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DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK
MULTILATERAL INVESTMENT FUND

CHILE

STARTUP CAMPUS

(CH-T1331)

DONORS MEMORANDUM

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CONTENTS

PROJECT SUMMARY

According to the 2023 Global Competitiveness Index, Chile has positioned itself as a leader in “early-stage entrepreneurial activity” with a bustling ecosystem that nurtures the creation and growth of an increasing number of companies through interactions with various stakeholders offering specialized support to startups that create jobs and have positive impacts on the economy. Yet despite its dynamic nature, this ecosystem’s value is being captured mainly by information technology and software companies. The ecosystem has had limited participation from science- and technology-based businesses (sci-tech firms), which are essential for technological advances and solutions to global challenges like climate change, water crises, food security, an aging population, or income inequality.

This proposal is aimed at creating and consolidating the Startup Campus, as the first hub specifically dedicated to supporting sci-tech entrepreneurship in Chile. This hub is intended to catalyze the success of sci-tech firms addressing the challenges of climate change. It will be a pioneering venue with high-quality laboratory infrastructure, connecting entrepreneurs with the best resources, support programs, and industry stakeholders to collectively address the effects of climate change and contribute to generating economic, social, and environmental value for Chile and its population.

The implementation of this project will position Chile as a go-to resource in Latin America, enabling **climate impact sci-tech firms** to: (1) accelerate their development cycle through access to state-of-the-art laboratories and equipment; (2) promote innovation in an enabling environment for collaboration, experimentation, and iteration; (3) significantly reduce their operating and investment costs by sharing infrastructure; (4) increase their visibility and recognition as startups among potential investors and clients, acquiring a badge of credibility that facilitates access to private capital and market entry; and (5) promote collaboration among entrepreneurs, corporates, and other relevant stakeholders, accelerating knowledge transfer and bringing new technologies to market faster.

The project seeks to promote the generation of knowledge, products, services, and solutions in Chile to address the needs and wants of the market, society, and the challenges arising from climate change, social vulnerability, and new technologies. By integrating sci-tech firms into the heart of the entrepreneurial ecosystem, Chile will not only advance its position as an innovation leader in the region but generate scalable, sustainable solutions to global challenges, pioneering a more prosperous and resilient future.

This initiative is led by Fundación Chile (FCH) and cofinanced by CORFO. FCH is a private nonprofit whose purpose is to promote Chile’s transformation towards sustainable development. For more than 47 years it has created social value in industries and businesses, while making significant contributions to public policy development.

ABBREVIATIONS

B2B	Business to business
B2C	Business to consumer
B2G	Business to government
Ch$	Chilean pesos
CORFO	Corporación de Fomento de la Producción (Production Development Corporation)
CRL	Commercial readiness level
CTI	Competitiveness, Technology, and Innovation Division
EOP	End of period
ESG	Environmental, social, and governance
ESI	Encuesta Suplementaria de Ingresos (Supplemental Income Survey)
FCH	Fundación Chile
NRTC	Nonreimbursable technical-cooperation
OECD	Organisation for Economic Co-operation and Development
SDG	Sustainable Development Goal
STEM	Science, technology, engineering, and mathematics
TRL	Technology readiness level

PROJECT SUMMARY

CHILE

STARTUP CAMPUS

(CH-T1331)

Country and geographic location:	Chile		
Executing agency:	Fundación Chile (FCH)		
IDB Lab verticals and crosscutting areas:	Agriculture and Natural Capital, Climate Change, Gender and Diversity		
Coordination with other donors/Bank operations:	The project is cofinanced by Corporación de Fomento de la Producción (Production Development Corporation) (CORFO), a public agency for innovation in Chile and counterpart for the following IDB sovereign guaranteed operations: CH-L1167 (Regional Productive Development Program of Chile) and CH-L1168 (Program to Support the Development of the Green Hydrogen Industry in Chile).		
Project beneficiaries:	102 climate sci-tech firms participating in campus programs and using its infrastructure, with 12% focused on making positive impacts on the quality of life of economically vulnerable populations.[1]		
Financing:	Technical cooperation:	US$1,300,000	15.7%
	Total IDB Lab contribution:	US$1,300,000	
	Counterpart:	US$6,981,400	84.3%
	Total project budget:	US$8,281,400	100%
Execution and disbursement periods:	36 months for execution and 42 months for disbursement.		
Conditions for the first disbursement	For the first disbursement of the technical cooperation funding, the executing agency will provide the following, to the Bank's satisfaction: (i) project procurement plan; (ii) appointment of the project manager; (iii) appointment of the project coordinator; and (iv) the agreement signed with CORFO for the implementation of Startup Campus.		
Unit with disbursement responsibility:	Country Office in Chile (CCH)		

[1] Population with monetary income at or below the median income in Chile.

I. The Problem

A. Problem description

1.1 As the development of new technologies has advanced, the creation of sci-tech firms seeking to making positive socioenvironmental impacts has been gaining momentum in recent years. These companies use technology and the market as tools for addressing socioenvironmental challenges that have been deepening for decades and even centuries, affecting the lives of millions of people. At the same time, these companies implement business models enabling them to grow, which, in their early stages, require financing formulas that are generally supported by public policies or venture capital.

1.2 Currently, the availability of new technologies makes it more realistic than ever for businesses to incur minimal environmental and social costs,[2] while developing impactful innovative solutions that, alongside a scalable business model, can rapidly be rolled out internationally. This makes these businesses attractive assets for investment funds that traditionally have only sought to maximize returns and minimize risks.

1.3 This category of startups is relevant, given the significance of this form of business development for the economy of countries. According to reports from the Organisation for Economic Co-operation and Development (OECD), startups with high growth potential can account for up to 69% of job creation, and their growth is more likely to be sustainable if they are technology-intensive because of the competitive advantage gained from technological innovation.[3]

1.4 The technology that is dominating the development of solutions among sci-tech firms is artificial intelligence (AI), which is as revolutionary as the microchip and the Internet once were. AI is transforming the dynamics of different industries, as well as people's lives and customs, as demonstrated by OpenAI with its advanced language models, Uber with urban mobility, and NotCo with alternative food and protein. These innovations do not occur in a vacuum; they are deeply rooted in the scientific advances that technology startups, many with scientific research origins, have been able to translate into practical applications.

1.5 With the emergence of generative AI, this leading technology in terms of innovation and investment attraction is being rapidly adopted by the public and private sectors around the world. AI is also being adopted to innovate existing business models and public service delivery. It is the top technology in speed of adoption by leading businesses worldwide.[4] This phenomenon reflects a broader trend, where technology based on sound scientific principles is finding its way towards widespread adoption, demonstrating that science not only promotes innovation but becomes the foundation on which practical, scalable technology solutions are built. Just as AI is marking a before and after in the technology world, other innovations of scientific origin are finding practical applications that resonate throughout the region. For example, advanced composite materials are redefining efficiency in different industries like automotive and air transportation. Meanwhile, innovations in water purification systems and precision agriculture are providing sustainable solutions to critical

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[2] Gidron, B.; Israel-Cohen, Y.; Bar, K.; Silberstein, D.; Lustig, M.; and Kandel, D. Impact Tech Startups: A Conceptual Framework, Machine-Learning-Based Methodology and Future Research Directions. Sustainability 2021, 13, 10048. https://doi.org/10.3390/su131810048

[3] Understanding Firm Growth, OECD, 2021.

[4] McKinsey Technology Trends Outlook, 2023.

environmental challenges. These technologies, born from scientific research, are showing that science is essential to address current socioenvironmental challenges.

1.6 According to the study Deep Tech: The New Wave[5] from Surfing Tsunamis and IDB Lab, there are unprecedented opportunities for economic development in Latin America. Disruptive technologies like biotechnology or AI can radically change people's lives, solving the world's most complex challenges. At the same time, they present an opportunity for addressing economic growth, social equity, and environmental sustainability. To demonstrate the magnitude of this opportunity, for example, the steam engine contributed to annual GDP growth of 0.3% for half a century. By comparison, AI is projected to increase global GDP growth by 1% per year in the coming decades.

1.7 However, like any entrepreneurial business, to grow and respond in a relevant way to the social and environmental issues that guide them, **impact sci-tech firms** need an enabling ecosystem that combines different entities and institutions providing opportunities to test and validate the solutions they develop, and offering access not only to financing but also to knowledge and connections that facilitate innovation.[6]

1.8 Nevertheless, the needs of impact sci-tech firms are more sophisticated than those of entrepreneurial businesses in general. As science-based businesses, they need physical spaces to experiment, generally have longer validation and sales generation cycles, and usually require large amounts of seed capital. All of this can create a higher perception of risk.[7]

1.9 Chile's ecosystem has been recognized for its development,[8] advances, and entrepreneurial activity[9] in a number of international rankings. This is not only because of the existence of public policies that foster innovation, promote a culture of entrepreneurship, and provide financing for seed capital, but also due to growth in private investment.[10] Challenges have been identified in continuing to expand its development, such as the availability of science and technology infrastructure, capacity-building for new technologies and AI, and ongoing diversification of private investment flows targeting sci-tech startups.[11]

1.10 Chile has also shown a marked tendency towards the emergence of entrepreneurial ventures trying to make a social or environmental impact. This is probably because, despite low poverty rates compared to other countries of the region, inequalities remain with respect to income and access to quality services in such sectors as health, education, and housing.[12] Although the nominal average income for someone employed in Chile is Ch$826,535 (approximately US$900), the median income is Ch$582,559 (approximately US$620), i.e., in Chile 50% of those employed have incomes below this amount.[13]

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5 Ignacio Peña and Micaela Jenik, Deep Tech: The New Wave, 2023.

6 Brown, R. and Mason, C. Looking Inside the Spiky Bits: A Critical Review and Conceptualization of Entrepreneurial Ecosystems. Small Business Economics 49, 11-30, 2017. https://doi.org/10.1007/s11187-017-9865-7

7 Gary P. Pisano, The Evolution of Science-based Business: Innovating How We Innovate, Harvard Business School, 2010.

8 Global Startup Ecosystem Report 2023, www.startupblink.com

9 GEM 2023/2024 Global Report: 25 Years and Growing, 2024, Gemconsortium.org

10 GEM Chile 2022 Report.

11 World Competitiveness Ranking, IMD, 2023.

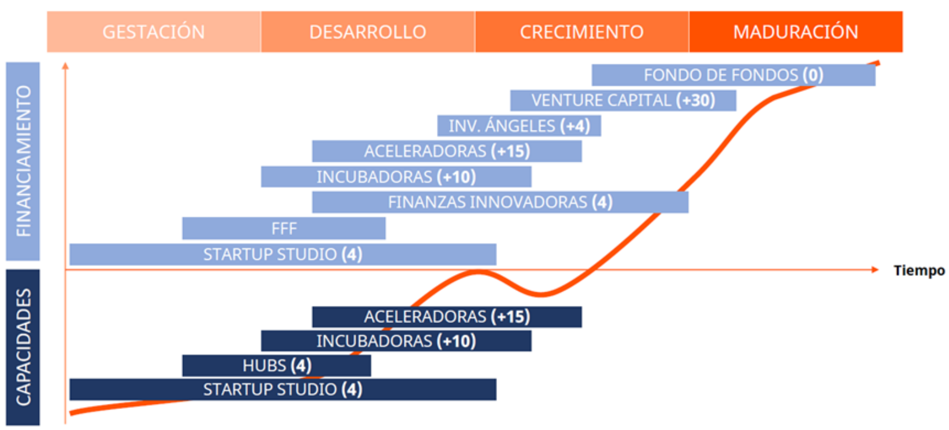
12 Villegas-Mateos, A. and Vázquez-Maguirre, M. Social Entrepreneurial Ecosystems in Upper-Middle-Income Countries: Social Policy and Sustainable Economic Development Implications. Sustainability 2024, 16, 729. https://doi.org/10.3390/su16020729

13 Supplemental Income Survey (ESI) 2023, National Statistics Institute.

1.11 Environmentally, Chile is considered highly vulnerable to climate change.[14] This is borne out by its higher average temperatures nationwide, less rainfall, frequent droughts, shorter periodicity of extreme events like landslides and floods, and more frequent wildfires resulting in greater losses. The country also faces challenges related to its air quality indexes[15] and waste management.[16] These factors negatively impact the quality of life of the Chilean population, especially the most vulnerable.[17]

1.12 Moreover, although Chile has promoted the creation and operation of various institutions to support innovation and entrepreneurship, these focus on the intermediate stages of the life cycle and provide limited support and infrastructure for businesses in early validation stages. Technology transfer is one of the weakest aspects of the ecosystem.[18] This limits the prospects for science and technology innovation to evolve towards the development of sci-tech firms with real impact on productivity and on narrowing environmental and social gaps.[19] Not only do these firms need infrastructure for effective experimentation, prototyping, and piloting, they need specific knowledge and capacity for developing beneficial linkages with the corporate world, academia, and the public sector.

Organizations supporting entrepreneurship in Chile across the life cycle of a startup



Source: Fundación Chile, 2023.

1.13 The methodologies applied by existing support programs—incubation, acceleration, venture building, etc.—are rather traditional. Their training and mentoring models include areas like product development, intellectual property, business development, internationalization, business model, and raising capital, without considering the specific features of **impact sci-tech firms** (longer innovation and market entry cycles with greater need for specialized support).[20] They also do not consider the current context for the development of companies,

14 https://cambioclimatico.mma.gob.cl/contribucion-determinada-ndc/

15 https://www.iqair.com/es/world-air-quality-report

16 https://www.trade.gov/country-commercial-guides/chile-environmental-technologies

17 https://climateknowledgeportal.worldbank.org/country/chile/vulnerability

18 GEM Chile 2022 Report.

19 The New Imperative of Innovation: Policy Perspectives for Latin America and the Caribbean, IDB, 2016.

20 Segundo Estudio de Caracterización de los Emprendimientos y Empresas de Base Científica Tecnológica en Chile, ID 1098710-2-LE21, 11-2021.

which is shaped by two large phenomena: climate change and responsible development of technology.

1.14 Likewise, 80% of the venture capital that investors provided to startups in Latin America between 2022 and mid-2023 was concentrated in the fintech, proptech, HRtech, and logistics verticals (fintech alone accounted for 57.1%). Meanwhile, only 2.7% of this venture capital flowed towards such verticals as biotech and agtech,[21] associated with science- and technology-based solutions.

1.15 In addition to funding, impact sci-tech firms need other input to validate and consolidate their value propositions: specialized laboratory infrastructure, industry connections for their technology solutions, networks with similar businesses, and visibility among investors. They also need specific services to protect intellectual property; identify paths for business development, leadership, and team motivation; and adopt responsible development standards, with a people-centered approach.

1.16 This support for sci-tech firms is even more strategic for those led by women. For example, in Chile, the percentage of women with higher education degrees in STEM[22] is 18%, and the percentage of women enrolled in tertiary education in STEM is 21%. In research, only 24% of patent registration applications are from women, and only 11% of sci-tech firms are led by women.[23]

1.17 In the developed world, “startup campuses” are being created to promote sci-tech firms. These are physical spaces with integrated offerings (own or third-party) that contribute to the consolidation of impact sci-tech firms according to the stages of their life cycle (research, validation, market entry, and expansion) and connect them beneficially with the ecosystem.[24] There are similar initiatives in the region that have positioned certain locations as major innovation hubs, such as LATU in Uruguay, CUBO in Brazil, and CITES in Argentina.

1.18 The startup campus concept involves gathering support programs in one place for entrepreneurial development, network access, financing, events, and supplemental services. In addition to providing a beneficial platform for sci-tech firms, the startup campus attracts relevant stakeholders for their consolidation like researchers, experts, investors, corporates, financial institutions, and others. These campuses are particularly valuable, considering that 50% of sci-tech firms do not have academic origins and so lack connections to access the university infrastructure for technology validation.[25]

1.19 The OECD’s Latin American Economic Outlook 2023 highlights the region’s potential in natural resources, biodiversity, and green energy, which position it globally to contribute to the transition towards greener economies and offer opportunities for progress in equity and social inclusion. Leveraging these opportunities requires promoting and investing in new technologies, collaboration among different stakeholders, and incentives for connecting scientific research with entrepreneurship.[26]

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21 2023 LAVCA Startup Directory and Ecosystem Insights, LAVCA, June 2023.

22 Science, technology, engineering, and mathematics.

23 Tercera radiografía de género, Ministry of Science, Technology, Creativity, and Innovation of Chile, 2023.

24 Some of these centers are: Station F in France, T-Hub in India, and Techhub in England.

25 Segundo Estudio de Caracterización de los Emprendimientos y Empresas de Base Científica Tecnológica en Chile, ID 1098710-2-LE21, 11-2021.

26 Latin American Economic Outlook 2023, OECD et al., 2023.

II. THE INNOVATION PROPOSAL

A. Project description

2.1 The objective of the project is to launch and consolidate Startup Campus as the first space in Chile where dynamic entrepreneurship support offerings come together to catalyze the growth of socioenvironmental impact science- and technology-based startups (sci-tech firms), whose innovations contribute to combat the effects of climate change, through access to infrastructure, laboratories, and services dedicated to their development and scaling, in order to achieve their financial sustainability and socioenvironmental impact.

2.2 Startup Campus will be the most important space for ecosystem collaboration and coordination, continuing to solidify Chile's standing as a go-to resource for entrepreneurship in the region, engaging the scientific and entrepreneurial communities in addressing the most urgent social and environmental challenges in the country and the world.

2.3 **Innovation.** The proposal is innovative because of the array of resources to be made available to climate impact sci-tech firms: (i) access to collaborative workspaces and shared latest-generation infrastructure with laboratory equipment for biological sciences and a laboratory for electronics and prototyping; (ii) integration of public and private support offerings for entrepreneurship with a flexible path that includes multiple options and adapts to the needs and special features of the businesses, creating the conditions for their sustainable growth and making their path to scaling more efficient; (iii) specialized science and technology advisory support, a variety of networking opportunities, ecosystem events, international speakers, access to open innovation programs with corporates, etc.; and (iv) additionally, IDB Lab will have a physical presence and transfer a portfolio of tools and methodologies, which will strengthen the offerings of the Startup Campus, other ecosystem entities, and the business models of sci-tech firms. These tools and methodologies will span various strategic areas, principally the assessment and mitigation of environmental, social, and governance risks; promotion of climatetech technologies; and responsible development of technology (Entrepreneurial Journey of fAIr LAC,[27] LacNet,[28] etc.).

2.4 Initially, Startup Campus will test its impact thesis with technologies to address climate change adaptation, mitigation, and resilience,[29] supporting the responsible development and internationalization of the technologies and validating a model for sustainable public-private collaboration and coordination. Part of the IDB Lab financing will be intended to: (i) make these technologies accessible and generate benefits from their deployment to the poor and economically vulnerable population and groups experiencing some form of exclusion; (ii) develop specific activities to attract female talent in the creation, development, and leadership of climate sci-tech firms;[30] and (iii) develop strategic partnerships with similar entities in parts of Chile beyond the Metropolitan Region, to expand the scope of the initiative, motivate sci-tech firms in those areas to participate, and build the capacity of regional ecosystem actors.

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[27] Partnership among the public and private sectors, civil society, and academic institutions to influence public policy and the entrepreneurial ecosystem in promoting the responsible and ethical use of AI.

[28] International association that orchestrates, in a neutral and sustainable manner, the LACChain blockchain network for the implementation of use cases with social and environmental impact.

[29] This includes mobility, energy transition, carbon tech, food systems, industry, land use, water, and circular economy.

[30] The definition adopted by CORFO for women-led enterprises will be used for this project. These are companies where: (a) one or more women hold at least 50% of the capital stock; or (b) one or more women hold at least 30% of the capital stock and one or more women are the legal representatives of the company.

Climatetech verticals of Startup Campus

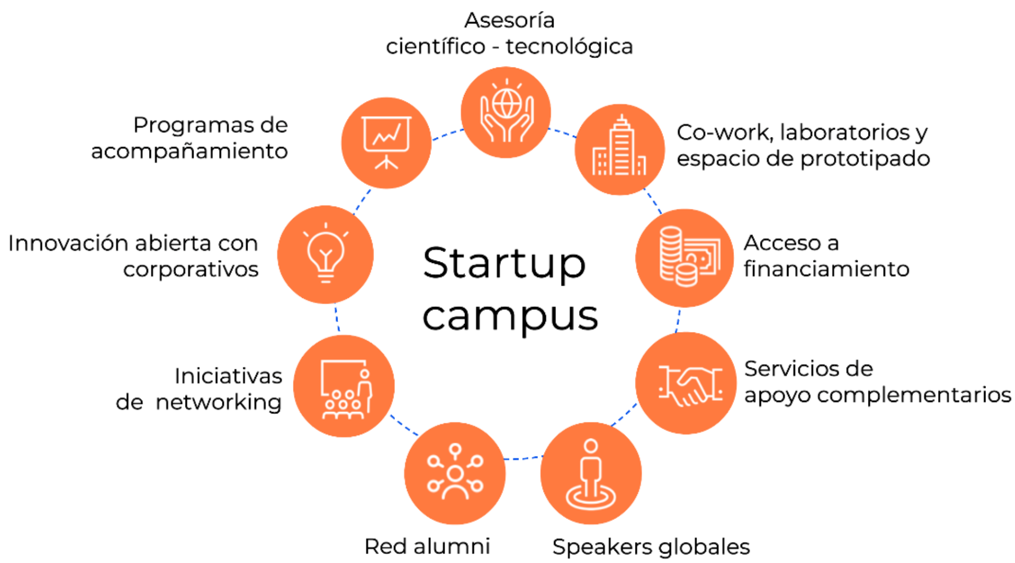
2.5 The Startup Campus infrastructure will include up to 400 square meters for biological science laboratories, up to 400 square meters for electronics and prototyping laboratories, and around 3,000 square meters for coworking spaces, offices, an auditorium, and common areas. When up and running, the hub is expected to accommodate an average of 50 startups with around 270 employees, in addition to the management team for the initiative, made up of 12 people.

2.6 The project has three components:

Component 1: Establishment of the Startup Campus ecosystem

2.7 The objective of this component is to position Startup Campus as a go-to resource for entrepreneurship support and to define the service offerings for climate impact sci-tech firms. To do so, the Startup Campus will include models led by ecosystem actors that complement its own future programs, to create a full array of support offerings tailored to the life cycle of the businesses. The planned services include technological and commercial validation, definition and validation of business models, market entry strategies, validation of the product/market fit, commercial scaling, financing strategy, internationalization, technical advisory support, scientific advisory support, mentoring, introduction to business ethics, responsible technology development, environmental impact monitoring, and others with a special focus on sci-tech firms tailored to their needs.

Startup Campus ecosystem



2.8 Potential partners for this ecosystem that have been identified preliminarily are organizations like The Ganesha Lab (global scaling accelerator for science- and technology-based startups in Latin America), GridX (company builder for biotech startups), Endeavor (community of high-impact global entrepreneurs), IndieBio (acceleration program for science-based startups), investment funds, financial institutions, corporates seeking to collaborate, invest, and pilot solutions together with climate impact sci-tech firms, and public programs that support science and technology entrepreneurship like Startup Ciencia and Startup Chile.

2.9 IDB Lab will join this ecosystem as a Startup Campus partner with a physical presence. The objectives are, first, to help enhance its value proposition, and, second, to implement capacity-building and transfer among Chilean ecosystem actors for the tools developed as part of strategic initiatives. These initiatives include fAIr LAC (responsible development and adoption of AI), Green Innovation Hub (development and adoption of climate technologies), LACChain (blockchain for social impact), Govtech Latam (adoption of innovation in the public sector), CIV LAC (adoption of innovation in the corporate sector and corporate impact venturing), and Diversity in VC (diversity in investment fund administrators and their portfolios). In addition, IDB Lab will broker connections with venture capital funds in which it has investments, and with other projects for ecosystem development and internationalization of startups in which it participates.

2.10 The IDB Lab strategic tools and initiatives will support the creation of networks, connections, and opportunities for startups, strengthening the Startup Campus service offerings in key areas for global prosperity. To do so, the coordination of IDB Lab initiatives will be explicitly included among the responsibilities of the Startup Campus team, which will coordinate: (i) training for the adoption of tools from strategic initiatives by other acceleration programs, investment funds, innovation hubs, and the startups participating in the campus; (ii) open workshops to raise awareness; and (iii) pitch and reverse pitch sessions and other activities identified to contribute to the development of climate impact sci-tech firms.

2.11 As part of their sustainability model, the entities participating in this ecosystem will pay a fee (monthly or annual, depending on their characteristics). The Startup Campus will manage and coordinate these partnerships in a way that generates the maximum value for climate impact sci-tech firms.

2.12 The expected outcomes of this component are: (i) at least 6 corporates enrolled with annual memberships; (ii) at least 5 acceleration programs being implemented at the campus; (iii) at least 9 acceleration programs or investment funds strengthened in environmental, social, and governance (ESG) issues, climate impact, and responsible technology adoption (IDB Lab strategic initiatives); (iv) at least 30 ecosystem and networking events; and (v) at least 6 partnerships with global and regional organizations implementing similar programs.

Component 2: Acceleration of climate impact sci-tech firms

2.13 The objective of this component is to identify the climate sci-tech firms with the greatest potential for impact, scaling, and financial viability, in order to accelerate both their technological validation (technology readiness level (TRL))[31] and commercial validation (commercial readiness level (CRL)).[32]

2.14 To achieve the objectives of this component, the executing agency will implement the following activities: (i) diagnostic assessment and selection; (ii) growth and connections; and (iii) supplementary services.

2.15 The selection of climate impact sci-tech firms will be based on an online diagnostic assessment process to evaluate such variables as the technology, problem being addressed, degree of innovation, stage of advancement of the technological solution, climate impact potential, business model, challenges to growth, and impact metrics. Based on this diagnostic assessment, the companies will be categorized according to life cycle stage and routed into the growth programs that best meet their needs, which will be implemented directly by the Startup Campus team or via support programs integrated into the portfolio of services.

2.16 The sci-tech firms to be served will be those developing technologies that respond to the challenges arising from climate change, including: (i) ex ante solutions aimed at lessening climate change or its impacts, including mitigation and risk management; and (ii) ex post solutions aimed at addressing existing impacts, including adaptation, resilience, emergency response, and the recovery of physical or environmental assets related to losses caused by weather events.[33] FCH's current portfolio has a significant share of climate startups, which reinforces the value proposition that this proposal will deliver to the local ecosystem. Examples of such solutions in the FCH portfolio are:

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31 "Technology readiness level" is an accepted method for measuring the degree of maturity of a technology. It includes nine levels, ranging from the basic principles of the new technology to its successful testing in a real environment.
https://www.mincotur.gob.es/publicaciones/publicacionesperiodicas/economiaindustrial/revistaeconomiaindustrial/393/no tas.pdf

32 "Commercial readiness level" is an accepted method for measuring the degree of maturity of a technology for its commercial deployment, considering such factors as regulatory compliance, product availability, and target market acceptance.
https://www.bindt.org/What-is-NDT/Index-of-acronyms/C/crl/

33 A Conceptual Framework for the Classification of Government Spending on Climate Change, IDB, 2022, page 4.

Name	Description	Impact measurement	Business model
Fungipor	Sustainable packaging based on mycelium from mushrooms	Reduced emissions in the logistics chain	B2B
Recoboards	Sustainable furniture based on circular technology for Tetra Pak	Reduced emissions in the furniture and equipment industries	B2B
Bluera	Waste-to-energy technology	Reduced waste and carbon emissions	B2B and B2G
Ecoturbo	Energy efficiency technology for wood-based heating	Reduced emissions and household pollution	B2B and B2C
Spora Biotech	Animal leather substitute based on mycelium from mushrooms	Reduced carbon emissions	B2B
Done Properly	Biotechnology for healthy diets	Water efficiency and obesity prevention	B2B
Photio	Nanotechnology for photosynthesis simulation	Reduced carbon emissions	B2B
Imeko	Bioplastic based on cigarette butts recycled through chemical technology	Reduced waste	B2B

2.17 The following selection criteria have been identified preliminarily for participating climate impact sci-tech firms: (i) technical criteria (maturity of the technology, degree of innovation, intellectual property); (ii) business criteria (technology, business model, stage of advancement, market, team); (iii) impact criteria (socioenvironmental, gender); and (iv) cultural criteria (fit-for-purpose of the Startup Campus and its internal culture). To promote diversity and crosscutting access to the Startup Campus services, additional value will be assigned to sci-tech firms from regions outside Santiago's Metropolitan Region and to women-led sci-tech firms.

Path of impact sci-tech firms at the Startup Campus

2.18 The selected startups will begin a support process that takes six months on average. This process may include technology validation, business model validation, formation of teams, intellectual property strategy, preparation for investment, market entry strategies, validation of product/market fit, commercial scaling path, internationalization, impact measurement, ESG risk management, specialized mentoring, and work plan monitoring.

2.19 Each startup based at the campus will pay a monthly fee, depending on their use of laboratories and coworking spaces. The participating corporates that maintain a brand presence at Startup Campus will pay an annual membership, based on their degree of participation and physical presence.

2.20 Along with regular calls for participation, three special calls for participation geared toward accelerating climate impact sci-tech firms will focus on economically vulnerable populations in the Startup Campus work areas, i.e., technologies to address climate change adaptation, mitigation, and resilience. From each call for participation, between four and five sci-tech firms with high impact on vulnerable populations will be selected to join the Startup Campus portfolio. These firms will be identified by adding specific questions to the application form to evaluate the potential for social impact. Examples of these types of solutions may include technologies for thermal efficiency in low-income housing, technologies to improve water access and quality in vulnerable communities, accessible electromobility, clean energy generation, food security for the vulnerable population, and platforms for green jobs. An example is Ecoturbo, a firm now part of the FCH portfolio, dedicated to developing innovative solutions to improve energy efficiency and reduce emissions from wood stoves, combating climate change, and improving air quality and community health. Its product has the potential to have a high impact on economically vulnerable populations.

2.21 The connection actions for participating startups at the campus will include organizing thematic talks, pitch days, open innovation workshops, and matching events with corporates and investment funds; developing networks and connections with international agencies working at the frontiers of innovation and knowledge; and coordinating with public programs, innovation hubs, technology transfer programs, and others. Startup Campus will also implement a "Supplier Club" to offer services at preferential rates and free support hours to the entrepreneurial businesses in such areas as legal counsel, accounting, patents, and human resources.

2.22 IDB Lab will try to promote opportunities for leveraging the tools developed by strategic initiatives, as well as visibility and involvement in calls for participation and other occasions by the firms participating in the Startup Campus. For example, it will connect them with venture capital funds in the IDB Lab portfolio, angel investor networks, and other ecosystem programs inside and outside the region.

2.23 The expected outcomes of this component are: (i) 102 startups strengthened (trained), with 12% focused on vulnerable populations and 75% receiving training on ESG issues and measuring their impact; (ii) at least 20% of the sci-tech firms in the Startup Campus portfolio are women-led; (iii) at least 10% of the startups trained are from regions other than the Metropolitan Region; and (iv) at least 40% of the sci-tech firms trained have made progress on the TRL and/or CRL of their technologies.

Component 3: Framework for the impact evaluation of Startup Campus and regional integration.

2.24 The objective of this component is to design and implement a framework for the monitoring and evaluation of Startup Campus and its portfolio, as a catalyst for climate impact sci-tech firms and public expenditure efficiency; and to implement a series of exchanges with similar hubs inside and outside the region, to expand opportunities for the sci-tech firms that are part of the campus's portfolio and incorporating best practices in the management of such initiatives.

2.25 A unit will thus be created to oversee the management and impact of Startup Campus It will monitor the methodology used for calls for participation, evaluation, and the business models of the portfolio's startups. This will include assessing their advancement in TRL, CRL, increasing sales, raising capital, employment, etc., to identify the differences between startups utilizing the various infrastructures (laboratories or coworking spaces) or participating in the various programs offered by the executing partners of Startup Campus (to be determined).

2.26 To achieve the objectives of this component, the executing agency will implement the following activities: (i) consulting services for the design and development of a platform for monitoring and evaluation of the impact of the Startup Campus, including diagnostic assessment tools, baseline, and tracking; (ii) impact evaluation of Startup Campus and its portfolio; (iii) mapping of similar initiatives worldwide and technical visits to a group of them; (iv) systematic documentation and pilot testing of identified best practices; and (v) analysis of the local ecosystem, identifying the main challenges and opportunity gaps for fostering the growth of climate impact sci-tech firms.

2.27 The expected outcomes of this component are: (i) evaluation model designed for the Startup Campus, to measure its impact and results annually; (ii) baseline set, and subsequent impact evaluations performed, for a portfolio selection validated by an external entity; and (iii) average Net Promoter Score of at least 7 for the science and technology entrepreneurship support programs implemented by Startup Campus.

B. Results, measurement, monitoring, and evaluation

2.28 The executing agency will be responsible for compiling data and reporting on results and achievements based on the project's Results Matrix. The executing agency will develop a monitoring plan at the start of the project, to ensure that indicators are tracked and measured. It will also keep the Bank informed through a project status report and deliver a final project status report on the project's results upon completion.

2.29 The main results to be achieved are: (i) the sci-tech firm portfolio increases its sales, clients, and/or headcount by 30% annually on average;(ii) at least 30% of the portfolio's sci-tech firms access financing; (iii) 70% of the portfolio's sci-tech firms continue operating one year after the support ends; (iv) 85% of the portfolio's sci-tech firms participating in IDB Lab's strategic strengthening initiatives adopt practices on at least one of the following dimensions: ESG issues; carbon neutrality; or responsible technology development standards; and (v) by the end of the third year, Startup Campus has achieved a financial sustainability ratio of 70%.

2.30 The project's Results Matrix indicators (Annex I) will be monitored regularly (annual), and the impact evaluation will be performed under Component 3.

III. ALIGNMENT WITH THE IDB GROUP, SCALABILITY, AND RISKS

A. Alignment with the IDB Group

3.1 The project meets the opportunity for contributing to the development and consolidation of the Chilean ecosystem, based on key solutions developed by climate impact sci-tech firms for addressing social and environmental challenges. The project is thus aligned with IDB Lab's priorities.

3.2 The project is also consistent with the Bank's Innovation, Science, and Technology Sector Framework Document (GN-2791), which considers it essential to nurture enabling environments for the development of sci-tech firms as tools for competitiveness, improved living conditions for the population, and effective response to phenomena like climate change by promoting effective public-private coordination.

3.3 The IDB Group Country Strategy with Chile 2022-2026 (GN-3140) includes the following priority areas: (i) promoting social cohesion and inclusion; and (ii) enabling the economy of the future, by emphasizing actions to increase environmental sustainability, decarbonize the productive matrix, grow the circular economy, promote nature-based solutions, develop natural capital, and improve productivity.

3.4 One hundred percent of the operation's resources will be invested in climate change mitigation and/or adaptation activities, according to the joint methodology of the multilateral development banks. These resources contribute to the IDB's climate finance target (30% of the volume of annual approvals). The Startup Campus project contributes to the institutional objectives of promoting climate finance through activities for an enabling environment (i.e., acceleration programs). For this reason, since 100% of the portfolio has been defined as climate sci-tech startups based on its selection criteria, 100% of the IDB Lab funds for this project will be allocated to climate finance. Moreover, the commitment to provide startups with methods for measuring climate impact, so they can do so robustly in the future, contributes to such allocation and alignment. The type of climate finance will be dual, for adaptation and mitigation purposes, since the acceleration portfolio is expected to include both climate innovation channels. Therefore, the climate finance categories for this operation are: (i) adaptation > institutional capacity support or technical assistance > technical services or other professional support; and (ii) mitigation > cross-sector activities > climate change mitigation support > technical services necessary to develop or implement projects to finance climate change mitigation.

3.5 Paris alignment: This operation is considered aligned with BB1 (mitigation component). Furthermore, the activities mediated in the operation have low or insignificant adaptation risks and contribute to Chile's national adaptation strategy, so they are aligned with BB2 (adaptation and resilience component). The project also contributes to the indicators proposed in Chile's Nationally Determined Contribution (NDC) under the Paris Agreement,[34] specifically, with the development of technologies to mitigate emissions, build capacity, and manage climate-related risks.

3.6 The program is aligned with the following Sustainable Development Goals (SDGs): (i) SDG 7, affordable energy and its targets of increasing the use of renewable energy sources and implementing energy efficiency measures; (ii) SDG 9, industry, innovation, and infrastructure and its targets of retrofitting industries and carbon neutrality; (iii) SDG 11, sustainable cities and communities; (iv) SDG 13, climate action and its target of strengthening resilience and adaptive capacity to climate-related hazards; and (v) SDG 17, partnerships for the goals.

B. Additionality and scalability

3.7 Scaling is a centerpiece of the Startup Campus model. The project will enable both the adoption of innovations and their internationalization to other countries inside or outside the region. Another essential part of the project's activities will be deepening actions for

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[34] https://cambioclimatico.mma.gob.cl/contribucion-determinada-ndc/

coordination among ecosystem actors, both public and private, resulting in alignment that favors the growth of climate impact sci-tech firms.

3.8 The impact evaluation under Component 3, with technical advisory support from the Bank's Competitiveness, Technology, and Innovation Division (CTI), will help nurture the development of effective public policies in Chile and the region.

3.9 Lastly, as part of its financial sustainability strategy, Startup Campus will generate revenue enabling it to expand and maintain service offerings over time. The revenue generation lines will be related to space and laboratory leasing, services provided to corporates, and activity sponsorships. When up and running, the cost per startup supported is estimated at US$55,000 per year.

3.10 As part of the sustainability and scaling strategy, Startup Campus will leverage the Bank's experience in the public and private sectors to promote climate impact sci-tech firms and high-potential enterprises, including the following: (i) the selection processes are important, both for the evaluation of applicants and appointment of evaluators; (ii) the implementation of open innovation processes should include sufficient identification of challenges and scouting for solutions; (iii) sci-tech firms require advisory support across the board, to facilitate access to finance and resources for strengthening their business models, technology validation, and protection of intellectual property; (iv) gender mainstreaming is important for balanced access to support instruments; and (v) the development of innovation and entrepreneurship ecosystems is a crosscutting theme that should involve cooperation from the public and private sectors.

C. Project and institutional risks

3.11 **Macroeconomic risk.** Like the rest of the world, Chile's economy is experiencing a period of fiscal strain and a GDP downtrend that could disincentivize entrepreneurial development, affecting the Startup Campus portfolio. **Mitigation:** The initiative seeks to contribute to the climate issue, which despite economic crises responds to global needs for productive transformation towards carbon neutrality, so demand will increase over time. FCH and CORFO also have a pipeline of pre-identified technology solutions.

3.12 **Continuity risk for the country's innovation policies.** The initiative's main source of cofinancing is resources from CORFO, a public agency for innovation that, if faced with changes in the political cycle, may have to modify sector and programmatic priorities. **Mitigation:** The financing for the Startup Campus has been approved under a multiyear framework of five years, longer than this project's execution period, which will keep the expected outcomes from being jeopardized so the financial sustainability model can be validated.

3.13 **Governance risk.** Because the Startup Campus is a pilot project that promotes various parallel and complementary initiatives supporting the validation and development of climate impact sci-tech firms, the model designed may be subject to changes to keep up with evolution of the ecosystem that require broad agreement on the governance structure, which could take more time than expected. **Mitigation:** The initiative includes a governance structure to ensure that all stakeholders are represented, under the leadership of CORFO and FCH (section V of this document describes the governance framework), operating nimbly to not affect the project implementation timetable.

3.14 **Risk of not attracting climate impact sci-tech firms and ecosystem actors.** The value proposition of the Startup Campus may not be attractive enough given the cost of participating, which could affect achievement of the project objectives. **Mitigation:** The project, in addition to infrastructure, will develop a mechanism for international partnerships and connections highly valued by the participating sci-tech firms.

3.15 **Risk of not consolidating the Startup Campus financial sustainability model.** The revenue generation model will be based mainly on infrastructure leasing mechanisms and sponsorships, which can be unstable over time. **Mitigation:** The Startup Campus will offer latest-generation laboratory spaces and engage a large number of actors from the local and international ecosystems, enabling it to diversify revenue sources and offer a portfolio of services at competitive costs. According to financial projections, this will put sustainability within reach in five years.

IV. INSTRUMENT AND PROPOSED BUDGET

4.1 The project will have a total cost of US$8,281,400. Of that amount, US$1,300,000 (15.7%) will be contributed by IDB Lab in the form of nonreimbursable technical-cooperation funding, and US$6,981,400 (84.3%) will be contributed by the counterpart. The main source of financing for the counterpart contribution will be resources already approved by CORFO for the project.

4.2 The counterpart contributions will be provided from the first year onwards under an agreement signed between CORFO and FCH.

4.3 **Retroactive recognition of counterpart funds.** Counterpart expenditures incurred on or after the project eligibility date[35] may be recognized retroactively for an amount of up to US$200,000 between the eligibility and approval dates.

Project components	**IDB Lab NRTC**	**Counterpart**		**Total US$**
		In kind	In cash	
Component 1: Establishment of the Startup Campus ecosystem	97,800	-	337,700	453,500
Component 2: Acceleration of climate impact sci-tech firms	588,600	1,340,000	23,500	1,952,100
Component 3: Framework for the impact evaluation of Startup Campus	262,800	-	-	262,800
Project administration	320,800	4,760,200	520,000	5,601,000
Contingencies	30,000	-	-	30,000
Total	**1,300,000**	**6,437,900**	**543,500**	**8,281,400**
% of financing	15.7%	77.7%	6.6%	100%

V. EXECUTING AGENCY AND IMPLEMENTATION STRUCTURE

A. Executing agency description

5.1 Fundación Chile (FCH) will be the project executing agency and will sign the agreement with the Bank. FCH is a private nonprofit corporation founded in 1976, whose purpose is to foster sustainable development by promoting technological innovation, private sector development, and public policies. Its public-private board of directors is made up of representatives of Chile’s national government and BHP, who are professionals with extensive experience in different fields.

[35] 8 May 2024.

5.2 Recognized as a “do tank,” FCH has helped empower new productive sectors in Chile by building a portfolio of companies, developing various capacity-building programs, and providing technology services. Its original founders were the Government of Chile and ITT Corporation. In 2005 ITT sold its ownership stake to BHP Billiton.

5.3 FCH’s areas of action are future skills, sustainable use of resources, transformation of industries, innovation, and entrepreneurship. FCH has more than 200 employees. Its governance consists of a public-private board of directors and an international advisory council.

5.4 FCH has a long record of work with the IDB Group. It has been the executing agency for several IDB Lab projects in the past (Multilateral Investment Fund) in pioneering areas like job skills (originating public policies now in effect), renewable energy and energy efficiency (originating the first programs to incentivize and finance these technologies), venture capital funds, and open innovation. It has also been consulted on various issues related to employability and human capital, as the beneficiary of technical cooperation operations with the Bank’s Water and Sanitation Division (WSA) and Education Division (EDU), and performed an execution unit role on IDB loan CH-L1138, Program to Support Chile’s Global Services Export Sector, of the Integration and Trade Sector (INT/INT), implementing the Digital Talent initiative for Chile.

5.5 FCH currently focuses on issues related to sustainability and technology-based entrepreneurship. Its innovation initiatives to be incorporated into the Startup Campus platform are: Expande (open innovation in mining), Chilean Plastics Pact, Water Scenarios 2030, and Formación TP Digital. Each of these initiatives has corporate partners that will be part of the Startup Campus ecosystem.

5.6 In 2023, FCH participated in IDB Lab’s program to strengthen clean technology entrepreneurship support actors as part of the Green Innovation Hub initiative (RG-O1700/RG-T4138), which was deployed through the Climate-KIC ClimAccelerator. As a result of this strengthening, FCH has developed specialization in identifying climate technologies and managing ESG risks, which will be transferred to the Startup Campus model. FCH is also currently executing a program cofinanced by IDB Lab, Aster: Accelerator of Efficient Technologies in Chile (CH-T1309/CH-G1011), which promotes climate technologies that impact the living conditions of vulnerable populations.

5.7 CORFO will be the institution providing the counterpart contribution. As part of the FCH board, CORFO shares the same vision that public policies for innovation and entrepreneurship, especially technology-based innovation and entrepreneurship, need to be better coordinated, to address Chile’s social, environmental, and territorial development challenges. FCH and CORFO will sign an agreement for execution of the program, as a condition precedent to the first disbursement for the project.

5.8 **Integrity review.** The project team, with assistance from the Office of Institutional Integrity (OII), conducted the integrity due diligence review of the project and did not identify any integrity or reputational risks for IDB Lab that warrant disclosure.

B. Structure and implementation mechanism

5.9 FCH will establish an execution unit and the necessary structure for execution of the project activities and efficient and effective management of the project resources. FCH will also be responsible for delivering status reports on project implementation.

5.10 The IDB Lab team in Chile, supported by the IDB Lab program coordinator at Startup Campus, will be responsible for coordinating the training offerings and connections with strategic initiatives. The IDB Lab program coordinator will report functionally to the Startup Campus manager.

5.11 Several coordination and decision-making bodies will be established, to ensure effective governance of the initiative:

5.12 The Strategic Council will be made up of CORFO, FCH, and an entity to be identified by mutual agreement. It will review progress and establish strategic policies and guidelines for Startup Campus.

5.13 The Assembly of Members will be a body for providing information to all active members of Startup Campus. Its purposes will be continuous improvement of the value proposition, development of new benefits, and identification of opportunities to expand collaboration.

5.14 The Advisory Council of experts in various fields will be responsible for providing technical advisory support for the smooth development and operation of the campus, including its sustainability and scaling model.

5.15 During implementation of the project with IDB Lab, six-monthly meetings and monitoring with the Strategic Council will yield recommendations to support achievement of the project's objectives. Moreover, the Bank will participate in these coordination bodies as part of the Startup Campus ecosystem.

VI. Fulfillment of Milestones and Special Fiduciary Arrangements

6.1 **Results-based disbursement and fiduciary arrangements.** The executing agency has agreed to IDB Lab's standard arrangements for results-based disbursements and the procurement and financial management policies applicable to the private sector, consistent with the Financial Management Guidelines for IDB-financed Projects (OP-273-12), version of 12 June 2019, and as specified in the Operational Guidelines for Management of Milestones and Financial Supervision for MIF and SEP Technical Cooperation Projects .[36]

6.2 **Results-based disbursements.** The Country Office in Chile will supervise the project. Monitoring will be in accordance with the performance- and risk-based project management policies (fulfillment of milestones) established by IDB Lab in April 2008.

VII. Access to Information and Intellectual Property

7.1 **Access to information.** Under the Bank's Access to Information Policy, this document will be disclosed and made available to the public upon approval.

7.2 **Intellectual property.** The solutions developed by the sci-tech firms working at the campus will be the intellectual property of their creators. The project will provide advisory support and assistance for the proper registration of intellectual property and patents, to maximize the potential of its business models.

7.3 The project's deliverables (knowledge products such as annual reports, impact evaluations, etc.) will be the intellectual property of FCH, which will grant the Bank a nonexclusive, free license for noncommercial purposes to use, copy, distribute, reproduce, exhibit, and publicly perform such deliverables. At the Bank's request, the project's deliverables will be licensed by the executing agency to third parties under the Creative Commons license IGO 3.0 BY-NC-ND (http://creativecommons.org/licenses/by-nc-nd/3.0/igo/legalcode).

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[36] Operational Guidelines for Management of Milestones and Financial Supervision for MIF and SEP Technical Cooperation Projects.

7.4 FCH will guarantee that the execution of the project does not, and will not, infringe the rights of third parties, and agrees to undertake all necessary activities for the Bank to be able to exercise the rights mentioned herein without limitation.

7.5 FCH agrees to include the assignment of the respective intellectual property rights, including copyright, in all contracts entered into under the project with consultants involved in the development of the project's deliverables.

7.6 The Bank may disclose, reproduce, and publish any information associated with the project and include the name and logo of both parties in that information.