

H4D Review



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Energy Sector Management Assistance Program



Dear H4D Partners,

The [Hydrogen for Development \(H4D\) Partnership](#) is a global initiative convened by the World Bank Group (WBG) to build a platform for knowledge sharing, capacity building, and financing by fostering international cooperation needed to afford tailored-made solutions for developing countries and emerging markets on green and low-carbon hydrogen. The knowledge produced by the H4D Partnership will support the implementation of policies and regulations to build a hydrogen economy.

The [Energy Sector Management Assistance Program \(ESMAP\)](#) provides the Secretariat of the H4D Partnership and works closely with partners, stakeholders, and observers.

The World Bank Group (WBG) team is pleased to announce the first quarterly newsletter, [H4D Review](#). The goal is to provide the latest information about the activities, analytical work, and upcoming events on green and low-carbon hydrogen to H4D's partners, stakeholders, and observers.

As of February 21, 2023, H4D has 18 partners, including associations, business organizations, hydrogen clusters, knowledge institutions, laboratories, public agencies, and development institutions.

List of H4D Partners (status February 21, 2023)

- African Green Hydrogen Alliance
- Agência de Desenvolvimento do Estado do Ceará
- Australian Hydrogen Council
- Corporación de Fomento de la Producción
- LTU Center for Hydrogen Energy Systems Sweden
- Fuel Cell and Hydrogen Energy Association
- Green Hydrogen Catapult
- Green Hydrogen Organisation
- H2 Chile
- H2 Colombia
- H2 Mexico
- H2LAC
- Hydrogen Council
- Hydrogen Europe
- India Hydrogen Alliance
- National Renewable Energy Laboratory
- Research Institutes of Sweden
- RVO Netherlands

The H4D team extends a warm welcome to the Fuel Cell and Hydrogen Energy Association, Hydrogen Europe, Green Hydrogen Catapult, and India Hydrogen Alliance, organizations that joined as partners this January. We expect the number of partners to continue growing, as we reach out to other key players in the hydrogen space (governments, IFIs, business associations).

The H4D team has prepared an initial draft work plan for the H4D Partnership drawing from the initial interviews with partners and relevant stakeholders. This draft will be shared soon, with the goal of approving it at the first face-to-face H4D meeting scheduled for April.

Partner's news

- The Green Hydrogen Organisation (GH2) updated the Green Hydrogen Standard ([link](#))
- H2LAC launched its 12th review featuring relevant news about hydrogen in Latin America and the Caribbean ([link](#))
- The Center for Hydrogen Energy Systems Sweden launched a free online open course "Hydrogen for sustainable solutions" ([link](#))
- The Fuel Cell & Hydrogen Energy Association (FCHEA) hosted the Hydrogen & Fuel Cell Seminar in Long Beach, California, on February 7-9, 2023 ([link](#))
- The Câmara de Comercialização de Energia Elétrica (CCEE) launched the first renewable Hydrogen certification in Brazil, on December 8, 2022 ([link](#))

Recent events and presentations by WBG and H4D Partners

- World Bank and Hydrogen Council launched the report "Sufficiency, sustainability, and circularity of critical materials for clean hydrogen" ([link to the report](#) and [link to the event](#))
- H4D and the Fraunhofer Society held the webinar "Socioeconomic Analysis of Global Power-to-X Potential: State-of-the-art" ([link to the map](#))
- H4D and the Government of the Netherlands held the webinar "Low-Carbon and Green Hydrogen Technologies from Dutch Companies: An Opportunity for Developing Countries" ([link to the event](#))
- The World Bank Global Director for the Energy and Extractives Global Practice participated in the webinar "Financing Hydrogen: Moving from plans to bankable projects" ([link to the webinar](#))
- The World Bank Lead of the H4D Partnership participated in the meeting of the Global Hydrogen Industrial Association Alliance in the sidelines of the H2 and FC Seminar in Long Beach, California ([link to the agenda](#))

Upcoming WBG activities

- The World Bank will lead a publication on financing hydrogen in developing countries to be presented at COP 28 ([link to COP 28](#))
- The World Bank will prepare a position paper on the socioeconomics of hydrogen to be presented in Q4 2023
- The H4D Secretariat team is having bilateral discussions with partners to collect their inputs for the work program. The team has also consulted MDBs regarding their hydrogen activities

Recent Publications and Articles on Low-Carbon Hydrogen

- *Ammonia Production from Clean Hydrogen and the Implications for Global Natural Gas Demand* ([link](#))
- *EU Hydrogen Backbone Pipelines* ([link](#))
- *Make Hydrogen in developing nations: share prosperity while meeting our climate goals* ([link](#))
- *Green Hydrogen Opportunities for the Caribbean* ([link](#))

Major hydrogen project financing updates in news

- *EIB announces 1 billion Euro hydrogen loan for India* ([link](#))
- *Western Australia Allocates \$70 Billion in Green Hydrogen Push* ([link](#))
- *Los Angeles moves forward with \$800m plan to convert 830MW gas-fired power plant to run on green hydrogen* ([link](#))

Upcoming events

- *March 28-29, 2023: Hydrogen Europe 2023 in Amsterdam* ([link](#))
- *April 14-15, 2023: Africa Green Hydrogen Finance Accelerator Forum in Nouakchott – organized by AGHA and GHO, with World Bank support*
- *April 20-21, 2023: 2nd Hydrogen International Congress in Bogota – co-organized by Hydrogen Colombia* ([link](#))
- *April 24-25, 2023: First in-person H4D Partners Meeting in India (more information to be sent out soon)*
- *May 9-11, 2023: World Hydrogen Summit in Rotterdam* ([link](#)) - with support from RVO, presentations by WBG and H4D (more information to be sent out soon)
- *October 26-27, 2023: Asia-Pacific Hydrogen Summit in Sydney – co-organized by the Australian Hydrogen Council* ([link](#))



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The following Newsletter will be issued the last week of May 2023, and we will request inputs from H4D Partners by the second week of May.