



Project Identification Form (PIF) entry – Full Sized Project – GEF - 7

Economic instruments and tools to support the conservation of biodiversity, the payment of ecosystem services and sustainable development

Part I: Project Information

GEF ID

10213

Project Type

FSP

Type of Trust Fund

GET

CBIT

No

Project Title

Economic instruments and tools to support the conservation of biodiversity, the payment of ecosystem services and sustainable development

Countries

Chile

Agency(ies)

UNDP

Other Executing Partner(s)

Chile Ministry of Environment

Executing Partner Type

Government

GEF Focal Area

Biodiversity

Taxonomy

Focal Areas, Climate Change, Climate Change Mitigation, Agriculture, Forestry, and Other Land Use, Biodiversity, Species, Threatened Species, Mainstreaming, Fisheries, Agriculture and agrobiodiversity, Extractive Industries, Infrastructure, Protected Areas and Landscapes, Community Based Natural Resource Mngt, Biomes, Sea Grasses, Rivers, Lakes, Temperate Forests, Financial and Accounting, Conservation Finance, Natural Capital Assessment and Accounting, Payment for Ecosystem Services, Forest, Forest and Landscape Restoration, Land Degradation, Sustainable Land Management, Sustainable Forest, Improved Soil and Water Management Techniques, Sustainable Pasture Management, Sustainable Agriculture, Influencing models, Strengthen institutional capacity and decision-making, Convene multi-stakeholder alliances, Deploy innovative financial instruments, Transform policy and regulatory environments, Stakeholders, Indigenous Peoples, Beneficiaries, Private Sector, Large corporations, Local Communities, Type of Engagement, Information Dissemination, Partnership, Participation, Consultation, Civil Society, Academia, Non-Governmental Organization, Trade Unions and Workers Unions, Communications, Awareness Raising, Behavior change, Gender Equality, Gender Mainstreaming, Women groups, Gender-sensitive indicators, Sex-disaggregated indicators, Gender results areas, Participation and leadership, Capacity Development, Access to benefits and services, Knowledge Generation and Exchange, Capacity, Knowledge and Research, Learning, Adaptive management, Indicators to measure change, Innovation, Knowledge Generation, Forestry - Including HCVF and REDD+, Climate Change Adaptation, Private sector, Community-based adaptation

Rio Markers**Climate Change Mitigation**

Climate Change Mitigation 1

Climate Change Adaptation

Climate Change Adaptation 1

Duration

60 In Months

Agency Fee(\$)

218,500

Submission Date

4/5/2019

A. Indicative Focal/Non-Focal Area Elements

Programming Directions	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
BD-1-1	GET	1,190,269	7,870,870
BD-1-3	GET	1,109,731	3,629,130
	Total Project Cost (\$)	2,300,000	11,500,000

B. Indicative Project description summary

Project Objective

Improve national financing of biodiversity through the design, implementation and optimization of market-based economic instruments that strengthen public finances and facilitate the economic contribution of the private sector to the maintenance of the country's natural capital

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
1.- Institutional and governance framework and tools for the application of economic instruments for the conservation and sustainable use of biodiversity and ecosystem services (IECB) in terrestrial, freshwater, marine and coastal ecosystems.	Technical Assistance	1.1 Established/strengthened institutional and governance system providing enabling environment for the development, application, monitoring and evaluation of IECB, as measured by: - Functioning multisectoral working	1.1.1) Mechanisms for multisectoral coordination and tools put in place to promote the application of IECB at the national level, with the participation of public and private actors. This includes: (i) multisectoral working groups/ committees to promote the design, application, monitoring and evaluation of the IECB; (ii) optimization of the offset mechanism for residual impacts on biodiversity (applied once the mitigation hierarchy is employed); (iii) development of a mechanism for the payment of ecosystem services (PES); and, (iv) methodology for the registration and certification of conservation / restoration actions. 1.2.1) Technical tools developed for the application, monitoring and evaluation of IECB results in terrestrial, freshwater, marine and coastal ecosystems, including: (i) "procedural guides" ^[1] for effective application of the offset mechanism within the Environmental Impact Assessment System (SEIA). These must be applied by the Environmental Assessment Service as well all sectoral agencies that are involved in the EIA of development projects ; (ii) electronic registry of biodiversity offset measures established as part of the environmental assessment of investment projects; (iii) guidelines to monitor compliance with biodiversity offset measures to be applied by the the Superintendency of MMA (which monitors compliance with the environmental license given to investors of development projects), the Ministry of the Environment and as well as relevant sectoral agencies	GET	613,333	6,488,749

commitment on IECB at the national level.

- Design of procedures and regulatory tools for the implementation of IECB

(depending on the type of investment project); (iv) accreditation mechanism for conservation/ restoration initiatives; (v) on-line registry of accredited conservation/ restoration measures to be considered as offset measures; and, (vi) studies and tools to operationalize the payment for ecosystem services mechanism, including legal assessment, administrative design of mechanism, adaptation of the methodology of ecosystem service valuation to the country's institutional context, and PES monitoring procedures. The MMA has competency to promote the application of PES.

1.2 Technical capacity created and strengthened for the application, monitoring and evaluation of IECB, as measured by:

1.2.2 Action plan for capacity building of the public sector on the implementation of IECB prepared and implemented, including assessment of institutional requirements and strengthening (for environment, forestry, fisheries, sanitary services, among others).

[1] In accordance with national legislation (letter d) of article 81 of Law 19.300, the Environmental Evaluation Services is responsible for "standardizing the criteria, requirements, conditions, background, certificates, procedures, technical requirements and environmental procedures that the ministries and other competent state agencies establish, through the development, among others, of procedural guides".

- Number of tools designed and operational for the application

n of IECB
(preliminary goal:
10)

- Number of public officials trained in the use of elaborated technical tools (preliminary goal: 120)

- Incorporation of new tools in the environmental impact assessment processes of investment projects by public and private actors.

** Baseline and indicators will be confirmed*

during the
PPG
stage.

2.- Application of IECB mechanism s including offsets for residual impacts on biodiversity and payments for ecosystem services in demonstration projects	Technical Assistance	2.1 Biodiversity and ecosystem services in both terrestrial and marine priority production landscapes maintained and improved through the implementation of demonstrative experiences of IECB, as measured by: - 7,554 hectares of native forest of high value for conservat	2.1.1 Demonstration projects executed for the application of IECB in productive landscapes belonging to terrestrial and coastal marine-ecosystems, including: (i) demonstration project(s) of offsets for residual impacts on biodiversity in terrestrial and/ or inland water ecosystems (promotion of sustainable agriculture, forestry and/or non-timber forest production, as well as conservation and restoration of high conservation value native forest); (ii) demonstration project(s) of offsets for residual impacts on biodiversity in marine-coastal ecosystems (promotion of sustainable fishing practices in AMERBs); and, (iii) demonstration project(s) of payments for ecosystem services in priority native forest ecosystems (promotion of sustainable forest management and non-timber production, conservation and restoration of native forest). 2.1.2 Set of tools for biodiversity offsets and payments for ecosystem services validated for application in other areas or territories of the country, including procedural guides, enforcement guides, mechanisms for accreditation and registration of conservation/ restoration initiatives. 2.1.3 Participation and governance mechanisms for the application of IECB at the subnational/ local level validated for application in other areas of the country	GET	1,117,143	4,443,632
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ion and
biodiversit
y (HCV)[1]
maintaine
d /
improved
through
the
payment
for
ecosyste
m
services
mechanis
m.

- At least
5 Areas of
Managem
ent and
Exploitati
on of
Benthic
Resource
s
(AMERBs)
[2]
incorporat
ed in the
pilot
biodiversit
y offset
mechanis
m

-700
hectares
of marine-
coastal
ecosyste
ms
implemen

ting
sustainabl
e
productio
n
practices
to meet
indicative
standards
for HCVs

-300
artisanal
fishermen
involved
and
implemen
ting
favorable
practices
for the
conservat
ion of the
biodiversit
y of the
selected
AMERBs.

- At least
60 public
officials
and
relevant
stakehold
ers
involved
in the
process

-
Increased
public and

private
financing
for
conservat
ion and
sustainabl
e use of
biodiversit
y in
demonstr
ation site

** Baseline
values of
indicators
will be
confirmed
during the
PPG
stage*

[1] Given
that the
term HCV
does not
represent
an official
designati
on or
standard
for Chile,
it is used
here in
indicative
terms and
to refer to
the
standard
that the

project hopes to achieve in productive landscapes in the areas involved in this project.

[2]

Maitencillo, Quintay, El Quisco A, El Quisco B, Las Cruces

3.- Knowledge management, learning, monitoring and evaluation for the effective implementation of IECB	Technical Assistance	3.1 Increase of knowledge for the use, monitoring and evaluation of IECB in Chile, as measured by: - Degree of interest of key stakeholders	3.1 Communication strategy and knowledge management system implemented to promote learning about IECB with key stakeholders. This includes: (i) web platforms; (ii) publication of documents; (iii) talks and seminars. 3.2 Strategy for the monitoring, evaluation and collaborative learning of the results and products of the project implemented to strengthen project management and adaptive management. *COFINANCING FOR COMPONENT 3 WILL BE FURTHER EXPLORED AT PPG STAGE	GET	460,000	20,000
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ers in the use of the IECB that were developed (as measured through surveys).

- Increase in the use of electronic platforms for dissemination of the information and learning resulting from the project.

- Increase in participation and degree of satisfaction of key stakeholders in face-to-face dissemination and capacity building events (talks,

workshop
S,
seminars)

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-

Participati
on of key
stakehold
ers in
IECB
monitorin
g and
evaluation

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*

*Baseline
and
indicators
will be
confirmed
during the
PPG
stage*

Sub Total (\$)

2,190,476

10,952,381

Project Management Cost (PMC)

GET

109,524

547,619

Sub Total(\$)

109,524

547,619

Total Project Cost(\$)

2,300,000

11,500,000

C. Indicative sources of Co-financing for the Project by name and by type

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount(\$)
Government	Ministry of Environment	Grant	Recurrent expenditures	5,586,024
Government	Ministry of Environment	Grant	Investment mobilized	769,418
Government	Fisheries Under-Secretariat (SUBPESCA)	Grant	Recurrent expenditures	400,000
Government	Fisheries and Aquaculture National Service (SERNAPESCA)	Grant	Recurrent expenditures	130,000
Government	Superintendence of Sanitary Services (SISS)	Grant	Recurrent expenditures	129,530
Government	Forestry Institute of Chile (INFOR)	Unknown at this stage	Investment mobilized	129,531
Government	Forestry Institute of Chile (INFOR)	Grant	Investment mobilized	76,805
Government	Fisheries Development Institute (IFOP)	Grant	Investment mobilized	400,000
Government	National Forestry Corporation (CONAF)	Grant	Investment mobilized	150,000
Government	National Forestry Corporation (CONAF)	Grant	Recurrent expenditures	150,000
Private Sector	National Association of Sanitary Services Companies A.G. (ANDESS Chile)	Unknown at this stage	Investment mobilized	263,046
Private Sector	ANDESS Chile	Grant	Investment mobilized	76,805
Private Sector	Mining Council	Grant	Investment mobilized	1,382,488

Others	Academy, Pontifical Catholic University of Valparaíso (PUCV)	Unknown at this stage	Investment mobilized	1,535,349
Beneficiaries	Fishermen's unions	Unknown at this stage	Investment mobilized	192,012
CSO	Wildlife Conservation Society (WCS)	Unknown at this stage	Investment mobilized	32,383
GEF Agency	UNDP (Biofin)	Grant	Investment mobilized	96,609
			Total Project Cost(\$)	11,500,000

Describe how any "Investment Mobilized" was identified

• The co-financing amounts for these agencies: Fisheries Under-Secretariat (SUBPESCA); Fisheries and Aquaculture National Service (SERNAPESCA); Fisheries Development Institute (IFOP); National Forestry Corporation (CONAF), among others, will be validated during the PPG phase. "Investment Mobilized" was identified through direct consultations with project stakeholders and estimates made based on referential market costs for Chile. In the case of the Ministry of the Environment, the mobilized investment corresponds to the financial resources allocated to: (i) the elaboration of inventories of marine ecosystems; (ii) the platform for the conservation/ restoration project bank; (iii) the construction of databases of azonal ecosystems; (iv) evaluation of the state of conservation of ecosystems according to IUCN criteria; (v) Plans for socio-ecological restoration at the landscape scale; and, (vi) the preparation of conservation/ restoration projects for biodiversity offsets in the Metropolitan Regions of Santiago and O'Higgins. In the case of the SISS, the mobilized investment corresponds to resources allocated to support the feasibility analysis of regulatory modifications on sanitary matters to apply the mechanism of payment for ecosystem services. In the case of INFOR, IFOP and CONAF, this investment corresponds to resources allocated to carry out research related to the state, functioning and economic valuation of native forest and marine-coastal ecosystems and their ecosystem services (natural capital assessment and valuation). In the case of ANDESS Chile, the mobilized investment corresponds to human capital allocated to support the studies and the payment for ecosystem services mechanism, while in the case of the PUCV these resources are associated with the necessary studies to obtain the basic information for the design of the biodiversity offset mechanism in marine-coastal environments. In the case of fishermen's unions, these resources refer to the participation, local logistical support and participation in activities to implement offsets in coastal-marine biodiversity, monitoring and evaluation. In the case of WCS, as with UN Environment, the investment is related to basic information and technical support on biodiversity offsets, while, finally, in the case of UNDP (BIOFIN) this investment refers to the development of offset methodologies and analysis of the economic functioning of the mechanism.

D. Indicative Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)	Total(\$)
UNDP	GET	Chile	Biodiversity	BD STAR Allocation	2,300,000	218,500	2,518,500
Total GEF Resources(\$)					2,300,000	218,500	2,518,500

E. Project Preparation Grant (PPG)

PPG Amount (\$)

100,000

PPG Agency Fee (\$)

9,500

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)	Total(\$)
UNDP	GET	Chile	Biodiversity	BD STAR Allocation	100,000	9,500	109,500
Total Project Costs(\$)					100,000	9,500	109,500

Core Indicators

Indicator 4 Area of landscapes under improved practices (hectares; excluding protected areas)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
100000.00	0.00	0.00	0.00

Indicator 4.1 Area of landscapes under improved management to benefit biodiversity (hectares, qualitative assessment, non-certified)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
100,000.00			

Indicator 4.2 Area of landscapes that meets national or international third party certification that incorporates biodiversity considerations (hectares)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Type/Name of Third Party Certification**Indicator 4.3 Area of landscapes under sustainable land management in production systems**

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 4.4 Area of High Conservation Value Forest (HCVF) loss avoided

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Documents (Please upload document(s) that justifies the HCVF)**Title****Submitted****Indicator 5 Area of marine habitat under improved practices to benefit biodiversity (excluding protected areas)**

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
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700.00			
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Indicator 5.1 Number of fisheries that meet national or international third party certification that incorporates biodiversity considerations

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
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Type/name of the third-party certification

Indicator 5.2 Number of Large Marine Ecosystems (LMEs) with reduced pollutions and hypoxia

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (achieved at MTR)	Number (achieved at TE)
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0	0	0	0
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LME at PIF

LME at CEO Endorsement

LME at MTR

LME at TE

Indicator 5.3 Amount of Marine Litter Avoided

Metric Tons (expected at PIF)

Metric Tons (expected at CEO Endorsement)

Metric Tons (Achieved at MTR)

Metric Tons (Achieved at TE)

Metric Tons (expected at PIF)	Metric Tons (expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)

Indicator 6 Greenhouse Gas Emissions Mitigated

Total Target Benefit

(At PIF)

(At CEO Endorsement)

(Achieved at MTR)

(Achieved at TE)

Expected metric tons of CO₂e (direct)

89890

0

0

0

Expected metric tons of CO₂e (indirect)

0

0

0

0

Indicator 6.1 Carbon Sequestered or Emissions Avoided in the AFOLU (Agriculture, Forestry and Other Land Use) sector

Total Target Benefit

(At PIF)

(At CEO Endorsement)

(Achieved at MTR)

(Achieved at TE)

Expected metric tons of CO ₂ e (direct)	89890
Expected metric tons of CO ₂ e (indirect)	
Anticipated start year of accounting	2021
Duration of accounting	10

Indicator 6.2 Emissions Avoided Outside AFOLU (Agriculture, Forestry and Other Land Use) Sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO ₂ e (direct)				
Expected metric tons of CO ₂ e (indirect)				
Anticipated start year of accounting				
Duration of accounting				

Indicator 6.3 Energy Saved (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Total Target Benefit	Energy (MJ) (At PIF)	Energy (MJ) (At CEO Endorsement)	Energy (MJ) (Achieved at MTR)	Energy (MJ) (Achieved at TE)

**Target Energy Saved
(MJ)**

Indicator 6.4 Increase in Installed Renewable Energy Capacity per Technology (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Technology	Capacity (MW) (Expected at PIF)	Capacity (MW) (Expected at CEO Endorsement)	Capacity (MW) (Achieved at MTR)	Capacity (MW) (Achieved at TE)
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Indicator 11 Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	500			
Male	500			
Total	1000	0	0	0

Provide additional explanation on targets, other methodologies used, and other focal area specifics (i.e., Aichi targets in BD) including justification where core indicator targets are not provided

Indicator 6.1 -Referential preliminary data, considering estimates of absorption of C (-238 ± 31 g C / m2 / year) for temperate forests of the Los Lagos Region, developed by Perez-Quezada et al, 2018 [21]

Part II. Project Justification

1a. Project Description

1. Due to the uniqueness of its biodiversity and ecosystems, a significant part of Chile is recognized as one of the world's hotspots for biodiversity conservation [1, 2, 3, among others]. This hotspot ("Chilean winter rainfall Valdivian forests"), extends from the Pacific coast to the Andean peaks between 25° and 47 °S, including the narrow coastal strip between 25° and 19 °S [4, 1, 2] and houses in the order of 3,893 native vascular plants, of which 50.3% (1,957) correspond to endemic species of the country [5]. In the marine environment, a large part of the country's coast and Exclusive Economic Zone (EEZ) is part of the Humboldt Current Large Marine Ecosystem (HCLME), one of most biodiversity and productive marine ecosystems of the planet, supporting one of the largest fisheries in the world's oceans corresponding to 18 to 20% of global catches every year, but also a vulnerable ecosystem and one of 200 priority ecoregions for global conservation [6]. Both the terrestrial and coastal marine biodiversity of the aforementioned areas play important roles in the generation and provision of ecosystem services (ES- e.g., habitat for wild species and human population, regulation of the water balance, erosion and flood control, water and air purification, recreational opportunities, cultural services, etc.). Their degradation generates significant natural and socioeconomic impacts at the local, national and global scales.
2. Despite its importance, the country's biodiversity and ecosystem services are experiencing significant loss and deterioration. In the terrestrial sphere, about 50% of the terrestrial ecosystems of Chile (63 out of 127) are under some category of threat (49 Vulnerable, 6 Endangered and 8 Critically Endangered) [7], with the center-south zone of the country (the hotspot area) showing the highest levels of degradation. All the 'endangered' terrestrial ecosystems of the country are located in this area (with a loss in total area of between 60 and 85% compared to its historical range [8]) and most of the continental aquatic ecosystems (freshwater bodies) have mesotrophic or higher trophic state levels.
3. Along with the above, in relation to marine-coastal ecosystems, although there is no national categorization of their threatened status and notwithstanding the overall score in the Oceanic Health Index for Chile[4], which is relatively high (74) according to the analysis of One Shared Ocean (OSO) for Large Marine Ecosystems (LMEs) and the Transboundary Water Assessment Program (GEF TWAP[5]), the HCLME has a high global risk factor. In addition, the state of the main national fisheries in the year 2017 indicates that, of the fisheries reported, one fishery is underexploited, eight are in full exploitation, eight overfished, eight depleted or collapsed and one in an undetermined state [9] .
4. The loss of biodiversity outside of protected areas is of particular interest. Although a high proportion of Chile's land and marine area is protected (20% and 36%, respectively), the representativeness analyses show important protection gaps in several of the most important ecosystems of the country, from the point of view of their singularity and endemism. In the terrestrial sphere, more than 12% of the total ecosystems are not included in any category of protected area, and another 24% have less than 1% of their area under some category of protection [10]. In the marine sphere, one Marine Park (Hotu Moturo Hiva) in the Easter Island-Rapa Nui ecoregion covers more than 99% of the total area contained in marine protected areas in Chile.
5. In the continental terrestrial and aquatic environment, the most important drivers of loss and deterioration of biodiversity and ecosystem services in Chile are: (i) land use change, (ii) the introduction and dispersion of invasive alien species, (iii) intensive development of the primary productive sectors, (iv) forest fires, and (v) climate change. On the other hand, in marine and coastal areas, the most important drivers that affect ecosystems are related to: extractive

fishing activities (due to their intensity and use of inappropriate fishing gear); the introduction of exotic species; contamination from solid and liquid waste discharged into the sea; and the fragmentation of coastal habitats [11].

6. The drivers of negative changes in biodiversity and ecosystem services have multiple underlying causes in Chile, which include: (i) weaknesses of environmental institutions in relation to biodiversity matters (scattered and insufficient regulations, scarce tools for innovation); (ii) regulations and incentives for productive development that run counter to the conservation objectives of biodiversity and ecosystem services; (iii) poor knowledge and appreciation of the economic and socio-environmental importance of biodiversity and ecosystem services; (iv) associated with the above and in economic terms, the absence of agreed and tested methodologies to place a value on these contributions in economic terms and include them in national accounting and finance; and (v) low awareness and citizen participation in matters related to the need to protect biodiversity and ecosystem services.

7. In addition, many of the underlying causes of the negative drivers affecting biodiversity are aggravated by the scarcity of economic resources available to address them. The budgets allocated for the protection and management of biodiversity are much smaller than those assigned to productive development policies that exert negative impacts on the quantity and quality of natural capital. The analysis of public spending by the central government on biodiversity for the period 2010-2014, for example, shows that it corresponds to a small proportion of overall spending (only 0.036% of GDP), a percentage that is much lower compared to that allocated by other countries in the region for similar objectives. If we consider the spending on biodiversity in 2014 (CLP 56,323,939,000; USD 88,006,154) and estimate the cost of implementation of the National Biodiversity Strategy for the 2017-2030 period (CLP 618,599,019,194; USD 943,993,620), the gaps in national financing for conservation and sustainable use of biodiversity are very significant. Today, the instruments available to the State for the conservation of biodiversity and the provision of ecosystem services inside and outside of protected areas are insufficient, dispersed and incomplete. Through this project, the Government of Chile seeks to improve the institutional framework and existing economic mechanisms to support public policies oriented towards the conservation and sustainable use of biodiversity and ecosystem services in the terrestrial, continental aquatic and coastal marine environments [12].

Barriers

8. At the national level, the financing of biodiversity, whether it be through public or private sources, is hampered by various barriers, including: (i) institutional and regulatory framework; (ii) market-related barriers; and, (iii) barriers related to technical capabilities. Only a systematic and progressive approach to addressing these barriers will allow us to advance toward the objective of contributing to the creation of an enabling political and institutional environment for the conservation and financing of biodiversity and its management. The main characteristics of these barriers can be described as follows:

(i) *Institutional Barriers*: Chile has in place an environmental regulatory framework that is in the process of being consolidated, with important advances that have been made in the strengthening of environmental policies and institutions [13]. The institutional structure was put in place in 2010 with the creation of the Ministry of Environment and the promulgation of Law No. 20,417, which lays the foundations for dealing with environmental issues in the country in a unified manner. It includes the creation of the Council of Ministers for Sustainability, the Environmental Assessment Service, the Environment Superintendency and later the Environmental Courts, which are beginning to work together with the Ministry of the Environment constituting an important step in the structuring of the national environmental agenda. However, it is an institutional set-up that still has significant gaps, such as the lack of a modern institutional framework with broad and specific competencies associated with the protection and sustainable management of biodiversity. This gap constitutes a barrier that undermines the application of policies, strategies and innovative instruments for the management of biodiversity and also prevents the definition of competencies and resources, which are currently dispersed. Along with being considered the most centralized country in political administrative terms of Latin America and the most centralized in fiscal terms of the OECD [14], the public institutions and the administrative structure of the State of Chile are characterized by their compartmentalized and sectoral functioning, making it extremely difficult to put in place cross-sectional or cross-sector management

approaches. Given the increasing complexity of coordinating a significant number of institutions and funding sources, it is necessary to strengthen the governance of environmental policies as a necessary condition to increase the flow of resources destined for the conservation and sustainable use of biodiversity.

(ii) *Market Barriers*: Market barriers are significant and this is recognized by the OECD [13] in Chile's latest Environmental Performance Assessment, noting that there are no adequate incentives and instruments for private sector participation in the preservation and safeguarding of natural capital. Among the barriers to developing markets is a series of failures, among them: high transaction costs, gaps and information asymmetries, the presence of externalities, coordination costs and uncertainty. As an example, information gaps and asymmetries mean that there is no adequate identification and valuation of biodiversity goods and services, they are disconnected from the chains that add value, they are not considered in the establishment of prices and the markets that demand them do not internalize their costs, nor their effects on them. In the regulatory field, with regard to investment projects that must offset impacts on biodiversity, for example, there is a latent demand that is not captured, but the offer is invisible and decoupled from that demand and the instruments are not created or put into effect due to a lack of articulation and targeting. For these reasons, there are no markets or prices for most ecosystem services, which makes it impossible to use the advantages of the market to catalyze decentralized actions for the conservation of valuable ecosystems.

(iii) *Technical barriers*: The technical barriers for the application of economic instruments of payment for ecosystem services and biodiversity offsets in the country have to do, fundamentally, with the lack or insufficiency of tools associated with these instruments to facilitate the functioning of markets, the need to solve coordination problems and information asymmetries, among others. To promote payment for ecosystem services, it is necessary, for example: (i) to adequately and formally define the concept of ecosystem service; (ii) design a mechanism for payment (to facilitate coordination and exchange between agents); (iii) develop certification systems or a registry of actions to maintain or recover ecosystem services, as well as (iv) standardize the valuation of ecosystem services and develop accessible, efficient and transparent channels of information and dissemination (to resolve information asymmetries).

To optimize biodiversity offsets, in addition to the important advances made in recent years, technical tools are still required to ensure that these offsets are appropriate, cost efficient and ecologically equivalent. More specifically, some of the relevant technical barriers are: the absence of metrics or standards to evaluate impacted ecosystems and those that serve as offsets; lack of mechanisms for certification or registration of conservation or restoration actions; inexistence of recognized intermediaries (brokers or compensation banks); and the absence of ecological planning (landscape and seascape planning) that would define priorities for restoration, conservation and sustainable use. Some of these elements, such as generation of metrics for some ecoregions, have been addressed by the Ministry of the Environment with the support of UNDP in previous years [15, 16] and also at present [17, 18, 19, 20].

1A.2 The Baseline Scenario or Any Associated Baseline Projects

9. Despite the fact that there are multiple barriers and challenges to achieving the desired objectives of conservation and sustainable use of biodiversity in the country, there is also growing concern about these matters and the management of the environment and conservation of biodiversity are beginning to gain space in the public agenda. Concrete expressions of this are: (1) the high level of political and social consensus to move towards a more sustainable development model, expressed over the last few years, for example, in the publications of laws on waste management, extended producer responsibility and promotion of recycling; introduction of the ecosystem approach in the General Fisheries and Aquaculture Law; and the ban on use of plastic bags in the retail sector throughout the national territory; (2) significant advances in the decarbonisation of the energy matrix and expansion of non-conventional renewable energies (NCRE); (3) introduction of green taxes on emissions of particulate material; (4) expansion of marine protected areas (MPAs) from 4% of the Exclusive Economic Zone in 2014 to 44% in 2018[6]; (5) regulatory improvements in the Environmental Impact Assessment System (SEIA) to strengthen the environmental assessment of projects, which contemplate, among other changes, the optimization of offset mechanisms to ensure the conservation and sustainable use of natural capital; and, (6) prioritization in the legislative agenda of the discussion for the creation of the Biodiversity and Protected Areas Service (SBAP).

10. In addition, in Chile there are various initiatives related to economic instruments and support tools for the conservation of biodiversity and the provision of ecosystem services. The following stand out:

- *Law for the creation of the Biodiversity and Protected Areas Service (SBAP)*: this is currently under discussion in the Congress of Chile and was assigned the category of "Extreme Urgency", meaning that there are strict timelines to push this legislation through the system. The purpose of this new service is the conservation of biodiversity and the protection of the country's natural heritage, through the preservation, restoration and sustainable use of genes, species and ecosystems. Among its objectives, the Service intends to put in place monitoring networks to better understand the state of conservation of biodiversity, prepare and manage inventories of species and ecosystems, and promote a series of economic instruments such as biodiversity offset banks, payments for ecosystem services and a system of certification of sustainable actions (Articles 50 to 53 of the bill). This project will accelerate the implementation of the functions of the SBAP in terms of IECB, through the creation of the institutional and technical capacities for the operationalization of the IECB contained in the legal initiative.
- *GEF Projects*: Chile has received GEF funds to finance a series of projects at the national, regional and global levels associated with the biodiversity focal area that are complementary to the present project in terms of strengthening national capacities in legal, technical and operational terms, for the achievement of the biodiversity and ecosystem service conservation objectives. Among the areas addressed by these projects are: support to protected areas; certification and provision of ecosystem services; sustainable use of biodiversity; and strategic plans (see section 6, Coordination). The GEF projects related to this initiative add up to a total amount of USD \$ 26,519,459. There is significant potential to ensure the continuity of the products and results of the completed projects, as well as to coordinate with and create synergies with ongoing work.
- *Areas of Management and Exploitation of Benthic Resources (AMERBs)*: These are marine areas allocated exclusively to artisanal fishermen's unions for the sustainable exploitation of benthic species. It has been shown that many of them maintain significantly more biological diversity and abundance than the surrounding environment [10]. The intention of MMA is for part of these areas to be set aside, voluntarily by the unions themselves, for strict protection of biodiversity and SE. 5 AMERBs will be chosen for the application of one of the IECB's demonstration initiatives that promotes this management model. To this end, we also have the collaboration of the PUCV, which has carried out significant research in these areas and will participate in the design and application of the model. In this way, these areas can be part of the registry of certified conservation/ restoration initiatives that could be incorporated into the IECB on offsets in marine-coastal biodiversity.
- *Design of a monitoring network in the context of climate change (Climate Technology Center and Network)*. This project consisted of the establishment of a Biodiversity Monitoring Network in marine, terrestrial and aquatic environments, with the purpose of supporting the maintenance and recovery capacity of the ecosystems, species and the ecosystem services that these provide, and at the same time allowing society to adapt to climate change. Ecosystem services are one of the objects or themes that the network is taking into consideration for follow up on biophysical indicators.
- *National Strategy for Green Growth 2013 -2022 (OECD)*: In May 2010, Chile reiterated its commitment to the Green Growth Strategy of the OECD, for which the Ministries of Finance and the Environment jointly prepared a Green Growth Strategy for Chile. The objective of the Strategy is to promote economic growth and, at the same time, contribute to the protection of the environment, the creation of green jobs and social equity. Regarding environmental information, the Strategy considers a set of indicators for the adequate follow-up of public policies structured along three thematic areas: green growth, environmental behavior of citizens and strong environmental policies.
- *System of Environmental-Economic Accounting (UNSTATS)*: As part of its work in environmental accounting, the Statistics Division of the United Nations led the project "Momentum for the Experimental Accounting of Ecosystems in the System of Environmental and Economic Accounts (SCAE))" to refine its Manual of Ecosystem Accounts. The objective of the project was to evaluate the availability of data and measurement practices, and to prepare a

work program based on the political priorities of different pilot countries. Chile was one of the participating countries, with the Ministry of the Environment being the focal point. The key product of this project is a National Environmental Accounts Plan for Chile, which proposes a roadmap for the development of environmental accounting in the short and medium term.

- *Biodiversity Finance Initiative (UNDP-BIOFIN, 2014-2019)*: a global initiative with the participation of Chile whose objective is to transform national finances on biodiversity to contribute to the achievement of national and global biodiversity objectives. For this purpose, BIOFIN has supported the quantification of the biodiversity financing gaps at the national level and the development of a proposed financial strategy to address these gaps, which includes the optimization and diversification of public and market IECB. These include the promotion of sustainable productive practices and the use of biodiversity offsets. To this end, since 2017, UNDP (through the BIOFIN project) has been working together with the Ministry of the Environment on the development of technical capacities to establish ecological equivalencies in biodiversity offsets related to investment initiatives carried out in continental terrestrial and aquatic ecosystems.

11. In conclusion, the baseline scenario contemplates the development of a series of studies and analyses aimed at strengthening the application of IECB, as well as generating the conditions to develop and apply other complementary tools (environmental accounts, monitoring, indicators and financial planning). However, under the baseline scenario, the development of regulatory or technical tools for the application of IECB, as well as the strengthening of professional capacities for the application thereof, are limited and it is believed that these will only materialize slowly over time.

1A.3 The Proposed Alternative Scenario, with a brief description of expected outcomes and components of

the Project

12. The solution to the previously identified barriers will support the creation of a broader, modern and cost-efficient scenario of policies and instruments for the financing of biodiversity. This will have positive impacts in different dimensions (public management, markets, financing, conservation and sustainable use of biodiversity, for example). First, it will improve the public management of biodiversity by broadening the base of stakeholders involved in its conservation and sustainable management, as well as by developing cost-efficient tools and multisectoral professional capacities to address the issues associated with biodiversity offsets and payments for ecosystem services. These developments will, in turn, advance the process of implementation of the economic instruments with which the new SBAP will work. Second, it will allow investors to have greater clarity about the real costs of investment initiatives, adequately apply the hierarchy of mitigation of impacts, reduce and internalize the costs associated with reparation, mitigation and compensation. Third, it will make the exchange between different market agents possible in a regulated, informed and transparent environment that will reduce market failures and uncertainty. In this scenario, overcoming the barriers will allow the underlying causes of loss and deterioration of national biodiversity to be better addressed and will contribute significantly to the fulfillment of national and international objectives of conservation and sustainable management of biodiversity and ecosystem services. At the same time, the alternative scenario will contribute to the strengthening of the capacities of the communities involved, to the resilience of the ecosystems and landscapes involved, as well as to the fulfillment of the objectives of the international development agenda. To move towards this scenario, the project is structured around three main components:

13. **Component 1:** Institutional and governance framework and tools for the application of economic instruments for the conservation and sustainable use of biodiversity and ecosystem services (IECB) in terrestrial, freshwater, marine and coastal ecosystems. The main outcome of this component is an "institutional and governance system created/ strengthened for the development, application, monitoring and evaluation of IECB". This implies improvement of national capacities in three dimensions: (i) institutional structure and governance around the issues related to the application of IECB (increase and diversification of participation in decision-making); (ii) development of regulatory and technical tools to materialize public policy decisions regarding the application and diversification of IECB; and, (iii) the increase of technical and professional capacities (public and private) to promote, monitor and evaluate the

results of the application of IECB. The tangible experiences that will be acquired through the demonstration projects in Component 2 will feed into Component 1 and allow the governance models, multi-sectoral coordination mechanisms and technical tools to be adjusted as necessary in support of upscaling IECB at the national level.

14. More specifically, the outputs expected to be generated during the project are: (a) multisectoral coordination mechanisms, with the participation of public and private stakeholders, designed and implemented to promote the application of IECB at the national level. Various sectors and government agencies have a role to play in the implementation of the IECB to be promoted through this project, including the Ministry of Agriculture (responsible for forestry), Ministry of Economy (responsible for fisheries), mining, energy, sanitary services and infrastructure sectors (all of which can incur the obligation of putting in place biodiversity offsets), and the Ministry of Public Works (which would be involved in any PES scheme involving provision of water), among others; (b) regulatory and technical tools to operationalize decision-making around biodiversity offsets and payments for ecosystem services and apply them concretely in productive spaces; (c) increased professional capacities at the national level to apply IECB and complementary tools[7]. Within this framework, some of the main tools related to biodiversity offsets will include: (i) a methodology for the implementation of biodiversity offsets in terrestrial and freshwater environments (note that the project is focused on strengthening the implementation of the offsets mechanism, which is only triggered for residual and unavoidable impacts on biodiversity once the mitigation hierarchy is applied (in terms of avoiding, reducing and mitigating impacts on biodiversity); (ii) a methodology for the implementation of biodiversity offsets in marine-coastal environments; (iii) A procedural guide for the implementation of biodiversity offsets within the framework of the Environmental Impact Assessment System (SEIA); (iv) A technical guide for the monitoring and supervision of compliance with offset measures; (v) an on-line registration platform for biodiversity offset commitments established by holders of investment projects within the framework of the SEIA implemented; (vi) accreditation mechanism for conservation/ restoration initiatives to be considered as offset measures for biodiversity; (vii) on-line registration platform for accredited conservation / restoration initiatives as offset measures for biodiversity. With regard to payments for ecosystem services, these include[8]: (viii) technical guide for the inclusion of payments for ecosystem services in contracts for the supply (and quality) of drinking water; (ix) operational manual of payment for ecosystem service mechanisms; and (x) models of remuneration contracts for ecosystem services addressed during the project.

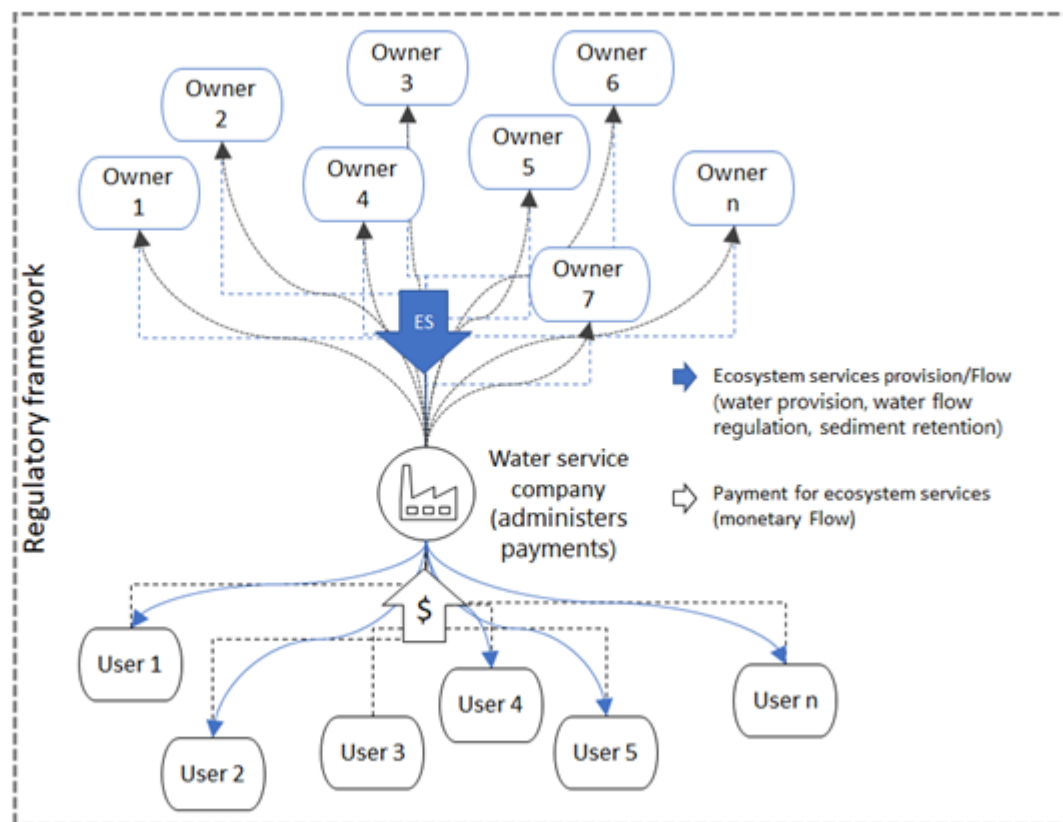
15. In order to develop these tools for the PES mechanism, the project will develop methodologies for the economic valuation of different forms of natural capital (different types of forests and soils) that contribute to water provision, water flow regulation and sediment retention in the project's focus areas, develop the methodologies to estimate the economic value of this ecosystem service, as well as methodologies to incorporate the economic valuation of ecosystem services into the system of establishing the price of providing the water service (water tariffs). In order to develop the tools based on the best available knowledge, STAP guidance will serve as a reference for the design of the conceptual framework and incorporation of lessons learned (e.g., definition of PES, barriers to PES effectiveness, etc.) and as a starting point for the design of specific technical tools during the PPG stage (e.g., indicators and monitoring procedures, recommendations about capacity building.). Lessons learned from STAP such as the importance of implementing monitoring systems to gather evidence to measure the effectiveness of PES schemes and the benefits of co-financing multiple ES are being taken into consideration in this project design

16. **Component 2:** Application of IECB mechanisms including offsets for residual impacts on biodiversity and payments for ecosystem services in demonstration projects. The sites selected for the demonstration initiatives are located in areas of high value for marine-coastal conservation and native forests, belonging to the Humboldt Current Large Marine Ecosystem (HCLME) and the Chilean hotspot for the conservation of biodiversity, the Valparaíso, Metropolitan Region of Santiago and the Lakes Region, respectively (see Annex C for specific locations). These sites were selected because they are located within productive coastal-marine and terrestrial landscapes and have substantial biodiversity of global importance (high rates of endemism and productivity), with limited representation in the national PA system, substantial anthropogenic pressures on them and where the State has limited tools to act in a regulatory manner in terms of biodiversity.

17. By means of this component, results and relevant products are sought in two areas: (i) improvement of biodiversity and ES in three productive landscapes of interest (terrestrial-freshwater and marine-coastal areas); and, (ii) concrete experiences and lessons learned for the improvement of the coordination mechanisms and tools (regulatory and technical) developed by the project (under Component 1). The demonstration projects will be based on simulated^[9] investment projects, for example, in the electricity generation, mining or sanitary sectors (installation of wastewater treatment plants), which are the main sectors that incur the obligation to offset their impacts on biodiversity. The specific objectives of the demonstration projects will be to i) test, evaluate and adjust the tools designed to establish offsets for residual impacts on biodiversity and payments for ecosystem services, including the procedural guides, enforcement guides, accreditation mechanisms and registration of conservation/ restoration initiatives and ii) to put in place the sustainable production and conservation practices with producers. The demonstration projects will strengthen operational and technical capacities for the application of the biodiversity offsets mechanism nationally as this existing mechanism required by law is not currently functioning effectively. The demonstrations will also help put in place the technical capacity and empirical experience to promote the PES mechanism and expand its use across the country. As such, the tools, coordination and governance structures for the implementation of these IECBs will be refined as necessary based on the demonstration projects and institutionalized under Component 1 for application nationally (as part of the mandatory requirements of the Environmental Impact Evaluation System in the case of biodiversity offsets and as part of the Ministry of Environment's mandate in the case of PES). This will facilitate sectoral mainstreaming of these economic instruments for the effective conservation of biodiversity.

18. As part of the mechanism of biodiversity offsets in marine ecosystems, the project will promote sustainable production practices among artisanal fishermen, such as recuperation of algae forests, reduction of incidental catch (through changes in fishing techniques), and reduction of water pollution (e.g., through recuperation and recycling of fishing nets). The implementation of these practices is expected to produce net biodiversity benefits and as such, credits will be generated once the equivalency of these benefits with the negative impacts produced by the development projects to be offset is established and validated. With regard to biodiversity offsets in terrestrial/inland water ecosystems, during the preparatory phase, the project will select an investment project with which it will work and based on this decision and the specific biodiversity impacts that need to be offset, will engage with producers in the relevant sector (e.g., forestry, agriculture or ranching) to promote sustainable production and conservation actions, such as enrichment of native forest, sustainable forest management, sustainable production of timber or non-timber forest products, erosion control, creation of connecting corridors, or fencing of livestock (which again will serve as credits that can be purchased as part of the offset mechanism).

19. The demonstration project related to payments for ecosystem services will develop and test a system to promote the maintenance of native forest in order to conserve the ecosystem services of water provision, water flow regulation and sediment retention. In this system or PES mechanism there are two types of relevant private stakeholders: (i) providers of ES (owners of land with native forest of interest); and, (ii) the water services company. The water services company has been engaged from the first stage of development of this project and the willingness of the owners of land with forest to participate in a PES scheme has been explored by previous initiatives in the proposed intervention area by the institutions involved in the project. The ecosystem service providers are the individual owners of native forest of interest, who by conserving the forest will contribute to the provision of water, water flow regulation and sedimentation regulation. The water services company will administer the payments to landowners at the pilot stage using GEF funds. After the pilot stage, the buyers will be the final users (and buyers) of the water services (see the next figure for a graphic representation). A detailed engagement strategy for the private sector will be developed during the PPG stage.



20. The demonstration experience will involve testing the methodologies developed under Component 1 including by undertaking an economic valuation of the ecosystem service of water provision in the demonstration site and refining the associated tools as necessary (operational manual of PES mechanism, technical guide for the inclusion of payments for ecosystem services in contracts for the provision of drinking water and sewage treatment and model remuneration contracts for ecosystem services). As part of this demonstration, the project will work with producers to promote sustainable forest management, conservation and restoration of native forest areas. The project will also work with the Superintendancy of Sanitary Services to promote a broader interpretation of the provision of the law related to the minimal costs that can be included in the establishment of water tariffs to include costs associated with the maintenance of natural capital.

21. Each demonstration project corresponds to a different ecosystem and territory and the application of the IECB will need to be adapted to the particular context from the socio-environmental, institutional, regulatory, administrative and territorial points of view. The demonstration projects will provide valuable information for the modification and improvement of the tools created as part of the outputs of Component 1 and for the subsequent application of IECB in other areas of the country. Special attention will be given to the complementarity of the tools developed with existing conservation and/or planning instruments. The project includes the design of a monitoring system (based on several indicators such as impact, effectiveness, efficiency, which will be measured at project start up and after implementation) as part of the technical tools included in project output 1.2.1, specifically those related to PES monitoring procedures (number (vi) of 1.2.1). The GEF experimental design recommendation will be taken on board in terms of the design of the monitoring system, based on the specific areas of intervention to be identified during the PPG stage. Issues such as statistically significant sample sizes and randomization will be incorporated into the monitoring system.

22. **Component 3:** Knowledge management, learning, monitoring and evaluation for the effective implementation of IECB. Through this Component, the project will seek to: (i) increase the degree of national interest in the use, monitoring and evaluation of IECB; (ii) create collaborative learning communities on these matters at the national level; and (iii) create/ improve national enabling conditions to expand the use of IECB in the management of biodiversity and ESS in the country (to promote replication). In this sense, the main outputs of the component are: (i) a communication strategy and knowledge management system to promote learning about IECB with key actors at the national level, the details of which will be defined during the PPG stage (preliminarily, some of the products and actions could include web platforms, the publication of documents, talks and seminars); and (ii) a monitoring, evaluation and collaborative learning strategy on the advances, results and products of the project to strengthen project management and adaptive management. This will include the periodic monitoring of indicators, annual reports, a Mid-term Review and a Terminal Evaluation, training of key stakeholders, workshops for the exchange of experiences, the systematization of learning, and proposals for improvements.

1A.4 Alignment with GEF Focal Area and/or Impact Program Strategies

23. The Project is consistent and aligned with the Biodiversity Focal Area and its goal of maintaining globally significant biodiversity in terrestrial and marine landscapes, contributing principally to the first objective of the area (Mainstream biodiversity across sectors as well as landscapes and seascapes). In particular, the project contributes significantly to the programmatic guidelines of elements 1-1 and 1-3 that is: "Mainstream biodiversity across sectors as well as landscapes and seascapes through biodiversity mainstreaming in priority sectors"; "Mainstream biodiversity across sectors as well as landscapes and seascapes through Natural Capital Assessment and Accounting" respectively. Another important aspect of the project is its contribution to the improvement of national biodiversity policy and planning. In the case of 1-1, the project will contribute through the inclusion of biodiversity considerations and specific regulatory and technical tools in sectors such as mining, fisheries, agriculture and forestry sectors; To contribute to 1-3, the project will develop a set of tools on accounting and evaluation of natural capital in Chile to apply IECB, specifically to support the development and implementation of a payment for ecosystem services mechanism related to the provision of water. This will entail the development of methodologies to estimate the value of ecosystem services provided by the environments in the intervention areas, the incorporation of the economic value of the ecosystem service into the system of establishing water tariffs and the testing and refining of these methodologies in the demonstration project(s) under Component 2, including the promotion of sustainable production and conservation to ensure the supply of water within the PES mechanism.

1A.5 Incremental/Additional Cost Reasoning And Expected Contributions From The Baseline, The GEFTF, LDCF, SCCF, And Co-Financing

24. The financing of biodiversity and strategies for the sustainable management thereof are among the most significant challenges for Chile's environmental policy. Without the support of GEF for the implementation of this project, Chile will continue to improve the national environmental institutional structure and make efforts to strengthen the application of IECB. With the creation of the SBAP, this process is expected to be strengthened and accelerated. However, both under the current scenario and with the approved SBAP, the application of IECB will be limited by insufficient technical and operational capacities. Outside PAs, the existing biodiversity will continue to be susceptible to the impacts of anthropogenic activities that do not incorporate certified good production practices and/ or that are not part of economic mechanisms for biodiversity conservation. The process of developing methodologies for the valuation of ecosystem services will continue to be incipient and without conclusive progress, such that the evaluation of these economic instruments in practice will be delayed. In the pilot areas, progress will be slow in the implementation of IECB, affecting the fulfillment of national and international goals to reduce the rate of biodiversity loss.

25. Under the alternative scenario, with the GEF project and the co-financing provided by the project's stakeholders, the institutional, technical, operational and training barriers identified will be quickly overcome, allowing for greater funding of actions to protect biodiversity in productive landscapes that harbor biodiversity and provide high value ecosystem services. GEF support will make it possible to create the conditions to implement IECB and, together with stakeholders at the national and local level, implement demonstration projects to test their design. These pilot exercises will be carried out in replicable

situations in diverse ecosystems in the Chilean biodiversity hotspot and will deliver results that can be applied in the short term. These results will make it possible to improve the instruments and extend their application to the entire national territory, increasing the contribution of private funding to the conservation and sustainable use of biodiversity and ES. s. In this way, the additional contribution of GEF will act as a catalyst and accelerator of beneficial and relevant processes for the achievement of national and international biodiversity and development objectives.

1A.6 Global Environmental Benefits (GEFTF) And/Or Adaptation Benefits (LDCF/SCCF)

26. As a result of the implementation of the project and the results and products of its three components, the initiative will contribute to various global environmental benefits (GEBs) related to the sustainable use and conservation of biodiversity, expressed in the GEF-7 Programming Directions document (see point 1A.4). The demonstration cases will contribute to the protection of ecosystems of high global importance, contributing in the order of 100,000 hectares of native forest of high value for conservation and biodiversity (HCV) managed sustainably and 700 hectares of marine-coastal ecosystems managed sustainably to reduce pressures on productive species threatened with collapse or extinction. In addition, beyond the project's time horizon, the project will contribute to the achievement of goals corresponding to the five Strategic Objectives of the Strategic Plan for Biodiversity 2011-2020 of the CBD.

1A.7 Innovation, sustainability and potential for scaling up.

Innovation

27. The project will develop new tools and methodologies, non-existent to date in Chile (and of limited existence worldwide), for the establishment of biodiversity offsets in marine-coastal ecosystems. The project will also design and support the initial application of a payment for ecosystem services scheme in Chile, which will allow complementary financing for actions related to the conservation and/or restoration of biodiversity and ecosystem services to be generated for the first time, enabling the involvement of new stakeholders (e.g., in the private sector and public institutions regulating service sectors) in national (and international) efforts of common interest. In the project context, innovation is understood as a new way of implementing mechanisms that exist elsewhere (in this case financial instruments such as PES) in a way that is adapted to the national context and effectively achieves results. Although PES is not a new mechanism in the global context, in Chile, progress has been limited to studies and design work, but a functioning PES system has not been put in place. The results of this baseline work on PES have led to information and proposals but not to the required institutional or regulatory changes, which will be achieved through GEF funding.

Sustainability

28. Political support for the project at all management levels (local, subnational and national) will contribute to project sustainability. The project will put into operation norms contained in a law whose approval is a commitment included in the current government's platform of action, but whose development had already begun under the previous government (which was a different political party). Therefore, it is a bill that has broad political support. In particular, the development of a legal framework for the economic instruments covered by the GEF project has cross-cutting support in the country. The project will accelerate the implementation of these instruments, including through the implementation of local demonstration projects. The roles played by local and regional stakeholders in the implementation of these type of instruments will be refined.

29. Institutional strengthening, professional skills and techniques will be developed to promote sustainability among project stakeholders. The continuity of institutional competencies, together with the training of professionals in the application of technical tools (e.g, methodologies for valuation of ecosystem services), and the use of operational tools (e.g., information systems and monitoring of ecosystem services), will ensure coherence between the expected results of the project and the response capacity of key actors. This will guarantee the replicability of the instruments and tools developed in other

management areas in biodiversity conservation and will reduce the financial resources gap that limits the execution of effective actions. Another factor that will promote project sustainability is the design and dissemination of methodological guides for application of the IECB, which will guide coordination among key actors, defining roles and responsibilities.

30. The involvement of key stakeholders and the beneficiary population will also support sustainability. Both in the area of biodiversity offsets, and in the case of payments for ecosystem services, there is interest in advancing their implementation and optimization not only on the part of institutions with direct competencies in this area, but also on behalf of various stakeholders in the field, including from the private sector, academia and civil society (both national and local). This interest has already been manifested for several years and it is believed that it will remain during the implementation and subsequent stages of the project.

31. The sustainability strategy is therefore primarily based on the institutionalization of the tools described under Output 1.2.1 (e.g., studies and tools to operationalize the PES services mechanism, including legal assessment, administrative design of mechanism, adaptation of the methodology of ES valuation to the country's institutional context, and PES monitoring procedures; procedural guides for effective application of the offset mechanism within the Environmental Impact Assessment System, electronic registry of biodiversity offset measures, guidelines to monitor compliance with biodiversity offset measures, and others). These tools are in line with the existing regulatory system, which will be further strengthened with the expected creation and functioning of the Biodiversity and Protected Areas Service (SBAP). The tools will strengthen institutional capacity and will allow the public agencies to establish the basis for future contracts between providers and buyers of ES.

Replicability

32. The replicability of the project is understood as the capacity to provoke a "demonstration effect" through its actions and to be adopted as a "model experience" throughout the country. Under Component 2, the project will generate practical experiences and adapted technical tools for the application of the biodiversity offset and PES mechanisms. The inputs from the demonstration projects under this Component will in turn feed into Component 1, which focuses on putting in place the governance system, multisectoral coordination structure and methodologies for the application and monitoring of biodiversity offsets and PES and the building of institutional capacity to apply IECB nation-wide. Component 1 will therefore play a critical role in facilitating widespread upscaling. The quality of the project and the results obtained will support project replicability, as will the current and projected regulatory framework. This framework mandates, for example, the implementation of biodiversity offsets since there are significant residual adverse effects from the execution of investment projects. Therefore, whenever this happens in the marine-coastal area, it will be necessary to offset these impacts and in this process, the processes and the tools generated by this project will be replicated. It should be noted that throughout the country there are more than 700 AMERBs, many of which have funding constraints in order to maintain their management model and safeguard the continuity of their economic resources. At the same time, the model for the provision of national health services is associated with the existence of more than 24 large companies dedicated to the production, distribution and treatment of wastewater in Chile, for which the topics related to water security constitute one of the main concerns at present. If successful, the present project will generate substantial interest in reproducing this experience on a national scale. Thus the upscaling and replicability of the project is related to the sustainability strategy, which in turns, is associated with the project's work to strengthen institutional capacity and develop the necessary instruments for upscaling (e.g., through provision of information, evidence, models, regulatory and technical tools human capacity). This capacity building will provide the enabling environment for the expansion of the use of PES schemes throughout the country.

[4] <http://www.oceanhealthindex.org/region-scores/scores/chile+-easter-island>

[5] http://onesharedocean.org/LME_13_Humboldt_Current

[6] According to the IUCN registry, Chile is the country with the fifth largest protected marine area (km²) after the US, Australia, New Caledonia and New Zealand.

[7] Of particular interest in this area are the professional staff belonging to the Ministry of the Environment; the Environmental Assessment Service; the Undersecretariat of Fisheries and Aquaculture; the National Fisheries and Aquaculture Service; and, the National Forestry Corporation.

[8] Although there have been multiple PES experiences in Latin America, the literature does not reflect convincing evidence about their success (see STAP-GEF, 2010). Nevertheless, different authors and studies have shed some light on the principal barriers and strategies to overcome them (such as the use of payments for multiple PES and ensuring that payments for landowners are sufficiently high to ensure viability. In Chile, INFOR (2010); MMA (2014) carried out an extensive revision of the studies and national experiences on this topic. During the PPG stage, this study and others will be revised, and the lessons learned will be considered during the detailed design of the project at the PPG stage.

[9] The project will not be working with actual investment projects requiring offsets as the private sector needs the tools and methodologies to operationalize this economic instrument to be in place and validated before applying them to a real project. The project will enable this to happen.

1b. Project Map and Coordinates

Please provide geo-referenced information and map where the project interventions will take place.

See Annex A

2. Stakeholders

Select the stakeholders that have participated in consultations during the project identification phase:

Indigenous Peoples and Local Communities

Civil Society Organizations Yes

Private Sector Entities Yes

If none of the above, please explain why:

In addition, provide indicative information on how stakeholders, including civil society and indigenous peoples, will be engaged in the project preparation, and their respective roles and means of engagement.

33. The project will ensure that all key stakeholders will be involved in project implementation. Key stakeholders will be included in the project's governance bodies (Steering Committee), the local bodies for the planning and execution of the demonstration initiatives and the populations adjacent to them that will benefit from the initiatives (local communities of artisanal fishermen, rural communities that provide or receive ecosystem services, for example). During the formulation of the PIF, the stakeholders that participated in a consultative manner in the design of the project include representatives of public institutions (INFOR, SISS, SEA), civil society organizations (WCS, PUCV) and private companies on a national scale (ANDESS, Mining Council, electricity generators). In order to adequately design the mechanisms for the participation of local communities, as well as to properly manage their expectations about the project, the participation of local communities will be assured from the PPG stage onwards in all stages of development of this initiative.

3. Gender Equality and Women's Empowerment

Briefly include below any gender dimensions relevant to the project, and any plans to address gender in project design (e.g. gender analysis).

34. During the PPG stage, a gender analysis will be conducted and a Gender Mainstreaming Strategy and Action Plan will be developed. The gender issue is considered an important dimension of the project, on a preliminary basis it is believed that it can be expressed through, among others, the following actions/ strategies:

- Determination of principles and criteria for the integration of the gender perspective in the entire process of project execution;
- Inclusion and incorporation of the gender perspective in the participatory process, through actions to gather the opinions, visions and needs expressed by women associated with the forest and artisanal fishing sectors (representatives of women's organizations, indigenous women, small and medium-sized landowners, for example), and their inclusion in the decision making and associated actions;
- Design and implementation of a gender-responsive methodology for the development of local capacities for the conservation of biodiversity;
- Inclusion of social and gender aspects as part of the co-benefits. In particular, the project will seek to recognize actions that promote gender equality as co-benefits, for example, actions that recognize and empower women as agents of forest conservation and fishery resources and that allow for scaling up of the contributions that these women are making;
- The logical framework of the project will include indicators disaggregated by gender, including the number of beneficiaries, among others. Financial and human resources will be allocated to monitor the effectiveness of gender mainstreaming during project implementation.

Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment? Yes

closing gender gaps in access to and control over natural resources;

improving women's participation and decision-making; and/or Yes

generating socio-economic benefits or services for women. Yes

Will the project's results framework or logical framework include gender-sensitive indicators?

Yes

4. Private sector engagement

Will there be private sector engagement in the project?

Yes

Please briefly explain the rationale behind your answer.

35. As previously indicated, from the PPG stage onward, the private sector will be incorporated in all stages of project design and execution and at all levels of execution, from the Steering Committee to the implementation of pilot initiatives. At the managerial level, the private sector will be involved through representatives of relevant unions or associations in the project intervention areas (representatives of fishermen's unions and representatives of sectors that regularly commit to biodiversity offset measures and/or representatives of sectors involved in payments for ecosystem services in the project, for example). On an operational level, the private sector will be involved in the participatory processes necessary for the proper design of the tools considered by the project (procedures, regulations, guidelines), as well as in the planning and execution of the pilot initiatives and their co-financing.

5. Risks

Indicate risks, including climate change, potential social and environmental risks that might prevent the Project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the Project design (table format acceptable)

Risk	Rating	Mitigation measures
<p>Authorities and heads of public services participating in the processes lose interest in supporting project objectives</p>	<p>Low-Medium-Risk</p>	<p>The Government of Chile is committed to making progress in the safeguarding of biodiversity and ecosystem services (see point 1A.2). There has been an increase in the area of protected terrestrial and marine ecosystems. Currently, the draft SBAP Law is under discussion in Congress, which aims to conserve the country's biological diversity through the preservation, restoration, and sustainable use of species and ecosystems. This Law contemplates the application of a series of IECB that this project addresses as a strategy to accelerate their implementation. Although not in the manner envisaged by the Law, these IECB can continue to be promoted based on the current legal competencies of the MMA and other public institutions involved. The two demonstration experiences in pilot sites associated with biodiversity offsets, for example, are designed within an economic management system of marine coastal areas contemplated within the Fisheries and Aquaculture Law as well as the regulatory framework of environmental assessment in Chile (Law 19.300 and DS 40/2013), while the development of the demonstration experience on payments for ecosystem services is supported by the legal framework related to Concessions for Sanitary Services. The support of the competent authorities in the decision-making process for the development of the economic instruments is crucial. To address this risk, permanent communication channels will be maintained and they will be fully involved throughout.</p>
<p>Key stakeholders of the communities participating in the IECB implementation process in the pilot sites do not get involved, decreasing their commitment</p>	<p>Low-Medium Risk</p>	<p>This risk can be mitigated through the continuous and well-directed communication of community stakeholders with the project team. It will be overcome through participatory workshops to provide training in the implementation of the economic instruments, and the dissemination of results and lessons learned, all with the aim of empowering the communities through capacity building.</p> <p>The project includes a component related to training and dissemination. It expects to put in place capacities at the local level regarding what has been implemented at the pilot sites, in addition to disseminating its results. It will train professionals in the application of technical tools (e.g., valuation methodologies) and the use of operational tools (e.g., information systems). This process will also be scaled up to professionals at the national level to guarantee the replicability of the results.</p>

<p>Buyers and sellers of ES do not continue to being engaged in this type of PES scheme after the project concludes</p>	<p>Low-Medium Risk</p>	<p>A substantive part of the institutional and technical tools to be developed by this project are oriented toward facilitating the interaction between these stakeholders and reducing this risk. These tools will be institutionalized and will therefore facilitate future cooperative arrangements between buyers and sellers.</p> <p>Additionally, several strategies will be implemented to manage this situation. First, a comprehensive selection process of the stakeholders to be engaged (sellers of ES) will be carried out and the project will facilitate the early participation of the stakeholders during project implementation. Second, the basis for later agreements/ contracts will be set up, which are supported legally by current norms (and which will be strengthened by proposed future regulations related to the SBAP). Third, strategies will be designed to continue with the engagement after the project concludes (e.g., through an approach to finance multiple ES-bundled payments); and linked to this, the creation/ strengthening of a governance system to enable PES to be discussed and decisions to be made at the local level.</p>
<p>There is a risk that Indigenous peoples (IPs) might be excluded from the decisions that will affect them (directly or indirectly), that they will not equitably benefit from the project or that there could be restrictions in exploitation of natural resources associated with the implementation of biodiversity offsets and payments for ecosystem services.</p>	<p>Low-Medium Risk</p>	<p>The project design is still preliminary and the intervention areas still need to be identified/confirmed so it is not yet clear whether IPs will be located in these areas and if so, which IPs will be involved. However, if IPs are engaged, participation in the economic instruments for the conservation of biodiversity that will be associated with the promotion of sustainable production practices, conservation and restoration will be purely voluntary and is expected to generate positive impacts for IPs and other potentially marginalized groups (e.g., through increased productivity of fisheries). During the PPG phase, a Stakeholder Engagement Plan will be developed, including an Indigenous Peoples Plan, which will clearly outline the project strategy for ensuring that Indigenous Peoples are properly consulted (in accordance with UNDP and GEF guidelines, national legislation and Convention 169 on Indigenous and Tribal Peoples) and that the project provides meaningful benefits to them. Measures will be identified to avoid and mitigate any potential negative impacts and the project will adhere to FPIC as required.</p>

<p>In terms of gender, there is a risk that existing gender-based discrimination could be reproduced by the project and that the promotion of sustainable production practices and the conservation and restoration activities included in the mechanisms of payments for environmental services and biodiversity offsets could entail some restrictions in terms of natural resource exploitation</p>	<p>Low-Medium Risk</p>	<p>As mentioned above, participation in biodiversity offset and PES schemes will be entirely voluntary and is expected to generate positive socio-economic impacts. The project will specifically reach out to women and to women's associations during the consultations in order to ensure that women's concerns are taken into consideration. During the PPG phase, a gender analysis will be carried out to specifically understand the potential impacts of the project on women and men and specific mitigation measures will be included in a Gender Mainstreaming Strategy and Action Plan. In addition, a Stakeholder Engagement Plan will be developed.</p>
<p>Climate change might negatively impact the project's results</p>	<p>Low Risk</p>	<p>It is expected that the observed and expected pattern of climate change with modified rainfall patterns, long periods of drought and rising temperatures in the sea and lakes will continue. This project aims to generate support tools for the implementation of economic instruments that will facilitate the generation of financial resources to be able to implement effective actions in the conservation of biodiversity and ecosystem services, which contribute to mitigation and adaptation to climate change.</p>

6. Coordination

Outline the institutional structure of the project including monitoring and evaluation coordination at the project level. Describe possible coordination with other relevant GEF-financed projects and other initiatives.

Institutional Structure

Level	Function
Executing agency: Ministry of the Environment (MMA)	The MMA will be responsible for executing the initiative, fulfilling managerial functions, multi-sectoral coordination, facilitating the process of participation of strategic stakeholders and local communities, developing specific products and carrying out monitoring, follow-up and evaluation.
Implementing agency: UNDP	UNDP will provide guidance, institutional support, technical and administrative assistance, as well as technical and theoretical knowledge at the national level for the execution of the project.
Steering Committee: Ministry of the Environment / Superintendancy of Sanitary Services (SISS) / UNDP / Artisanal Fisheries Representative / Representative of Academia/ Private Sector Representative (others to be defined at the PPG stage)	The Steering Committee will validate the project workplan, track the work plan in progress and approve any changes at the end of each year, as well as approve the workplan for the each subsequent year. This Committee will also evaluate the level of achievement of the results and lessons learned, and monitor risks and mitigation actions.
Technical Committee: Ministry of the Environment / UNDP / Undersecretariat of Fisheries / National Fisheries Service / National Forestry Corporation (other agencies may be included as necessary)	The Technical Committee will report to the Steering Committee on project progress and any problems encountered, as well as make recommendations on any modifications required in the project strategy to ensure that the project objective is met. This Committee will also provide technical advice and institutional support and report lessons learned to the Steering Committee, among other functions.
Project Management Unit (PMU)	The PMU will organize and guide the activities of the project in operational and logistical terms and in terms of convening stakeholders. It will report on progress, achievements and difficulties in the execution of the project to the Technical Committee. The PMU will gather information on the progress of the project and ensure that all beneficiaries are informed. It is the main responsible entity for preparation of the intermediate and final technical and financial project reports, and the periodic monitoring of the project, with the support and supervision of the executing and implementing agencies.

Possible coordination with other relevant GEF-financed projects:

GEF Project	Possible coordination
UN Environment GEF, Protecting Biodiversity and Multiple Ecosystem Services in Biological Mountain Corridors in Chile's Mediterranean Ecosystem (GEF ID 5135)	This project will develop green markets for sustainable products through organic certification, modification of perverse subsidies to encourage productivity, incorporation of good productive practices to conserve biodiversity and offset mechanisms in biodiversity through a green fund. It will put in place concrete experiences that can serve as a reference for the IECB project.
UN Environment GEF, Zero Extinction Alliance (AZE): Conservation of irreplaceable sites of threatened biodiversity	This project involves local stakeholders that play an active role in the design of conservation plans, in the implementation of conservation actions and in the environmental education program, among others. A small-scale local initiative is being executed in a biodiversity hotspot in the region of Los Ríos and Bio-bio. The experiences gained through this project can serve as a reference for the work associated with inclusive conservation in the territories selected for the execution of the demonstration initiatives.
FAO GEF, Conservation, sustainable use and valuation of critically endangered species and ecosystems in the Arica and Parinacota and Biobío regions.	This bioregional initiative includes three components related to: the generation of skills, knowledge and awareness with in the regional population; territorial management through interventions, generation of forests and protection of sites for the hummingbird; and political frameworks, regulations and integration of conservation within the Regional Development Strategy. The IECB project will coordinate and seek synergies with this initiative in terms of the participation of local communities, as well as the dissemination and application of biodiversity assessment methodologies to conservation problems. At the same time, the results of the IECB project could generate relevant results to contribute to the effectiveness and/ or sustainability of this initiative.
FAO GEF, Strengthening and development of tools for the management, prevention and control of beavers (<i>Castor canadensis</i>), an invasive exotic species in the Chilean Patagonia	This project seeks to contribute to the establishment of beaver management systems in areas of high conservation value, in addition to improving subnational institutional frameworks for the control, prevention and effective management of IAS. The IECB project will coordinate and seek synergies with this initiative in terms of the participation of local communities, as well as dissemination and application of biodiversity assessment methodologies to conservation problems. At the same time, the results of the IECB project could generate relevant results to contribute to the effectiveness and/or sustainability of this initiative.
FAO GEF, Integrated System for Monitoring and Evaluation of Forest Ecosystems	An Integrated System of Monitoring and Evaluation of carbon and biodiversity reserves in Forest Ecosystems (SIMEF) will be developed and implemented. The project's objective is to support government institutions, the private sector and CSOs with improved data and information and their application for better decision making with respect to policies, land use planning and forest regulations, as well as for the management of resources by local communities to guarantee their sustainable use and improve their livelihoods. The progress made in the SIMEF project will serve as a basis for the design and/ or improvement of the IECB considered in this project (baselines, estimates of carbon sequestration, ecosystem services, etc.). At the same time, the results of the IECB project can generate relevant results to make the SIMEF more robust and contribute to its usefulness and sustainability over time.
UNDP GEF, Support to civil society	A participatory process that promotes the sustainable use of land and ecosystem services by communities in the Medi

and community initiatives to generate global environmental benefits using subsidies and microloans in the Mediterranean ecoregion of Chile (GEF 4939)	terrestrial ecoregion will be implemented. The project has developed an interesting participatory planning methodology at a territorial scale, which can be applied within the framework of the IECB project in the context of the implementation of its demonstration initiatives. At the same time, the results of the IECB project could help to increase the effectiveness and sustainability of the initiatives promoted by the GEF 4939 project.
UNDP GEF, Catalyzing the Implementation of a Strategic Action Program for the Sustainable Management of Shared Living Marine Resources of the Humboldt Current System (GEF 9592)	This project facilitates fisheries management based on ecosystems and restoration of ecosystems in the Humboldt Current System for the sustainable provision of goods and services from shared living marine resources, in accordance with the Strategic Action Program approved by Chile and Peru. The IECB project will coordinate and seek synergies with this initiative in terms of research methodologies and results of the evaluations of biodiversity and coastal marine habitats. There are important synergies in terms of proposed tools for the restoration and maintenance of this type of biodiversity and habitats that can be considered within the definition of the tools for biodiversity offsets in coastal marine ecosystems.
UNDP BIOFIN, Biodiversity Finance	The IECB project has incorporated the results of the evaluations and proposals made by BIOFIN regarding the application of IECB in Chile and is consistent with the proposals made in the Financial Strategy proposed by BIOFIN to apply IECB in the country. At the same time, the strengthening of the institutional framework and the development of tools to apply IECB in Chile allow for the work carried out by BIOFIN to be implemented and some of the proposals developed by this initiative to be institutionalized.
UN REDD	UN REDD supports the implementation of the National Strategy on Climate Change and Vegetation Resources (ENCCR V, linked to the application in Chile of the guidelines for the Reduction of Emissions from Deforestation and Degradation of REDD + (UNFCCC).) This Strategy aims to support forest recovery and protection of native and xerophytic formations, as well as to promote the establishment of vegetation formations in soils that are appropriate for planting as mitigation and adaptation measures to the effects of climate change. For this purpose, it is proposed to advance in the design and implementation of a state mechanism that facilitates access by owners of forests, xerophytic formations and soils that are appropriate for afforestation, to the benefits associated with the environmental services of forest ecosystems. The advances of the ENCCR V will be relevant for the execution of the IECB project in terms of the provision of basic information, methodologies for accounting and valuation of ecosystem services and design of the payment for ecosystem services mechanism considered in the initiative. There are also significant synergies between both initiatives in terms of linking with relevant institutional actors, strengthening capacities and disseminating the results.
FAO GEF "Mainstreaming Conservation of Coastal Wetlands of Chile's South Center Biodiversity Hotspot through Adaptive Management of Coastal Area Ecosystems"	This project aims to "conserve and recover coastal landscapes, including wetlands and adjacent basins, integrating them into local development, through their management and sustainable use". In the coastal area, there are multiple complementarities and areas of potential cooperation with the three components of this project: 1. Information management and outreach to mainstream biodiversity and sustainable land management (SLM) through an integrated landscape approach; 2. Institutional and regulatory frameworks strengthened; and, 3. Demonstrative landscapes, from aspects related to regulatory frameworks, key stakeholders, information surveys, methodologies for evaluating biodiversity and ecosystem services, dissemination and others that will be further explored.

7. Consistency with National Priorities

Is the Project consistent with the National Strategies and plans or reports and assessments under relevant conventions

Yes

If yes, which ones and how: NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc

National Strategy	Consistency with the Project
National Biodiversity Strategy and its Action Plan (NBSAP)	The project is consistent with the third Strategic Objective of the strategy, which is to: "develop a robust institutional framework, good governance and fair and equitable distribution of the benefits of biodiversity", in particular with strategic guidelines 3, 4 and 6, relating to: (3) Mobilization of public and private resources for the implementation and monitoring of the National Biodiversity Strategy 2017-2030 and its National Action Plan; (4) Development, increase, and enhancement of economic mechanisms and instruments for conservation, such as: habitat banks, metrics for the evaluation of ecosystems and compensatory habitat, among others; and, (6) Capacity building and inter-institutional coordination related to the protection of biodiversity for public officials and decision makers.
Climate Change Adaptation Plan for Biodiversity	The project will contribute to the second objective of this Plan, which is to "promote sustainable production practices for biodiversity to adapt to climate change and the maintenance of ecosystem services".
National Strategy for the Conservation and Rational Use of Wetlands in Chile	Line of action proposes the "development and application of methodologies for the economic valorization of wetlands, incorporating environmental and sociocultural aspects; line of action 4.3 proposes " incentive measures for the conservation and wise use of wetlands" [17].
National Strategy of Marine Conservation	This Strategy proposes to "carry out spatial planning and implementation of the network of marine protected areas (MPA) and other measures based on areas that are effectively managed for the entire national territory and the exclusive economic zone (EEZ)". The project contemplates a demonstrative initiative related to IECB in AMERB, in order for marine areas to be managed effectively for conservation purposes.
National Strategy on Climate Change and Vegetation Resources - ENCCRV	The project is complementary to the efforts made by the ENCCRV in relation to its third specific objective to: "manage valuation and valorization mechanisms for environmental services that provide native vegetation resources, including performance-based payment systems that respect the distribution of benefits as well as environmental and social safeguards".

8. Knowledge Management

Outline the Knowledge management approach for the Project, including, if any, plans for the Project to learn from other relevant Projects and initiatives, to assess and document in a user-friendly form, and share these experiences and expertise with relevant stakeholders.

36. This project is being designed based on the knowledge accumulated from multiples initiatives -national and international- related to natural capital valuation and PES in Chile over the last 20 years (Scientific and Technical Advisory Panel of GEF; GEF projects, BIOFIN, REDD+, IPBES, CICES, NGOs, researchers, public institutions, etc.), as well as the contributions, results, experiences, lessons learned and best practices of various previous and ongoing initiatives. At the national level, the examples include, among others, the following: State of the Art of Payment for Environmental Services in Chile; Economic Assessment of Chile's Protected Areas; Compilation and systematization of information related to evaluation studies, mapping and valuation of ecosystem services in Chile; and Evaluation of the ecosystem services associated with the water resource: Biobío river basin as a case study. The project will be designed and implemented taking into account relevant results of the initiatives indicated, as well as the lessons learned and best practices employed in order to maximize impact. In order to guarantee that this previous knowledge and experiences are used effectively, the main institutions associated with these experiences are being engaged in project development and will be involved in project implementation (e.g., CONAF, INFOR, MMA, WCS). In addition, the project will promote the application of an adaptive and collaborative approach with both national and international initiatives to enhance the work and the results thereof through various means (exchange of information and methodologies, execution of joint actions, cooperation in capacity building, dissemination and cross-promotion among initiatives, strengthening the capacity of organizations involved in PES schemes, among other matters that will be further defined).

Part III: Approval/Endorsement By GEF Operational Focal Point(S) And Gef Agency(ies)

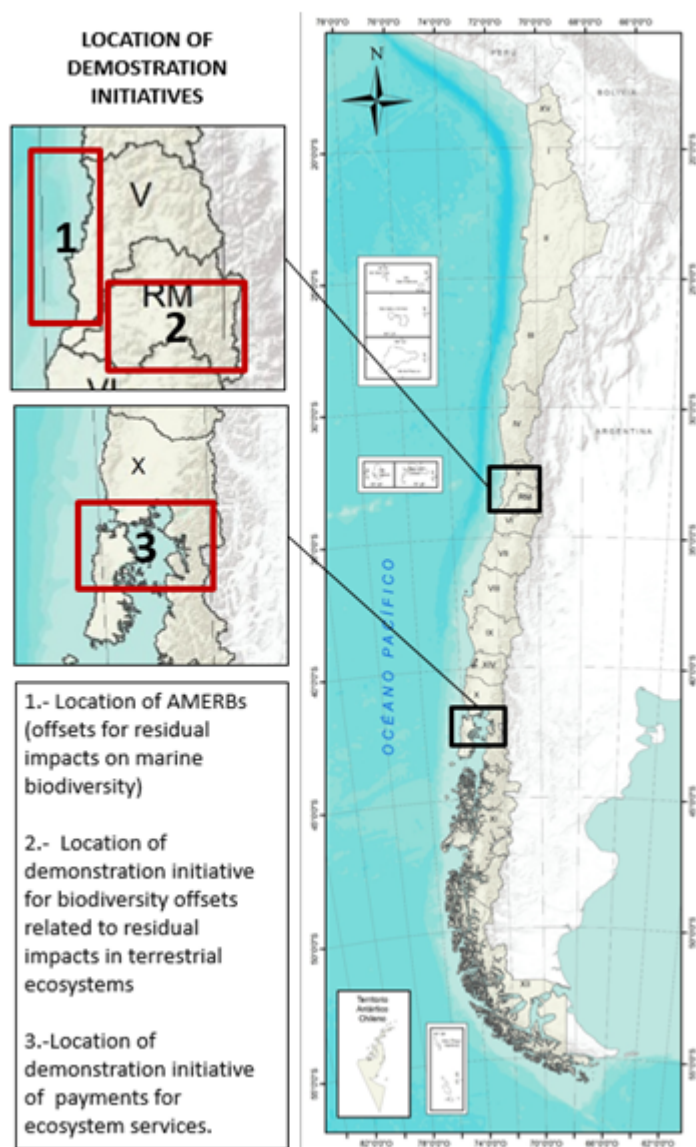
A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S): (Please attach the Operational Focal Point endorsement letter with this template).

Name	Position	Ministry	Date
Miguel Stutzin S	GEF Operational Focal Point	Ministry of Environment	3/28/2019

ANNEX A: Project Map and Geographic Coordinates

Please provide geo-referenced information and map where the project intervention takes place

PROGRAM/PROJECT MAP AND GEOGRAPHIC COORDINATES



a) The geographic coordinates for the AMERBs (for offsets in marine habitats) are the following: [1: 31°18'10"S-71°38'18" W; 2: 34°32'58"S-72°03'16"W; 3: 33°11'17.75"S-71°41'44.74"W; 4: 33°12'14.57"S-71°42'16.5"W; 5: 33°24'11.38"S-71°42'10.10"W];

b) The geographic coordinates for the demonstration areas for terrestrial offsets and for payments for ecosystem services cannot yet be provided in greater detail than the general location indicated in the map above. They will be defined during the PPG phase based on the design of the mechanisms and the specific offsets that are required.

SEE BELOW ANNEXES D & E

Annex D

Acronyms

AMERB	Areas of Management and Exploitation of Benthonic Resources
AMP (MPA)	Marine Protected Areas
AZE	Alliance for Zero Extinction
BIOFIN	Biodiversity Finance Initiative
CICES	Common International Classification of Ecosystem Services
CONAF	National Forestry Corporation
ENCCRV	National Strategy on Climate Change and Vegetational Resources
ERNC	Non Conventional Renewable Energies
ES	Ecosystem Services
FAO	Food and Agriculture Organization
GEF TWAP	GEF Transboundary Waters Assessment Programme
HCLMR	Humboldt Current Large Marine Ecosystem
IECB	Economic instruments of biodiversity conservation
IFOP	Fisheries Development Institute
INFOR	Forestry Institute
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
IUCN	International Union for Conservation of Nature

LME	Large Marine Ecosystem
MMA	Ministry of Environment
OECD	Organisation for Economic Co-operation and Development
PNUD (UNDP)	United Nation Development Programme
PNUMA (UNEP)	United Nations Environment Programme
PUCV	Pontifical Catholic University of Valparaíso
REDD+	Reduction of emissions derived from deforestation and forest degradation
SBAP	National Department for Biodiversity and Protected Areas
SCAE	System of environmental and economic accounts
SEA	Environmental Evaluation Department
SEIA	Environmental Impact Evaluation System
SIMEF	Integrated System for Monitoring and Evaluation of Forest Ecosystems
SLM	Sustainable Land Management
STAP	Scientific and Technical Advisory Panel of the GEF
SUBPESCA	Fisheries Under-Secretariat
UNFCCC	United Nations Framework Convention on Climate Change
WCS	Wildlife Conservation Society
ZEE	Exclusive economic zone

Annex E

ENDNOTES

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