Environmental and Social Review Summary (ESRS)
ICE Investment Program: Smart Metering – COSTA RICA

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1. General Information of the Project and Overview of Scope of IDB Invest's Environmental and Social Review

This transaction (the "Project") is about financing for the Instituto Costarricense de Electricidad (the "Client", the "Company" or ICE) to upgrade the energy infrastructure in Costa Rica by: i) replacing the old electric meters with smart meters, and ii) modernizing the hydroelectric plant Ventanas – Garita[1] (PHVG, in Spanish).

The Project is expected to generate a significant impact on: i) energy efficiency, by improving ICE's capacity to control the consumption of energy and reduce energy losses; ii) technological upgrade, which will result in higher service reliability, fewer outages and better data management for consumers and the Company; iii) climate action, by reducing the carbon footprint, promoting clean energy solutions and contributing to fighting climate change and encouraging a transition towards more sustainable energy sources; and iv) economic growth, by stimulating the economic activity, increasing the employment opportunities and generating long-term benefits thanks to a more efficient, resilient energy system.

The environmental and social due diligence (ESDD) process involved, among other aspects, the following: i) interviews and meetings with ICE's employees and those in charge of managing environmental and social (E&S) matters; and ii) review of E&S, and occupational health and safety (OHS) information made available by the Client, such as: (a) the corporate E&S management organizational chart; (b) ICE's annual sustainability report for 2023; (c) the Client's Corporate Strategy 4.0; (d) the preliminary version of the E&S management plan for the modernization of the PHVG; (e) the analysis of the sites in terms of how sediments and excavated material are managed while the modernization of the PHVG is underway; (f) the environmental feasibility study for the PHVG modernization project; (g) the economic assessment for the modernization of the PHVG; (h) the feasibility study for the PHVG modernization; (i) the PHVG modernization fact sheet; (j) the failure modes workshop report for the modernization of the PHVG; (k) the disaster risk management plan (DRMP) for the PHVG modernization project; and (l) the risk assessment for the modernization of the PHVG; etc.

In order to ensure the Project's commitment to respecting and safeguarding the human rights, its zero tolerance for retaliation and its determination to provide for and guarantee a safe environment so that the stakeholders may express their concerns without fearing retaliation, the ESDD process involved reviewing the following documents: (i) the corporate code of ethics and conduct (2024); (ii) the sexual harassment rulebook; (iii) the declaration of discrimination-free workspace; (iv) the

[1] This hydroelectric plant is located in Turrúcares de Alajuela, Costa Rica. It has an installed power of 96 MW, as well as an associated reservoir occupying a 7.6-ha area and a capacity of 722,167 m^3.

corporate human rights policy; and (v) the procedure to manage grievances and complaints from clients and other stakeholders; etc.

2. Environmental and Social Categorization, and Rationale

According to IDB Invest's Environmental and Social Sustainability Policy, the Project has been classified as of Category B as it may generate, for example, the following risks and impacts: i) potential access problems or road conflict when transporting the sediments from the PHVG modernization; ii) risks to the workers' health and safety while the reservoir is being cleaned and the sediments from the PHVG modernization tasks are being disposed of; iii) solid waste (hazardous and non-hazardous) generated during the replacement of 350,000 meters; iv) potential conflict with the neighbors of the waste disposal sites and during the transportation of the sediments produced when cleaning the reservoir during the modernization of the PHVG; and v) potential impacts on biodiversity. These impacts and risks are deemed to be of medium-low intensity.

The Performance Standards (PSs) triggered by the Project are: (i) PS 1: Assessment and Management of Environmental and Social Risks and Impacts; (ii) PS 2: Labor and Working Conditions; (iii) PS 3: Resource Efficiency and Pollution Prevention; iv) PS 4: Community Health, Safety, and Security, and (v) PS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources. Some preventive actions have been included in case PS 5: Land Acquisition and Involuntary Resettlement and PS 8: Cultural Heritage are triggered.

3. Environmental and Social Context

3.1 General Characteristics of the Project's Site

The Project involves: i) replacing 350,000 old meters with smart meters, to be further disposed of adequately in a non-polluting manner; and ii) modernizing the PHVG, which involves the plant's operational rehabilitation with actions in the Virilla and Ciruelas dam sites, the conveyance and control sites, the powerhouse site, at San Miguel reservoir.

Modernizing the PHVG will require the following activities: i) at the Virilla dam site: rehabilitation of the access road; reconstruction of drainage systems; slab reinforcement; instruments and crack repair; improvements to the bottom outlet, the intake structure, the desander, the surge chamber, other access roads, and the guardhouse; ii) at the Ciruelas dam: demolition works and improvements to the bottom outlet, the water intake structure, the desander, the energy dissipator, the shaft, the existing access roads, and the guardhouse; iii) at the San Miguel reservoir: dam instrumentation; sediment flushing during the Operations phase once the modernization works are complete; removal of sediments deposited in the reservoir; water intake repairs: improvements to the bottom outlet, the energy dissipation basin; reinforcement of the reservoir's lateral dike; improvements to access roads and the guardhouse; iv) at the tunnel: instruments repair, rehabilitation, and maintenance; v) repairs of low- and high-pressure pipelines; vi) improvements to the surge tank; vii) slope stabilization works; viii) improvements to the powerhouse, ix) reconstruction of transmission line currently connecting the powerhouse to the La Garita substation.

The latest version of the project scope description mentions a preliminary calculation of the sediments to be extracted at the San Miguel reservoir, which will be at about 700,000 m^3. These sediments will be transferred to disposal sites for proper treatment[2].

3.2 Contextual Risks

There are no indicators of high or moderate risk in Costa Rica. However, as it is located between two oceans, it is highly vulnerable to the adverse impacts of climate change. Between 2001 and 2008, the floods and storms in the area generated what may be the largest human and economic impact in the last few years. The country is also vulnerable to natural events due to the presence of settlements in areas that are prone to volcanic eruptions and unstable lands, degraded also by extensive livestock farming, or in poorly planned areas that are vulnerable to landslides and floods.

On the other hand, the combination of political and social stability, together with steady growth, have resulted in one of the lowest poverty rates in Latin America and the Caribbean. Only 12% of the population of Costa Rica is considered poor, whereas 4.7% is extremely poor. The country's success in the last few decades is apparent in its robust indicators of human development, which are still higher than those of other countries in the region. Biodiversity is one of the drivers of the national social and economic development[3].

4. Environmental Risks and Impacts and Proposed Mitigation and Compensation Measures

4.1 Assessment and Management of Environmental and Social Risks and Impacts

4.1.a Environmental and Social Management System

ICE's first two-year Sustainability Strategy was published in 2022, and was a fundamental component for Grupo ICE's 2023-2027 Corporate Strategy, which aims at encouraging the creation of value by managing sustainability comprehensively, contributing to the Sustainable Development Goals (SDGs) and considering the international best practices applicable to business, with a triple-bottom-line approach, which is materialized through the definition of objectives and the establishment of indicators for the Group's companies, oriented to creating economic, social and environmental value in the territories where it operates and to minimizing the E&S impacts of its operations.

This strategy is based on nine categories, twenty-three topics and twelve principles, the most outstanding being: process management, decarbonization of the economy, climate change resilience, biodiversity management, stakeholders, human rights, etc. Moreover, it uses a triple-bottom-line approach, which is materialized through the definition of objectives and the establishment of indicators for the companies, oriented to create economic, social (external and

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[2] For the modernization of the PHVG, ICE: i) has analyzed 10 sites within a 11-kilometer radius of the San Miguel reservoir; ii) has prepared an environmental feasibility study, and an environmental and social management plan (ESMP); iii) is working on (a) an environmental diagnostic study, (b) an environmental assessment instrument (called D1) for new activities to be performed during the Construction and Operations phase, and (c) a declaration of national interest (DCN, in Spanish); and iv) has initiated actions to (a) submit applications for drinking water and sewerage availability, and (b) obtain a temporary permit to extract water for the Construction phase.

[3] https://www.climate-expert.org/en/home/business-adaptation/costa-rica

internal) and environmental value, help the communities, reduce the environmental impact and govern with integrity.

ICE has been recognized nationwide for its excellence in the deployment of institutional environmental management programs[4] since 2016. In addition, it has earned six awards in Climate Change under the program Programa de Bandera Azul Ecológica[5] (PBAE, in Spanish). A total of 28 generation plants have been certified in carbon reduction by the Climate Change Office (DCC, in Spanish), whereas all its hydroelectric power plants are certified under ISO 9001[6], ISO 14001[7] and ISO 45001[8].

MERCO[9], the corporate reputation business monitor, named Grupo ICE in 2023 as one of the most responsible companies in Costa Rica, ranking 12th in the general classification and standing out in such areas as responsible company domestically, clients and society, and in the environmental, social and governance matters.

4.1.b Policy

ICE has several policies in place, some of which are: i) policy on confidential treatment of information; ii) anti-corruption and conflict of interest management policy; iii) transparency and disclosure of information policy; iv) Grupo ICE's human rights policy; v) communications policy; and vi) fair competition policy. It also has other corporate management instruments, like: i) a sexual harassment rulebook; ii) a corporate code of ethics and conduct; iii) a declaration of discrimination-free workspace; and iv) Grupo ICE's procedure to manage grievances and claims from clients and other stakeholders.

Grupo ICE's 2023-2027 Corporate Strategy includes 15 business objectives, some of which are the diversification of the electric power grid to reach full renewable generation, and the encouragement of an organizational culture that promotes the staff's holistic wellbeing so that they outperform the established goals, their health and safety is protected, and a responsible business conduct is instated in ICE as a source of competitive edge and public value.

4.1.c Identification of Risks and Impacts

The environmental feasibility study for the modernization of the PHVG includes the preliminary identification of potential E&S risks and impacts that could derive from the execution of the expected works. A preliminary environmental and social management plan (ESMP) was prepared for the modernization of the PHVG, which includes an impact assessment and measures to prevent, mitigate or compensate them. The ESMP, in turn, includes a social engagement and communication strategy; a communication strategy; stakeholders mapping; and a consultation plan.

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4 Institutional Environmental Management Plan of the Ministry of Environment and Energy (MINAE, in Spanish).

5 The program called Programa Bandera Azul Ecológica (PBAE, in Spanish) aims to organize the civil society in the coastal areas with the goal of promoting their development, in line with the protection of the sea and the corresponding beaches.

6 International Organization for Standardization's (ISO) standard for quality management and control.

7 ISO standard for environmental management systems.

8 ISO standard for occupational health and safety management systems.

9 Monitor Empresarial de Reputación Corporativa.

4.1.c.i Direct and Indirect Impacts and Risks

Some of the direct impacts are: i) potential topsoil or subsoil pollution; ii) deterioration of the water and air quality; ii) increasing environmental noise; iv) potential effects on the pedestrian and road accesses during sediment transportation; v) risks for the workers' health and safety; vi) potential pollution caused by solid waste (hazardous and non-hazardous) generated by the replacement of meters; vii) potential conflicts with neighbors of the large sediment waste sites; viii) visual impacts; ix) potential effects on the downstream communities as a result of commissioning and opening the reservoir's bottom outlet gates, and x) potential loss of flora and fauna caused by cleaning of the sediment deposit sites.

4.1.c.ii Analysis of Alternatives

The feasibility study for the modernization of the PHVG included an analysis of alternatives which weighed different ways to recover the useful volume of the reservoir. It also involved looking into the sites for managing special sediments and excavated material in situ.

4.1.c.iii Cumulative Impact Analysis

The Project has not yet carried out a cumulative impact analysis, as, given its current conditions, it is not deemed necessary.

4.1.c.iv Gender Risks

ICE's corporate gender and human rights program (PCGDH, in Spanish) promotes gender equality and equity practices, which lead to eliminating the gender-based salary gap, among other improvements. Moreover, ICE has implemented a sexual harassment rulebook, together with other gender-oriented programs. However, in 2023, 26% of its employees were women, 34% of whom held leadership positions, which represents a 50% drop with respect to 2022. Therefore, ICE has decided to boost actions to improve its gender indicators to get positive results in the medium term.

4.1.c.v Gender Programs

ICE has a corporate gender and human rights program, which serves Grupo ICE to implement: i) governance guidelines to eradicate discrimination towards the LGBTIQ+[10] individuals as part of its campaign "Somos iguales en derechos y dignidad" (We are equal in terms of rights and dignity) (2015); ii) Grupo ICE's declaration of discrimination-free workspace, which was disclosed as part of the campaign "Somos iguales en derechos y dignidad" (2016); iii) the handbook for guidance and support in cases of gender-based discrimination (2017); iv) San José declaration, an initiative of the LGBTIQ Commissioner under the President's Office and the Business Alliance for Development (AED, in Spanish) to encourage respect for human rights within the Group (2018); v) human rights policy for ICE and its companies (2019); and vii) Grupo ICE's political commitment to executing human

[10] "LGBTQ+" is an inclusive term that describes individuals with diverse sexual orientations and gender identities. It refers to lesbian, gay, bisexual, transgender, queer and intersexual people; the + symbol indicates that the community includes many other unspecified identities.

rights due diligence for responsible business conduct, as well as a roadmap to carry out the due diligence process in Grupo ICE (2024).

Furthermore, ICE has participated with other institutions in the following committees: i) the National Network of Units for Gender Equality (RUPIG, in Spanish); ii) the Interinstitutional Committee for Tracking and Implementing Human Rights International Covenants of the Ministry of Foreign Affairs and Worship; iii) the national policy for effective equality between men and women (PIEG) for 2018-2030; and iv) the Male Network for Gender Equality in the Public Sector.

ICE has launched several gender actions, and since 2003 it has had an institutional program of gender equality and equity. Also, since 2022 it has adhered to the United Nations' Women Empowerment Principles (WEP), thus consolidating its commitment to gender equality. In 2023 it adopted the political commitment to human rights due diligence as part of its responsible business conduct stance, in the context of the Responsible Business Conduct Project for Latin America and the Caribbean, driven by the UN High Commissioner for Human Rights and the Organisation for Economic Co-operation and Development[11] (OECD).

4.1.c.vi Climate Change Exposure

The area where the Project is located is not significantly exposed to hydrometeorological threats, like droughts and heatwaves. However, these could worsen in the future with respect to the baseline, particularly in a high-emissions scenario of RCP 8.5[12].

The threats imposed by dry weather events as well as by increasing average temperature and heatwaves may affect the hydroelectric power generation, as evaporation losses increase and the recharge flow diminishes. The field workers' health may also be affected by extreme temperatures.

One of the major action pillars of the National Adaptation Plan (NAP, in Spanish) 2022-2026, or the Action Plan of the National Policy of Climate Change Adaptation 2018-2030 (PNACC, in Spanish) in Costa Rica, is "assuring the continuity of public utilities and an adequate protection of the assets, improving the capacity of the public investment to adapt to climate change." Thus, it is expected that public assets are managed in such a way that guarantees robust infrastructure works and redundant essential services (roads, energy, water).

Given the fact that the Project aims at enhancing the useful life for the PHVG and achieving efficient metering systems, its objectives are consistent with the relevant climate resilience policies applicable in the country, directly contributing to action pillar #4 "Adaptation of public utilities and resilient infrastructure" in Costa Rica's NAP.

The Project is deemed as aligned with the provisions of the Paris Agreement, based on an analysis performed in line with IDB Group's Paris Alignment Implementation Approach.

[11] The OECD is an international organization that gathers 38 countries with advanced economies, promotes cooperation among its members and aims for sustainable economic and social development, with better policies that seek for prosperity, equality, opportunities and wellbeing for everyone.

[12] RCP 8.5 or Representative Concentration Pathway 8.5 is a greenhouse gas (GHG) emissions scenario developed by the Intergovernmental Panel on Climate Change to model possible climate change future scenarios.

4.1.d Management Programs

ICE prepared an ESMP for the modernization of the PHVG as well as a DRMP, which includes an emergency action plan.

ICE will prepare a recovery program for the old meters as part of the meter replacement works.

4.1.e Organizational Capacity and Competency

ICE has defined roles and responsibilities to guarantee the effective oversight of environmental, social and sustainability matters. An executive unit was set to supervise the execution of the construction works and the completion of the actions defined in the ESMP, and the environmental and social action plan (ESAP).

The executive unit will engage the Finance Department and the Electricity Department. The Sustainability and Planning Area within the Electricity Department, through its E&S and Technical Coordination Unit, will be in charge of managing the Project E&S aspects as defined in the ESMP and the ESAP, as well as the supervision requirements from the national agencies. On the other hand, the Unregulated Service Management Office and the Generation Division will be responsible for monitoring the hiring and bidding processes, as well as the construction works and the implementation of the E&S measures.

4.1.f Emergency Preparedness and Response

ICE has implemented a risk assessment and a disaster and climate change risk assessment for the PHVG modernization project under the Disaster and Climate Change Risk Assessment Methodology (DCCRAM)[13]. Thanks to these instruments, it was possible to identify the threats and the infrastructure criticality with the analysis of the three variables of the criticality matrix[14]. Considering the main threats, vulnerabilities and criticality, and the potential risk exacerbation for the area under study, it was concluded that the infrastructure falls under the high-risk category[15]. This led to the creation of a disaster risk management plan (DRMP).

Under the DRMP, a qualitative analysis was performed of twenty-nine failure modes for the PHVG, six of which correspond to scenarios related to the modernization project. As a way to counteract the effects if they ever materialize, the DRMP proposes actions with short-, medium- and long-term measures. The following measures are to be carried out in the short term: improving the emergency system; performing downstream water studies; assessing climate change; carrying out geotechnical monitoring and instrumentation actions; disposing of the reservoir sediments; recovering the bottom outlet; automating the gates; rehabilitating the tunnel; stabilizing the slopes and upgrading the equipment; also some governance measures are included (institutional strengthening, continuous training, coordinated actions with local and national authorities, and territorial control in exposed areas).

[13] IDB, 2019.

[14] It includes an analysis of the physical characteristics of the area, the negative impact on the essential services and the negative impact on the population (IDB, 2019).

[15] As per IDB's DCCRAM (IDB, 2019).

4.1.g Monitoring and Review

ICE has made up an executive unit to track procedures, programs, plans, and forms that help control and monitor the environment, as well as the legal environmental compliance of its projects. The Sustainability and Planning Office also monitors the goals and objectives of Grupo ICE's 2023-2027 Corporate Strategy[16], related to environmental management, climate change and biodiversity across the company.

4.1.h Stakeholder Engagement

For the rehabilitation works at the PHVG, ICE has prepared a communication strategy, which includes mapping and identifying stakeholders, and developing a consultation plan as well as prevention, mitigation, and compensation measures. Moreover, an internal engagement process has been developed as part of the failure modes workshop.

4.1.h.i Disclosure of Information

ICE, through its Electricity Department, produces annual sustainability reports. Its latest one, published in 2023, used the Global Reporting Initiative (GRI)[17] methodology for the first time. Additionally, it shares E&S information on its website and social media.

4.1.h.ii Informed Consultation and Participation

According to its ESMP, ICE's communication strategy presents three action pillars for each project stage: i) a one-way informative communication that will address the project overview and the need to launch and carry out the project; ii) a two-way communication that encourages community engagement[18]; and iii) actions to raise awareness and promote the measures that are included in the ESMP for the community's control and monitoring.

ICE is expecting to start by mid-2025 a process of reporting and dealing with queries and concerns from the Project stakeholders, particularly with the local organizations already identified at the stakeholder mapping.

4.1.i External Communication and Grievance Mechanism

Grupo ICE has in place a procedure to manage grievances and claims from clients and other stakeholders (47.00.001.2010); its current version has been in use since June 2024. The procedure defines the official channels to receive grievances and claims, as well as the specifications of the process: channels to report grievances and claims; requirements to submit them; term to fulfill the requirements; suggestions, congratulations and thank-you messages; file creation; response times; notification; response content; and expiration date of the grievances or claims.

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16 ICE's Corporate Strategy for 2023-2027.

17 The Global Reporting Initiative (GRI) is an internationally recognized methodology for the preparation of business sustainability reports that shares a set of standards to measure and communicate the economic, environmental, and social impact of an organization.

18 Equivalent to an environmental license.

ICE will have a Project-specific grievance mechanism, which will enable: i) receiving and processing grievances anonymously; ii) receiving grievances from vulnerable groups; and iii) managing sexual violence or harassment reports.

4.2 Labor and Working Conditions

4.2.a Working Conditions and Management of Worker Relationships

Grupo ICE has 13,707[19] payroll employees and is planning new hires for the Project.

ICE also has: i) a human resources policy, ii) trade unions; iii) a grievance mechanism for the workers; iv) a code of conduct; vi) an internal labor regulation (RAL, in Spanish); vi) staff regulations; and vii) a declaration of discrimination-free workspace. It has also certified its OHS systems under standard ISO 45001[20].

4.2.a.i Human Resources Policies and Procedures

ICE relies on a procedure to recruit, evaluate and select candidates, mainly aimed at guaranteeing a quality, efficient process. Furthermore, there are well-defined performance and assessment processes.

4.2.a.ii Working Conditions and Terms of Employment

One of Grupo ICE's 2023-2027 Corporate Strategy[21] objectives (Business Objective No.14) focus on establishing an organizational culture that promotes the holistic wellbeing of the staff so that they outperform the established goals, and their occupational health and safety is protected. This implies encouraging dynamic, continuous learning as a way to prevent job obsolescence and to get them ready for new challenges, while focusing on diversity, inclusion, business health, employee retention practices and employee recognition.

The Company has established eleven sustainability-related topics to focus on; in this regard, it advocates for the analysis of the workers' job satisfaction, the need for human talent retention and training, and the availability of resources to suitably execute the tasks in ICE's value chain.

ICE has another procedure (32.00.002.2024_3) to recruit, evaluate and select candidates, mainly aimed at guaranteeing a quality, efficient process; a code of ethics and conduct offering guidance with values, commitments and rules for workers; and an internal labor regulation aimed at ruling the employer-employee relationship according to the Labor Code and other labor or related laws in force in Costa Rica.

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19 Data from the 2023 Sustainability Report. Sustainability

20 ISO standard for occupational health and safety management systems.

21 ICE's Corporate Strategy for 2023-2027.

4.2.a.iii Worker Organizations

Upon committing to complying with the local legislation applicable in Costa Rica, the Company recognizes the workers' rights to form associations and to be part of them, and it observes and assumes all the responsibilities arising from the legislation, including those in international treaties and conventions executed by Costa Rica with the International Labor Organization (ILO).

4.2.a.iv Non-discrimination and Equal Opportunity

To date, Costa Rica has ratified 52 ILO international conventions in connection with the workers' rights: eight of the ten fundamental conventions, the four governance conventions and forty technical conventions.

ICE has not reported violations to the rights of Indigenous peoples or cases of child, forced or obligatory labor in the Company or its value chain. It also reported that it effectively dealt with and managed fifty-five cases of harassment (41 at the workplace and fourteen of sexual nature), as well as sixteen cases of discrimination.

ICE maintains a declaration of discrimination-free workspace, in which it agrees to respect human rights and encourages the elimination of any form of discrimination, as well as staff regulations, which seek to guarantee fair and equal treatment to prevent discrimination as established.

4.2.a.v Grievance Mechanism

ICE and its companies have in place mechanisms, means and channels to deal with internal and external grievances and claims from stakeholders in the organization's value chain: i) in person (verbally or in writing), through its agencies, stores, kiosks, external dealers, corporate and business accounts executives, complaint and suggestion boxes, as well as national media outlets; ii) over the phone, through its contact centers or available numbers[22]; iii) electronically, to an email address (contactenos@ice.go.cr), messaging services or web chats; iv) electronic links (www.grupoice.com); and iv) social media (Facebook, LinkedIn, X, Instagram, Tik Tok, YouTube and WhatsApp).

ICE has in place a procedure to manage grievances and claims from Grupo ICE's clients and other stakeholders.

4.2.b Protecting the Workforce

ICE has committed to complying with the Costa Rican applicable OHS laws and regulations and adequately monitoring the exposure of its direct and indirect workers to occupational risks. Moreover, it has established it will bear no tolerance for slave or child labor, for workers, contractors, and business partners.

[22] 800-DENUNCIE, 800-USUARIO, 800-SOPORTE, 800-EMPRESA, 8000-ICESOC, 8000-ICELEC, 800-ENERGIA, 800-363-7442, 1193, 1119 and 1026.

4.2.b.i Child Labor

Costa Rica is recognized as one of the six most advanced countries in terms of child labor eradication. Also, the Office of Child Labor Eradication and Adolescent Worker Protection (OATIA, in Spanish)[23], of the Ministry of Labor and Social Security, has prepared a roadmap for Costa Rica to become a country free from child labor and its worst forms.

As required by Costa Rican legislation, ICE submitted its report, in which it revealed there had been no documented cases of forced and child labor in 2023.

4.2.c Occupational Health and Safety

In compliance with the labor and OHS laws in Costa Rica, including the National Occupational Health Policy, and the requirements of certification ISO 45001[24], ICE has defined what employees and contractors should do and how they should act, leading to: i) protecting the physical integrity of employees and contractors; ii) preventing injuries and damages to their health; iii) not affecting process safety by implementing and executing industrial safety and occupational health procedures; and iv) identifying hazards, assessing risks and setting up prevention, corrective, control or transference measures.

Finally, the EMP for the PHVG modernization project includes a labor management plan (LMP), with a Project-specific code of conduct, a grievance mechanism for the workers and specific OHS plans.

4.2.d Provisions for People with Disabilities

ICE's corporate human resources policy is meant to consolidate a corporate culture in the spirit of inclusion and equality, which respects human rights and promotes the eradication of all forms of discrimination, including disabilities, across ICE's and its companies' activities and operations, according to its values.

Moreover, Law No. 7600, Equal Opportunities for People with Disabilities Law, is applied to all activities and projects. In 2023, ICE employed seventy-three people with disabilities (13 women and sixty men).

4.2.e Workers Engaged by Third Parties

ICE has in place specific labor policies for the outsourced services. Additionally, it supervises and audits the rendered services to guarantee they are aligned with the Group's policies and goals.

4.2.f Supply Chain

The Company makes its purchases through two systems: SICOP (the integrated public procurement system), or ICE's online procurement system.

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[23] Decree No. 27516-MTSS (1998).

[24] ISO standard for occupational health and safety management systems.

SICOP is a transactional model of electronic procurement based on the best international practices that makes it more efficient to complete purchases and hiring dealings with public institutions. This platform is an e-commerce marketplace that operates as a single window and is accessible through the Internet; it creates time and cost savings for suppliers and institutions, favors transparency, encourages bidders' engagement, and boosts competitiveness among the local companies and the State.

ICE's online procurement system is based on five guidelines: i) general rules for contract management; ii) the corporate policy to prevent corruption and manage conflicts of interest; iii) the OHS rule, and iv) the internal rulebook for administrative hiring.

On the other hand, ICE takes actions to face the challenges and strengthen the management of green purchases as an award requirement. In its 2023 Sustainability Report, ICE revealed that no transaction involved forced, child or obligatory labor, and that a total of 318 were assessed under E&S criteria out of its 518 national and twelve international suppliers.

4.3 Resource Efficiency and Pollution Prevention

4.3.a Resource Efficiency

One of ICE's sustainability principles is encouraging efficient, sustainable use of resources; biodiversity management; weather events resilience; investments; sustainable, competitive business under a regenerative and positive net impact approach. This includes proactive focus on ecoefficiency and climate action, as well as measurement of the whole carbon footprint across the companies' operations, in the light of the SDGs.

4.3.a.i Greenhouse Gases

ICE set up a greenhouse gas (GHG) elimination program for 2024-2027, which will have 2024 as the base year. At operational level, the Electricity Department has been implementing certain measures to inventory and reduce carbon emissions.

Its generation grid presents a renewability rate that is higher than 94%, with a GHG emission average factor of 35.6 tCO_2/GWh for 2019-2023.

Additionally, ICE will take inventory of the greenhouse gas emissions for the Project.

4.3.a.ii Water Consumption

ICE has made a preliminary estimation of the volume of water required for the Construction phase of the Project, and it was set at about 18,300 l/day (18.3 m3/day). This will be supplied from the existing public aqueduct (managed by the Municipality of Alajuela); so, it will submit the respective drinking water and sewerage availability applications. ICE will also request a temporary permit to extract water for spraying roads and for construction activities, etc.

4.3.b Pollution Prevention

All wastewater from the Project will be directed to the treatment systems (sanitary cabins or septic tanks) and monitored before being discharged into the final receiving body.

ICE will execute a sediment management plan, which will determine the volume of sediments to be placed in waste disposal sites, with E&S measures to handle sediments and properly dispose of them.

4.3.b.i Waste

ICE follows the national regulations (Comprehensive Waste Management Law); by setting goals for and seeking continuous improvement of the way it manages the waste it produces. The process includes the segregation of waste in situ, its transportation to a transfer center (the one in Cebadilla for the Project, which is about 4 km away from the dam) and its treatment or final disposal through authorized entities. Hazardous waste is duly registered in the SIGREP[25] and managed twice a year depending on the capacity of the transfer center. The ESMP for the PHVG modernization project includes a solid (hazardous and non-hazardous) waste management program, with procedures for the adequate management of solid, semi-solid, liquid and gas waste, whether hazardous or non-hazardous, ordinary, special, recyclable, or non-recyclable, recoverable or non-recoverable.

4.4 Community Health, Safety and Security

4.4.a Community Health, Safety and Security

The feasibility study for the PHVG modernization project includes a diagnosis of the existing infrastructure, which comprises an assessment of risks involving occupational health, natural disasters, and climate change. Nine impacts were identified in connection with road safety, which are addressed in the ESMP through the relevant management measures.

The community health and safety plan for the modernization of the PHVG will cover specific plans for road traffic management, communications, signaling, fencing and noise monitoring. It will also contain an LMP and a Project-specific code of conduct.

4.4.a.i Infrastructure and Equipment Design and Safety

The Project will be designed to feature a maintenance plan for the San Miguel dam, and an emergency action plan.

4.4.a.ii Ecosystem Services

ICE has not yet carried out any assessments of the ecosystem services, because its current conditions determine there is no need for one.

[25] Hazardous Waste Management System of the Ministry of Environment and Energy (SIGREP-MINAE, in Spanish).

4.4.a.iii Community Exposure to Disease

ICE will incorporate a protocol to prevent and address diseases within the ESMP programs, which will be applicable to the workers and contractors involved in the Project as well as the community and will contain programs to raise awareness and prevent the spread of infectious diseases. The overall risk of exposure to transmissible or other diseases will be further controlled through continuous monitoring.

4.4.a.iv Emergency Preparedness and Response

For the Construction phase, ICE has added a contingency program to the emergency action plan within the ESMP, with a procedure for emergency preparedness and response, and dealing with hazardous waste or substance spills.

A risk assessment and a disaster and climate change risk assessment have been prepared for the Operations phase of the PHVG modernization project under the Disaster and Climate Change Risk Assessment Methodology (DCCRAM)[26], which entails a qualitative analysis and a DRMP as well as certain actions with short-, medium- and long-term measures. ICE will prepare an emergency action plan.

4.4.b Security Personnel

ICE is in charge of evaluating, preventing, and supporting the management of safety risks. This includes monitoring and mapping them. Depending on what is needed, the Company either hires staff directly or resorts to a security service provider. In either case, the security personnel is armed, so ICE will make sure that the relevant service contracts will include provisions that let it: i) carry out reasonable investigations to ensure that security personnel have no criminal records and have not been involved in any case of abuse in the past; ii) verify the details on the required training on the use of force[27] and on the meaning of the Voluntary Principles on Security and Human Rights (VPSHR); iii) verify the restrictions and procedures used if personnel carry fire arms, including the permits to do so, and iv) identify the details on environmental training and social awareness, including the matter of human rights. All this shall be part of the Project-specific security management plan.

4.5 Land Acquisition and Involuntary Resettlement

The Project does not expect to acquire land, nor will it cause any physical or economic displacement of the population nearby. However, it is still in the process of identifying the potentially suitable sites to dispose of the sediments from the San Miguel reservoir. Fifteen sites are being analyzed for potential acquisition. If these plots were needed to be acquired, ICE will make sure it will occur through voluntary purchase and sale processes or through expropriation procedures, in line with the national legislation applicable to ICE as a public institution. The analysis of this land seeks to

[26] IDB, 2019.

[27] Good Practice Handbook: Use of Security Personnel — Assessment and Management of Risks and Impacts and Note on Good Practice for the Private Sector. Addressing the risks of retaliation against the Project stakeholders, the IFC and IDB Invest, respectively.

avoid involuntary economic or physical displacement. Should either be required, a land acquisition plan and a resettlement plan shall be prepared, as needed.

4.6 Biodiversity Conservation and Sustainable Management of Living Natural Resources

4.6.a General Requirements

The Project will conduct interventions in an area that has already been significantly altered; major material impacts on the ecosystems involved have been established; and prevention, mitigation and compensation measures have been proposed. As these ecosystems are deemed vulnerable, ICE mentioned measures required to manage the biodiversity in its ESMP. The plan will have information about the inventory of trees to be cut down, the compensation measures, and the management strategies to avoid or mitigate the impacts on the sensitive species.

4.6.b Protection and Conservation of Biodiversity

The land where the PHVG works will take place has been widely modified since the 19th century: it was firstly used for agriculture and livestock farming and later for urban and industrial uses and development. Nonetheless, species that are somehow protected[28] and sensitive ecosystems, mainly aquatic, have been identified.

A forest covers 24% (4.34 ha) of the total area of the Project (18.15 ha). It is located on the canyon slopes of the Virilla river, particularly to the right and left of the Virilla intake, the Ciruelas intake and the San Miguel reservoir. In general, it is fragmented and located in strips of variable width along the pressure pipeline. The most predominant riparian and terrestrial forest species per hectare are common species for the type of forest. A species was identified, however, that is associated with riparian forests: the *Hauya lucida*, which is categorized as an endemic species with a small population.

In terms of fauna, a sample of groups of amphibians, fish, reptiles, mammals and birds revealed the existence of two species classified as "vulnerable" in the IUCN (International Union for the Conservation of Nature) Red List: i) the Central American white-faced capuchin (*Cebus imitator*) and ii) the shadow toothcarp (*Xenophallus umbratilis*); as well as one classified as "nearly threatened": the keel-billed toucan (*Ramphastos sulphuratos*). Also, the scarlet macaw (*Ara macao*) was found, which is an endangered species in the terms of the lists of the National System of Conservations Areas (SINAC, in Spanish).

Regarding the aquatic environment, the Project will impact directly on the aquatic ecosystems of Virilla and Ciruelas rivers, the Yurro Negro and San Miguel streams, as well as the San Miguel reservoir. Virtually all these water bodies are highly polluted, so only the guppy (*Poecilia reticulata*) was found in most sites. In the Yurro stream, however, the shadow toothcarp (*Xenophallus umbratilis*) was identified, which is reported as a vulnerable species by the UICN.

The ESMP mentions specific measures for the impacts caused by the shrinkage of the forest area, the changes in the vegetation cover in the lands used for agriculture and livestock farming, the

[28] The preliminary analysis identified seven endangered or critically endangered species. Two of them correspond to a restricted range species.

alteration of the spatial distribution of the terrestrial fauna and the modifications to the aquatic diversity in water bodies.

4.6.b.i Legally Protected Areas and Internationally Recognized Areas

The PHVG-associated works do not occur in national protected wildlife areas or Alliance for Zero Extinction (AZE) sites. The Project, however, is located in a buffer area of the Central Volcanic Mountain Range Biosphere Reserve and less than 2 km away from the key biodiversity area El Rodeo, Cerros de Escazú and La Carpintera. It is also almost fully deployed within the Garcimuñoz Biological Corridor. In addition to this, five Project work fronts lie in water protection areas with secondary forest coverage.

Any intervention in such areas is only possible if the Project has obtained an executive decree of the declaration of national interest (DCN, in Spanish), which is supported with studies proving that its social benefits are higher than the E&S costs, which shall be estimated by proper means (Forestry Law No. 7575, Section 3, Subsection m). These Project-associated works are inside these protection areas because in 1987, when the construction took place, the law was not in force (the Forestry Law was passed in 1996).

4.6.b.ii Invasive Alien Species

To date, ICE has not identified any invasive alien species in the Project area of influence. ICE will, however, include a protocol for the early detection of and fast response to invasive alien species in the ESMP of the PHVG modernization project; the protocol will be especially focused on the waste disposal sites and the water hyacinth (*Eichhornia crassipes)*, which is one of the 100 most harmful invasive alien species in the world, according to the UICN[29].

4.7 Indigenous Peoples

The Project will not interfere with Indigenous communities or cause any impacts on them.

4.8 Cultural Heritage

The Project will not interfere with cultural heritage areas. It has been requested, however, for a chance finds protocol to be added to the ESMP, as not all the land that will be used for disposing of the sediments has yet been acquired.

5. Local Access of Project Documentation

The documentation related to the Project is available at: Energy Projects.

[29] https://www.iucngisd.org/gisd/pdf/100Spanish.pdf