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Hydrogen Sale and Purchase Agreement: Challenges in Contract Standardization

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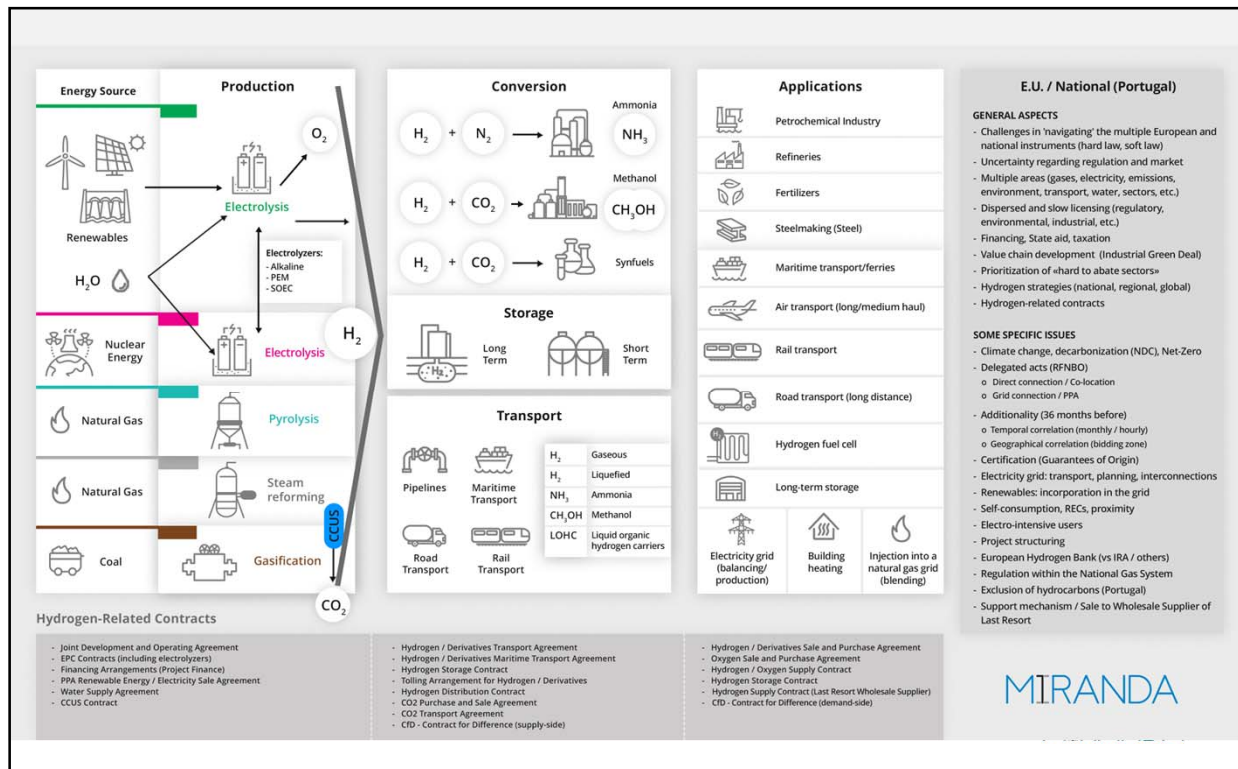
AIEN's Hydrogen Taskforce

- ❑ In December 2021, AIPN expanded its industry mandate from “hydrocarbons and gas fired power plants” to “energy”, and changed its name to AIEN.
- ❑ Proven track record in developing O&G model agreements.
- ❑ Establishment of three sustainability taskforces on: CCS, ESG Compliance, Hydrogen (“H2TF”).
- ❑ H2TF commenced work in Q1/2022, with a primary goal: to ascertain if it was possible to H2 standardise agreements.
- ❑ Three Working Groups set-up, with the following outcome:
 - (i) Model ‘Hydrogen Joint Development and Operating Agreement’ (April 2024, new drafting committee);
 - (ii) Model ‘Hydrogen Sale and Purchase Agreement’ (April 2024, new drafting committee);
 - (iii) Term-Sheet, ‘Financing of Hydrogen Projects’ (ongoing).
- ❑ Focusing on the term-sheet prepared as basis for the second drafting committee on a model ‘Hydrogen Sale and Purchase Agreement’

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H2 (Derivatives) SPA

- ❑ AIEN model H2 (Derivatives) SPA expected to incorporate contractual terms and conditions for a long term, renewable / low carbon hydrogen sale / offtaking.
- ❑ Model H2 SPA expected to be **Industry accepted**:
 - (i) Bankability;
 - (ii) Look to comparable industries and other model forms;
 - (iii) Include optionality;
 - (iv) Reflect different offtake principles;
 - (v) Technology neutral (?);
- ❑ **Balanced**, with input from: commercial; legal; academics; project sponsors; offtakers; financiers;
- ❑ **Country neutral**, considering that:
 - (i) No accepted global certification standard exists;
 - (ii) Certification determined by the corresponding environmental attribute in the offtake jurisdiction;
 - (iii) Carbon methodology for certification to vary depending on destination market.
- ❑ Timeline for delivery: Q1/2025 – (i) initial H2 (Derivatives) SPA, (ii) guidance notes, and (iii) long-form term-sheet.

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Some Drafting Challenges

- ❑ **Form of Agreement**: Full-fledged model agreement.
- ❑ **Product**: Hydrogen or derivatives (e.g. ammonia, methanol, liquid organic hydrogen carrier – LOHC).
- ❑ **Carbon intensity**: Renewable (consider whether the model agreement can be technologically neutral), with product to meet defined specifications and carbon methodology.
- ❑ **Delivery terms**: Incoterms depending on case (in principle, DAP / DES), possibly including optional clauses / guidelines for amendments to allow others (e.g. FOB, CIF, CFR, EXW).
- ❑ **Midstream activities**: Responsibility for midstream activities may be difficult for certain project financed developers.
- ❑ **Delivery point, title and risk**: To be tailor-made to project structure, offtaking, and financing.
- ❑ **Transportation and delivery operations**: Dependent on project structuring, transportation, risk sharing, offtake, etc.
- ❑ **Offtake**: To be agreed; (i) Steady Supply; (ii) Push Model; or (iii) bespoke offtake principles (e.g. hybrid).
- ❑ **Offtake structure**: H2 SPA to be long term agreements, with limited flexibility to amend, terminate, assign or replace?

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Some Drafting Challenges

- ❑ **Product specifications / Certification:** Chemical, production and GHG specifications (ISO standards), and it may include product certification (iaw defined standards).
- ❑ **Shortfalls | Failure to take:** Depends on offtake principle. In Steady Supply similar perhaps to gas / LNG. The Push Model requires different approach. Buyer may wish precedence on excess product.
- ❑ **Liability:** Dealing in a standardized manner with supply, technology, regulation, value-chain, project structuring and financing uncertainties.
- ❑ **Off-spec product:** To cover chemical, production and GHG specifications. Auditing, accounting testing important.
- ❑ **Boilerplate clauses:** Some adaptation could be required depending on various aspects of the agreement, project structure, offtake principle, specification, certification, etc..

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Final Remarks

- ❑ Designing model agreements for the hydrogen space not an easy undertaking due to uncertainties (e.g. NEOM project).
- ❑ H2 SPA: basis for discussing contract terms and conditions, to be adapted to project specificities.
- ❑ Various fundamental aspects are critical:
 - (i) Project structuring (e.g. size, level of integration);
 - (ii) Offtaking principles and offtakers (location);
 - (iii) Regulatory and public incentives environment;
 - (iv) Product, production, GHG specs;
 - (v) Transport, storage, receiving terminals;
 - (vi) Financing and incentives.
- ❑ “Moving goal posts” – examples:
 - (i) The implications of ‘White Hydrogen’;
 - (ii) Innovation and technology (e.g. methane pyrolysis);
 - (iii) Geopolitical aspects / International cooperation.

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