

International Market Consultation on the 1st H2Global Tender

Berlin, 13th July 2022







Agenda

1. Introduction

a. Welcome, Setting the Scene

2. Key Aspects of the Awarding Procedure

- a. Legal Procedural Process
- b. Eligibility and Selection Criteria Prequalification

3. Product Requirements / RED II

- a. Dealing with RED II
- b. Key Aspects of the DAs

4. Additional Sustainability Criteria

- 5. HINT.CO: Commercial Model
- 6. Hydrogen Purchase Agreement Draft Commercial Terms
 - a. Key Aspects of the Draft Commercial Term Sheet





Disclaimer

The content of the following presentation represents the **current status** of the preparations for the first H2Global tender. However, the content presented is still **subject to change**, hence the **final design** of the tender **might differ** from the documents and design presented.





Introduction

Federal Ministry for Economic Affairs and Climate Action HINT.CO GmbH





Purpose of the Market Consultation

As the first auctions are designed, it is necessary to have as precise as possible an understanding of the short-term potential availability of and demand for green PtX products.

To this end, the Federal Ministry for Economic Affairs and Climate Action is holding an international consultation of market players.





Key Aspects of the Awarding Procedure

Ernst & Young



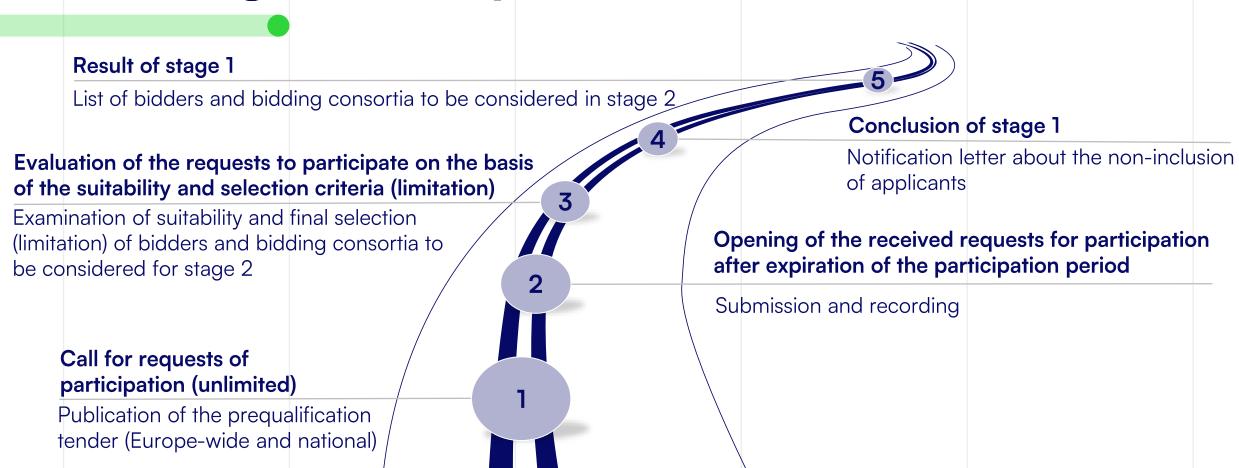
Disclaimer

All of the following information regarding the procurement process is preliminary/indicative. It is only intended to provide an impression of the general framework conditions.



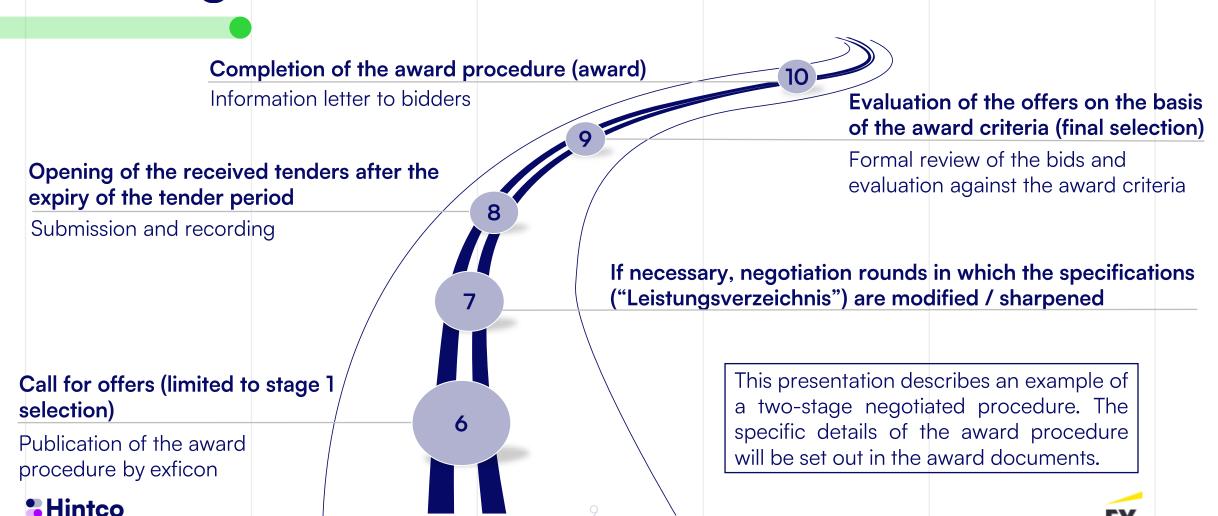


Outline of the Procurement Procedure — Stage 1: Prequalification



Hintco

Outline of the Procurement Procedure — Stage 2: Tender



Selection Criteria

Legal framework: Art. 58 Directive 2014/24/EU ("Directive") / §§ 45, 46 Vergabeverordnung ("VgV")

Nr. 1 VgV)

ratio between assets and liabilities
(Art. 58 par. 1 Directive, § 45
Abs. 1 Nr. 2 i.V.m. § 46 Abs. 4
Nr. 1-4 VgV)

references

creditworthiness

turnover

etc.

minimum yearly turnover (Art. 58 par. 3 Directive, § 45 Abs. 1 Nr. 1,

sufficient level of experience demonstrated by suitable references from contracts performed in

the past (Art. 58 par. 4 Directive, § 46 Abs. 3

Abs. 2 VgV)

• the necessary human and technical resources and experience to perform the contract to an appropriate quality standard (Art. 58 par. 4 Directive, § 46 Abs. 3 Nr. 2 VgV)

- quality assurance standards (Art. 62 par. 1 Directive, § 46 Abs. 3 Nr. 3 VgV)
- specification of the supply chain management and supply chain monitoring system (§ 46 Abs. 3 Nr. 4 VgV)
- environmental management standards (Art. 62 par. 1 Directive, § 46 Abs. 3 Nr. 7 VgV)
- average annual employment over the last 3 years (§ 46 Abs. 3 Nr. 8 VgV)

serve to explain the legal framework. The actual selection criteria are subject of the prequalification tender documents.

The present examples only





Identifying Candidates Legal framework: Art. 65 Directive 2014/24/EU ("Directive") / § 51 Vergabeverordnung ("VgV")

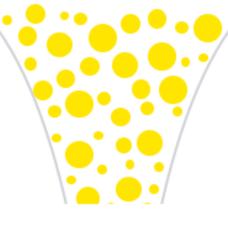
- Goal: limit the number of candidates meeting the selection criteria
- **Requirements:** "The contracting authorities shall indicate, in the contract notice or in the invitation to confirm interest, the objective and non-discriminatory criteria or rules they intend to apply, the minimum number of candidates they intend to invite and, where appropriate, the maximum number."
- "In the competitive procedure with negotiation ... the minimum number of candidates shall be three".

Suitable criteria for reducing the circle of suitable candidates (e.g.):

- References
- Turnover
- Human and technical resources and experience to perform the contract (e.g. "qualification levels")

The present examples only serve to explain the legal framework. The actual selection criteria are subject of the prequalification tender documents.





participants





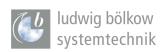
Indicative Timeline

Relevant aspects and (minimum) deadlines: • For the start of the bidding period, only the day on Relevant aspects and (minimum) deadlines: which the notice is sent is relevant - bidding period Participation or tender deadlines start on the day starts at 0:00 a.m. on the day after the notice is after the notice is sent to the Publications Office of sent. the European Union (regularly via TED). Standard deadline in negotiated procedure/competitive dialogue for submission of Expected Standard deadline in the negotiated End of procedure/competitive dialog for submitting bids: 30 days (day 0: sending via TED) August requests to participate: 30 days (day 0: sending via In the course of negotiations, sharpening of the 2022 TED) specifications is possible to a limited extent. Legal minimum 30 days term at least 15 days Legal minimum 30 days term Transition (esp. deadlines Status quo Pregualification (steps 2 - 5) regarding possible Tender (steps 7 - 9) complaints) According to experience approx. 2 - 3 months According to experience approx. 3 - 5 months Call for final bids (limited to Call for requests of participation stage 1 selection) The present schedule describes a two-stage negotiated procedure as an example. The specific details of the **Hintco** award procedure and the deadlines to be observed by the bidders are set out in the award documents.

Product Requirements / RED II

Federal Ministry for Economic Affairs and Climate Action Ludwig-Bölkow-Systemtechnik (LBST) TÜV SÜD





Electricity supply cases (RED II)

Delegated Act to Art. 27(3)



Case 1: Grid Mix

Partial renewable hydrogen

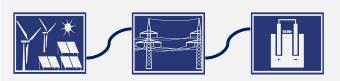
Renewable share of grid



Case 2: Direct connection

100% renewable hydrogen

New renewable installation



Case 3: PPA

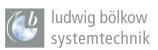
100% renewable hydrogen

- New renewable installation
- No aid to renewable installation
- Temporal correlation
- Geographic correlation

- 70% rel. to 94 g_{CO2eq}/MJ
- GHG emissions: grid mix
- 70% rel. to 94 g_{CO2eq}/MJ

- 70% rel. to 94 g_{CO2eq}/MJ





Delegated Acts

Draft Delegated Acts (DA) (version published by the European Commission on 20 May 2022 for public consultation) related to Renewable Energy Directive recast (RED II):

$DA_{27(3)}$

• Delegated Act establishing a Union methodology setting out detailed rules for the production of renewable liquid and gaseous transport fuels of non-biological origin (RFNBO) as defined in Art. 27(3) of RED II

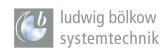
Commission Delegated Regulation (EU) .../... of XXX supplementing Directive (EU) 2018/2001 of the European Parliament and of the Council by establishing a Union methodology setting out detailed rules for the production of renewable liquid and gaseous transport fuels of non-biological origin; version published on 20 May 2022 as part of the public consultation by the European Commission

DA₂₈₍₅₎

 Delegated Act specifying a methodology for assessing greenhouse gas (GHG) emissions savings from RFNBOs and from recycled carbon fuels (RCF) as defined in Art. 28(5) of RED II

Commission Delegated Regulation (EU) .../... of XXX supplementing Directive (EU) 2018/2001 of the European Parliament and of the Council by establishing a minimum threshold for greenhouse gas emissions savings of recycled carbon fuels and by specifying a methodology for assessing greenhouse gas emissions savings from renewable liquid and gaseous transport fuels of non-biological origin and from recycled carbon fuels; version published on 20 May 2022 as part of the public consultation by the European Commission





Renewability

DA₂₈₍₅₎ Annex clause 3 specifies:

If the output of a process does **not fully qualify as RFNBO** or RCF, their respective shares in the total output shall be determined as follows:

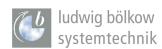
(a) the **fraction of RFNBO** shall be determined by dividing the relevant renewable energy input into the process by the total relevant energy inputs into the process. [...]

The relevant energy for material inputs is the lower heating value of the **material input that enters into the molecular structure** of the fuel.¹

For **electricity inputs** that are used to **enhance the heating value of the fuel or intermediate products** the relevant energy is the energy of the electricity.

For industrial off-gases, it is the energy in the off-gas based on their LHV. In case of heat that is used to enhance the heating value of the fuel or intermediate product, the relevant energy is the useful energy in the heat that is used to synthesise the fuel. Useful heat is the total heat energy multiplied by the Carnot efficiency[...]. Other inputs are only taken into account when determining the emission intensity of the fuel.





¹ For material inputs containing water, the lower heating value is taken to be the lower heating value of the dry part of the material input (i.e. not taking into account the energy needed to evaporate the water).



Additionality: Direct Connections



DA₂₇₍₃₎ Art. 3 related to directly connected installations specifies with respect to additionality:

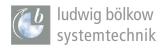
Rules for counting electricity sourced from directly connected installations as fully renewable

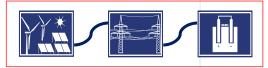
For the purpose of demonstrating compliance with the criteria set out in Article 27(3), fifth subparagraph, of Directive (EU) 2018/2001 for counting electricity obtained from direct connection to an installation generating renewable electricity as fully renewable, the fuel producer shall provide evidence on the following:

(a) [...]

(b) the installations generating renewable electricity came into operation not earlier than 36 months before the installation producing RFNBO. Where additional production capacity is added to an existing installation producing renewable liquid and gaseous transport fuel of non-biological origin, the added capacity shall be considered to be part of the existing installation, provided that the capacity is added at the same site and the addition takes place no later than 24 months after the initial installation came into operation;







Additionality: Grid Connection



DA₂₇₍₃₎ Art. 4 related to electricity sourced through power purchase agreements (PPA) specifies with respect to additionality: Rules for counting electricity taken from the grid as fully renewable [...]

- 2. Fuel producers may also count electricity taken from the grid as fully renewable if they have concluded one or more renewables PPAs [...], provided that the following criteria are met:
- (a) the installation generating renewable electricity came into operation not earlier than 36 months before the installation producing the RFNBO.

Where an installation generating renewable electricity [...] under a renewables PPA [...] that has ended, it shall be considered to have come into operation at the same time as the installation producing the RFNBO under a new renewables PPA. Where additional production capacity is added to an existing installation producing RFNBO, the added capacity shall be considered to have come into operation at the same time as the initial installation [...]

(b) the installation generating renewable electricity has not received support [...]

DA₂₇₍₃₎ Art. 7 related to transitional phase specifies with respect to additionality:

Transitional phase

Article 4(2), points (a) and (b) shall apply from 1 January 2027.









Case 3

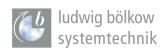
DA₂₇₍₃₎ Art. 4(2) point c related to electricity sourced through PPAs specifies with respect to temporal correlation: *RFNBO is produced:*

- (i) during the **same one-hour period** as the renewable electricity produced under the renewables PPA; or
- (ii) from renewable electricity from a **storage asset that is located behind the same network connection point as the electrolyser** and that has been charged during the same one-hour period in which the electricity under the renewables power purchase agreement has been produced;

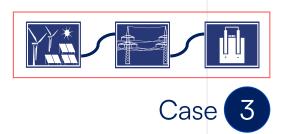
DA₂₇₍₃₎ Art. 7 2nd and 3rd subparagraphs related to transitional phase specifies with respect to temporal correlation: **Until 31 December 2026**, by way of derogation from Article 4 (2) (c)(i) and Article 4 (2) (c)(ii), the RFNBO shall be produced during the **same calendar month** as the renewable electricity [...]

For projects involving **State aid**, other than where the aid remunerates only capital expenditure, the derogations in the second paragraph shall not apply





Geographical Correlation: Europe



DA₂₇₍₃₎ 4(2) point d related to electricity sourced through PPAs specifies with respect to geographical correlation:

- (a) installation generating renewable electricity under the renewables PPA is located, or was located at the time when it came into operation, in the **same bidding zone** as the electrolyser; or
- (b) in a **neighbouring bidding zone** and electricity prices in the relevant time period on the day-ahead market referred to in point (c) in the neighbouring bidding zone is equal or higher than in the bidding zone where the RFNBO is produced; or
- (c) the installation generating renewable electricity under the renewables PPA is located in an **offshore bidding zone** adjacent to the bidding zone where the electrolyser is located.

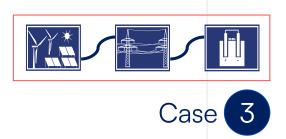
"Bidding zone" is defined in Article 2, point (65), of Regulation (EU) 2019/943 as follows:

(65) 'bidding zone' means the largest geographical area within which market participants are able to exchange energy without capacity allocation;





Geographical Correlation: Other Countries



We suggest the following two options for interpreting these provisions in countries where the definition of bidding zone cannot be applied:

Option 1:

- the maximum distance (as the bird flies) between power generation installation and hydrogen generation installation shall be 50 km; both installations must be connected by the grid and within the same country
- where the distance is higher, evidence must be provided that there are no grid congestions between power generation installation and hydrogen generation installation; both installations must be connected by the grid and within the same country

Option 2:

Bidding zone = interconnected grid connecting renewable installation and electrolyzer within the country





GHG Reduction: Fossil Fuel Comparator

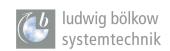
RED II Art. 25(2) specifies a GHG reduction of 70%

2. The greenhouse gas emissions savings from the use of renewable liquid and gaseous transport fuels of non-biological origin shall be at least **70**%* from 1 January 2021.

compared to the fossil fuel comparator defined in DA₂₈₍₅₎ clause 2:

For all renewable liquid and gaseous transport fuels of non-biological origin and recycled carbon fuels, the total emissions from the **fossil fuel comparator** referred to under point 2 shall be **94 gCO_{2eq}/MJ**.





GHG Reduction: CO₂ Sources

DA₂₈₍₅₎ Annex related to CO₂ sources specifies in clause 11:

Emissions from existing use or fate include all emissions in the existing use or fate of the input that are avoided when the input is used for fuel production. These emissions shall include the CO₂ equivalent of the **carbon incorporated in the chemical composition of the fuel** that was or would have otherwise been emitted as CO₂ into the atmosphere. This includes CO₂ that was captured and incorporated into the fuel provided that at least one of the following conditions is fulfilled:

- (a) The CO₂ has been **captured from an activity listed under Annex I of Directive 2003/87/EC** and has been taken into account upstream in an **effective carbon pricing** and is incorporated in the chemical composition of the fuel before 2036, or;
- (b) The CO₂ has been **captured from the air**, or;
- (c) The captured CO_2 stems from the **production or the combustion of biofuels, bioliquids or biomass fuels** complying with the sustainability and greenhouse gas saving criteria and the CO_2 capture did not receive credits for emission savings from CO_2 capture and replacement, set out in Annex V and VI of Directive (EU) 2018/2001, or;
- (d) The captured CO_2 stems from a **geological source of CO_2** and the CO_2 was previously released naturally; with the exception of captured CO_2 stemming from a fuel that is **deliberately combusted** for the specific purpose of producing the CO_2 and CO_2 , the capture of which has received an emissions credit under other provisions of the law.

Emissions associated with the inputs like electricity and heat and consumable materials used in the capture process of CO_2 shall be included in the calculation of emissions attributed to inputs.





GHG Reduction: Co-Processing

DA₂₈₍₅₎ Annex related to "co-processing" specifies in clause 2:

[...] The greenhouse gas emissions shall be determined by dividing the total emissions of the process concerning each element of the formula by the total amount of fuel stemming from the process and shall be expressed in terms of grams of CO_2 equivalent per MJ of fuel (g CO_{2eq} /MJ fuel). If a fuel is a mix of RFNBO, RCF and other fuels, **all (fuel) types shall** be considered to have the same emission intensity.





Additional Sustainability Criteria

Roundtable for Sustainable Biomaterials (RSB)
TÜV SÜD





Development of Additional Sustainability Requirements

Ancillary provisions Grant notice

Minimum Criteria

- Environmental
- Social

Supplementary Criteria

Reporting on relevant
 SDG indicators

International best practice, Sustainability Standards

Required Documentation

- Validation
- Verification
- Company-related
- Project-related





Minimum Criteria: Environment

- Environmental Impact Assessment
- Environmental & Social Management Plan
- Water
 - Ensuring water availability for downstream users
 - Water quality and water management system
- Desalination (if applicable)
 - Exclusively renewable energies
 - Sustainable handling of residues

- Conservation
 - Project areas not within / directly located next to conservation areas (e.g. nature reserves, wetlands, cultural sites)
 - Good conservation status regarding biodiversity and carbon storage is maintained
- No release of toxic substances
- Waste and pollutant management





Minimum Criteria: Social

- Social impact assessment
- Compliance with ILO standards
 - C014 weekly rest
 - CO29 no forced labour
 - C098 right to organise + collective bargaining
 - C100 right to equal pay
 - C111 no discrimination
 - C138 minimum age
 - C183 maternity protection

- Living wage
- Access to health services / health insurance
- Local value creation / competence gains: stakeholder & local SME participation
- Gender: active involvement of women in project;
 no gender-based violence / harassment
- No forced resettlement / illegal land grabbing





Minimum Criteria

Compliance with additional sustainability criteria will be assessed during tendering procedure, before delivery of first products and during operational phase.

- Validation: process for evaluating the reasonableness of the assumptions, limitations and methods that support a statement about the outcome of future activities
- Verification: process for evaluating a statement of historical data and information to determine if the statement is materially correct and conforms to criteria

ISO 14064-3:2019





Example: Environmental and Social Impact Assessment

Requirement

An environmental and social impact assessment, which takes into account the entire supply chain in addition to the production sites, must be carried out. Both assessments should comply with an international Environmental Impact Assessment (EIA) and be carried out by the operator.

Validation

Draft EIA acc. to IFC - Performance Standard 1: Assessment and Management of Environmental and Social Risks and Impacts, or Worldbank ESS1; and

Draft SIA acc. to IFC - Performance Standard 1: Assessment and Management of Environmental and Social Risks and Impacts or RSB SIA guidelines (RSB-GUI-01-005-01) or Worldbank ESS1

Verification

Final EIA and SIA

NB: The IFC — 1 Standard includes establishment of management programs, organisational capacity, stakeholder engagement, as well as grievance mechanisms





Example: Water Supply

Requirement

The water supply for the production of hydrogen must be sustainable so that no impairment of quality or water scarcity is contributed to the project.

Validation

- Assessment of water availability and water scarcity in the area
- Water impact assessment (as part of EIA, assessing impact on water table, natural watercourses and reservoirs)
- Water management plan (based on local rainfall conditions, including optimisation of water use, waste water
 - reduction, water recovery
- Water sourcing concept
- Consultation with relevant local stakeholders

Verification

- Updated plans and assessments
- Regular monitoring

NB: For the regional assessment, resources such as WRI Aqueduct Water Risk Atlas can be used: https://www.wri.org/aqueduct





Example: Conservation

Requirement

 Project operator must ensure that project areas along the entire value chain are not located in or directly on the border with nature reserves, landscape conservation areas, marine protected areas, special protected areas (e.B bird sanctuaries), areas with high biological diversity (e.B. rainforests), areas with high natural carbon stocks (e.B wetlands) and in areas with important cultural sites.

• Project operator must maintain conservation status with regard to biodiversity and natural carbon storage in

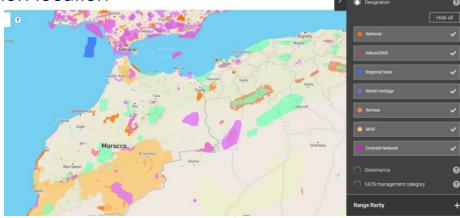
order to avoid ecological consequential damage at the production location

Validation

- Land use plan
- Satellite images
- Documentation of assessment tools (e.g. GRAS or IBAT)
- (Consultation of regional and local stakeholders)
- Draft EIA, Draft ESMP

Verification

Final EIA, Final ESMP



NB: For locally important conservation values and areas used for provisional services, local stakeholder consultations may næd to be conducted





Example: Land Grabbing

Requirement

 Forced resettlement or illegal land grabbing must be ruled out.

Validation

- Land use plan, satellite images before project start
- Plan of stakeholder consultation about land rights and land use prior to operations
- Grievance procedures
- Policies to avoid involuntary resettlement
- No verification possible in case there are disputes about the tenure agreements of the land among stakeholders

Verification

- Contracts / records of land ownership or lease
- Records of stakeholder consultation

NB: Free, Prior and Informed Consent (FPIC) is a specific right that pertains to indigenous peoples and is recognised in the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). It allows them to give or withhold consent to a project that may affect them or their territories. The FPIC-360° (https://fpic360.org) tool can be used to implement and monitor FPIC processes





Example: Local Value Creation, Competence Gains and Gender

Requirement

• The contribution to local value creation as well as the participation of local and civil law actors is to be ensured, e.g. by ensuring the competence gains of local actors and by actively involving local SMEs in the project. Women must be actively involved in the implementation of the project. The tenderer shall provide evidence of compliance with these requirements.

Validation

- Action plan with key targets regarding:
- stakeholder engagement, and
- regional capacity building, and
- involvement of local SMEs, and
- one of the following: 1) creation of year-round

and/or long-term jobs; 2) establishment of governance structures to support empowerment of rural communities; 3) use of locally produced bioenergy; 4) shareholding options, local ownership, joint ventures and partnerships with local communities; and 5) social benefits for local communities such as building and servicing of clinics, homes and school

Verification

- Evidence / status of fulfilment of the key targets defined in the action plan
- Measurement of the key targets, with disaggregated reporting data to report benefits achieved for women, indigenous communities and vulnerable people





Example: Implementing the SDGs

Requirement

Bidders must explain how the project supports the implementation the UN Sustainable Development Goals (SDGs) in the respective partner country

Validation

- Action plan including targets on the following aspects (covering relevant SDG indicators as defined by TÜV SÜD):
 - Energy efficiency policy
 - Material / resource efficiency policy
 - Buildings with sustainability certificate
 - GHG reduction programme

- Reduction of air pollution + air pollution management system / mitigation strategy
- Registration of workers in the social security system
- Availability of child care service is available
- Training / education programme for local workforce
- Programme for involvement of local MSMEs (local value creation

Verification

Reporting on targets



















HINT.CO: Commercial Model

HINT.CO

B E T Büro für Energiewirtschaft und technische Planung





Executive Summary

- In mature commodity markets the roles and responsibilities of Producer, Midstreamer and Consumer are clearly assignes along the value chain.
- Due to resource restrictions and grant stipulations HINT.CO GmbH will not be in the position to own and manage the risks usually owned by the Midstreamer.
- HINT.CO is a special purpose entity that has been established to perform the operations of the H2Global support scheme. Hence it will buy products using long term Hydrogen Purchase Agreements (HPA) with an annual contract value determined by the annual support scheme budget.
- HINT.CO is capitalized with 25.000 € equity, deploying very limited manpower, possessing neither logistics infrastructure nor risk capital. The scope of HINT.COs operations will be limited to few administrative processes. Hence the roles and responsibilities of the contract counterparties must be adapted to HINT.COs unique requirements.
- Against this backgrounds the HINT.CO team is in the process of developing a commercial model for the company that consists of HPA and Hydrogen Sales Agreements (HSA). A draft of the Commercial Terms for the HPA has been shared in the info material of this market consultation for comments.

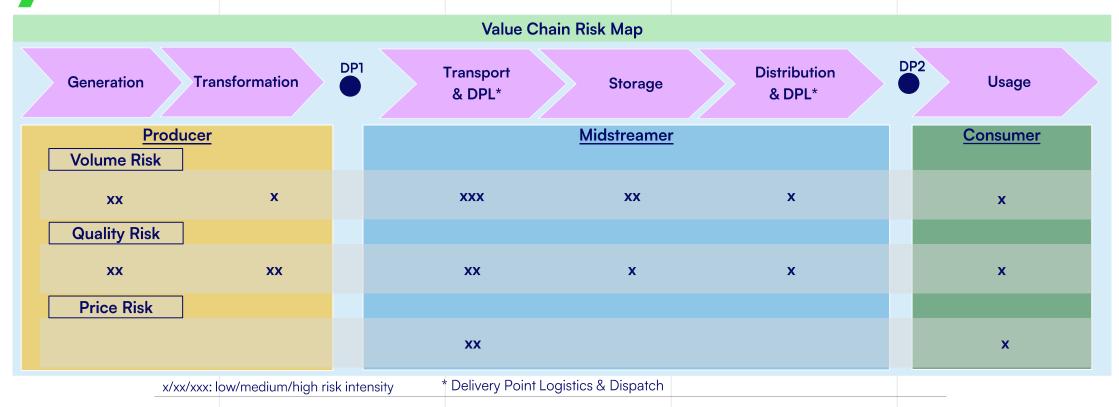
When commenting on the draft Commercial Terms please bear in mind these unique characteristics of HINT.COs scope and mandate





Usual Risk Allocation in the Value Chain

In the value chain the roles and responsibilities of Producer, Midstreamer and Consumer are clearly assigned



In mature commodity markets risks along the value chain are owned and managed by Producer, Midstreamer and Consumer respectively





HINT.CO is a special purpose entity that has been established to perform the operations of the H2Global support scheme

Framing of HINT.COs role in the Value Chain



The objective of the H2Global scheme is to accelerate the ramp-up of the international green hydrogen value chain. HINT.CO is the beneficiary of a 10-year support scheme by the BMWK of 900 Mio € in total. This grant will be utilized to conclude long term purchase agreements for green products.

HINT.CO is going to sell these green product by concluding short term - up to one year - sales contracts with multiple customers.

HINT.CO is entitled to deploy the support scheme funds solely for making up any revenue difference between the proceeds from product sales and procurement expenditure. HINT.CO is not supposed to utilize support scheme funds for providing any kind of services - e.g. product logistics, storage or risk management — in the value chain.



HINT.CO has been established with an equity of 25.000 €, accordingly HINT.COs balance sheet does not provide any risk capital.

To fund its very lean operations HINT.CO is going to charge a service fee and a risk fee to its counterparties from purchase.

To fund its very lean operations HINT.CO is going to charge a service fee and a risk fee to its counterparties from purchase and sales contracts, respectively.



Due to its unique set up HINT.CO does not possess the resources - manpower, logistics infrastructure or risk capital - a Midstreamer regularly provides to the value chain. Hence in this particular case activities and risks usually managed by the Midstreamer will have to be assigned to the counterparties of HINT.CO.

Only by fully de-risking HINT.COs operations the long-term purchase agreements HINT.CO is going to conclude will become bankable.

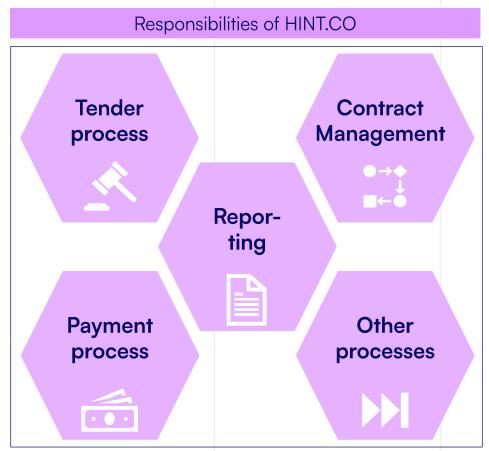


HINT.CO is in the process of designing a suitable commercial model following the guiding principle that risks shall be allocated to such counterparty that is best positioned to bear and manage the respective risk. At no time will HINT.CO possess any product physically.





The scope of HINT.COs operations will be limited to few administrative processes



HINT.CO assumes only selected operations while contractually becoming a counterparty to producers and consumers

Detailed description (non-exhaustive list)

Conducting tender processes

- HPA tenders for up to three products
- Annual HSA tenders
- HSA tender prequalification

Contract Management

- HPAs
- HSAs

Managing the payment process

- Invoicing of customer
- Funding call to BMWK
- Payment to producer

Reporting

- BMWK requirements
- EU Commission requirements

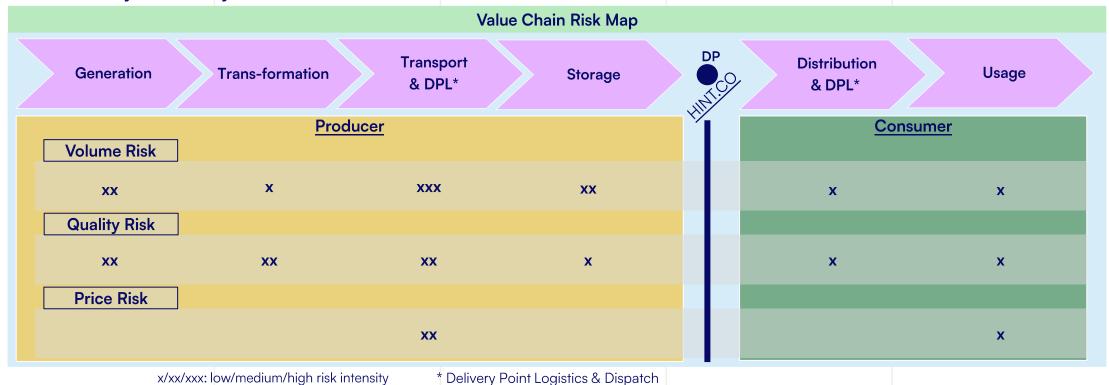
Other Processes

- Operating payment accounts
- Monitoring of delivery process and confirmations (trigger for payments)
- Monitoring of quality auditing



Risk Allocation in the H2Global Value Chain

Due to resource restrictions and grant stipulations HINT.CO will not be in the position to own and manage the risks usually owned by the Midstreamer



In comparison to the conventional value chain the roles and responsibilities of the contract counterparties must be refined and adapted to HINT.COs unique requirements





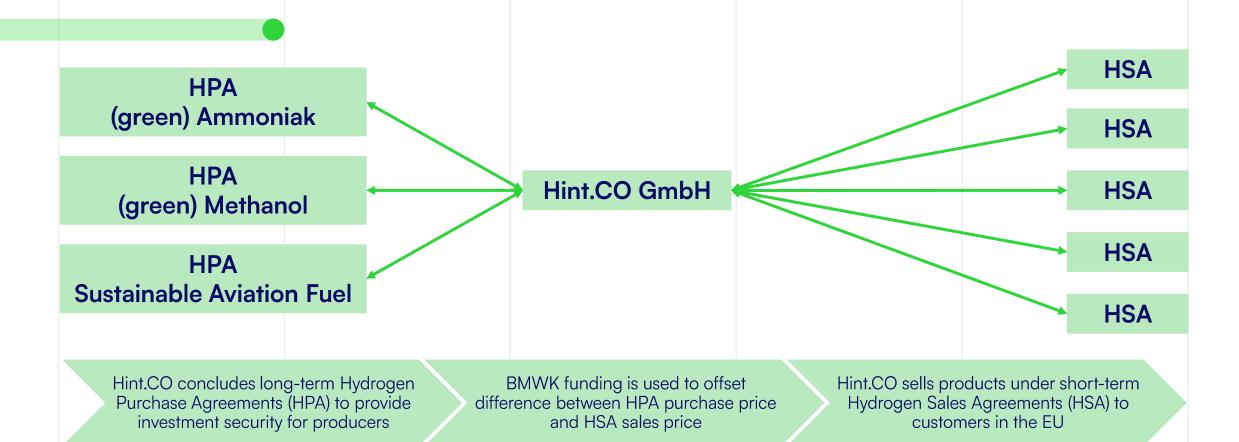
Term Sheet: Hydrogen Purchase Agreements

Freshfields Bruckhaus Deringer





H2Global — Contractual Landscape







Commercial Key Points

- **HPA Tender:** Global tender procedure production site outside of the EU and EFTA states
- Parties: HINT.CO and winning bidder as determined by tender
- Products: green ammonia, green methanol, sustainable aviation fuel (one HPA for each product)
- Term: 10 years (1 January 2024 31 December 2033)
- Quantity: Determined by annual funding amount (approx. € 34m as of 2026) and agreed price
- Price: Includes product cost, transport charge, logistics & dispatch and import duty
- Delivery: A port in Germany, Belgium or the Netherlands at agreed intervals
- "Take or pay": HINT.CO will assume commercial risk that products cannot be sold at competitive prices
- Product quality: Determined by technical product specifications, additional product specifications and additional sustainability requirements
- Contractual safeguards: Performance bond, penalty payments, termination rights in favor of HINT.CO
- → Commercial terms are (partially) determined by EU state aid approval and BMWK funding decision





Discussion Point: Port of Delivery / Handling of Products

- The Port of Delivery must be a port in Germany, Belgium, or the Netherlands (Delivery Region).
- Determined by Seller with approval by HINT.CO. Mutually agreed change of Port of Delivery within Delivery Region is possible with 18 months notice period.
- Transfer of title and risk from Seller to HINT.CO (and from HINT.CO to HSA Customer) will take place at the flange of the port facility (Delivery Point) where the HSA Customer takes over the Product.
- Seller is responsible for the Product transport, storage and port logistics up to delivery to the Delivery Point. This
 does include the import of the Product into the EU.

→ Interested parties are invited to comment particularly for SAF on the delivery concept.





Discussion Point: Delivery Schedule

- Seller will deliver the annual quantity of Product in a mutually agreed delivery schedule complying with the following conditions:
 - [2-12] [equal] lots,
 - spread out [evenly] over the entire year and at predetermined dates,
 - including flexibility of delivery date of [+/- 5] working days,
- Seller will provide customary proof of delivery to HINT.CO.
- DDP Incoterms 2020 to apply.
- Transport and logistics shall take place in compliance with all applicable safety regulations.

→ Interested parties are invited to comment separately for ammonia, methanol, and SAF which adjustments to the delivery schedule, if any, would have a significant impact on reducing the contract price.





Discussion Point: Technical Product Specifications

Each Product will have to comply with technical product specifications (subject to a warranty) upon delivery:

<u>Ammonia</u>		<u>Methanol</u>		SAF (renewable electricity based)
Ammonia	min. 99,8% (mass)	Methanol	min. 99,85 wt%	to be determined
Water	max. 0,2% (mass)	Water	max. 0,100 wt%	
Oxygen	max. 10 ppm (mass)	Acetone	max. 30 mg/kg	
Oil	max. 5 ppm (mass)	Ethanol	max. 50 mg/kg	
		Chlorine	max. 0,5 mg/kg	

→ Interested parties are invited to comment (also from an off-taker sector-perspective) separately for ammonia, methanol and SAF on technical specifications a) would be required to fully mirror prevailing conventional product specs, b) would have a material impact for reducing the contract price.





Discussion Point: Contract Price & Payment

- HINT.CO pays Seller the contract price for duly delivered Product quantities.
- The contract price (CP) consists of the price elements of the contract price formula:
- \bullet CP = P + T + LD + ID
 - P = Product Price (fixed)
 - T = Transport Charge (variable)
 - LD = Logistics & Dispatch Charge (variable)
 - ID = Import Duty
- Payments are due by the [25th] day of the [second] month after the month of delivery.

→ The contract price formula envisages variable elements due to the term of the HPA. Interested parties are invited to comment on whether a fixed price for the components T and LD would also be feasible for the entire term of the HPA.





Partner



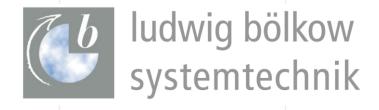
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You have the possibility to comment on the process in writing by 31st July 2022 by emailing marktkonsultation-h2global@bmwk.bund.de.





