Green Hydrogen Contracting – Dispute Resolution

1. The Purpose of Dispute Resolution Clauses

Overview

The dispute resolution clause in a contract sets out the way in which disputes arising between the parties in connection with the contract will be resolved.

It is important that parties decide at the time of contracting how disputes which may arise between them will be resolved (i.e. before the dispute actually arises). Once a dispute arises, the parties may have an acrimonious relationship, which can make it much harder to agree a suitable mechanism for resolving the dispute.

Dispute resolution clauses can cover both (i) contractual disputes (such as a dispute between the parties as to the effect and/or meaning of a specific contractual provision); and (ii) non-contractual disputes (such as where a party to a contract asserts that the counterparty has been negligent in its performance of that contract).

Methods of dispute resolution

Methods of dispute resolution are generally either binding or non-binding.

Binding forms of dispute resolution

In binding forms of dispute resolution, the parties submit their dispute to a third-party decision-maker (for example, a judge or arbitrator) to make a decision with which the parties are then required to comply (although there may be an appeal process available). Binding methods of dispute resolution include the following:

a) Litigation

Litigation is a common form of dispute resolution – this is using the courts of the relevant jurisdiction to resolve the dispute between the parties. Courts in different jurisdictions operate using different rules and processes. Some court systems are efficient, while others may be more time-consuming or expensive, including because court rulings may be subject to appeal.

This preliminary set of guidance from the initiative on *Green Hydrogen Contracting – for People and Planet* is aimed to support governments, communities and companies. It is under development and is currently being shared with stakeholders for consultation. The guidance has been developed by a working group consisting of governments, law firms, companies and civil society groups. For further information about the initiative and to access the set of guidance on green hydrogen contracting, visit gh2.org/green-hydrogen-contracting**.** GH2 welcomes comments and feedback on the guidance to be sent to Ines Marques (ines.marques@gh2.org).

b) Arbitration

Arbitration is a process whereby the parties to a contract agree that a specially convened tribunal (usually consisting of one or three arbitrators) will resolve their dispute instead of the courts. Arbitration is often more flexible than litigation as the parties typically have more control over the procedure that is followed and are often able to choose the arbitrators.

Arbitration is commonly used for international disputes involving parties from more than one jurisdiction. This is because it can be easier to enforce arbitration awards than court judgments in foreign jurisdictions, and also because parties may be unwilling to submit to the jurisdiction of a court which is foreign to them. Arbitrations are commonly run with the assistance of an arbitral institution, an organization which helps to administer and manage the arbitration using its own well-drafted arbitration rules (for example, the International Court of Arbitration of the International Chamber of Commerce (ICC)[1], the London Court of International Arbitration (LCIA)[2] or the Singapore International Arbitration Centre (SIAC)[3]).

c) Expert determination / Adjudication

Expert determination and adjudication are separate methods of dispute resolution where the dispute is determined by a neutral third party, which is usually someone with specialist expertise relevant to the dispute. The decision is usually binding on the parties and can be enforced through the courts. Expert determination and adjudication are often appropriate where industry expertise is required for resolving the dispute and/or where a decision is needed in respect of a distinct, standalone issue (for example, a technical issue in a construction dispute).

Non-binding forms of dispute resolution

Non-binding forms of dispute resolution are methods whereby the parties seek to resolve their dispute on a consensual (agreed) basis. For example:

a) Mediation

In mediation, an independent third party (the mediator) explores areas for potential compromise between the parties. Although it is still up to the parties to agree to a resolution of their dispute, the involvement of an experienced mediator can make such an outcome much more likely. Often the parties will conclude a mediation agreement so that the process and procedure for the mediation is agreed between the parties from the outset.

b) Negotiation

Negotiation may be structured or unstructured. It is sometimes split into two or more phases, with the first phase between representatives of the parties who are involved in operating the contract on a day-to-day basis. If the dispute is not resolved, it may then be escalated to negotiations between

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[1] The latest version of the ICC Rules of Arbitration is available here.

[2] The latest version of the LCIA Arbitration Rules is available here.

[3] The latest version of the SIAC Rules is available here.

senior management at both parties. The parties' lawyers may also attend either of the phases of negotiation.

c) Early neutral evaluation

This is where a neutral, third-party evaluator gives an opinion on the merits of the parties' respective cases in order to help them assess how strong their cases are and inform negotiations/settlement strategy (including whether to pursue the case further as part of binding dispute resolution proceedings).

The dispute resolution clause

The dispute resolution clause in a contract may set out one or more of the binding or non-binding forms of dispute solution methods. The agreement may prescribe a single step or multi-stage process. The appropriate method or combination of methods may different from one project to the next and is therefore a question of fact.

For example, if the judiciary in a host state is independent and able to resolve disputes in an efficient and effective manner litigation may be the preferred dispute resolution matter. Projects which are pursued in host states which have poor judicial independence may be prefer a combination or negotiation and arbitration to litigation. Finally, where communities are concerned, the project may be required to pursue a consultative approach which entails mediation or conciliation.[4]

Why is it important to have a dispute resolution clause in a contract?

It is common for disputes to arise between parties to a contract. This may be in relation to minor operational issues, such as where there is a delay or a defect in one of the parties' performance of its obligations, or it may relate to much larger issues, such as termination of the contract, allegations of misrepresentation or negligence, disputes over the value or quality of work performed, or disputes as to which party bears the cost or risk of a certain event.

A well-drafted dispute resolution clause helps disputes to be resolved in a timely and efficient way. It is likely to be important to potential investors in a project that a robust dispute resolution clause forms part of a contract, as this will help the investors have confidence that there is a mechanism in place to help the parties resolve any disputes which arise.

When trademarks, logos or other forms of proprietary technology are involved, having a robust dispute resolution mechanism is particularly important in ensuring that parties have confidence that their intellectual property will be protected as they will have a contractually binding way of enforcing their intellectual property rights.

There is generally a willingness on the part of courts and tribunals to uphold terms that have been contractually agreed between commercial parties, including the parties' choice as to the method of dispute resolution. It is therefore crucial that the clause is concise, clear and workable from the perspective of courts and tribunals to avoid any risk of ambiguity or uncertainty about how it should operate.

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[4] Also see the [Local Community Management paper] for information on grievance management and local community focused dispute resolution mechanisms.

Parties should also give careful consideration to the governing law of a contract, which sets out the substantive law applicable to the interpretation of the agreement. It is generally advisable that the governing law of the agreement should be the law of a neutral country with a well-developed body of legal principles. In light of this, parties to international contracts and cross-border transactions often choose the law of England and Wales as the governing law for the relevant agreements. This is because English law offers a vast body of well-developed jurisprudence, including on technical issues, which helps ensure high degree of certainty and predictability in commercial transactions.

Why is the choice of an appropriate dispute resolution clause important?

It is very important to choose the right dispute resolution clause. At the time of contracting, parties should give proper consideration to the dispute resolution provisions in the contract so as to avoid being tied to a procedure that they find at a later date is unsuited to their needs. Although at the outset of a project it may be difficult to envisage a dispute arising between the parties, contentious situations are unfortunately a reality of commercial dealings in any industry in all parts of the world. Taking the time to consider the specific implications of the dispute resolution clause may well save significant time in the long run.

Relevant questions to consider in this regard include:

- Should the dispute resolution procedure be binding on the parties?
- How long is the procedure likely to take from start to finish, and will this be appropriate for the timescales of the project?
- Who should the decision-maker be and how will this be decided? For example, should the decision-maker be an industry expert or a lawyer? Which jurisdiction should they come from?
- Does the procedure (and the documents provided during the procedure) need to be confidential?
- Is it important that the type of procedure envisaged is already familiar to one/both/all of the parties and/or any other relevant stakeholder(s) (such as investors)?
- If the contract in question is part of a suite of contracts, does the dispute resolution mechanism need to accommodate disputes arising under related contracts as well?
- How much will the procedure cost and how will the parties allocate those costs?

The answers to the above questions will vary greatly depending on who is likely to be party to a dispute, the nature of the issues that are likely to be involved (i.e. are they likely to involve complex technical issues), how quickly any dispute needs to be resolved, and the costs that the parties are prepared to incur in order to resolve the dispute.

Contents of a dispute resolution clause

The contents of a dispute resolution clause will largely depend on which method(s) of dispute resolution the clause provides for (see Section 2 below).

There are however certain key points that will need to be considered when drafting any dispute resolution clause. For example:

- The legal system (i.e. the laws of which jurisdiction) which will govern the contract and be applied to any disputes that arises out of or in connection with it;
- The body or individual which will apply that law in order to make a decision on the dispute;

- The initial steps (if any) which the parties should be required to take to seek to resolve the dispute before it is referred to a decision-maker for a binding decision (for example, compulsory negotiation or mediation); and
- Whether it would be appropriate to appoint a service agent in the jurisdiction where any court proceedings would be commenced. The effect of this would be a contractual agreement between the parties that proceedings may be served on their service agent, who acts as their nominated representative. This may avoid a dispute about whether proceedings have actually been properly served.

As mentioned in the introduction, parties to a contract should consider whether a multi-tiered dispute resolution clause would be appropriate for their contract. This would provide for a dispute to be progressively escalated up from the informal stage of discussions between the parties to a more formal process (such as litigation or arbitration) until the parties have resolved the dispute. Whether a tiered dispute resolution clause is appropriate and what specific stages should be provided in the clause will depend on the contract in question. Relevant factors to consider include the nature of the disputes that are likely to arise, the value of the contract, the costs associated with the dispute resolution process and how important it is for any dispute to be resolved quickly.

Example dispute resolution clauses

Below are some examples of sample wording that may be found in dispute resolution clauses. These are provided as illustrations only - the drafting of any dispute resolution clause will depend on the circumstances of the contract and the priorities of the parties involved.

Type of clause	**Sample wording**
Court jurisdiction (i.e. litigation) clause	*The courts and tribunals of [England and Wales] shall have exclusive jurisdiction to settle any [dispute/Dispute] which may arise (including claims for set-off and counterclaims) under or in connection with this Agreement. Any dispute that arises between the Parties shall be resolved according to the laws of [England and Wales*].
Ad hoc arbitration clause (i.e. an arbitration where the parties have not selected an institution to administer the arbitration)	*All [disputes/Disputes] arising out of or in connection with this Agreement, including any question regarding its existence, validity or termination, shall be finally resolved by arbitration.* *The seat of the arbitration shall be [London].* *The governing law of the arbitration agreement shall be [the law of England and Wales].* *The [dispute/Disputes] be resolved according to the laws of [England and Wales].* *The language of the arbitration shall be [English].* *The party commencing arbitration shall send to the other party a notice of arbitration demanding that the dispute be referred to arbitration.* *The arbitral tribunal shall consist of [three] arbitrators, one appointed by the party commencing arbitration and named in*

	the notice of arbitration, the second appointed by the party responding to the notice of arbitration within [28] days of receipt of the notice of arbitration, and the third, who shall act as the presiding arbitrator, appointed by the two parties within [28 days of the appointment of the second arbitrator]. If any arbitrators are not appointed within these periods, [the relevant appointing authority] shall, upon the request of any party, make the appointment(s).
Mediation clause	*In the event of a [dispute/Dispute] arising out of or relating to this Agreement, including any question regarding its existence, validity or termination, the Parties shall seek settlement of that [dispute/Dispute] by mediation in accordance with [the agreed/relevant mediation rules], which Rules are deemed to be incorporated by reference into this clause*.

2. Dispute Resolution in the Energy Sector[5]

The international energy sector frequently gives rise to complex, technical, and high-value disputes. As economic and commercial circumstances change, joint venture partners for energy projects may disagree over operations, sellers and buyers may seek to amend pricing terms and host states may seek to change the regulatory environment governing energy projects.

Any of these outcomes can have substantial consequences for parties operating in the energy sector. Disputes are therefore a significant risk in any international energy project. Parties must anticipate and manage disputes from the inception of the relevant contractual frameworks to the point a dispute arises and is eventually resolved.

Parties in the energy sector can use a number of dispute resolution methods in their agreements. These may include arbitration, litigation, expert determination, and specialist dispute resolution boards, as well as non-binding methods like negotiation and mediation. Depending on how a contract is drafted, parties may also be able to use several methods of dispute resolution together.

The key dispute resolution methods which are typically used in the energy sector are considered below.

a) Arbitration

Arbitration has many features that make it well-suited to the resolution of international energy disputes, and it is consequently one of the most widely used forms of dispute resolution in the energy sector.

While it is a legally binding process like court litigation, it allows the parties procedural flexibility in terms of how and where they wish to resolve their disputes. This means that parties can choose decision-makers with particular language skills, professional backgrounds, or technical expertise which ensures they are familiar with the types of issues likely to arise in a project (for example, arbitrators with engineering, joint venture accounting or commodity pricing experience). It can also be valuable for arbitrators to be familiar with energy industry norms.

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5 Although the generation of renewable energy and the production of green hydrogen are two discrete processes both form part of the energy sector.

Importantly, arbitration offers a neutral forum which is separate from a domestic court system. Energy projects commonly involve a cross-border element, with investors, suppliers, contractors, and project operators likely being based in several jurisdictions. Parties may prefer to resolve their disputes in an international setting rather than in one country's domestic courts.

Moreover, it may be more straightforward to enforce the decision made by an arbitral tribunal (the award) in different jurisdictions than it would be to enforce a court judgment. The Convention on the Recognition and Enforcement of Foreign Arbitral Awards, also known as the "New York Arbitration Convention", has much wider coverage than international treaties on the recognition of court judgments.

Arbitration is also frequently used by energy sector participants because it can allow the parties to ensure that their dispute process remains private and/or confidential. Court proceedings (or at least the fact that a dispute is taking place between the parties in court) may be public. In arbitration, parties can agree that the proceedings, as well as the fact that the dispute is taking place, should be confidential. Given the commercial and political sensitivity of many energy projects, this is often an important consideration.

Energy sector participants also often use a specialist category of arbitration known as investment treaty arbitration. This is where foreign investors seek to enforce protections offered to them by host states, for example through bilateral or multilateral investment treaties (such as the Energy Charter Treaty, which has 47 signatory states) or stabilization clauses in contracts. Such protections may include a guarantee of fair and equitable treatment and protection against discrimination and expropriation of the investment.

Treaties or contractual clauses may give investors a free-standing right (separate from the agreements to which it is party) to bring proceedings directly against the host state by way of international arbitration before an independent tribunal (rather than the host State's domestic courts) to seek compensation for breach of these protections. For example, since 1991, over 136 arbitrations have been commenced under the Energy Charter Treaty. In addition to the dispute resolution methods stipulated in commercial contracts associated with energy projects, parties operating in this sector may therefore also have recourse to investment arbitration claims against States in the event that any actions of a State (such as withdrawal of subsidies for a renewable energy project, cancellation of licenses and permits etc.) breach the protections offered to those investors.

b) Litigation

While court litigation is a familiar dispute resolution mechanism for commercial contracts in general, it is less common as a dispute resolution mechanism in energy sector contracts. This is because typically in international energy projects, the parties and the project itself may be based in more than one jurisdiction and parties may therefore be resistant to submitting to the courts of another State. In addition, there can be difficulties associated with enforcing court judgments in foreign jurisdictions and the cost and length of court trials.

Litigation may, however, be chosen when all or many of the parties involved in a project are from the same jurisdiction. Similarly, the laws of the jurisdiction where a project is based may mandate the use of local courts, particularly where State-owned entities are involved in a project, although local court jurisdiction will often be resisted in negotiations by investors to the extent possible.

c) Expert determination

Expert determination is well-suited to disputes of a specialist or technical nature, such as relating to the valuation of assets/ business, pricing, or technical assessments in oil, gas and energy disputes. Contracts related to energy projects such as construction contracts or supply agreements often include expert determination clauses. This is an effective dispute resolution method for highly technical matters.

Difficulties may however arise when there are matters of both fact and law in dispute between the parties (as is often the case in many energy-related disputes) as a technical expert may not be qualified to decide on all of these at once. For this reason, energy sector contracts will often specify that certain narrow types of disputes will be resolved through expert determination (for example, disputes as to compliance of a product with industry specifications) while also providing a 'catch-all' arbitration clause for any other disputes arising under the contract.

d) Dispute resolution boards

Dispute resolution boards are commonly used in construction contracts for large-scale and long-term projects. These typically involve the establishment of a standing board, comprised of one or three independent members jointly appointed by the parties, which is available to assist the parties throughout the project in resolving issues as they arise. In contrast to an arbitral tribunal, which is only appointed when a specific dispute arises, a dispute resolution board is created at the start of the project and can address all disputes across the life of the project. Depending on the terms of the contract, the boards can issue either binding or non-binding recommendations to the parties.

The purpose of dispute boards is to avoid formal proceedings (such as arbitration or litigation). They allow the members of the board to become familiar with the project in question and can be an efficient way to resolve operational issues, as they avoid the time and cost of commencing arbitration or litigation in respect of each issue. They may not be appropriate, however, to address complex or high-value legal or commercial issues.

This method of dispute resolution has proven to be effective in the construction industry, although its usage is still growing across the energy sector.

e) Mediation and negotiation

It is common to see dispute resolution clauses in energy sector contracts provide for negotiation or mediation as a preliminary step before the parties can proceed to arbitration, expert determination, or litigation. The aim of such clauses is to require the parties to seek to resolve the dispute through a structured, non-binding process before it can be escalated to more costly, time-consuming formal proceedings. Given the importance of relationships in the energy sector, such clauses will often require the involvement of senior management from each party, in the hope that they can be resolved in a consensual way.

3. Dispute Resolution in the Green Hydrogen Value Chain: Relevant Considerations

When considering what dispute resolution mechanism may be appropriate in a green hydrogen-related contract, it is instructive to consider the possible areas of conflict along the value chain and what types of disputes may arise.

Disputes may include:

- **Licensing and regulatory disputes**: in States where a licence is required in order to build and operate a green hydrogen product, disputes may arise under those licences or under other contracts between State entities and the operators of green hydrogen projects. This may include, for example, disputes as to the operator's compliance with the conditions for the licence or other applicable regulation; the terms on which a licence is extended, renewed or cancelled; the operator's obligations in respect of environmental or local community impact assessment and management (in particular around the management of water resources); and disputes in respect of changes in the regulatory framework.

- **Construction disputes**: green hydrogen projects will typically require the construction of new infrastructure for the production, transmission and storage of hydrogen, and in some cases the conversion of existing infrastructure (for example, where natural gas infrastructure can be repurposed for use with hydrogen). Disputes may arise with contractors and sub-contractors in relation to delays in construction and defects in the final product, as well as disputes over changes in scope of projects and compliance with regulatory requirements. Given the novel nature of much of the technology which will be involved in this developing sector, the potential for disputes about the technical suitability of designs for hydrogen plants and related infrastructure is high.

- **Technology disputes**: as the technology required for green hydrogen projects is further developed and refined, the protection of intellectual property will become a greater focus for participants in the sector. Companies which develop proprietary technology for the production, storage and transmission of hydrogen may license their technology for use by large projects, and such agreements may give rise to a range of disputes. Disputes may arise, for example, where the technology is proven not to be fit for purpose, where it is used by the project operator for a purpose other than the terms of the licensing agreement allow, where it is licensed to competitor projects in breach of exclusivity provisions or where a renewal of the licensing agreement is refused, or where the payment for the use of the technology is contested.

- **Joint venture disputes:** many hydrogen projects are likely to be owned and managed by joint ventures composed of a number of different companies holding different interests in the project, as part of risk-spreading strategies. The obligations between those joint ventures are likely to be governed by joint operating agreements or other contracts which set out the rights and responsibilities of the different joint venture partners. In particular, the operator of the project will bear certain responsibilities in managing the project, while the other partners will have certain decision-making rights and be required to contribute financially. As with joint ventures in the energy sector more generally, disputes are likely to arise in relation to issues like the operator's management of the project, the allocation of risk and cost between the partners for unanticipated events (including accidents during production) and decommissioning, and the partners' ability to exit the project. Where a State-owned entity is part of a joint venture, these disputes can become even more complex, in particular where a dispute arises from a change in the applicable regulation by that State.

- **Disputes under power purchase agreements**: the supply of renewable electricity is a core component of green hydrogen projects. Disputes may arise under the power purchase agreements by which green hydrogen producers acquire the electricity used in the projects, for

example where there are interruptions to the supply of electricity, where hydrogen producers do not meet their payment or offtake obligations, where there are changes in pricing, or where there is a dispute as to the responsibility for defects in electricity transmission infrastructure. Given the importance of the green credentials of the electricity used in green hydrogen production, there may be disputes as to an alleged misrepresentation of the origin of the electricity.

- **Disputes under hydrogen offtake agreements**: in many projects, hydrogen producers will sell the hydrogen produced from the project to third parties, for example for use in aviation, shipping or industry. Disputes may arise under these agreements where the project does not provide the required volume of hydrogen or where the payment from the offtaker is deficient or late. Similarly, disputes may concern changes in pricing, the responsibility for accidents or loss during the transport or storage of hydrogen, as well as allegations in relation to the quality or contamination of the product provided. There may also be disputes as to the misrepresentation of the green credentials of the product, for example if any portion of the electricity is found to be produced from non-renewable sources.

There may be a range of other disputes arising across the green hydrogen value chain, including with participants' investors, shareholders, local communities, employees, and end-use customers.

4. Conclusion

Given the complexity and diversity of the possible disputes outlined above, there is no 'one size fits all' approach to dispute resolution which can be applied to all contracts across the green hydrogen value chain. In many circumstances, an arbitration clause will be the most appropriate choice, potentially combined with expert determination for certain narrow issues identified in advance and compulsory negotiation or mediation at the preliminary stage.

Nevertheless, there are some key considerations which may assist in choosing an appropriate dispute resolution clause for a particular contract. These include:

- **Involvement of foreign investors and international parties**: providing a dispute resolution mechanism which is familiar to energy sector stakeholders is likely to be important in generating confidence among foreign investment and international participants in a project. International arbitration is therefore likely to be more attractive to international parties than court litigation in the domestic courts, including the reasons of neutrality, the potential for confidentiality and the capacity for specialist decision-makers, as explained in Section 2 above.

- **Local law requirements and State involvement**: in some jurisdictions, certain types of energy or infrastructure projects must be dealt with through domestic courts as a matter of local law. This may also be the case where State entities hold interests under certain contracts. For instance, some domestic laws prohibit the arbitration of disputes involving the activities of State-owned entities in that State. If this is the case, arbitration may not be able to be used in certain contracts. Similarly, where disputes concern compliance with regulatory issues, they may need to be resolved in domestic courts.

- **Interoperability of related contracts**: many projects will involve a suite of related contracts. It may be important for the contracts to have mutually compatible dispute resolution clauses which allow for the consolidation of disputes arising under different contracts into a single dispute. For example, the construction phase of a project is likely to involve a range of different

contracts in which the performance of parties' obligations may be reliant on the prior performance of another party's obligation (such as where sub-contractors are responsible for different parts of a plant). Many construction projects in the energy sector use compatible arbitration or expert determination clauses in which parties have agreed in advance to the consolidation and joinder of related claims, in order to facilitate the efficient allocation of responsibility for delays or defective performance.

- **Confidentiality and the protection of intellectual property**: given the likelihood that green hydrogen projects will involve innovative, proprietary technologies, it may be important to participants that disputes can be resolved in private and/or confidential proceedings, such as arbitration or expert determination rather than court proceedings.

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