

International Hydrogen Ramp-Up Program (H2Uppp) for early green Hydrogen / PtX project development with business

July 2024

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The International Hydrogen Ramp-up Programme (H2Uppp) of the German Federal Ministry for Economic Affairs and Climate Action (BMWK) promotes projects and market development for green hydrogen in selected developing and emerging countries as part of the National Hydrogen Strategy

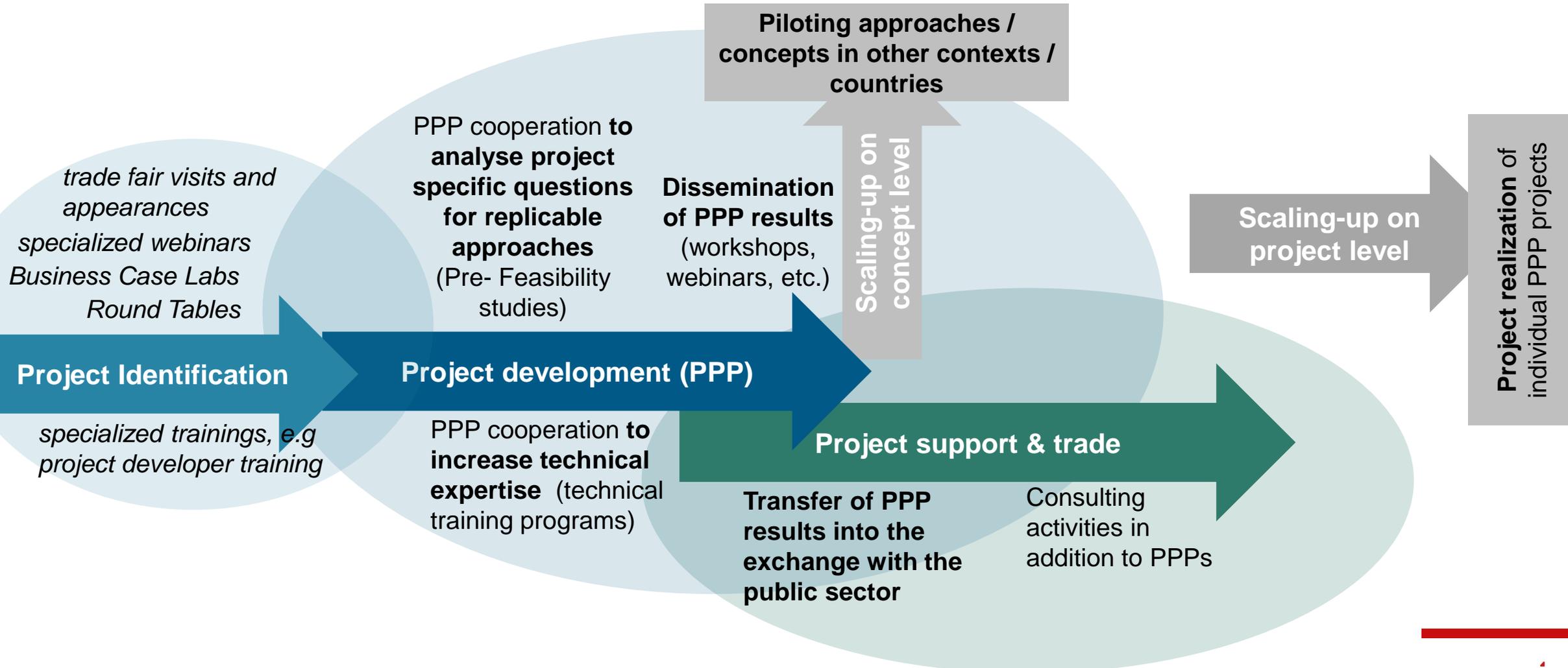
H2Uppp - Programme Focus

OBJECTIVE

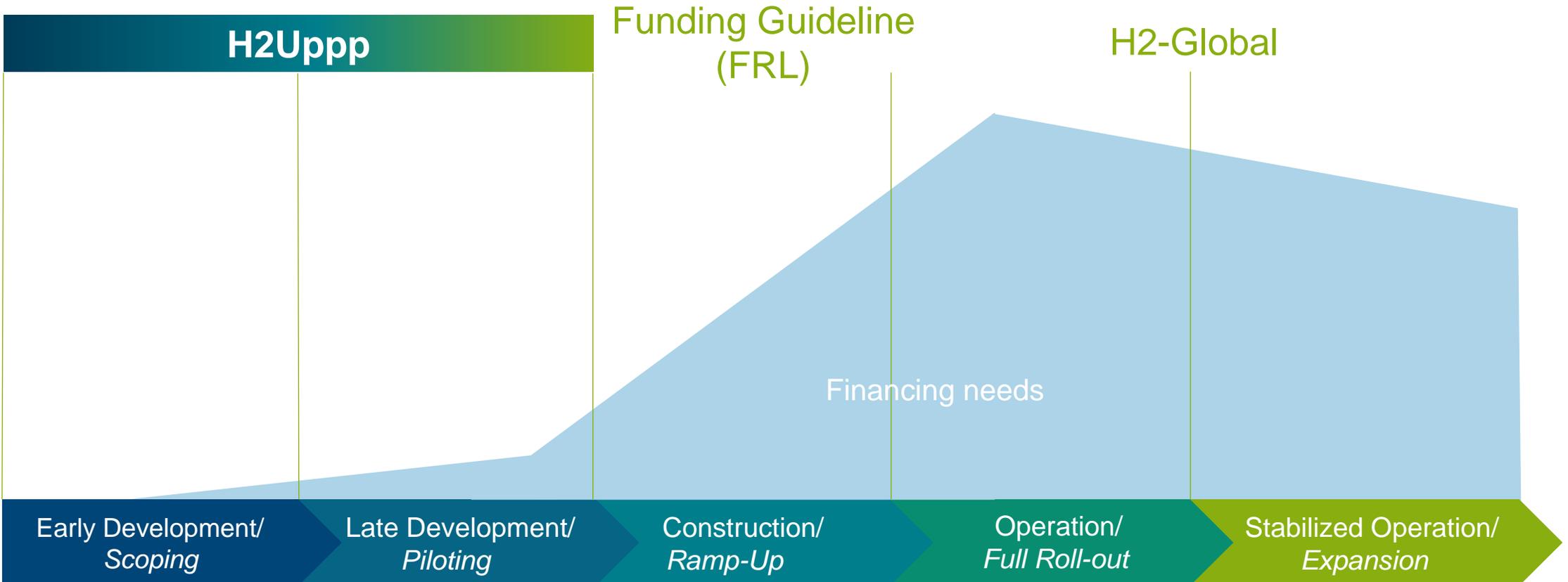


Markets for green H2/PtX technologies and applications, especially in developing and emerging countries (ODA countries) **are further developed through partnerships with the private sector and the establishment of export-import relationships with Germany and Europe**

Fields of action along the project cycle



H2Uppp and other German H2 funding programmes



Fields of action – Focus today



Project
identification



Project
Development (PPP)



Project
support & trade

PPP – at a glance

PPP projects are cooperation projects between
GIZ (public partner)
&
Private Company/ies (private partner/s)

- Lead applicant based in Germany or the EU, consortia with local partner are possible
- Private Partner (or consortium) must contribute at least 50%
- Amount of public contribution is min. EUR 50,000 and max. EUR 2,000,000
- PPP duration: up to two years / max. until 09/2026

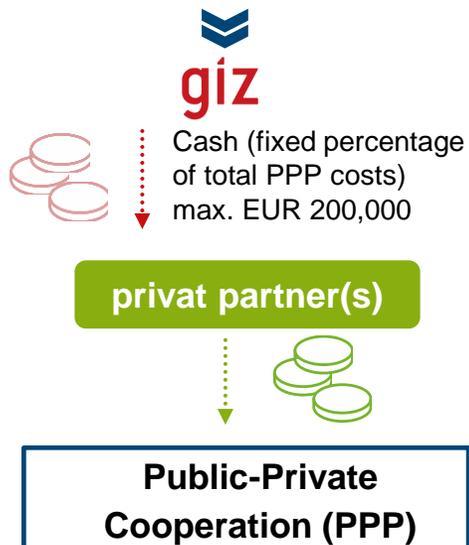


PPP contracts

PPP Project – Contract types

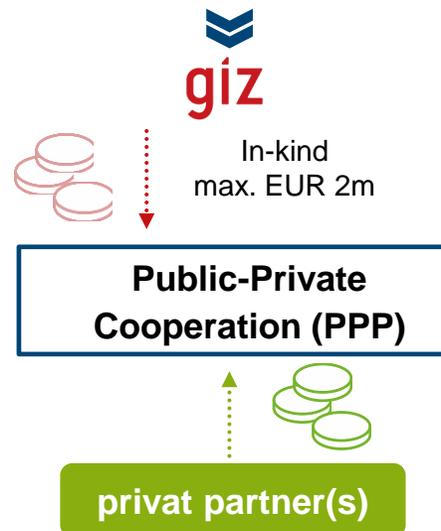
Implementation Agreement

PPP implementation mainly by private partner(s)



Cooperation Agreement

Joint PPP implementation



The PPP partnership is formalised as

- **Service Contract (= Implementation Agreement):** company receives **up to EUR 200,000** public contribution for pre-determined services; includes audits of expenditures),
- or
- **Cooperation Agreement:** company and GIZ deliver agreed services, no financial flows between GIZ and company public contribution up to EUR 2m.

Win-Win for Private and Public via H2Uppp PPPs

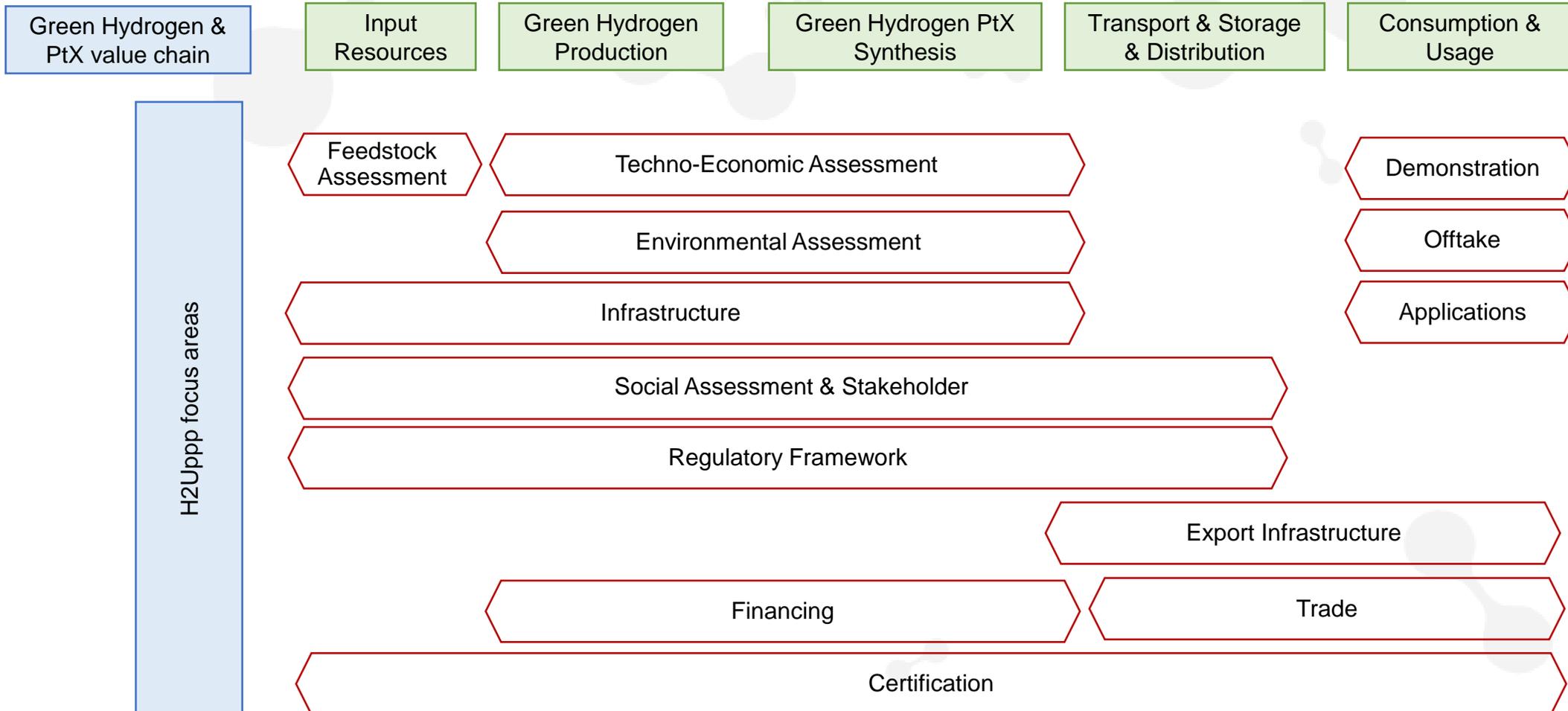
The PPP instrument addresses **specific questions** along the **entire value chain**

- that analyse relevant **issues** in **project development** and **business model development**
- that target at **replicable project** approaches
- **results are published** and publicly discussed

=> To decrease project development risks and thus costs

=> To enable building up expertise in the market(s)

H2Uppp PPP focus along the value chain



NEW PPP Call - OPEN

The deadlines for the submission of project ideas are:

Call #4: 1 September 2024, 11:59pm CEST

Call #5: 1 February 2025, 11:59pm CET

- Companies are invited to apply for support and cooperation with GIZ via an open call for PPP project ideas
- Applicants are invited to discuss their ideas with H2Uppp teams in the partner countries or in Germany before officially submitting the idea in the Call. This is an offer but not mandatory.

The application form and the short information is published on “MatchMaker”
[MatchMaker - Discover new business opportunities in emerging markets.](#)
[MatchMaker \(EN\) \(wirtschaft-entwicklung.de\)](#)



H2Uppp (Phase I) Cooperation projects

As of 1 May 2024



Lead Partner: Hy2Gen

Other Partners: Mexión

PPP-Project: Marengo I: the road to decarbonization with green ammonia

Country: Mexico

Lead Partner : Siemens Energy

PPP-Project : From Theory to Action: Implementing Green Hydrogen Solutions in Mexico

Country : Mexico

Lead Partner : Soventix

Other Partners : SI Solar Investments and Pabettin

PPP-Project : Concepts for the development of a sustainable green H2 / NH3 plant pool in the Antofagasta region

Country : Chile

Lead Partner : INERATEC

PPP-Project : FrontEnd Engineering Design (FEED) Study for a Power-to-Liquid (PtL) plant

Country : Chile

Lead Partner : Mele Group

Other Partners : Coopernan und Ambicoop (agriculture cooperatives)

PPP-Project : Sustainable hydrogen derivative production derived from biogas and green hydrogen in Parana

Country: Brazil

Lead Partner : SAP

PPP-Project : Green Proof for the Hydrogen Value Chain – Digital Solutions for Green Hydrogen Certificates

Country: Brazil

Lead Partner : Burgbad

Other Partners : Eczacıbaşı Yapı Gereçleri Sanayi ve Ticaret A.Ş

PPP-Project : Demonstration of an H2 value chain in the ceramic industry in Türkiye

Country : Türkiye

Lead Partner : RENAC

PPP-Project : E-learning program on hydrogen projects for project developers and project financiers

Country : Global

Lead Partner : Enapter

Other Partners : ERDI at Chiang Mai University.

PPP-Project : Developing Chiang Mai into a Knowledge Centre for Green Hydrogen

Country : Thailand

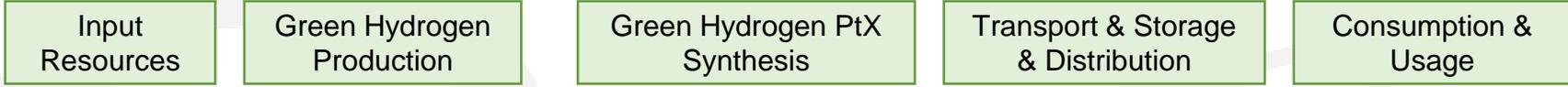
Lead Partner : RWE Supply&Trading

PPP-Project : Indian Green Ammonia Supply Chain: Production and International Trading

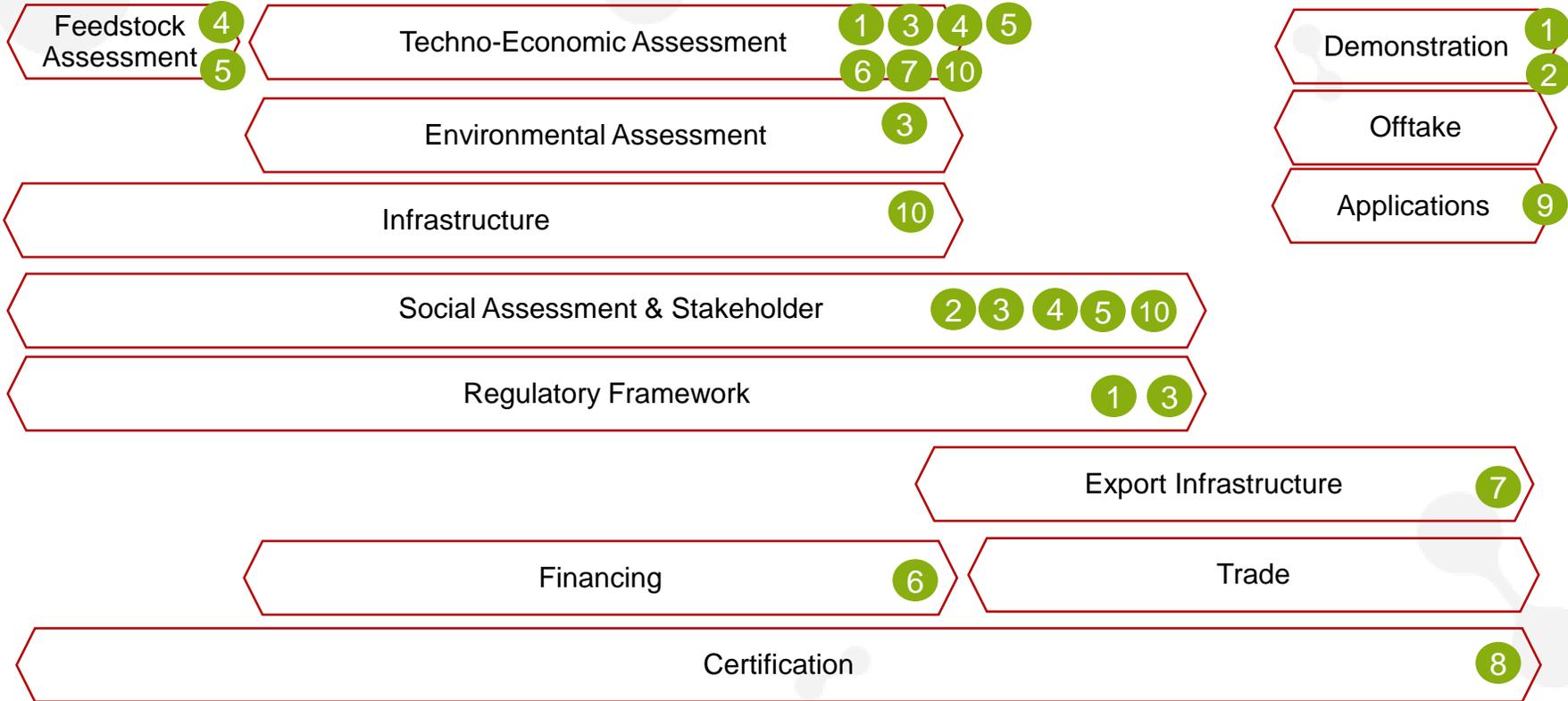
Country : India

H2Uppp PPP focus along the value chain

Green Hydrogen & PtX value chain



H2Uppp Schwerpunkte



- Burgbad 1
- Enapter 2
- Hy2Gen 3
- INERATEC 4
- Mele Group 5
- RENAC 6
- RWE 7
- SAP 8
- Siemens Energy 9
- Soventix 10

Mexico: Marengo I - The road to decarbonization with Green Ammonia

PPP Project: Prefeasibility study (concept) for an off-grid green ammonia production in Mexico for export and local use

- Partners: GIZ, German H2 project developer Hy2Gen and the Mexican RE project developer
- Idea: develop a blueprint for off-grid ammonia production plants on an industrial scale in Mexico.
- Tasks:
 - Hy2Gen and Mexion are clarifying the technical and economic (pre-)feasibility of such plants
 - GIZ is investigating the environmental and social impacts
 - Both: approval processes are clarified and authorities and local stakeholders are involved at an early stage.
- The data provider is a specific project, Marengo-I in Campeche. The project is considered a pioneer in Mexico and is generating a great deal of interest from the public and private sectors.



Modell einer netzfernen Ammoniakanlage in Campeche. (@GIZ)

Mexico: Marengo I - The road to decarbonization with Green Ammonia

PPP Project: Prefeasibility study (concept) for an off-grid green ammonia production in Mexico for export and local use

Impact

- The replicable concept (Blueprint) reduces risks and costs for project developers to invest in the Mexican market
- Increased stakeholder engagement and improved capacity promotes H2 market ramp-up

Key Data

Volume 516,250 €, of which 39% public contribution

Period 1,5 years (08/22 - 12/23)

Contribution Company

- Assessment of technical and economic feasibility based on project prefeasibility analysis (Marengo I)

Contribution GIZ

- Environmental and social impact assessment
- Regulatory Framework Assessment,
- Communication and stakeholder engagement, and capacity development.

Cooperation Partners

Hy2Gen
KMU
(Wiesbaden)

- Development, Financing, construction and operation of green H2 projects worldwide
- Motivation: Entering the Mexican market with GIZ

Mexion
KMU (Mexico
City)

- Project developer in the renewable energy sector
- Motivation: Entry into the H2 market

Open Call for PPP ideas:

“MatchMaker” [MatchMaker - Discover new business opportunities in emerging markets.](#) | [MatchMaker \(EN\) \(wirtschaft-entwicklung.de\)](#)



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