Chile Green Hydrogen Facility Project

Review PIF and Make a recommendation

Basic project information

GEF ID

11065

Countries

Chile

Project Name

Chile Green Hydrogen Facility Project

Agencies

World Bank

Date received by PM

3/16/2023

Review completed by PM

5/11/2023

Program Manager

David Elrie Rodgers

Focal Area

Climate Change

Project Type

FSP

GEF-8 PROJECT IDENTIFICATION FORM (PIF) REVIEW SHEET

1. General Project Information / Eligibility

a) Does the project meet the criteria for eligibility for GEF funding?

b) Is the General Project Information table correctly populated?

Secretariat's Comments DER/TK: Yes.

Agency's Comments

2. Project Summary

Does the project summary concisely describe the problem to be addressed, the project objective and the strategies to deliver the GEBs or adaptation benefits and other key expected results?

Secretariat's Comments

DER/TK: Yes. This operation seeks to catalyze the early deployment of green hydrogen projects in Chile by providing loans and risk sharing mechanisms to mobilize commercial finance and contribute to strengthening the enabling environment for building local capacity and demand on the technology. The Project will be instrumental to develop the risk mitigating instruments to help generate market and investors? confidence in this nascent industry. The GEF Blended Finance resources will provide the innovative risk sharing reserve accounts that will bring comfort to lenders that despite risks related to under performance of a new technology that hydrogen sub-projects will pay their debts. This will enable commercial banks to issue debt at a lower cost and help scale up the nascent market. The use of GEF resources would facilitate the allocation of IBRD resources towards financing of sub-projects and a more efficient use of resources. The project is expected to support at least 10 green hydrogen sub-projects developed by private sponsors, leading to production of 16,000 tons of green hydrogen per year, and generating 2.33 million tons of GHG emissions reductions (tCO2e) over an 18-year period.

The project is highly relevant for the CCM FA and is in line with the GEF-8 FA priorities and Strategic Directions, specifically the project is aligned with objective 1.2 of the CCM strategy ?Enable the transition to decarbonized power systems?. The proposal has been well structured and the baseline and project scenarios properly identified/described. Also, the environmental and social risk classification (EES) has been rated as substantial. The ESS is quite comprehensive and touches upon all the main environmental concerns of Green Hydrogen

(GH2) projects, including water sourcing and potential cases of forced labor in the solar panels? value chain.

Agency's Comments

3 Indicative Project Overview

3.1 a) Is the project objective presented as a concise statement and clear?
b) Are the components, outcomes and outputs sound, appropriate and sufficiently clear to achieve the project objective and the core indicators per the stated Theory of Change?

Secretariat's Comments

DER/TK: Yes. Please address the following questions:

1. Renewable-energy-powered electrolysis. The proposal clearly states it will support renewable-energy-powered electrolysis. However, the proposal would benefit from an explanation on which sources of renewable energy are eligible under the project. Specifically, please clarify whether blue hydrogen (use of natural gas + carbon capture and storage) would be considered under the project.

2. Chile?s GH2 regulatory framework. The proposal has done a good job in identifying the relevant upstream policies in Chile, including their GH2 national strategy, net-zero target, climate change law, etc. However, it remains silent on the more technical standards and regulations. As such, the proposal would benefit from an explanation on existing standards or country?s plans or on-going discussion discussions with regards to GH2 certificates of origin and standards. Particularly, the production of renewable electricity can involve some greenhouse gas emissions. In some cases, there may be some GHG emissions associated with electrolysis and associated processes (such as water treatment / desalination). Would the project apply a GHG emissions threshold (i.e., kg CO2e per kg H2) as a selection criteria of sub-projects?

3. GEB GHG emission reductions. The assumptions used to estimate the GHG emission reductions are not clear. At this stage, please provide at least a preliminary calculation based on estimations on the number of projects, MW/h of renewable energy generated, lifetime of the technology (used for the calculation of GHG emissions), etc. At the CEO Endorsement stage, a more precise excel sheet which allows easy tracking of the estimated GHG reductions would be required.

4. On-going GEF activity on GH2 in Chile. The PIF should reference project ID 10918 Green Hydrogen Support in Developing Countries which, among others, aims at supporting investment projects in four pilot countries, including Chile. This NGI proposal should elaborate further on how project 10918 has helped inform the preparation of the proposed NGI project and more broadly create the enabling environment for the operationalization of the first GH2 projects in Chile.

5. CORFO tender of April 2021. The proposal indicates that on April 2021, CORFO opened a tender available to national and foreign companies with the objective of financing the cost of electrolyzers to viable GH2 projects. The proposal would benefit from further explanation on how this tender fits within the GHF project. Is this tender also part of the broader GHF? What would be the linkages between this tender and the proposed project? Would projects which were selected under the April 2021 tender also eligible under the proposed project?
6. Existing pipeline. It seems there is already a preliminary pipeline of projects [some sections of the proposal mention 40 projects in the pipeline and others 30, while the Environmental and Social Summary (ESS) mentions 26 projects. If the information is available, the proposal would benefit from an explanation of the type of projects expected, final use of the GH2, type of stakeholders, etc.

DER/TK Comments 4/20/2023:
1. Cleared. Thank you for confirming the project will only support green hydrogen produced from renewable-energy powered subprojects, namely wind and solar technologies.

2. Cleared with comments to be addressed at the time of CEO Endorsement.
The progress on a regulatory action plan and an inter-ministerial coordination on green hydrogen in Chile is acknowledged and welcomed. As per the methodology developed by the International Partnership for Hydrogen and Fuel Cells in the Economy (IPHE), renewable electricity generation has no associated emissions, resulting in 0 kg CO2?eq/kg H2. However, wind and solar (which the project aims to use) are variable sources of electricity while electrolyzers need a stable energy source. Could you please confirm the back-up energy sources to be used by the sub-projects when wind and solar energy is not available? Would the sub-projects use diesel back-up generators? Would the sub-projects be connected to the grid? Transparency on the emissions intensity of hydrogen production can help facilitate investment. By agreeing to use the emissions intensity of hydrogen production in the definition of national regulations about hydrogen, authorities can facilitate market and regulatory interoperability. Therefore, given that standards can be an important enabler for future market development (beyond this project), at CEO Endorsement we encourage the World Bank team to explore the use of standards/GHG thresholds under the project and discuss existing or future plans on green hydrogen standards within the Government of Chile, and potentially consider supporting it through the technical assistance component of the proposal. Please address at the time of CEO Endorsement.

3. Cleared. At CEO Endorsement please provide an excel sheet to easily track the GHG calculations. Also, at CEO Endorsement kindly provide a reliable source for some of the assumptions/default data use, I.e. utilization factor, lifetime emissions of grey hydrogen, etc.

4.Cleared. The updated PIF includes a reference to project ID 10918 and explains how it has helped inform the preparation of the proposed NGI project.

5. Cleared with thanks for the explanation.

6. Cleared. Information on the pipeline has been updated and it is now consistent throughout the proposal.

DER/TK: May 11, 2023. All comments cleared.

Agency's Comments

WB 4/12/23:

1. The Project will only support green hydrogen produced from renewable-energy powered subprojects, namely wind and solar technologies given their high potential and low costs. As this variable renewable energy is likely to be developed mostly in the Antofagasta and Magallanes regions, it is expected that wind- or solar-powered subprojects will benefit from the GHF. In no case will the GHF benefit or target other than green hydrogen subprojects. Blue or grey-hydrogen activities will not be eligible under the Facility. This is clarified in the Project Summary in the portal.

2. The Government of Chile has defined a regulatory action plan to implement laws and regulations that will support the deployment of green hydrogen projects. The main topics covered by the regulatory action plan include those related to (i) fostering local demand and market creation; (ii) safety; and (iii) environmental management. The Ministry of Energy is leading the efforts to implement the regulatory action plan and will do so with the support of the ministries of Transport, Mining, Health, Environment, Mining, Superintendency of Energy and Fuel, and National Energy Commission. This is clarified in the Project Summary in the portal.

Regarding associated GHG emissions, as the Project will rely exclusively on renewable energy technologies, any associated emissions would be quite negligible, so a GHG emissions threshold is not deemed necessary at this time. Further details regarding GHG emission reductions and used methodology are included below. Please see the updated explanation of the calculation of CI 6 in the portal.

3. Further details on project boundaries, baseline, assumptions, and other key details have been added, following World Bank guidance and processes. The World Bank GHG accounting team has reviewed and have cleared ? in principle ? the steps and assumptions made to arrive at the included GHG emissions estimations. As suggested, these will be further developed and presented in an excel sheet for CEO endorsement. Please see the updated explanation of the calculation of CI 6 in the portal.

4. The Project and proposal are also aligned to and supported by the GEF-funded ?Green Hydrogen Support in Developing Countries? Technical Assistance (TA) program. In particular, the TA program is supporting Chile to develop the important aspects of the GHF. The GEF funds have become critical to both the IBRD loan and the proposed NGI instrument by:

?   Helping develop the eligibility criteria and selection requirement for the GHF and subproject selection;

?   Support the preparation of the GHF?s economic and financial assessment.

The GEF?s support to these tasks has allowed both CORFO and the IBRD to accelerate the preparation and design of the GEF and informed Chilean counterparts and stakeholders on key aspects to be considered for a successful development of the green hydrogen industry. Furthermore, by allowing to both quantify the impacts and needs of private capital to be mobilized under the initiative, the GEF?s support has been vital in providing key evidence for policymakers to finish detailing and designing the GHF instruments and have overall proved the relevance and viability of the operation, allowing it to move towards approval. The GEF support has also helped build capacities within CORFO by providing necessary resources for the training of key staff. The text in the portal section on cooperation with other ongoing initiatives has been updated to reflect this.

5. The text has been clarified (see footnote in stakeholders consulted section) to indicate that although CORFO provided funds between US$2 to 11 million to the six selected projects, developers have expressed that the grants have a limited impact on the financial closure of the projects (as these will only be provided if the sub-projects are operational by the end of 2025). Analyses have shown that innovative financial mechanisms that enhance access to finance conditions can allow the absorption of risks and ensure flexible loan conditions to help match the investment needs of the projects, including risk-sharing mechanisms and attractive credit lines, which are required to secure the bankability of the projects. As such, subprojects selected may apply for support for the GHF?s instruments as well, as the grants received may not be sufficient to ensure subprojects? success.

6. The proposal has been edited based on latest available information. A new Annex (I) has been added to the Word version of the PIF to include further details on the expected pipeline of subprojects.

5/8/23:
2. Request to further address this comment at CEO Endorsement is well noted.
3. Further justification on expected GHG emission reductions will be provided at CEO Endorsement.

3.2 Are gender dimensions, knowledge management, and monitoring and evaluation included within the project components and appropriately funded?

Secretariat's Comments

DER/TK: Yes. As appropriate for Blended Finance project, the M&E is funded through co-financing.

DER/TK: 4/20/2023. During project development, please continue to engage on gender dimensions and consider ways to incentivize women beneficiaries for investment at significant levels and document in the CEO endorsement.

Knowledge management is well described in Annex G but some of that information may also be usefully included in Project Overview under Component 2.

DER/TK: May 11, 2023. Comments cleared.

Agency's Comments

WB 5/8/23:

The comment on gender dimensions is well noted and will be further addressed at CEO Endorsement.

We have revised the Project Overview to include further details on knowledge management.

3.3 a) Are the components adequately funded?

b) Are the GEF Project Financing and Co-Financing contributions to PMC proportional?

c) Is the PMC equal to or below 5% of the total GEF grant for FSPs or 10% for MSPs? If the requested PMC is above the caps, has an exception (e.g. for regional projects) been sufficiently substantiated?

Secretariat's Comments

DER/TK: Yes. Please address the following questions:

1. The co-financing of USD 6.75 M for capacity buildings and USD 2 for risk mitigation as noted in the Term Sheet are not identified in the co-financing table. Please clarify.
2. As presented, the co-financing ratio is already substantial. However, are other funders being pursued, such as EIB, KfW and IDB? If so, please clarify if those funders will be listed as co-financing and how that will impact the overall project ambition and GEBs.
3. The PMC is recorded as zero which is appropriate for a blended finance project.

DER/TK Comments 4/20/23. Please see comments below.

1. Clarification provided. Comment cleared.

2. Thank you for the response. It is normal within GEF projects to claim identified co-financing when those resources may be part of the same financial structure or go to the same beneficiaries. This helps GEF donors understand the leveraging and catalytic benefits of the GEF and Agency investments. Reporting of known co-financers at PIF stage also prevents misunderstanding among Council members if they are seeing the same project come through multiple funding agencies. We suggest the following approach. At the PIF stage, please report all expected co-financing, including estimated contributions from private sector participants. Describe other potential co-financing that is yet to be confirmed in the coordination section of the PIF. Any confirmed co-financing included in the PAD should be included. Then at the time of CEO endorsement, further document all known co-financing partners, including other MDBs. Tracking of impacts can be apportioned among co-investors to avoid double-counting.

DER/TK: May 11, 2023. Comment cleared.

Agency's Comments

WB 4/13/23:

1. Both the USD 6.75 M and USD 2 M are part of the IBRD loan, as such, they have been included in the US 150 M loan. However, we have tried to make it clearer throughout the document.

2. The WB Project?s impact is independent from other MDB financing. The WB Project results would be independent from any other MDB financing. The resources of the IBRD and GEF mentioned in this proposal are not dependent from the financing from the European institutions or the IDB and their financing is not being counted as co-financing. Moreover, although at different preparation stages, all MDBs are coordinating preparatory work, especially in terms of the technical assistance that would be provided and the environmental and social management systems.

WB 5/8/23:

2. The proposed Project claims co-financing resources attributable to the Project. All identifiable co-financing attributable to the Project has been identified, including private sources. It is expected the GEF support and thus the overall Project would help mobilize US$300 million.

Regarding the contributions of other potential financing sources, such as the IDB, EIB and KfW, the coordination section includes information on their potential green hydrogen initiatives in Chile. However, at this stage, further details about such contributions or resources is unknown as these proposals are still in preparation stage and Project results are independent from these. This information will be updated at the time of CEO endorsement, if available.

4 Project Outline

A. Project Rationale

4.1 SITUATION ANALYSIS

a) is the current situation (including global environmental problems, key contextual drivers of environmental degradation, climate vulnerability) clearly and adequately described from a systems perspective?

b) Are the key barriers and enablers identified?

Secretariat's Comments DER/TK: Yes.

Agency's Comments

4.2 JUSTIFICATION FOR PROJECT

a) Is there an indication of why the project approach has been selected over other potential options?

b) Does it ensure resilience to future changes in the drivers?

c) Is there a description of how the GEF alternative will build on ongoing/previous investments (GEF and non-GEF), lessons and experiences in the country/region?

d) are the relevant stakeholders and their roles adequately described?

Secretariat's Comments DER/TK: Yes.

Agency's Comments

5 B. Project Description

5.1 THEORY OF CHANGE

a) Is there a concise theory of change that describes the project logic, including how the project design elements will contribute to the objective, the expected causal pathways, and the key assumptions underlying these?

b) Are the key outputs of each component defined (where possible)?

Secretariat's Comments DER/TK: Yes.

Agency's Comments

5.2 INCREMENTAL/ADDITIONAL COST REASONING

Is the incremental/additional cost reasoning properly described as per the Guidelines provided in GEF/C.31/12?

Secretariat's Comments DER/TK: Yes.

Agency's Comments

5.3 IMPLEMENTATION FRAMEWORK

a) Is the institutional setting, including potential executing partners, outlined and a rationale provided?

b) Comments to proposed agency execution support (if agency expects to request exception).

c) is there a description of potential coordination and cooperation with ongoing GEF-financed projects/programs and other bilateral/multilateral initiatives in the project area

d) are the proposed elements to capture and disseminate knowledge and learning outputs and strategic communication adequately described?

Secretariat's Comments DER/TK: Yes.

Agency's Comments

5.4 a) Are the identified core indicators calculated using the methodology included in the corresponding Guidelines (GEF/C.54/11/Rev.01)?

b) Are the project?s indicative targeted contributions to GEBs (measured through core indicators)/adaptation benefits reasonable and achievable?

Secretariat's Comments DER/TK: Yes.

Agency's Comments

5.5 NGI Only: Is there a justification of financial structure and use of financial instrument with concessionality levels?

Secretariat's Comments DER/TK: Yes. Please address the following questions:

1. On the Debt Service Reserve Account (DSRA) there is an inconsistency on the expected GEF co-financing. It appears that the total allocation for the DSRA is US$ 10 million, which includes US$ 8 million GEF financing and US$ 2 million

IBRD. However, the indicative term sheet indicates the GEF financing is US$ 10 million.

2. Also, it is unclear who administers the escrow account for the two reserves accounts. Please clarify if this is CORFO?
3. The term sheet includes no estimate for fees associated with administration of the reserve fund. Please provide a range of estimates based on similar reserve funds implemented by the Agency.
4. The fee calculation approach is unclear. Please clarify.
5. The proopsal explains that fees are not reflowed back to the GEF, as accrued, but instead they are put back into the reserves accounts and recycled for other potential projects. Unused funds are only ?reflowed? back to the GEF at the end of the investment period, estimated to be 18 years. Please justify this extra level of concessionality as it lowers the GEF's return on investment. Please clarify if the project can be redesigned to reflow accrued fees annually with remaining principal to be reflowed at end of the project.

DER/TK Comments 4/20/23. Thank you for the clarifying comments. Please see notes below.

1. Clarifications provided. Comment cleared.

2. Clarifications provided. Comment cleared. Additional details on the administration of the escrow account should be provided at the time of CEO endorsement.

3. Clarifications provided. Comment cleared. Additional details on fee calculations should be provided at the time of CEO endorsement.

4. Clarifications provided. Although we recognize that additional determination of the fee may be required, we also recognize the proposal is not clear on how IBRD or CORFO would ensure that the pricing advantage of an IBRD/GEF financing will flow through to the project finance level. What assurances can be provided that financial intermediaries won?t pocket the difference?

5. Clarifications provided. Please address these remaining comments.

The explanation provided notes that the fees are yet to be calculated. We would expect a project design with the intent of minimum concessionality may provide a shorter tenor and/or flexibility for a fee structure that leads to potential reflows to the GEF Trust Fund.

Specifically, the justification for an 18 year tenor of the reserve fund does not match with a proposed lack of reflows from fees. We would expect that green hydrogen projects will prove successful or not within a few years of initial investment. That is, the technology risk should be resolved with a short tenor. At that point, financiers may no longer need to access the reserve fund and may be able to attract commercial financing. This raises several areas that need to be addressed at the PIF stage. We request the project team consider and provide clarifications on whether one or more of the following options could be introduced into the project design and offer a stronger case for GEF reflows while still offering significant concessionality:

A) Flexible/escalating fee structure: An 18 year tenor for a very low fee reserve is inconsistent with providing minimum concessionality, vis a vis both commercial lenders and potential IFC investments in green hydrogen. Has the project team considered this approach to the reserve fund may crowd out other investors? A flexible/escalating fee structure would allow the executing partners to reprice fees consistent with lending experiences. Early successful investments might lead to escalating fees to crowd in other investors. Early defaults/calls on the reserve fund could keep fees low to encourage additional applications. Please respond.

B) Early exit: Once technology risk is resolved, there could be a scenario for an early exit strategy for the GEF funding that encourages CORFO and the financial intermediaries to continue the reserve fund on their own, if needed. Remaining principal and earnings could reflow back to the GEF in 5-8 years, for example. Alternatively, if the reserve fund is depleted through early investment failures, the project could be ended as no more GEF funding would remain. Either way, a short tenor for GEF funding might be appropriate. Please respond.

C) Early reflows: For example, if many projects succeed and the reserve fund is healthy, it should be unnecessary to maintain the reserve fund at full strength for 18 years. In this scenario, a portion of the principal and fees would be returned as reflows within 5 years while a smaller reserve fund provides support in later years, if needed, over the remaining life of the project. Please respond.

DER/TK: May 11, 2023. The additional financial structure and reflow data is very helpful. We understand that the reflow estimate base case is the GEF principal. In addition, reflows will any interests or revenues accrued, minus any funds disbursed from reserve accounts and not recovered, but this amount is estimated. At the time of CEO endorsement, please provide numerical estimates for these amounts based on base case, worst case, and best case scenarios. Comment cleared.

Agency's Comments

WB 4/13/23:

1. The term sheet and proposal has been edited to correct and clarify these numbers. The reserve accounts would be funded as follows:

? LRA: US$ 5 million GEF

? DSRA: US$8.76 million GEF, US$2 million IBRD

2. A commercial bank, most likely the financial intermediary or the agent leading the syndicated loan, would administer the escrow account.
3. The administration of the instruments will be covered by the subprojects through a one-time fee, to be agreed between CORFO and the RFI and following best practices. Costs will vary by subproject and criteria will be set in the Project?s operations manual.
4. The proposal includes further details, though there is still some uncertainty which will be addressed in the coming months with CORFO and also included in the Project?s operations manual.
5. As green hydrogen is still a nascent industry and there is barely any commercial finance available for these types of subprojects, there is no market that can act as a reference for the fees to be charged. Thus, to foster the intended investments and reduce perceived risks, the fees charged to the sub-projects will need to be as low as possible. To achieve this, subprojects will be charged a fee aimed at covering administrative costs for the management of the financial instruments. The fees? sole purpose will be to pay for administration costs and as such it would be expected there would be no fees available to be reflowed back to the GEF.

WB 5/8/23:
2 and 3 - The request to provide additional details at CEO Endorsement is well noted.
4. Financing under component 1 would be provided at IBRD financing terms, but covering CORFO?s costs. RFIs receiving funding for on-lending would determine the rates of their sub-loans considering market conditions, but the subsidiary agreements to be signed between these and CORFO will include a cap on fees and limit costs, especially as most risks should be covered by CORFO and the RFI would have an operational role. CORFO has ample experience in calculating these fees and in entering in contracts with RFIs that minimize the fees charged by intermediaries.

Eventually, CORFO could also provide direct lending to sub-projects (provided it develops its project finance capacities) helping to further ensure a potential reduction in costs and increasing efficiency.

5. Thanks for the comment, please note there would be individual sub-project-linked to the reserve accounts (debt service reserve account and liquidity reserve account). Also, please note that several sections have been revised last week following the official IBRD loan appraisal mission. Considering the latest discussions, several relevant issues have been revised or clarified, as further detailed below.

In terms of the fees to be paid or covered by sub-projects for benefitting from the reserve account instruments, these will be further defined through the Project?s Operational Manual and could be assessed and tweaked throughout the Project?s lifetime if possible (and if not hampering competition or creating unfair practices). Specific levels are still to be defined, but will be expected to cover the administrative costs associated to activating and managing the reserve accounts. Thus, these fees will not be reflowed back to GEF. At all times the Project and CORFO will seek to use resources in an efficient manner to keep these costs low (and at all times the Project team will monitor these are set at market levels). CORFO?s potential development of capacities to directly lend eventually to sub-projects should further help reduce transaction (and fees) costs.

Regarding the potential concessionality of the instruments, as only these admin fees will be charged, it is believed this is justified because of the nascent status of the industry. In addition, as the team and CORFO believes that this would not imperil the participation or crowding-out of private actors, but on the contrary: as the reserve accounts are precisely for addressing risks associated to the private debt of sub-projects, they will help crowd-in private actors, reduce costs and risks for private sponsors and help develop the industry.

In terms of reflows, we have clarified that the individual sub-project reserve accounts will be provided by CORFO (through RFIs or eventually directly and both including the IBRD loan to finance CAPEX and the GEF resources to fund the sub-project?s reserve accounts) as a credit line which will be accounted as debt of each RFI (or sub-project, when provided directly) to CORFO. This means that the reserve accounts will be constantly re-paid by sub-projects with an amortization schedule in line with the one to be set for the CAPEX sub-loans and to be set in the specific subsidiary agreements to be signed between CORFO and the RFIs.
Given that the reserve accounts will be sub-project debt to be repaid, at the end of the amortization timeframe, any resources left in the reserve accounts will belong to the sub-project. Thus, the re-flow schedule has been revised to show constant re-flow of resources from sub-projects to CORFO and from CORFO back to the GEF.

All remaining funds would thus be reflowed by the time the sub-projects debt is amortized. The reflow would not be the same, as in theory the LRA would only be operational for the first 5 years of the sub-projects life (as by then track record on the technology would have developed), while the DSRA would accompany the loan 10 tenor. Considering that new sub-projects will receive financing and reserve accounts at different times throughout the initial 5 years, the reflows would need to be done in at least 15 years.

Finally, as mentioned before, the reflows would exclude both any fees to cover admin costs as well as any losses incurred if a sub-project defaulted on the reserve accounts repayments.

5.6 RISKs

a) Are climate risks and other main risks relevant to the project described and addressed within the project concept design?

b) Are the key risks that might affect the project preparation and implementation phases identified and adequately rated?

c) Are environmental and social risks, impacts and management measures adequately screened and rated at this stage and consistent with requirements set out in SD/PL/03?

Secretariat's Comments DER/TK: Yes.

Agency's Comments

5.7 Qualitative assessment

a) Does the project intend to be well integrated, durable, and transformative?

b) Is there potential for innovation and scaling-up?

c) Will the project contribute to an improved alignment of national policies (policy coherence)?

Secretariat's Comments DER/TK: Yes.

Agency's Comments

6 C. Alignment with GEF-8 Programming Strategies and Country/Regional Priorities

6.1 Is the project adequately aligned with focal area and integrated program strategies and objectives, and/or adaptation priorities?

Secretariat's Comments DER/TK: Yes.

Agency's Comments

6.2 Is the project alignment/coherent with country and regional priorities, policies, strategies and plans (including those related to the MEAs and to relevant sectors)

Secretariat's Comments DER/TK: Yes.

Agency's Comments

6.3 For projects aiming to generate biodiversity benefits (regardless of what the source of the resources is - i.e. BD, CC or LD), does the project clearly identify which of the 23 targets of the Kunming-Montreal Global Biodiversity Framework the project contributes to and how it contributes to the identified target(s)?

Secretariat's Comments NA

Agency's Comments

7 D. Policy Requirements

7.1 Is the Policy Requirements section completed?

Secretariat's Comments DER/TK: Yes.

Agency's Comments

7.2 Is a list of stakeholders consulted during PIF development, including dates of these consultations, provided?

Secretariat's Comments DER/TK: Yes.

Agency's Comments

8 Annexes

Annex A: Financing Tables

8.1 Is the proposed GEF financing (including the Agency fee) in line with GEF policies and guidelines? Are they within the resources available from (mark all that apply):

STAR allocation?

Secretariat's Comments

NA

Agency's Comments

Focal Area allocation?

Secretariat's Comments

NA

Agency's Comments

LDCF under the principle of equitable access?

Secretariat's Comments NA

Agency's Comments

SCCF A (SIDS)?

Secretariat's Comments NA

Agency's Comments

SCCF B (Tech Transfer, Innovation, Private Sector)?

Secretariat's Comments NA

Agency's Comments

Focal Area Set Aside?

Secretariat's Comments NA

Agency's Comments

8.2 Is the PPG requested within the allowable cap (per size of project)? If requested, has an exception (e.g. for regional projects) been sufficiently substantiated?

Secretariat's Comments DER/TK: The PPG request is zero which is appropriate for a Blended Finance Project.

Agency's Comments

8.3 Are the indicative expected amounts, sources and types of co-financing adequately documented and consistent with the requirements of the Co-Financing Policy and Guidelines?

Secretariat's Comments DER/TK: Yes.

Agency's Comments

Annex B: Endorsements

8.4 Has the project been endorsed by the country?s(ies) GEF OFP and has the OFP at the time of PIF submission name and position been checked against the GEF database?

Secretariat's Comments DER/TK: Yes. The LOE dated 18 November 2022 is signed by the OFP Miguel Stutzin, Ministry of Environment.

Agency's Comments

Are the OFP endorsement letters uploaded to the GEF Portal (compiled as a single document, if applicable)?

Secretariat's Comments DER/TK: Yes.

Agency's Comments

Do the letters follow the correct format and are the endorsed amounts consistent with the amounts included in the Portal?

Secretariat's Comments
DER/TK: Please address the following issue:

1. The LoE is using the latest template as of October 2022. However, the project name in the LoE ?Chile Green Hydrogen Facility? doesn?t exactly match the project name in the PIF ?Chile Green Hydrogen Facility to support a Green, Resilient and Inclusive Economic Development?.

Agency's Comments
WB 4/13/23:

The project name has been corrected in the proposal to match that used in the LoE; the same is being done in the submission portal.

8.5 For NGI projects (which may not require LoEs), has the Agency informed the OFP(s) of the project to be submitted?

Secretariat's Comments DER/TK: Yes.

Agency's Comments
Annex C: Project Location

8.6 Is there preliminary georeferenced information and a map of the project?s intended location?

Secretariat's Comments DER/TK: Yes.

Agency's Comments

Annex D: Safeguards Screen and Rating

8.7 If there are safeguard screening documents or other ESS documents prepared, have these been uploaded to the GEF Portal?

Secretariat's Comments DER/TK: Yes.

Agency's Comments

Annex E: Rio Markers

8.8 Are the Rio Markers for CCM, CCA, BD and LD correctly selected, if applicable?

Secretariat's Comments DER/TK: Yes.

Agency's Comments

Annex F: Taxonomy Worksheet

8.9 Is the project properly tagged with the appropriate keywords?

Secretariat's Comments DER/TK: Yes.

Agency's Comments

Annex G: NGI Relevant Annexes

8.10 Does the project provide sufficient detail (indicative term sheet) to take a decision on the following selection criteria: co-financing ratios, financial terms and conditions, and financial additionality? If not, please provide comments. Does the project provide a detailed reflow table to assess the project capacity of generating reflows? If not, please provide comments. Is

the Partner Agency eligible to administer concessional finance? If not, please provide comments.

Secretariat's Comments

DER/TK: Please see box 5.5

DER/TK: May 11, 2023. Comment cleared.

Agency's Comments

9 GEFSEC Decision

9.1 Is the PIF and PPG (if requested) recommended for technical clearance?

Secretariat's Comments

DER/TK: This project has received a preliminary screening under the Blended Finance Call for Proposals that closed February 27, 2023. The project has merit but requires revisions. The attached review sheet includes the results of the preliminary screening. Additional review? and comment on the financial aspects of the project will be developed through consultation with the GEF Advisory Group of Financial Experts. Revised projects should be submitted in a timely manner and will be considered along with all other projects being submitted for the June 2023 work program.

DER/TK: 4/20/23. Thank you for the extensive response. Most comments are cleared. Please address the remaining comments in boxes 3.1, 3.2, 3.3 and 5.5 and take note of section 9.2 comments to be considered by the Agency at the time of CEO Endorsement. Also, in Project General Information please change the Region entry to Latin America.

DER/TK: May 11, 2023. All comments cleared. This project is recommended for technical clearance.

Agency's Comments

WB 5/8/23:

Comments have been addressed above and region has been changed.

9.2 Additional Comments to be considered by the Agency at the time of CEO Endorsement/ Approval

Secretariat's Comments

DER/TK 4/20/2023.

1) The progress on a regulatory action plan and an inter-ministerial coordination on green hydrogen in Chile is acknowledged and welcomed. As per the methodology developed by the International Partnership for Hydrogen and Fuel Cells in the Economy (IPHE), renewable electricity generation has no associated emissions, resulting in 0 kg CO2?eq/kg H2. However, wind and solar (which the project aims to use) are variable sources of electricity while electrolyzers need a stable energy source. Could you please confirm the back-up energy sources to be used by the sub-projects when wind and solar energy is not available? Would the sub-projects use diesel back-up generators? Would the sub-projects be connected to the grid? Transparency on the emissions intensity of hydrogen production can help facilitate investment. By agreeing to use the emissions intensity of hydrogen production in the definition of national regulations about hydrogen, authorities can facilitate market and regulatory interoperability. Therefore, given that standards can be an important enabler for future market development (beyond this project), at CEO Endorsement we encourage the World Bank team to explore the use of standards/GHG thresholds under the project and discuss existing or future plans on green hydrogen standards within the Government of Chile, and potentially consider supporting it through the technical assistance component of the proposal.

2) At CEO Endorsement please provide an excel sheet to easily track the GHG calculations. Also, at CEO Endorsement kindly provide a reliable source for some of the assumptions/default data use, I.e. utilization factor, lifetime emissions of grey hydrogen, etc.

3) Fully document all co-financing partners, including other MDBs. Tracking of impacts can be apportioned among co-investors to avoid double-counting.
4) Full details on the administration of the escrow account should be provided.
5) Consider incentivizing investments in women owned beneficiaries
6) Strengthen and document stakeholder engagement.

Agency's Comments

WB 5/8/23:

These comments are well noted and will be taken into account and responses provided at CEO Endorsement.

Review Dates

	PIF Review	Agency Response
First Review	**3/24/2023**	**4/13/2023**

	PIF Review	Agency Response
Additional Review (as necessary)	**4/20/2023**	**5/8/2023**
Additional Review (as necessary)	**5/11/2023**	
Additional Review (as necessary)		
Additional Review (as necessary)		