

BBVA

Corporate &
Investment Banking

Considerations for the financing of Hydrogen projects

Webinar

March 2026



Universidad
de Navarra

CÁTEDRA DE
TRANSICIÓN
ENERGÉTICA



repsol
fundación



Key investment drivers for hydrogen projects include robust contractual structures, EPC and comprehensive due diligence



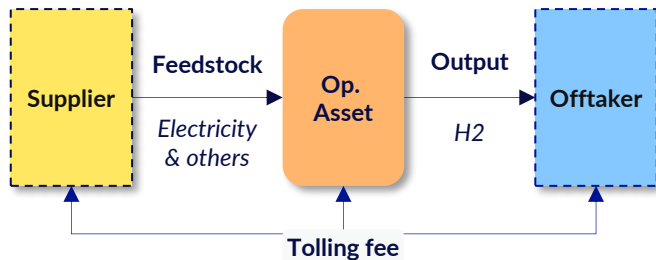
Bankable contractual structures for green hydrogen projects are those not exposed to market risks

	Hydrogen Purchase Agreement (HPA)	Optimal structure to de-risk offtake and energy procurement Tolling Agreement	Contracts for Difference (CfD)	Hydrogen as a Service (HaaS)	Merchant sales
Description	Producer procures all feedstock and sells H ₂ to the offtaker at a fixed or indexed price	Producer operates electrolyzer; offtaker provides power/water and pays a fee per kg of H ₂ produced	Government pays the producer the difference between an agreed "strike price" and the market price	Bundled delivery of H ₂ fuel, storage, and transport/ infrastructure as a service	Uncontracted H ₂ sales at spot market prices
Contract structure	Take-or-pay Contracts indexed or fixed \$/kg	Tolling fee Fixed and variable fee to reach target returns	Strike price mechanism Payment to the producer if strike > reference price – compensation mechanism	Service agreement Pay-per-kg or monthly fee and includes performance SLA and delivery	Spot sales or indexed to grey H ₂ price
Typical contract duration	10-20 years	10-20 years	7-15 years	3-10 years	None
Market risk	Offtaker	Offtaker	Government	Producer (partially)	Producer
Technical risk	Producer	Producer	Producer	Producer	Producer
Use case	Industrials (refining, ammonia), utilities and O&G looking for guaranteed supply	Utilities, IPPs and O&G with RES assets	Industrial, large-scale projects, export-linked	Mobility/fleets (without infra capabilities), remote industrial SMEs	Trading , usually seen as part of a larger contracted project
Bankability for PF	✓	✓✓	✓	Untested	✗

Tolling structures mitigate feedstock and offtake risks unlocking financing for cleantech assets

TOLLING STRUCTURES DE-RISK OPERATIONS...

Op. asset is mainly exposed to construction and operations risks



Toller
Feedstock and offtake/output will be closed under a capacity + variable payment where the toller covers both feedstock and offtake

... WITH KEY AREAS INVOLVING FEES, SUPPLIES, OFFTAKES, OPS & REGULATION

- 1 **Tolling fee structure**
 - Fixed and variable payments for converting feedstock into output
$$\text{Tolling fee} = \text{capacity payment} + \text{conversion fee} \times \text{delivered volumes}$$
 - Where **capacity payment** is a fixed payment for plant availability ("Use-or-Pay"); **conversion fee** comprises the variable costs agreed plus industrial benefit; **delivered volumes** is feedstock volumes
 - Title transfer of commodities under the tolling agreement should be contemplated based on tax considerations

- 2 **Feedstock supply**
 - Electricity as primarily feedstock
 - Define delivery, quality, and timing as well as conversion metrics aligned with electrolyzer performance
 - Include provisions for performance variations vs. agreed conversion factors

- 3 **Nomination obligations**
 - Toller shall nominate quantities aligned with operational restrictions, e.g., min/max volumes, delivery schedule to be agreed with flexibility for weekly/monthly adjustments based on operational realities
 - Agree on hydrogen delivery point

- 4 **Maintenance, downtime, force majeure**
 - Plan shutdown and rights around plant maintenance and upgrades
 - Force Majeure to address grid instability, curtailed renewables or electrolyzer degradation
 - Define who bears the cost if the plant is unavailable, and corresponding economic compensations (e.g., replacement cost)

- 5 **Regulatory, Sustainability & Certification Clauses**
 - Ensure compliance with regulations (RED III and national implementation, EU taxonomy, Guarantees of Origin)
 - Define roles in emissions reporting and verification (critical for subsidy or compliance markets)

Disclaimer

This document has been drafted with an informative purpose, having the information contained herein merely the character of an example. The information contained herein shall not be deemed to be considered in any case as financial advisory, investment advice, tax/legal advice or otherwise nor a recommendation to enter into any transaction nor should it be relied upon to make any sort of decision in any direction. Clients should independently evaluate the financial, environmental, social, market, legal, regulatory, credit, tax and accounting risks and consequences and should not rely on BBVA for this.

Banco Bilbao Vizcaya Argentaria, S.A., or any other of its Group companies (hereinafter "BBVA") do not assume any obligation whatsoever to communicate any changes to this document or to update its contents. In particular, the ESG (Environmental, Social and Governance) information/opinions provided by BBVA are based on BBVA's understanding of current market standards and practice, which may vary over time and/or may be amended or replaced by legally binding regulations. BBVA does not assume any obligation to update the ESG information/opinions or any information on which they are based.

BBVA has obtained the information included in this document (hereinafter "Information") from the client and sources considered to be reliable. However, notwithstanding the fact that reasonable measures to assure that the Information contained herein is not mistaken or misleading, BBVA does not represent or warrant, either express or implicit, its accuracy, integrity or correctness and therefore no party should rely on it. BBVA accepts no liability for any mistake or omission in the Information.

This document has not been drafted according to the rules in place for the independence of investment reports; thus, it does not contain objective explanations, nor has it been independently verified and does not opine on any prohibition that may exist concerning the trading of the financial instruments mentioned in the same before its divulgation.

This document and its contents do not constitute an offer, financing proposal, invitation, solicitation nor proposal of any other financial service, nor an invitation or solicitation to purchase, subscribe, place or underwrite any securities or other instruments, or to undertake or divest investments. This document or its contents are not deemed to form the basis of any contract, commitment or decision of any kind and, in particular, to commit BBVA to perform the tasks imposed to it hereby.

Clients or potential clients who have access to this document should be aware that the securities, instruments or investments to which it may refer may not be appropriate for them due to their specific investment goals, financial positions or risk profiles, as these have not been taken into account to prepare this document. Therefore, investors should make their own investment decisions considering said circumstances and obtaining such specialized advice as may be necessary.

Clients should voluntarily and independently assess the ESG information/opinions provided by BBVA and are solely responsible for their adoption, for the decision to execute a particular transaction and its consideration as a sustainable transaction, for obtaining a Second Party Opinion and for applying and complying with any applicable laws, regulations and obligations to that effect.

The potential performance by BBVA of any service or tasks is conditional upon definitive approval by BBVA's internal decision committees, all of the transaction's definitive legal documentation being satisfactory to BBVA, and that the service or task take place according to the terms set forth in a later mandate or offer.

BBVA is involved in a wide range of commercial banking, investment banking and other activities (including, among others, investment management, corporate finance and securities issuing, trading and research). In particular, within its ordinary course of business, BBVA may carry out transactions (such as trading, loans, swaps, etc.) related to a transaction involving BBVA (and entities with which such companies may be considering entering into a potential transaction or business relationship) for its own account and for the accounts of customers and may at any time hold a long or short position in such securities.

Notwithstanding the above, BBVA has in place Chinese walls and conflict of interest procedures in compliance with the applicable regulations and its internal policies. Accordingly, if the provision of any service is finally agreed, the relevant BBVA's team/department/division would act in its capacity as provider of such services but not as potential financier or shareholder of any company or in any other capacity. For the avoidance of doubt, the provision of such services by said team/department/division in no manner will limit, condition or influence the decisions and/or actions that BBVA or its representatives may take in connection with the matters identified in the above paragraphs (in particular, as regards a particular transaction or company involving BBVA), being such decisions taken independently by the relevant persons and/or departments within BBVA.

Neither BBVA nor any of its affiliates, subsidiaries, officers, employees or directors accepts any responsibility or obligation nor will have any liability whatsoever for any loss, damage or claim of any kind, arising from or in relation to the use of this document or its contents, and specifically, without limitation, arising from or in relation to the ESG information/opinions provided by BBVA or any action taken in reliance thereon, in or from any jurisdiction, including but not limited to the present or future consideration of any transaction as sustainable.

This document is property of BBVA. Any denominations, designs, and logos are registered trademarks of BBVA. The information contained herein is provided to its recipients by BBVA on a strictly confidential basis and no to any other person. The information contained in this document is confidential and no part of this document may be (i) copied, photocopied or duplicated by any other form or means (ii) redistributed (iii) quoted or (iv) furnished to any other person or entity without the prior written consent of BBVA. No part of this document may be copied, conveyed or distributed into the United States of America or furnished to any person or entity in the United States or any US person. Failure to comply with these restrictions may breach the laws

BBVA