White Paper Series: Good Green Hydrogen Contracting

The reduction of cost of capital for green hydrogen projects and Bilateral Investment Treaties

Summary

This paper explains the role of bilateral investment agreements (BITs), including intergovernmental agreements and state-to-investor host government agreements as tools to reduce the cost of capital for projects in developing countries. It considers the case of Argentina and provides recommendations that are applicable to other host government.

This publication is a first step in a broader effort to analyse and develop good practices in BITs and other legal instruments which can contribute to the enabling environment of the green hydrogen economy.

Achieving global net-zero emissions by 2050 will requires collaboration among stakeholders and significant investment to transition to renewable energy sources and technologies. The scale of investment needed for this transition is estimated at trillions of dollars annually.

Green hydrogen will play a key role in reducing emissions from hard to abate sectors, but challenges such as high costs and regulatory uncertainties hinder investment. Developing countries with renewable resources can attract investment by negotiating project-specific agreements based on existing bilateral investment treaties, to provide clarity, stability, incentives and legal protection to investors. Governments can create a standardised investment agreement template derived from a detailed project-specific agreement negotiated with a lead project. This could not only reduce risks for investors but also aid other developing nations with favorable renewable resources, enabling them to compete in the global green hydrogen market.

White paper (August 2023), Tom Dimitroff, General Counsel and Head of Strategy, CWP Global

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Foreword

Bilateral Investment Treaties (BITs) can reduce the cost of capital and become a key tool in enabling large scale renewable energy and green hydrogen projects. Climate change will not be avoided without the massive scaling up of renewable energy and green hydrogen foreign direct investment in developing countries and emerging economies. The cost of capital in these markets is often higher than in developed countries. To make investments competitive, efforts need to be made to lower country risks.

Tom Dimitroff, General Counsel and Head of Strategy at CWP Global has written this paper setting out how BITs can contribute to this lowering of risks and lowering of the costs of capital.

As Tom writes, within many systems of law, BITs and Intergovernmental Agreements, as state-to-state treaty commitments, will enjoy high standing within the hierarchy of legal norms, ranking below the constitution but above laws of ordinary application.

The reputation of BITs has been mixed. The Wikipedia article on BITs notes: "BITs give rights to investors, but give obligations only to States. Whilst preliminary objections by states are becoming more common in cases instituted under BITs, NGOs have spoken against the use of BITs - stating that they are essentially designed to protect foreign investors and do not take into account obligations and standards to protect the environment, labour rights, social provisions or natural resources. Moreover, when such clauses are agreed upon, the formulation is legally very open-ended and often unpredictable. A counter-claim may be a way of rebalancing investment law, by allowing States to file claims against investors, as a means to sanction investor misconduct."[1]

The Green Hydrogen Organisation (GH2)'s mission is to ensure the responsible enabling environment for the green hydrogen economy. We have included strict environmental, social and governance requirements in the Green Hydrogen Standard and we have worked with a wide group of civil society organisations, lawyers, companies and governments within Good Green Hydrogen Contracting – for People and Planet on developing and sharing good international rules and practice on sustainability.

Concerns about BITs must be taken seriously. There is a need for strong international frameworks safeguarding the best environmental, social and governance practices. At GH2, we think there is a need to carefully consider how BITs, with the appropriate safeguards in place, can contribute to fighting climate change by enabling substantial foreign direct investments in developing countries and emerging economies. This needs to be coupled with strong investment frameworks which safeguard the rights and

[1] https://en.wikipedia.org/wiki/Bilateral_investment_treaty

interests of host governments and their citizens. This paper considers in particular the case of Argentina and recommendations that may be applicable to other host countries.

Together with a group of lawyers, companies and governments, the GH2 is seeing this paper as a first step in a broader initiative to analyse and develop good practices in BITs and other legal instruments which can contribute to the enabling environment of the green hydrogen economy.

At COP28 in December 2023, the GH2, CWP and our other partners will report on progress so far and what comes next.

If you are interested in this topic and initiative, please be in touch.

Jonas Moberg
CEO
Green Hydrogen Organisation

I. Introduction

Reducing global greenhouse gas (GHG) emissions to 'net zero' by 2050, as required by the Paris Agreement, represents a significant global undertaking of unprecedented scale that can only be achieved if governments, citizens, NGOs, banks, private sector investors, technology providers, developers and offtakers act urgently and in a concerted manner.

The majority of GHG emissions, in particular CO2, is driven by the energy (road, maritime and aviation) and land-use/agricultural sectors. Transitioning away from fossil fuels to renewables and other low carbon power generation is seen as critical but will require quickly mobilising unprecedented levels of capital across numerous sub-sectors and technologies. This will likely include widespread electrification, renewable power generation, grid improvements, electrified transport (including EVs), and in green hydrogen (and derivatives) and related infrastructure.

While green hydrogen is not a panacea for the climate crisis, it does and will play an important role in reducing global GHG emissions in what are commonly referred to as 'hard-to-abate' sectors. Specifically, green hydrogen is an indispensable intermediate element required to produce zero- and low-carbon commodities, including reduced iron for the steel industry, fertiliser for the agricultural and chemicals industries and transportation fuel for the maritime shipping and aviation sectors.

Current estimates of the quantum of investment required to achieve 'net zero' by 2050 range between US$3-4 trillion per year from now out to 2050.[2] Of this amount, McKinsey estimates that the production and use of green hydrogen and derivatives will account for reducing approximately 20% of total CO2 emissions by 2050.[3] This is broadly consistent with what the World Bank has recently reported in estimating that the necessary investment in green hydrogen production and related infrastructure will be in the range of $30 trillion between today and 2050, translating into roughly $800 billion per year.[4]

[2] See for example statements from IEA, BNEF, McKinsey and UN Climate Champions.
[3] https://www.mckinsey.com/capabilities/sustainability/our-insights/five-charts-on-hydrogens-role-in-a-net-zero-future
[4] https://energypost.eu/financing-renewable-hydrogen-globally-ramp-up-to-2030-only-needs-150bn-year/

There are three fundamental issues that currently impede investment in green hydrogen production at scale:

(1) lowering the cost of production (currently the cost of producing green commodities using green hydrogen materially exceeds the cost of producing the same grey, or fossils-fuel-based, commodities);
(2) establishing a downstream market that is able to enter into sufficiently long-term offtake agreements that enable investment in production facilities; and
(3) establishing a threshold offtake price for green commodities which, equally, is sufficient to underwrite the investments (and the return required on those investments) in production facilities.

The first issue (1) cannot be addressed unless and until:

i. electrolyser technology improves and economies of scale are achieved via increased demand, thereby lowering the cost of production; and
ii. host governments increase their support for green hydrogen production (either directly in the location of production, or downstream in the location of use) through various tax credits and other forms of incentives, subsidies, grants and support so as to, in effect, remove "add-on" costs which are counterproductive to global net-zero objectives.

The second and third issues (2 and 3) cannot be addressed unless and until governments step in to, directly or indirectly, raise the cost of carbon emissions to a point where green commodities are price competitive with their grey equivalents, e.g. by placing a tax on Co2 emissions and/or otherwise intervening in markets so as to direct economic outcomes to achieve core policy objectives.

Thus far, more than 16 countries in the industrialised world have already stepped up to enact meaningful legislation to support green hydrogen production in order to lower the cost of production. Consequently, of the 684 green hydrogen projects announced globally by end-2022 globally, more than two thirds are within developed countries.[5] With the adoption of the US Inflation Reduction Act in August 2022, and emerging incentives from the EU, Japan and other countries in the industrialised world, an accelerating number of projects will undoubtedly be added to the picture, further swelling investments in green hydrogen production in the industrialised world.

[5] https://www.mckinsey.com/capabilities/sustainability/our-insights/five-charts-on-hydrogens-role-in-a-net-zero-future

That said, the development of renewable power generation projects in the industrialised world frequently encounters one or more of the following three obstacles:

A. Connecting upstream renewable power generation to the grid is frequently complicated by lengthy permitting procedures, particularly in parts of the US and much of the EU;
B. Renewable power generation requires high renewable resource concentration and large amounts of land and / or offshore areas. These conditions are less frequently found in most industrialised countries (with some exceptions, like Australia and Canada) due to the relationship between population centres, existing grid connections and, more generally limited land availability and relatively poor renewable resource concentration in comparison to other jurisdictions; and
C. Where suitable conditions and available grid connections do exist, the resulting production costs are challenged by the linkage of power costs to grid price and the prevalence of fossil fuel sourced power fed into the grid.

Obstacles (A) – (C) above, are more prevalent in the industrialised world. Logically, this should present the developing world and emerging markets with an immediate advantage: several jurisdictions clearly possess exceptional renewable resource conditions, located in areas with low population density and where scaled non-grid connected renewable power generation and green hydrogen production infrastructure may be developed on an economically advantageous and likely expedited basis. Accordingly, while the industrialised world has announced the greatest number of green hydrogen projects on the back of comprehensive policy support, the optimal conditions (from a technical and resource perspective) for the green hydrogen production are, to oversimplify, more favourable in the emerging and developing markets. It is therefore appropriate to ask why green hydrogen production projects are not progressing more rapidly in the developing world?

II. Challenges to Investment in developing countries

Based upon 'net zero' trajectories aligned with the goals of the Paris Agreement, the World Bank has observed that by 2050, between 25-50% of the global green hydrogen production will need to come from the developing world. However, not only is investment in developing countries not being directed towards the development of green hydrogen production, the World Bank recently noted that, private sector investment in infrastructure in developing countries has effectively halved between 2012 and 2022, (from about $156 Bn per year to $76 Bn per year). According to the World Bank, the principal reasons for this fall in investment are related to policy and regulation, including the perception of inappropriate regulation, public policy instability and / or inaction, and the risk (real or perceived) that this may give way to a rapid shift in legislation and/or regulation.

This "change of law" risk (in the broadest sense) makes it harder for private sector organisations to make financial investment decisions for long-term projects and, where they do, the cost of capital associated with such decisions is inevitably materially higher in comparison to those jurisdictions which are perceived as being more stable and predictable. In addition to issues associated with a lack of consistency and transparency in the application of laws, legal systems in some developing countries, for example those without experience with extractive industries, frequently lack core components relating to permitting, fiscal terms, state and non-state land rights acquisition and registration. Alternatively, where these features are already in place, they frequently are not fit-for-purpose and require amendment so as to meet the requirements of complex multi-gigawatt renewable energy project developments targeted for the production and export of green hydrogen and its derivative products.

(1) Pre-completion risks

Pre-completion risks that may threaten the development, financing and construction of large-scale, high-magnitude and multi-component infrastructure projects, such as large-scale green hydrogen hubs, include the following:

a. a failure by the host government to provide the support of the national and, where applicable, local authorities in support of the project, often leading to a scenario where central government support is undermined by rent-seeking or more general obfuscation at a local level;
b. a failure by the host government (whether at central or local level) to issue in a timely manner the required licences, permits and authorizations for the construction and operation of the project;

c. a failure by the state to provide rights to acquire or gain access rights to state-owned land, or to assist the project developer to acquire or gain access rights to non-state-owned land, including where negotiations have failed;
d. a failure to provide appropriate investment protection measures and an overall economically stable environment for investment; and
e. a denial of neutral international arbitration.

(2) Post-completion risks

Post-completion risks that may threaten the smooth, uninterrupted, certain and predictable operation of large-scale, high magnitude multi-component infrastructure projects include, inter alia, the following:

- changes in the fiscal framework (including the applicable taxation arrangements) which have the effect of jeopardizing the project economics, for example requirements to pay higher government fiscal fees (for facilities operated on a tolling basis) or changes to the price of the product (for facilities owned and operated on a merchant basis);
- changes in the legal and regulatory framework that render the application of the framework uncertain and unpredictable over the life of the project;
- interruptions, curtailments or outright stoppage of the operation of the project due to a government order or a physical security breach; and
- full or quasi-nationalisation measures (for example, forced domestic sales), where the international economic justification for the project is undermined.

Lack of certainty in the legal, regulatory and fiscal environment governing high-magnitude infrastructure projects, such as green hydrogen hubs, both pre- and post-completion, has the effect of materially raising the cost of capital, as well as reducing the potential sources of capital.

Conversely, recent pro-active policy and legislative initiatives pursued by countries and regions in the industrialised world, for example in the US and the EU, has had the effect of lowering the cost of capital for domestic projects, in turn exacerbating the relative economic disadvantage for projects in developing countries.

III. Available Tools to Reduce the Cost of Capital for Projects in Developing Countries

A. What has been done globally to address change of law risk?

Due to higher risk premia typically assigned to large-scale infrastructure and other projects in developing countries, countries that are regular sources of project and investment capital have often sought to negotiate and conclude bilateral investment treaties (BITs) with a view to supporting their investors and stimulating further investments. The commitments in these BITs vary in their subject matter, quality and specificity, but most generally seek to: define qualifying investors and investments, provide international standards of investment protection, including (as a minimum) protections against expropriation and nationalisation; provide guarantees of currency convertibility and profit repatriation; and facilitate access to neutral international arbitration for the settlement of disputes.

1. BITs and Intergovernmental agreements (IGAs)

Within many systems of law, BITs and IGAs, as state-to-state treaty commitments, will enjoy high standing within the hierarchy of legal norms, ranking below the constitution but above laws of ordinary application. When treaty commitments are entered into, and become fully effective and binding upon the parties, the ratifying parties gain a degree of comfort, both in law and diplomatically, that the commitments entered into will be honoured over time and that any political and legislative changes occurring within a member state will not result in any departure from the treaty commitments themselves. Accordingly, treaty-level agreements are usually deemed to be amongst the most secure level of political and legal support for incoming international investment, subject to the specificity with which they are drafted, agreed to and ratified.

In 1992, the World Bank published its Guidelines on the Treatment of Foreign Direct Investment (the “World Bank Guidelines”), which define a set of principles to guide countries in the admission and treatment of investors and their investments with a view to ensuring a broadly consistent international approach. A subsequent effort to sponsor a Multilateral Agreement on Investment negotiated under the auspices of the OECD failed in 1998 due to opposition from civil society organizations and governments on the basis that it would become more difficult to appropriately regulate the activities of investors.

At present, therefore, there is no applicable multilateral agreement designed to support and facilitate the rights and obligations of states and investors involved in the development, investment in, debt financing and ownership of green hydrogen production or related energy infrastructure.

The use of BITs to mobilise foreign direct investment and international lending, on the other hand, has a long history and in fact has been highly effective. There are currently more than 2,750 BITs in place between various countries globally.[6] While the level of investment protection measures offered by BITs can vary widely, BITs entered into between states will frequently provide investors with a material degree of support and, in practice, private sector investors will typically seek to structure their investments so as to attract the most beneficial BIT protection.

2. Project-specific IGAs and HGAs

While the protections offered to investors by the provisions of a BIT are often an important consideration in the context of investment decisions, they are not, on their own, project specific, nor do they have the level of detail needed to support capital-intensive and complex projects, such as massive-scale green hydrogen hubs or projects.

By drawing upon precedent, certain large-scale multi-component energy infrastructure projects have benefited from project-specific 'horizontal' state-to-state treaties or IGAs and 'vertical' state-to-investor host government agreements ("HGAs") that further detail the commitments set forth in the IGAs.[7] Combined project-specific IGAs and HGAs have been entered into and ratified to support numerous large-scale, cross-border infrastructure, including the Baku-Tblisi-Ceyhan Pipeline, the South Caucuses Pipeline, Trans-Anatolian Pipeline and the Trans-Adriatic-Pipeline (among others), all of which were subject to a range of horizontal cross-border and vertical political and project risks.[8] The foregoing infrastructure was all successfully developed, financed, constructed and is now operational across multiple jurisdictions. Notwithstanding formidable perceptions of risk, these infrastructure projects are now delivering large-scale fiscal revenues and other economic benefits to the host countries in question.

[6] There are also more than 10,000 double tax treaties in place globally.
[7] In addition, there are numerous examples of IGAs supporting cross-border infrastructure including inter alia Turkstream, the East Africa Oil Pipeline, and Kirkuk-Ceyhan as well as host government agreements supporting LNG projects (Tanzania LNG).
[8] The BTC IGA and HGA served as the template for the Energy Charter's Model IGA and HGA. See https://www.energycharter.org/fileadmin/DocumentsMedia/Legal/ma2-en.pdf

3. HGAs linked to a BIT

In most circumstances, a BIT (or a project-specific IGA) alone will be insufficient to adequately de-risk a large-scale, high-magnitude investment, such as investment in and financing of the infrastructure required for a green hydrogen project. The basic principles as set out at a higher-level on a state-to-state basis in an BIT and / or IGA may be further elaborated in a project-specific HGA. Such HGAs typically cross-reference the relevant IGA and / or BIT. The HGA, which is a vertical commitment from a state directly to the investor (usually in the form of a contract governed by the laws of a neutral jurisdiction), may in turn be further elaborated via one or more detailed project-level agreements.[9]

In making more granular assessments of risk premia and the cost of capital associated with political, legal, regulatory and fiscal risk, project developers, equity investors and banks will consider, inter alia, the quality of the commitments made by the host state as follows:

- Do the commitments (state-to-state, in a BIT or IGA) adequately relate to the portions of the project which are within the territories and hence under the respective jurisdictions of the respective signatory states?
- Are the commitments (whether state-to-state or state-to-investor) specific to the project investor and / or project?
- What standing do the commitments have within the hierarchy of applicable law and how may they be practically enforced?[10]
- Do the commitments ensure that, inter alia, the fiscal terms are fit for purpose and appropriately stabilized over the loan / investment repayment period?
- Do the fiscal terms: (i) adequately support the ability of the investor to ensure that the proceeds of product sales may be paid abroad; (ii) that the proceeds thereof may be used to repay project loans; (iii) whether hard currency may be freely imported and exported; (iv) whether that currency may be freely converted; and (v) whether profits may be readily repatriated?

[9] HGAs are instruments entered into between a host government and investor and are commonly used in the extractive industry (in the form of an oil and gas production sharing agreement), the mining sector and to implement complex infrastructure projects such as LNG, integrated port, rail and or / roads etc.
[10] Contractual change in law provisions often included within HGAs (and similar agreements) can be less useful to investors in a practical sense as they (1) at best trigger a compensation claim often leading to years of arbitration and (2) do not directly obligate local officials to comply in circumstances where an official may invoke a conflicting or ambiguous provision of local law as a pretext to account for what might otherwise be considered a change of law. Clearly, enactment of key investment protection provisions and / or specific amendments to enable sector specific activities and to otherwise stabilise the fiscal and regulatory regime is preferred, noting that it remains essential that the host state retains full control and sovereignty over key regulatory matters, such as safety, environmental, health and labour matters.

- Are any gaps found in the applicable laws appropriately filled and / or amended such that the project's pre- and post-completion activities are appropriately supported?
- Has the host government made commitments to undertake reasonable and lawful endeavours to assist the investor, as well as the investor's relevant contractors and project participants, to obtain all rights, authorization, approvals and facilities required for the timely implementation of the project.

IV. Case study: What can be done in Argentina to address high risk premiums to attract and enable international investment in green hydrogen projects?

1. Recommendations for the case of Argentina

In the case of Argentina, renewable wind resources in Patagonia are among the best in the world, with wind speeds in various locations clocking an average 10-12 metres per second on a sustained basis. A number of large-scale green hydrogen production projects have already been announced and are now in the early stages of development. The country, moreover, is geographically well-positioned to export green hydrogen derivative products to a number of important offtake markets, including in East Asia and Europe. In addition, local landowners and regional governments are generally supportive of hosting these strategically important projects.

Unfortunately, global perceptions of Argentina's sovereign credit risk, as well as its legal, regulatory and fiscal environment, are not favourable. For example, Moody's, S&P, Fitch, as well as other global credit agencies, currently rate Argentina as 'highly speculative', and the country is not well-ranked ranked in terms of adherence to the rule of law.[11] As a result, the risk premium currently assigned to Argentina is 26.65%.[12] The foregoing ratings are largely the result of Argentina having defaulted on its sovereign debt nine times (three times in the last two decades). In addition, and in particular, investors are concerned with foreign exchange controls, currency convertibility, profit repatriation, political risk and other forms of legal, fiscal and regulatory instability. In order to attract

[11] Argentina is ranked 122 out of 192 countries evaluated.
[12] This is the same risk premium assigned to, inter alia, the countries of Haiti, North Korea, Malawi, Sierra Leone, and Somalia https://www.stern.nyu.edu/~adamodar/pc/datasets/ctryprem.xlsx

cost-competitive capital so as to develop the potential of Argentina's large-scale renewable energy and green hydrogen resources, Argentina will need to provide specific assurances to foreign direct investors and lenders that capital may be deployed safely and in confidence.

Notwithstanding the high-risk premia associated with Argentina's sovereign rating and perceived political and legal instability, large-scale investments have recently been made successfully in the energy sector. Petronas has recently committed to a USD multi-billion investment in an upstream shale gas development and associated gas transportation pipeline to a new-build port on the North-East coast of Argentina, where a large-scale gas liquefaction facility will be constructed to ship LNG cargoes globally. This massive project was made possible by the adoption of a ring-fenced, project-specific, legal, fiscal and regulatory regime targeted to provide Petronas with a stabilised and predictable basis for its investment and financing.

While investment in large-scale green hydrogen production projects is at least as complex as the planned Petronas integrated gas production, transportation and liquefaction project, large-scale green hydrogen hubs represent an entirely novel sector that will require comparable forms of protection, with certain additions to reflect the nascent nature of such projects. Only then can one foresee an environment sufficiently secure and stable to attract the necessary investment and access to debt.

Argentina is already a party to a number of BITs with a large array of other states, including the Netherlands, Germany, the USA, the UK, Switzerland, as well as other countries where investors could realistically originate from or commonly use to structure their investments.[13] Based upon a cursory reading of some of these BITs, Argentina already has a well-developed set of international-level investment protections and support mechanisms in place.

As an example of these BITs, the Netherlands and Argentina BIT (entered into in 1992) is relatively comprehensive and protective of investor interests.[14] It should, however, be noted that in order to come under the Netherlands-Argentina BIT's protection, an investor will need to have 'substance' in the Netherlands, meaning that a simple post-box (including a Dutch BV holding company) in the commercial structure etc is unlikely,

[13] https://investmentpolicy.unctad.org/international-investment-agreements/countries/8/argentina
[14] https://globalarbitrationreview.com/insight/know-how/investment-treaty-arbitration/report/netherlands

by itself, to be sufficient. More specifically, the Netherlands-Argentina BIT includes a form of an umbrella clause (Article 4) such that agreements between a qualifying investor and Argentina will fall under the BIT's scope, thus elevating contractual obligations to the international level.

So the question then arises: how does an investor and/or project developer secure an "investment agreement" (i.e. a HGA) with Argentina which delivers the specific protections, benefits and/or undertakings that are required to enable the relevant green hydrogen project to proceed. In this regard, and specifically from Argentina's perspective, it is reasonable to assume:

- Argentina wishes to encourage the emergence and growth of green hydrogen projects in its country;
- Argentina would likely prefer to simplify and standardise (subject to necessary adaptions for project specific matters) the types of benefits it offers to potential investors; and
- Argentina recognises that many other jurisdictions which are effectively competing for the attention of green hydrogen project developers are providing very significant subsidies, tax credits and other incentives (e.g. the USA, pursuant to the Inflation Reduction Act), so it is important from a competitive standpoint to enhance the investability of the Argentinian environment, as was done for the Petronas gas project.

Consequently, it would be both efficient and beneficial for Argentina to develop a standardised form of investment agreement which would be available to developers of green hydrogen projects. Any such standardised agreement would provide for direct cross-referencing back to any relevant BIT protections which the investor may also enjoy.

2. Recommendations for the case of Argentina

Rather than developing such an agreement (an HGA) in isolation, it may be possible that Argentina develops a template agreement through the negotiation process entered into with a lead pilot project, and by reference to the more detailed rights, duties, standards as already set out in a relevant BIT already in place. For example, in the event that a company, such as the Port of Rotterdam, elected to partner with one of the lead green hydrogen

project developers in Argentina, the Netherlands–Argentina BIT would be the appropriate BIT to directly associate with that investment partnership and pilot investment project in question.

The executive branches of the two governments could additionally enter into an intergovernmental agreement affirming the urgent challenges presented by climate change, the overriding strategic importance for the two countries to cooperate and collaborate in the development of green hydrogen projects, and a commitment to pursue a sector- and / or project-specific BIT to specifically elaborate the protections set out in the Netherlands–Argentina BIT. A project-specific HGA would then take into account the specific legal, regulatory and fiscal challenges confronting the development, financing, construction and long-term operation of the green hydrogen project in question, and provide more detailed provisions that would elaborate and be directly associated to the Netherlands – Argentina BIT and the specific executive decisions. Following a form for an HGA being agreed with the foregoing developer, specific elements of the HGA, to the extent that these elements require that local law is amended and / or overridden, could be enacted with the force of law.

Once the foregoing project-specific HGA is fully negotiated and implemented, the project-specific elements can be removed, and that HGA could then be used as a basis for a more standardised form available to other potential investors, no doubt subject to those investors meeting certain threshold criteria. In this regard, it would be unreasonable to expect Argentina to provide such undertakings to investors that lack the means to implement the projects or to projects that are otherwise not feasible, and which therefore would have little prospect of successfully proceeding. Broadly, this approach is reflective of how standard form documentation is often created, with that documentation being drawn from the actual agreements developed, negotiated and agreed in connection with concrete projects (such as the Baku-Tbilisi-Ceyhan project), as referenced above.

V. Conclusion

Needless to say, the recommendations for the case of Argentina may be applied to other wind and solar-rich parts of the developing world that are disadvantaged in the increasingly competitive race for green hydrogen project investment. With a clear understanding of the necessary pace and scale of the global energy transition, and a realisation that abundant renewables resources in developing countries must play a central role, it is critical that efforts are made, and legal tools are deployed now, to boost confidence, address perceptions of risk and reduce cost of capital premia currently applicable in some of the countries best placed to deliver green hydrogen and derivatives at scale.