



## **CTF – DPSP (V-FUTURES)**

**PROJECT TITLE: GREEN HYDROGEN SUPPORT PROGRAM**

**COUNTRY: GLOBAL**

**MDB: INTERNATIONAL FINANCE CORPORATION (IFC)**

**Cover Page for CTF Project/Program Approval Request<sup>[a]</sup>  
Dedicated Private Sector Programs (DPSP (V-FUTURES))**

<b>Country/Region</b>	Global	<b>CIF Project ID#</b>	<b>PCTFDP023A</b>
<b>Type of CIF Investment:</b>	<input type="checkbox"/> Public <input checked="" type="checkbox"/> Private		
<b>Project/Program Title (same as in CCH)</b>	Green Hydrogen Support Program		
<b>Sector/Pillar</b>	<input type="checkbox"/> Enabling Environment <input type="checkbox"/> Energy Efficiency <input type="checkbox"/> Energy Storage <input checked="" type="checkbox"/> Renewable Energy <input type="checkbox"/> Renewable Energy/ Energy Efficiency <input type="checkbox"/> Transport		
<b>Technology/Area</b>	<input type="checkbox"/> End Use <input type="checkbox"/> District Heating <input type="checkbox"/> Smart Grid <input type="checkbox"/> Capacity Building <input type="checkbox"/> Multiple <input type="checkbox"/> Batteries <input type="checkbox"/> Hydro <input checked="" type="checkbox"/> Green Hydrogen <input type="checkbox"/> Geothermal <input type="checkbox"/> Wind <input type="checkbox"/> Solar <input type="checkbox"/> Hydropower <input type="checkbox"/> Cookstoves <input type="checkbox"/> Waste to Energy <input type="checkbox"/> Bioenergy <input checked="" type="checkbox"/> Mixed RE <input type="checkbox"/> Green Fuels <input type="checkbox"/> Modal Shift <input type="checkbox"/> Vehicle Technologies <input type="checkbox"/> Mass Transit <input type="checkbox"/> Electric Vehicles <input type="checkbox"/> Other ( _____ )		
<b>Project Lifetime (MDB board approval to project closure)</b>	20 years		
<b>Is this a private sector program composed of sub-projects?</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
<b>Financial Products, Terms and Amounts (same as CCH)</b>			
<b>Financial Product</b>	<b>USD (million)</b>	<b>EUR (million)<sup>[b]</sup></b>	
Grant	1.00 <sup>1</sup>		
MPIS	0.85		
Public sector loan – Senior loan			
First loss guarantee			
Second loss guarantee			
Equity			
Senior loan			
Senior loan in local currency hedged			
Senior loan in local currency unhedged ( <b>EXCEPTIONAL REQUEST</b> )			
Subordinated debt/loan/ mezzanine instrument with income participation	31.50 <sup>2</sup>		

<sup>1</sup> Due to the FY24 limit on grants, IFC is currently seeking CTF Trust Fund Committee approval for non-grant resources and MPIS only. IFC shall seek Committee approval for the USD 1.0 million grant funding requested under this *Program* when additional resources become available.

<sup>2</sup> As pipeline projects mature and meet readiness criteria, IFC may seek to submit a supplemental funding request for CTF Trust Fund Committee consideration.

Subordinated debt/loan / mezzanine instrument with income participation local currency unhedged ( <b>EXCEPTIONAL REQUEST</b> )		
Subordinated debt/loan /mezzanine instrument with convertible features		
'Convertible/contingent recovery' grant/loan/guarantee (loans convertible to grants or vice versa)		
Convertible Loans (convertible to equity only)		
For loans and guarantees – is this a revolving structure? <sup>[3]</sup> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
<b>Specify local currency type here</b>		
Other (please specify)		
<b>Total</b>	<b>33.35</b>	
<b>CIF Financial Terms and Conditions Policy</b>	<a href="#">Link</a> Is this request in accordance with the CIF Financial Terms and Conditions Policy?  <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (if no, please specify detailed information under the justification section)	
<b>Justification (exceptional request)</b>		
<b>Implementing MDB(s)</b>		
MDB Headquarters-Focal Point:	Andrey Shlyakhtenko Tendai Madenyika	
MDB Task Team Leader (TTL):	Don Purka Alessandra Salgado Barria Achimi	
<b>National Implementing Agency:</b>		
Country Focal Point/s	N/A	
<b>Brief Description of Project/Program (including objectives and expected outcomes) <sup>[c]</sup></b>		
<p><b>Green hydrogen (GH2) projects are being announced with unprecedented momentum and several projects are advancing rapidly to early planning stages across many developing countries.</b> GH2 has a fundamental role in the decarbonization agenda for hard to abate sectors such as industry (e.g., chemicals, steel, aluminum) transportation (including shipping and aviation), and agriculture (e.g., fertilizers). According to the International Energy Agency, “only 5 per cent of [announcements for the production of low-emission hydrogen] have taken firm investment decisions due to uncertainties....” The significant capital investment required, technical and integration challenges, policy and regulatory constraints, and appropriate business models essential for GH2 pilot projects are some of the key barriers. Overcoming these barriers requires</p>		

<sup>3</sup> With a revolving structure, after the loan or guarantee matures, instead of returning the funds to the Trustee, the funds are redeployed as a new loan or guarantee.

government support and/or low-cost financing. As a result, the global GH2 industry remains at a nascent stage of development, despite its immense transformational potential.

**The IFC Global Green Hydrogen Support Program (the “Program”) seeks to target global opportunities to create GH2 markets in CIF countries such as Morocco, Brazil, India, and South Africa.** The global *Program* will aim to create a crowd-in effect by increasing confidence in investors, de-risking project risks, reducing the cost of capital, and driving the competitiveness of GH2 projects. IFC’s GH2 project pipeline includes production of GH2 for green ammonia for agriculture, green steel, e-methanol for green shipping and aviation fuel, and development of GH2 hubs, among others. The *Program* has the potential to kickstart GH2 value chains in key identified economies by making a transformational impact to the development of GH2 markets in target countries, thereby stimulating long-term decarbonization objectives and making an important contribution to commitments under the Paris Agreement on Climate Change and Sustainable Development Goals.

**In line with the stated objectives of the CTF Futures Window, the *Program* underpins both large scale renewable energy generation and local production of GH2.** Expanding access to dedicated renewable energy resources remains a necessary pre-condition for the success of the *Program* across countries, regardless of the final GH2 applications and uses.

**The *Program* will initially focus on the most advanced projects in IFC’s pipeline and, given the rapid development of the nascent GH2 market, the *Program* will remain flexible, seeking to identify where CTF support is most needed and likely to be most impactful. Presently, the most promising pipeline opportunities are in Morocco and India. As pipeline projects mature and meet readiness criteria, IFC may seek to submit a supplemental funding request for CTF Trust Fund Committee consideration.**

In Morocco, for example, the *Program* aims to support transformative first-of-a-kind GH2 pilots that are in line with the country’s sustainable energy and decarbonization objectives. If successful, IFC foresees the development through these pilots of at least 3,300 Megawatts of clean power generation and 1 million metric tons of green ammonia production starting with the first phase of deliveries in 2026. The Morocco pilots will substitute USD 2 billion of fossil-based ammonia for local green production. Other key benefits are the potential greenhouse gas emissions reduction of 1,367,269 tCO<sub>2</sub>/year, creation of over 2,500 direct and indirect jobs, and implementation of a just transition and gender action program to leverage the benefits of a balanced workforce in the country. CTF funds will be used selectively and might not support the full pipeline of Morocco pilots.

**Concessional funding is critical for early GH2 projects to be viable and to reduce large premiums on these sustainable products relative to what is currently available from fossil fuels.** In Morocco, the GH2 pilots will facilitate large scale production of green fertilizers and, with the country’s geographic proximity and existing pipeline connectivity to Europe, provides an alternative source of GH2 and green ammonia for Europe for other potential uses in industry, power, heating, and transport. Sub-projects in other countries targeted by the *Program* will similarly utilize concessional resources to enable catalyzing the scale-up of GH2 production to serve markets for applications in agriculture, industry and/or transport.

**Note, this funding proposal replaces the proposal entitled *Global: DPSP Futures Window: Green Hydrogen Pilot Program* circulated to the CTF Trust Fund Committee for review on January 26, 2023, and later withdrawn from consideration by IFC due to the restrictions on grant use.**

**Consistency with CTF investment criteria**

a. Potential for transformational change	
Relevance (strategic alignment)	See Section 2.1
Systemic change	See Section 2.1
Speed	See Section 2.1
Scale	See Section 2.1
Adaptive sustainability	See Section 2.1
b. Potential for GHG emissions reduction/avoidance	See Section 2.2
c. Potential to significantly contribute to the principles of just transition	See Section 2.3
d. Financial effectiveness	See Section 2.4
e. Implementation potential	See Section 2.5
f. Development impact potential	See Section 2.7
g. Additional costs and risk premium	See Section 2.9
<b>Additional CTF investment criteria for private sector projects/ programs</b>	
h. Financial sustainability	See Section 2.10
i. Effective utilization of concessional finance (including a detailed analysis on how the proposal meets the minimum concessionality principles, and on how it is aligned with the blended concessional finance principles)	See Section 2.11
j. Mitigation of market distortions	See Section 2.12
k. Risks	See Section 2.13
<b>For DPSP projects/programs in non-CTF countries, explain consistency with FIP, PPCR, or SREP Investment Criteria and/or national energy policy and strategy.</b>	
<p><b>The <i>Program</i> is taking a global approach and will be implemented in a flexible manner, targeting projects with the highest likelihood of commitment and highest potential impact in CIF countries.</b> Given the current shape of the pipeline and country strategies and commitments, it is likely that all the sub-projects financed by the <i>Program</i> will be in CTF countries.</p> <p><b>In any event, the <i>Program</i> will be consistent with directions of respective national energy policies and strategies.</b> The <i>Program</i> will seek synergies, where practical, with work being undertaken under relevant CIF</p>	

Country Investment Plans, the objectives of the Nationally Determined Contributions (NDC) under the Paris Agreement, as well as by other development partners. The emissions reduction of the *Program* will contribute to the 2030 unconditional NDC objectives.

The *Program* as defined in this document uses the structure, design, and data from IFC’s more advanced Morocco pipeline as a model for underlying project descriptions, assumptions, and indicators of the global *Program*. Since the identified countries and addressable market segments are heterogenous (see Annex B), the details of other country programs are expected to be different once those projects advance in their preparation.

**Social Inclusion and Stakeholder Engagement**

**Stakeholder engagement in the *Program* will follow IFC rules and procedures.** The work for all sub-projects targeted by the *Program* will be organized effectively, similar to and learning from the experiences of other projects undertaken by IFC in renewable energy markets across a number of countries.

**Gender Considerations**

<p><b>Gender Analysis</b> (Please insert the text from the project document on the analysis of gaps in access to services, markets, and jobs by women in relation to the project sectors)</p>	<p>The <i>Program</i> will seek to promote gender equality and social inclusion in all activities from design, construction, operations, and management of green hydrogen plants. In line with the <i>Program’s</i> contribution to the just transition principles, the <i>Program</i> will pay particular attention to gender equality when it comes to the acquisition of green and sustainable related skills and experience among local workers and communities.</p> <p>IFC will conduct a thorough gender analysis in target countries and work on an action plan with clients to collect gender-disaggregated data to ensure that women and men can equally participate in the construction and operations of the sub-projects, as well as in the surrounding communities, creating business value and securing influence and income for themselves.</p>
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<p><b>Gender Activities</b> (Please insert the text describing gender-specific activities included in the project)</p>	<p>The <i>Program</i> will develop management strategies for attracting, retaining, and developing the skills of women in multiple functions, including in technical, leadership and other roles with agency. Gender-related efforts will seek to increase corporate knowledge and awareness about the business case for a balanced workforce, improve its strategies for recruitment, and provide women with training and support to develop the skills they need to excel in company functions. IFC will review each respective sub-project’s gender policies, gender/sex disaggregated workforce data and develop a customized training package to build the knowledge and awareness of the business case for investing in women’s career development and leadership training.</p>
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<b>Gender Indicators</b> (Please insert the text on selected gender specific indicators, including annual targets. from the Project Log Frame that the project is committing to report on)	i. Number of women employed in the construction, operations, and management phases of the GH2 plants; and ii. Number of companies (sub-project sponsor or investee companies) adopting management strategies to attract, retain, and develop skills among women in multiple functions, including technical, leadership and other roles with agency.
<b>For projects/programs with activities in countries assessed as being at moderate or high risk of debt distress, macro-economic analysis to evaluate the potential for the CTF project or program to impact the country's debt sustainability</b>	
<b>Investments undertaken by IFC are not expected to require sovereign guarantees</b> and, therefore are unlikely to be reflected in the country's debt service requirements, thereby not affecting the beneficiary country's debt sustainability.	
<b>For public sector projects/programs, analysis of how the project/program facilitates private sector investment</b>	
N/A	
<b>Expected Results (M&amp;R)</b>	
<b>Project/Program Timeline</b>	
Expected start date of implementation <sup>[d]</sup>	Q4 2024
Expected end date of implementation <sup>[d]</sup>	N/A
Expected lifetime of project results in years (for estimating lifetime targets)	20 years
<b>CTF Core Indicators</b>	<b>Project-Defined Indicators/Targets</b>
<i>Please identify which of the indicators below are relevant to the project proposal, list the corresponding project-defined indicator(s), and report all targets, including disaggregated targets. (See the <a href="#">CTF Monitoring and Reporting Toolkit</a> for additional guidance.)</i>	
<b>CTF 1:</b> GHG emissions reduced or avoided (mt CO <sub>2</sub> eq)	
<i>Annual</i>	1,367,269
<i>Cumulative Lifetime</i>	27,345,380
<b>CTF 2:</b> Volume of direct finance leveraged through CTF funding (\$)	<i>Indicator calculated from the co-financing section below</i>
<b>CTF 3:</b> Installed capacity of RE as a result of CTF interventions (MW)	
<i>Wind</i>	2,300 MW
<i>Solar</i>	1,000 MW
<i>Hydro</i>	
<i>Geothermal</i>	
<i>Other/Mixed</i>	
<i>TOTAL</i>	3,300 MW
<b>CTF 4:</b> Number of additional passengers per day using low-carbon transport	N/A
<i>Women</i>	

	<i>Men</i>	
	<i>TOTAL</i>	
<b>CTF 5: Energy savings as a result of CTF interventions (GWh)</b>		N/A
	<i>Annual</i>	
	<i>Cumulative Lifetime</i>	
<b>Please also submit the full project results framework to the CIF Secretariat upon MDB Board approval of the project.</b>		
<b>Relevant Development Impact Indicators</b>	<b>Project-Defined Indicators/Targets</b>	
Hydrogen Electrolysis Capacity	1,850 MW	
Annual Green Ammonia Production	1 Million Metric Ton	
Battery Storage System	2,700 MWh	
<b>CTF Co-Benefit Indicators</b>	<b>Project-Defined Indicators/Targets</b>	
<i>Please identify one or more expected co-benefit indicators–i.e., other social, economic, environmental benefits beyond the CTF core indicators–that the project will track and report.</i>		
Jobs created <sup>4</sup> :		
- direct		500
- indirect		2,000
Number of companies adopting management strategies to attract, retain, and develop skills among women		TBD
<b>Co-financing</b>		
	<b>Please specify as appropriate</b>	<b>Amount (in million USD)</b>
MDB 1	IFC	200
MDB 2 (if any)		
Government		
Private Sector		6,967.5 <sup>5</sup>
Bilateral		
Others (please specify)		
<b>Total Co-financing</b>		<b>6,967.5</b>
<b>CIF Funding</b>		<b>32.5</b>
<b>Total Financing (Co-financing + CIF Funding)</b>		<b>7,000</b>
<b>Proportion of Total Financing for Adaptation</b>		<b>-</b>
<b>Proportion of Total Financing for Mitigation<sup>[e]</sup></b>		<b>100%</b>
<b>Expected Date of MDB Approval</b>		
IFC expects that the first investment under the <i>Program</i> could reach IFC Board approval as soon as in Q4 2024.		

<sup>4</sup> Gender-disaggregation targets to be determined based on results from gender analysis.

<sup>5</sup> Precise details of the financial package are not yet known. However, IFC assumes that other development finance institutions, private sector players, as well as local banks could contribute to the financing package.



**NOTES:**

[a] This cover page is to be completed and submitted together with the MDB project/program proposal when requesting CTF funding approval by the Trust Fund Committee.

[b] For products denominated in EUR, please also provide USD equivalent in the column to the left

[c] Please provide the information in the cover page or indicate page/section numbers in the accompanying project/program proposal where such information can be found.

[d] Insert “N/A” (not applicable) if dates cannot be determined at the time of submission (e.g., private sector programs)

[e] Per MDBs’ own Paris alignment climate finance tracking methodologies

**Version: October 2023**

CCH – [here](#)

CIF Website – [here](#)

CIF Pipeline Management and Cancellation Policy - [here](#)

CIF Financial Terms and Conditions Policy updated for FY24 - [here](#)

CTF M&R Toolkit – [here](#)

Futures Window - [here](#)