines for the Treatment of Recurring Expenses and Expense Eligibility Policy (document GN-2331-5 and updates thereto)).
☒	Advance procurement and retroactive financing	<p>The need to anticipate some stages of ICB for the procurement, implementation, and maintenance of the solar photovoltaic plant, and of national public bidding for the procurement, implementation, and maintenance of the desalination plant has been identified, namely, the prequalification of firms, calls for bids, and opening and analysis of bids, among others. In both cases, the contracts signed will contain the respective provisions on fraud and corruption, as well as those on the origin of goods and eligibility. Likewise, in accordance with paragraph 1.11 of document GN-2349-15, the borrower proceeds with advance procurement at its own risk and understands that the Bank's agreement to the procedures, documentation, or award proposal does not commit it to making a loan for the project in question.</p> <p>The Bank may retroactively finance from the loan proceeds up to US\$200,000 (1.3% of the proposed loan amount) in eligible expenditures incurred by the borrower prior to the loan approval date for hiring the staff of the specialized program team, provided that substantially similar requirements to those set forth in the loan agreement have been met. Such expenditures will have been incurred on or after 27 March 2024, but will under no circumstances include expenditures incurred more than 18 months prior to the loan approval date (see documents GN-2349-15, GN-2350-15, and the Bank policy on recognition of expenditures, retroactive financing, and advance procurement (GN-2259-1)).</p>
☒	Procurement supervision	<p>The supervision method will be ex ante for the first procedure of each category to be performed under the Bank's procurement policies. Ex post reviews will be performed in accordance with the program's supervision plan, subject to changes during execution. Ex post review reports will include at least one visit.</p> <p>The threshold amounts for ex post review will be defined annually based on program execution. Ex post reviews will be conducted annually in accordance with the program supervision plan, subject to change during execution. Ex post review reports will include at least one visit.</p> <p>Threshold amounts for ex post review will be defined annually, based on the amount executed.</p>
☒	Records and files	The executing agency will be responsible for maintaining the original procurement, contracting, and financial management records under its responsibility in the framework of the program's execution.

Main procurements:

Procurement description	Selection method	New procedures / tools	Estimated date	Estimated amount (US\$)
Goods				
Procurement of materials for the rehabilitation of the Orito sector	NCB		[11/19/2024]	297,000.00
Works				
Contracting, implementation, and maintenance of the solar photovoltaic plant	ICB		[08/04/2024]	11,050,000.00
Contracting, implementation of the desalination plant	NCB		[11/24/2025]	1,130,500.00
Nonconsulting services				
Firms				
Services including the technical inspection of works for the implementation and commissioning of the solar photovoltaic plant	Quality- and cost-based selection (QCBS)			190,400.00

Click [required link 4](#) to access the 18-month procurement plan.

IV. FINANCIAL MANAGEMENT AGREEMENTS AND REQUIREMENTS

☒	Programming and budget	<p>The executing agency's budget is comprised of allocations from the public sector budget, as defined in the Financial Administration Act of the State (Decree Law 1.263/75), and income from the company's services. Accordingly, SASIPA prepares budget programming for each fiscal year in advance (and approved by the company's board of directors), which is then reported to the Budget Office of the Government of Chile (DIPRES). No difficulties for budget programming that could affect program execution are anticipated.</p>
☒	Treasury and disbursement management	<p>Bank accounts. The executing agency will manage and control the bank accounts to be opened in U.S. dollars and local currency for the exclusive and separate management of the loan proceeds, as well as their bank reconciliation.</p> <p>Financial plan. Disbursements to the executing agency will be made on the basis of a detailed financial plan based on the actual liquidity needs of the program.</p> <p>Disbursement methods. The Bank will disburse funds under the advance of funds modality or another modality recognized in the Financial Management Guidelines for IDB-financed projects (document OP-273-12). Advances of funds will be made on the basis of a financial plan generated for up to six months ahead, when payments are fulfilled and suitably documented. With the exception of the first advance of funds, subsequent advances may be processed upon substantiation of 80% of the total accumulated balance of advances. The "Online Disbursement" electronic platform will be used to manage disbursements from the Bank.</p>
☒	Accounting, information systems, and reports	<p>For the operation's accounting records, an enterprise resource planning system will be used (hereinafter ADM). It has an administration module (financial accounting), a warehouse module, and a budget module. A cost center will be created to identify the program's funds.</p> <p>The accounting records will be cash-based and will follow the International Financial Reporting Standards when applicable. As a complement to the policies and guidelines applicable to the operation, the program Operating Regulations will be used with the documented definition of workflows and internal controls.</p>
☒	Internal control and internal audit	<p>SASIPA has a permanent internal auditor who reports to the company's board of directors. The internal control system is based on the organizational plan, and on plans and procedures approved by the General Government Audit Council (CAIGG).</p>

<input checked="" type="checkbox"/>	External control and financial reports	The executing agency will use independent auditors that are acceptable to the Bank, including the Office of the Comptroller General of the Republic. Within 120 days after the close of each fiscal year of the executing agency, and during the loan disbursement period, it will submit the program's audited financial statements in accordance with the terms of reference agreed on with the Bank. The last report will be submitted within 120 days after the date stipulated for the last loan disbursement.
<input checked="" type="checkbox"/>	Financial supervision of the operation	The financial monitoring plan will be based on risk and fiduciary capacity assessments of the executing agency and will consider onsite and desk monitoring visits, as well as analysis and monitoring of the results and recommendations of audits of the annual financial reports.

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-___/25

Chile. Loan ____/OC-CH to the Sociedad Agrícola y Servicios Isla de Pascua SpA (SASIPA). Rapa Nui Water and Electricity Services Sustainability Program

The Board of Executive Directors

RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to enter into such contract or contracts as may be necessary with the Sociedad Agrícola y Servicios Isla de Pascua SpA (SASIPA), as borrower, and with the Republic of Chile, as guarantor, for the purpose of granting the former a financing aimed at cooperating in the execution of the Rapa Nui Water and Electricity Services Sustainability Program. Such financing will be for the amount of up to US\$15,000,000 from the resources of the Bank's Ordinary Capital, and will be subject to the Financial Terms and Conditions and the Special Contractual Conditions of the Project Summary of the Loan Proposal.

(Adopted on ____ 2025)