

Political Risk in Emerging Market Green Hydrogen Projects

Where do emerging markets fit in?



It goes without saying that the phrase “green hydrogen” has been the buzzword of the global energy markets for the past year or so. With ambitious worldwide targets to decarbonise, reduce emissions and increase energy security, there is no doubt that in the mid to long-term, green hydrogen will play a crucial role in delivering the energy transition.

One of the key obstacles to delivering green hydrogen projects in the short-term, is the cost of production – the current levelised cost of green hydrogen production lies in the range of USD 3-6 per kg, making it uneconomical. The production cost of green hydrogen depends primarily on the capital cost of electrolyzers, their capacity or utilisation factor and on the procurement cost of renewable electricity¹. This is where many emerging markets have an advantage – Africa, in particular, has significant renewable energy potential, access to large areas of undeveloped land, and a high quantity of platinum group metals (used in electrolyzers to produce hydrogen) – reducing the cost of production.

As a consequence, we have seen a number of green hydrogen projects announced over the past year or so across the African continent, including the 3GW Tsau Khaeb project in Namibia, which is being developed by Hyphen Hydrogen Energy (with a production capacity of 300,000 tons per annum (tpa) and a cost of

USD 9.4bn², as well as Mauritania’s 1.7 million ton per annum (mtpa) Aman project, which is being developed by CWP Global at a cost of USD 40bn³. As a firm, we are providing early-stage legal advice on a number of (confidential) green hydrogen projects across the African continent.

Risk allocation and structuring (generally)

Structuring a **bankable** green hydrogen project is complicated. Before committing to lend to a green hydrogen project on a project-finance basis (with recourse being limited to the cash-flows of the project), lenders will need to be satisfied with the overall risk profile of the project (in the same way as any infrastructure project with private sector involvement), and that risks have been allocated to those best able to bear them (whether this be sponsors, insurers, financiers or governments).

In terms of the potential scope of risks – these are also similar to other large-scale power or infrastructure project risks – including offtake or market risk (in this context, ensuring that there is a long-term offtake of hydrogen with a creditworthy buyer and at a fixed price), construction risk, technology risk (which is usually more acute for newer technologies), fuel supply risk (in this context, renewable power supply risk), access to market risk, transport and infrastructure risk.

With a green hydrogen project, there is the added complication of:

- project-on-project risk (for example, the risk of delays to the construction of the upstream renewable energy generation facilities and/or any of the

¹ Source:

<https://www.gep.com/blog/strategy/Green-and-blue-hydrogen-current-levelized-cost-of-production-and-outlook#:~:text=The%20current%20levelized%20cost%20of,procurement%20cost%20of%20renewable%20electricity>

² Source:

<https://furtherafrica.com/2023/03/31/green-hydrogen-projects-underway-in-africa-in-2023/>

³ Source: <https://african.business/2023/11/apo-newsfeed/aman-green-hydrogen-project-in-mauritania-advances-msgbc-panel-confirms-advanced-technical-studies>

downstream hydrogen transportation and storage infrastructure, leading to the payment of penalties under the



upstream / downstream project documents); and

- risks associated with the use of third-party or shared infrastructure (such as ports and logistics infrastructure, rail and roads serving multiple customers).

On top of these risks, lenders (and developers) will also need to think about:

- **“Buyer political risks”** – i.e. the risk associated with the withdrawal of (or non-existence of) financial support provided by the buyer’s government (for example, the withdrawal of subsidies which are required in order to enable green hydrogen to compete with fossil fuel alternatives and to enable the buyer to offer an economically viable fixed price offtake); and
- **“Host country political risks”** – i.e. the risk of war, civil commotion, expropriation, as well as the risk of change in law and change in tax over the lifetime of the project, FX risk (being the risk associated with the convertibility, availability and transferability of hard currency) and the risk of default or non-compliance

by state-related entities, in the relevant host country,

each of which will be a fundamental consideration for lenders looking to finance green hydrogen projects in emerging markets.

How should “buyer political risks” be allocated?

The financial support offered from the buyer’s host government will be fundamental in ensuring the long-term economic viability of any green hydrogen project. Given its importance, we would expect lenders to undertake comprehensive due diligence to fully understand the structure of the support that is being offered, including any applicable regulatory framework that sits behind it.

The risk of the buyer’s government changing the support that it offers in a manner that has an effect on the offtake agreement, should be allocated to the buyer, particularly given that the seller/producer may not be aware of all of the detail of the government support underpinning the project⁴.

The only exception to this is where a government provides financial support to a project directly – for example, by entering into a contract for difference (“CfD”) with a seller/producer of green hydrogen. There are various ways of structuring a CfD, but in a green hydrogen context, a CfD essentially gives the recipient a “top-up” or subsidy that represents the difference in cost between green hydrogen and existing grey hydrogen or natural gas. Whilst a number of CfD subsidy schemes have been announced by governments around the world (including the UK, France, Germany and Japan), this is not something that we are seeing (or would expect

⁴ Source: Financing a world scale hydrogen export project (Oxford Institute for Energy Studies, January 2023).

to see) offered by governments in emerging market countries.

How is “host country political risk” typically allocated?

On a “typical” grid-connected emerging market power project (with a domestic state utility as offtaker), lenders expect “host country political risk” to be borne in full by the relevant host government (being the party that is seen as being best placed to assume that political risk). The host government will therefore enter into a government support agreement (which is also sometimes referred to as an “implementation agreement” or “concession contract”) (a “**Government Support Agreement**”), documenting the terms on which the government provides support to the project company, including in relation to:

- obtaining (and renewing) consents and authorisations that are required for the project;
- obtaining access to land required for the project;
- tax exemptions and other fiscal benefits;
- opening foreign currency accounts (both onshore and offshore);
- the availability of hard currency; and
- converting and transferring hard currency offshore.

In addition to the “general support” referred to above, the Government Support Agreement may also set out the terms upon which the government will “stand behind” payments which are to be made by the state utility under the offtake agreement, provide financial compensation for changes in law or changes in tax (i.e. economic stabilisation) and, ultimately, pay termination compensation in the event that there is a termination of the Government Support Agreement / offtake agreement following the occurrence of a prolonged political risk event. The amount of

termination compensation payable by government typically covers the entirety of the outstanding debt and equity invested in the project (plus an element of equity return), thus keeping both lenders and developers “whole”.

How should “host country political risk” be allocated on an emerging market green hydrogen project?

In an emerging market green hydrogen project, the offtaker of the relevant hydrogen product is unlikely to be a domestic state offtaker. As a consequence, there is likely to be less incentive for the host government to provide financial support for political risks associated with the project (although prospective tax revenues, growth in GDP, and the desire to meet energy transition targets may be factors which weigh in favour of providing support to the project). Whilst we would still expect the host government to enter into a Government Support Agreement to provide certain “general support” to the project of the nature described above (including financial protection in respect of changes in law and change in tax), we would not necessarily expect the host government to contractually assume the full **financial** risk of political risk events.

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As a consequence, and in order to ensure that emerging market green hydrogen projects remain bankable, these political risks will need to be financially allocated to third parties or mitigated by other means.

So how can “host government political risks” be mitigated if not fully assumed by the host country?

Similar to the approach taken on large-scale LNG projects, project developers (and their lenders) will need to look at other options to mitigate political risk, including:

- bilateral investment treaties (“**BITs**”);
- involving export credit agencies (“**ECAs**”), multilateral development banks (“**MDBs**”) and development finance institutions (“**DFIs**”);
- political risk insurance (“**PRI**”); and
- offering the host government an equity stake in the project.

Looking at each of these in more detail:

BITs are international agreements establishing the terms and conditions for private investment by nationals and companies of one country to another country. They typically provide (amongst other things) protection in respect of expropriation, the right to transfer funds related to an investment, into and out of the host country, and access to international arbitration in the event of a dispute between an investor and a host government. It will therefore be extremely important to ensure that developers structure their equity investment in such a way that they can benefit from a BIT entered into by the host country. A list of BITs by country can be found on the UNCITRAL website.

ECAs are government-owned or supported agencies established to promote the export of goods and services from their country. They do so by offering direct loans or guarantees to projects (under which commercial banks or bond investors can invest). The reason why ECA involvement is invaluable in financing and developing large-scale projects in emerging market economies, is because ECAs can accept or cover certain political risks that commercial lenders (as well as certain MDBs and DFIs)

cannot, including in respect of war, political violence and expropriation. Some of the larger ECAs also have the capacity to provide very substantial loans, supporting projects where the international bank or bond markets simply do not have sufficient capacity to lend. ***In the context of an emerging market green hydrogen project, with extremely high capital costs, as well as exposure to host country political risk, ECA involvement (e.g. from the offtaker or EPC contractor’s country) is likely to be a necessity and not just a “nice to have”.***

MDBs and **DFIs** can also provide “soft support” to projects by virtue of what is commonly referred to as their “halo effect”. Having MDBs and/or DFIs involved in a project allows lenders and developers to benefit from the leverage and influence that these institutions have with host governments, thereby reducing the risk of political interference and providing additional channels for the informal resolution of disputes if things do go wrong.

PRI can be taken out by both lenders and equity investors, to ensure that they are repaid debt / equity invested in a situation where the project is damaged or destroyed by, or as a result of, political violence. They can also provide cover in respect of currency restrictions which prevent the transfer of funds abroad, as well as in respect of expropriation. There are a number of PRI products available in the market from both public and private insurance companies. Public sources include ECAs, as well as MDBs such as the World Bank. Investors can also obtain PRI from private commercial insurers or brokers, tapping the commercial insurance market such as Lloyds of London. It is worth noting that the scope of coverage, pricing, tenor and eligibility can vary widely by PRI provider, host country and type of investment, and is unlikely to cover 100% of any loss. Many providers may require the host government ultimately to stand behind the political risks covered by the relevant policies.



Offering the host government an equity stake (whether fully funded or carried) is another option to consider when thinking about ways to mitigate political risk. Whilst there are clearly potential downsides from an investor / lender perspective (in terms of involvement in decision making processes and potential interference in the project), the benefits can outweigh the economic factors involved, insofar as the host government is highly incentivised to ensure that the Project reaches commercial operations and remains in production for the entirety of a project's lifespan.

Conclusion – “plugging the gaps”

In conclusion, it is clear that there will likely be “gaps” in terms of host government support for political risks, when comparing emerging market green hydrogen projects with emerging market power projects. A better comparison, perhaps, are large-scale LNG projects, which involve comparable capital costs and a non-domestic offtake. On these projects, both developers and lenders have had to get comfortable “plugging the gaps” with the various risk mitigation tools and products that we have outlined above.

Rather than overlooking or ignoring these gaps, it is necessary to embrace them from the outset, and ensure that appropriate early stage

advice is sought to with respect to the scope of government support that is envisaged for a project, the structuring of the debt and equity package (including the proposed involvement of ECAs, MDBs and DFIs), as well as the suitability / necessity for PRI cover (amongst other matters).

Getting these things right from the very beginning and communicating realistic expectations to the relevant host government in terms of the likely support that they will be required to provide, will, without doubt, facilitate the realisation of these ground-breaking new projects in emerging markets across the globe.

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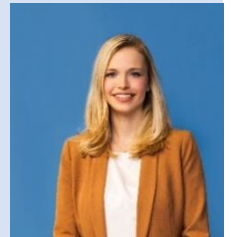
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