Alliance for Industry Decarbonization

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Joint Action Plans 2025

Updated: 26 March 2025

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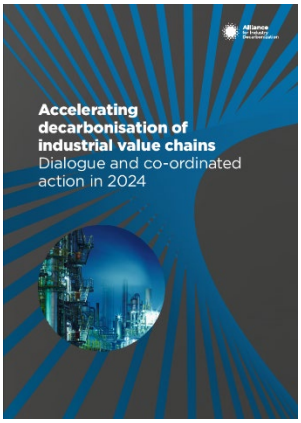
Progress 2024:

AFID continues to drive industrial decarbonisation through the power of partnerships based on honest dialogue and concrete action. For progress in 2024, please consult report “Accelerating decarbonisation of industrial value chains”, Dialog and coordinated actions in 2024.



Focus areas:

Technology			Process	Enablers	
Renewables	Bioenergy with CCUS	Green hydrogen	Circularity	Human Capital	Finance

Outreach events 2025:

World Future Energy Summit
Session at IRENA Pavillion
14 January 2025, UAE
WORLD FUTURE ENERGY SUMMIT

Webinar on Financing Industry decarbonization
Online
5 June 2025
IRENA
MISSION INNOVATION

IRENA Innovation Week
10 – 13 June 2025
IRENA

AFID all members and partners call
9 September 2025
IRENA

New York City Climate Week
21 - 28 September 2025, NY
CLIMATE WEEK NYC

UN Climate Change Conference Belem (COP 30)
10 - 21 November 2025

Actions and Initiatives 2025

TECHNOLOGY FOCUS AREA			
Renewables – Action Plan			
Name of the action	**Involved members & partners**	**Description**	**Deliverable**
Critical Materials	Members	Sourcing of critical materials for renewable sector	**1. Traceability guidelines:** Increase transparency in raw material usage for main equipment by developing/ adopting industry recommendations on traceability protocol/standard that defines the methodology to collect evidence over the origin and source.
Technology Readiness and Innovation	Members	Strengthen TRL across countries by organizing knowledge-sharing events, facilitating technology transfer, and creating a best-practices database. Establish a Knowledge and Innovation Platform featuring virtual seminars, case studies, and a global database of renewable energy and decarbonization technologies. Implement collaborative pilot projects involving AFID members in the practical development of new technologies for the renewable energy sector, focusing on advancing TRL.	**2. Presentations**. Sharing of relevant experiences and best practices from members regarding for example: Examples of successful decentralized renewable projects / storage initiatives as an enabler for adoption of renewable generation.
Enterprise Twinning platform	IRENA Members	Advance and keep the Platform updated This tool is a dynamic platform that connects AFID members and partners with external organisations to promote industrial decarbonisation through partnerships and collaboration. Open to all external organisations interested in climate action and the energy transition, the platform also provides AFID members with easier access to each other's activities, expertise, and sustainability efforts. This approach will enhance knowledge sharing and fuel collaboration.	**3.** Launch and promote use of the **Enterprise Twinning platform** with external stakeholders
Energy storage	Members	Conduct studies on various energy storage solutions to support industrial decarbonization via renewable electrification as renewable penetration increases globally.	**4.** Share experiences and best practices **on energy storage solutions. Technology Brief** with the description of energy storage solutions to support industrial decarbonization

Bioenergy with Carbon Capture Utilization and Storage (BECCUS) – Action Plan			
Name of the action	**Involved members& partners**	**Description**	**Deliverable**
Technology Solutions and Innovation	Members	In order to accelerate decarbonization, there is a need in guiding industries to adopt the right ready-to-market technologies (economically and technically viable) in line with their needs and processes. There is an increased focus on hard-to-abate industries. The technology brief will be developed in a "simple user-friendly pick-n-choose" content mapping the various ready-to-market CC technologies for the various industries in various geographies, including references for already implemented projects and pilots.	**5. Technology Brief on readily implementable CC technologies**
Policy and Advocacy	Members	Engage authorities and governmental institutions to support acceleration in implementing actionable local decarbonization initiatives, adopting policies and having greater commitment for the adoption of alternative clean solutions to the existing hydrocarbons, with a focus on CCUS for hard-to-abate industries such as cement and steel. Bring the voices of industries and high representatives from the public sector on a same roundtable to deliver more impactful and powerful aligned commitments and actions among key stakeholders.	**6. Engagement event on BECCUS**
Financing and Funding	ERM (lead)	Continue to address financing challenges for Bioenergy and CCUS projects by identifying key barriers and advocating for solutions including grants for project pilots, project development funding for groundwork, and project finance for implementation.	**7. Developing a report on BECCUS financing**
Knowledge sharing	Members	During WG calls invite technology providers (members / non-members) to present innovative solutions in BECCUS. Participate in AFID Innovation Competition and present BECCUS technology at technology showcase IRENA Innovation Week.	**8. Presentations**: by Technology Providers

Green Hydrogen – Action Plan

Name of the action	Involved members & partners	Description	Deliverable
Techno-Economic challenges and solutions for large scale H2 hub **Regulatory aspects for fast-tracking GH2 projects**	Snam (lead), Eni, UNIDO, ERM, GreenEartX, TII, Khrone, Net Zero Think, Bureau Veritas, Xodus, Poly Consulting	Continue work on the report conceptualizes a framework based on segments of the Green H2 value chain as "building blocks" of H2 clusters highlighting their challenges and barriers. The report also showcases a case study from the Mediterranean region, where green hydrogen is being produced in North Africa, shipped along the SoutH2 Corridor, for off-takers distributed in Italy, Austria and South-East Germany. The report brings the voice of the industry on what are the challenges that the nascent (green) Hydrogen market, thus allowing policy makers to take tailored action and realize the role of hydrogen in industrial decarbonization.	**9. Report** "The Building Blocks of Hydrogen Hubs – A case study from the Mediterranean region"
Cost reduction strategies of Green H2	Members	The digital story would take shape of a website tool which contains a model capable of showing the impact of underlying assumption on LCOH and of running different scenarios. This website tool can potentially be uploaded into our AFID website, under <Resources> The first part of the digital story would delve into the underlying components of LCOH, assessing the magnitude of impact for each and providing insights of levers to drive down cost. It can also examine how government support, subsidies, fiscal incentives, and different technologies influence the model, as well as how these factors can be incorporated to enhance its effectiveness. The second part of the digital story could look into the offtake part, defining the "willingness to pay" and provide policy recommendations to reduce the gap with production cost, without threatening the international competitiveness of key industries.	**10. Digital story:** discrepancy between production cost and customer's "willingness to pay" analyzing levers to drive down cost and reduce discrepancy

Policy and Market Engagement with focus on PPAs	Members IRENA	A common problem when dealing with renewable PPAs is the difficulty in negotiating terms. When a template is first written and shared by either the producer or the off-taker, terms and conditions tend to allocate more risks to the counterparty. PPAs can include provisions specifying that the electricity being supplied to a purchaser will be generated from renewable sources. A grid-connected electrolyser, therefore, could use a renewable PPA to ensure that the hydrogen it produces is fully renewable. However, tackling the challenge of renewable power intermittency might require new and more complex forms of PPAs. To fulfil their need for more stable and predictable power than individual renewable power facilities could typically supply, green hydrogen projects could sign renewable PPAs that include supply from multiple generating resources across a wider geographic region (if grid connections are available). This would avoid additional costly capacity that may often go unused. Renewable PPAs for electrolysers ensure that the hydrogen they produce will be "green". Another PPS type of PPA is used between a green hydrogen producer and a buyer as offtake agreement.	**11. Sharing knowledge and best practices on a renewable Hydrogen Power purchase agreements (PPA)**
Knowledge Sharing	Members	Presentation on a monthly basis of a technology or discussion around challenges that Members of the working group are facing Participate in AFID Innovation Competition and present Green Hydrogen technology at technology showcase IRENA Innovation Week.	**12. Presentations**

PROCESS FOCUS AREA			
Circularity – Action Plan			
Name of the action	**Involved members & partners**	**Description**	**Deliverable**
Accelerated circularity in industries	Members	Continue developing blueprints for decarbonization for the industry aluminum with focus on circularity. Looking into global experiences and solutions.	**13. Report on Circularity in Aluminum industry** with trends and data, highlights on circular economy
Share experiences on national and regional Pilots to promote Decarbonization Technologies	Members	Partnering with innovators, research institutions, and governments to secure funding, select high-impact locations, and establish KPIs for success. Advocating for incentives to support adoption and scaling up of circularity practices based on pilot results	**14. Identify and engage in relevant international and national programmes that support circularity solutions**
Decarbonization Innovation	Members	Promote collaboration between industries such as steel, aluminum, chemicals, and energy in adopting decarbonization strategies. Participate in AFID Innovation Competition and present circularity technology at AFID Technology Showcase during IRENA Innovation Week.	**15. Present technology innovation on circularity**

ENABLERS FOCUS AREAS			
Human Capital - Action Plan			
Name of the action	**Involved members & partners**	**Description**	**Deliverable**
Promote active contribution to My Change platform	Members	Continue development of "MyChange" which is a Digital Learning Environment implemented for AFID to support our people to face the greatest challenges of our time and actively participate in the cultural change that our companies are undergoing towards the energy transition, the sustainable development, and the digital transformation.	**16. Expand Platform Usage and Content of "MyChange for AFID**. Ramp-up of the platform in terms of integration of additional contents and increasing the number of users from Alliance AFID members.
Training Program for Industrial Decarbonization	Members	Create a comprehensive training program to equip workers with the skills needed for industrial decarbonization. The training program could include modular courses, also leveraging the contents of My Change platform.	**17. Training programs on decarbonization**
Finance – Action Plan			
Name of the action	**Involved members & partners**	**Description**	**Deliverable**
Impact and opportunities for Global South	Members	Explore the impact of CBAM on Global South countries, focusing on their competitive advantage in green production (renewables) and its implications for green commodities (methanol, ammonia, steel, aluminum). Ensure CBAM is well understood, enabling actors in the Global South to navigate it effectively and mitigate the exposure of carbon-intensive exports.	**18. Presentations on impact and opportunities**
Carbon credit financing	Members	Analyzing the opportunities arising from COP29 under Art. 6 of the Paris Agreements	**19. Brief paper on carbon credit financing**
Define what is green project & Sustainable guarantees for climate projects	TUV SUD GreenEarthX, Ecopetrol	Continue Identifying key barriers and innovative financing models. Showcase successful case studies and best practices. Provide recommendations for policymakers, financial institutions, and industry. Additional Content: Address SME financing challenges in developing countries.	**20. Webinar with MI** **21. Report "Overcoming challenges and fostering finance solutions for industry decarbonization"**

CROSS-CUTTING THROUGH ALL AREAS			
Name of the action	**Involved members & partners**	**Description**	**Deliverable**
GHG emission reductios	XODUS	Online digital tool on Emissions Management: GHG ERAPs that will help AFID members to • Understand own emissions • Identify opportunities • Rank & prioritise • Take action	**22.Digital tool on GHG emissions reporting and optimization**
AFID Innovation Competition	NZTC	Led by AFID and supported by AFID members and knowledge partners, the technology showcase will go through the following phases: 1. Source technologies 2. Secure finalists 3. Final Prep 4. Showcase Support	**23. Technology Showcase at IRENA Innovation Week 2025**

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