GAR Global Arbitration Review

The Asia-Pacific Arbitration Review

2023

Disputes arising out of energy transition projects in Australia

The Asia-Pacific Arbitration Review

2023

The Asia-Pacific Arbitration Review 2023 contains insight and thought leadership inspired by recent events, from 53 pre-eminent practitioners. This edition covers Australia, China, Hong Kong, India, Japan, Malaysia, Singapore, Sri Lanka and Vietnam and has overviews on damages; energy disputes of all stripe; private equity-owned and arbitration; ISDS under the region's main multilateral instruments; the effect of sanctions on construction projects; interim measures in China; and the covid-fallout affecting hospitality.

Generated: February 8, 2024

Disputes arising out of energy transition projects in Australia

Joachim Delaney, **Jo Garland**, **Nick Longley**, **Dan Perera** and **Kate Fisher**
HFW

Summary

IN SUMMARY

In this chapter, we consider some of the key issues that may give rise to disputes in energy transition projects in Australia, including traditional solar and wind farms, as well as those involving newer technologies, such as hydrogen and storage. We also analyse disputes that have arisen from renewable energy projects in recent years.

DISCUSSION POINTS

- Potential disputes arising in energy transition projects
- Complex legal and commercial relationships and contractual frameworks
- Regulatory framework for planning and development as well as commissioning and connection to the grid
- Potential delays during construction and commissioning, including due to labour shortages and supply chain issues, and performance issues during construction
- Management of legal and commercial risks to minimise claims and ensure project success

REFERENCED IN THIS ARTICLE

- International Energy Agency
- Australian Energy Market Agreement
- National Electricity Law
- National Electricity Rules
- National Electricity Regulations
- Australian Energy Market Commission
- Australian Energy Regulator
- Australian Energy Market Operator

INTRODUCTION

The International Energy Agency (IEA) sets out in its report entitled 'Net Zero by 2050 – A Roadmap for the Global Energy Sector' (the IEA Report) a roadmap for the development and utilisation of renewable energy technologies (RETs) required to reach net zero by 2050 and keep global warming below 1.5 degrees.[1] The IEA Report explains the need for new and emerging technologies to be developed and commercialised if the necessary reductions in carbon dioxide emissions are to be achieved by 2050. That innovation needs to take place this decade.[2]

As developing technologies enter the market and start to scale up to full commercialisation – particularly at the breakneck speed predicted by the IEA Report – so too will new and evolving challenges. Comparatively traditional renewables projects, such as solar and wind farms, have faced many challenges during their development and initial operation phases.

The disputes that have arisen from these projects will inform and assist with managing potential disputes arising from new energy transition projects.

In this article, we consider some of the key issues that may give rise to disputes in energy transition projects including traditional solar and wind farms, as well as those involving newer technologies, such as hydrogen and storage. Implementing developing technologies is likely to result in an increase in integration and performance-related disputes against manufacturers' warranties and potentially misrepresentation, negligence and contract claims.

Regardless of the technology at issue, managing the complex legal and commercial relationships between parties through the various challenges that may arise during the different stages of a project is essential to a project's success. Properly understanding and appropriately assigning the risk is also essential to mitigate risk and claims.

The multifaceted regulatory framework may give rise to various issues during the development and planning stages, and also throughout commissioning and connection to the grid. Complying with regulatory requirements may also lead to delays, particularly when the requirements change.

Delays during construction and commissioning are to be expected as with any energy project. Delays in supply chains of materials and equipment and labour shortages have been exacerbated by the covid-19 pandemic, leading to disputes.

Defects may arise from equipment being adapted to new environments or implementing new technology during the commissioning and operation phases, which may also eventuate in delays as technologies fail to perform as expected and rectification works or replacement takes time. Other performance issues may also arise during operations.

To mitigate and minimise claims, it is vital to ensure these legal and commercial risks are appropriately allocated at the time of the negotiation of the contracts and that the project is effectively managed during the construction and commissioning phases. The timely and efficient management of any claims that arise, through agreed and well established dispute resolution processes, is also imperative to minimise the impact of any disputes.

DEVELOPING TECHNOLOGIES

RETs are rapidly evolving and improving. While the technologies behind more traditional, developed renewable energy sources, including solar, hydroelectric and wind, are now fairly well understood, more recent innovations and technologies clearly have significant roles to play in the energy transition. These technologies are less proven, both in terms of the science and ultimate functionality. Among these technologies are advanced batteries, hydrogen electrolysers and direct air capture and storage, which the IEA considers to be the most critical of innovations for the reduction of emissions between 2030 and 2050.[3] Realising the potential of these technologies will require the establishment of significant infrastructure, including integrated systems for transportation of hydrogen around industrial zones and ports, as well as pipelines and destinations for captured carbon. Adequate storage of produced energy – in the form of advanced batteries, for example – will be essential for proper utilisation of renewable energy.[4]

Green hydrogen holds particular promise towards efforts to decarbonise heavy industry and transportation, both being notoriously difficult to electrify. Significant investment, including by the federal and state governments, is flowing to green hydrogen in particular, that is,

hydrogen created from traditional renewable sources such as wind and solar, as opposed to brown and blue hydrogen, produced using coal and natural gas respectively. The Australian federal government has invested in the Hydrogen Energy Supply Chain Pilot Project with Japan, which has seen the first shipment of liquid hydrogen from Melbourne to Kobe in Japan in February 2022, upon a specially built ship, the ***Suiso*** Frontier.

Similarly, green ammonia is considered central to decarbonising the agriculture and shipping industries, through carbon neutral fertilisers and shipping fuels respectively. Both green hydrogen and green ammonia technologies rely on the innovation and use of effective electrolysers, the units in which electrolysis – the process of using electricity to split water into hydrogen and oxygen – takes place.

As efficiencies and diversity of renewable energy sources improve, the need for greater storage capability is paramount. Large-scale battery storage is the leading RET designed for this purpose.

Carbon capture, utilisation and storage (CCUS) is essential for achieving net zero targets. The IEA Report predicts CCUS growing to 7.6 billion tonnes of carbon dioxide per year by 2050. This technology has the potential 'to address emissions from existing energy assets, to support a cost-competitive scaling up of low-carbon hydrogen production, and to remove carbon from the atmosphere'.[5] Historically, development of CCUS has been protracted, marred by difficulties in reaching commercialisation, but the global pipeline for carbon capture capacity is improving.[6]

Of course, the rapid advancements in RETS and the necessary construction of infrastructure for commercialisation will bring risks, precipitating potential disputes between parties involved relating to integration issues, performance of new technologies, safety and delay. As some technologies may be in the early stages of development or may even be untested, there are inherent risks with seeking to put such technologies into operation. As a result, performance may not be as anticipated, or unexpected problems may arise. Disputes may result in warranty claims as well as claims of misrepresentation, negligence or breach of contract being brought against the developer of the technology or the construction contractor.

CONTRACTUAL FRAMEWORKS

Energy transition projects involve complex commercial and legal arrangements between the various stakeholders, including the owner or developer, investor, engineering, procurement and construction (EPC) contractor and subcontractors, and the offtaker, as well as the network service provider (NSP) and regulatory entities, including the Australian Energy Market Operator (AEMO).

Likewise, the legal and contractual frameworks for these projects are also complex, usually involving a suite of contracts relating to, for example:

- the commercial relationships between the owner, developer and any investors;
- the financial relationships between the financiers and investors on the one hand and the owner or developer on the other;
- the contractual relationships relating to the land on which the project is developed, including sale, lease and licence arrangements;
-

the power purchase agreement (PPA) between the owner or developer and the party purchasing the energy (the offtaker);

- the construction contracts between the owner or developer and the construction contractor;
- the operations and maintenance (O&M) contract between the owner or developer and the party operating and maintaining the project; and
- various specialist subcontractors and consultants required to assist and support these relationships, including equipment manufacturers.

The project agreements have had to be developed from agreements used for traditional forms of energy, such as coal, oil and gas. These agreements may not address all of the specific issues that may arise with energy transition projects.

For example, PPAs used for traditional power projects have been developed and adapted to suit solar and wind farms. As with traditional coal and gas power plants, the offtaker of some PPAs are public entities or large electricity distributors. However, many PPAs for solar and wind farms are corporate PPAs where the offtaker is a corporate entity seeking to reduce its carbon footprint.

As issues have arisen with the development of solar and wind farms, various clauses in PPAs have been amended and adapted to take into account scenarios not previously foreseen. For renewables projects, clauses in the PPA relating to achieving commercial operations, commissioning and final acceptance tests, delays and liquidated damages, and long stop dates and termination, are central to the allocation of risk and potential liability between the parties. Many of these clauses have been amended or refined as more projects are developed.

For example, some PPAs specify minimal or even no requirements for achieving commercial operations, including the steps required for the final acceptance tests. As disputes have arisen around these issues, subsequent PPAs have been amended to include more specific requirements to ensure there is no ambiguity as to when final acceptance has been achieved. Likewise, clauses relating to liquidated damages for delay or performance shortfalls have been refined to take into account a precise allocation of risk, taking into account issues that may arise during the initial years of operation. Termination provisions have also been clarified to include more specific grounds for termination and processes to be followed. In addition, change in law provisions have been introduced, if not already included, to accommodate changes in the legal and regulatory frameworks.

Similarly, the contracts required for the construction of solar and wind farms have developed from traditional EPC contracts or design and construct contracts. Again, with issues and claims arising as a result of unexpected delays to the construction and commissioning process, various clauses have been refined to address these issues. For example, the timing of and the specific requirements for achieving connection and commissioning of the solar farm were often vague and ambiguous and are now more clearly defined. Also, the allocation of risk with respect to grid connection and commissioning is shifting away from the EPC contractor to the developer and those parties with more involvement in managing and completing the connection and commissioning process.

Operations and maintenance contracts have also been adapted to accommodate issues that are specific to the operation of solar and wind farms. Clauses relating to

performance metrics and consequences if there is performance shortfall have been adapted to accommodate the inevitable weather changes that have been occurring and to accommodate force majeure events.

While there is a myriad of potential disputes that may arise out of the contracts relating to construction and operation of these projects, commercial disputes may also arise between the parties. If there are significant delays during construction or commissioning, parties may be seeking to challenge or blame their joint venture partner or the party engaged as the project manager or asset manager. As a result, typical commercial disputes relating to breach of contract or termination have also arisen.

REGULATORY FRAMEWORK RELATING TO DEVELOPMENT OF THE PROJECT

There is unfortunately no 'one size fits all' regulatory framework for renewable energy projects in Australia. The types of planning and environmental approvals depend on which state the renewable energy project is located in, its size and the potential impacts it may have.

As a result, it may be necessary to obtain regulatory approvals from all three levels of government, namely:

- Commonwealth – environmental approvals under the Environment Protection and Biodiversity Conservation Act 1999 (the EPBC Act) (there is no comparable Commonwealth planning legislation);
- state – under the various state environmental protection and planning legislation, which in some states can also include a layer of state policy; and
- local – including under local development control plans or local planning schemes.

Environmental impacts from renewable energy projects are required to be regulated if, for example, the project requires the clearing of native vegetation, has an impact on 'matters of environmental significance' under the EPBC Act or disrupts threatened flora and fauna. This can result in an interesting balancing exercise between wanting to shift to lower emissions energy sources, while acknowledging that this may have an impact on the environment. A recent example of this is the Federal Environment Minister's decision that the Asian Renewable Energy Hub, a large-scale solar and wind project in the East Pilbara region, is 'clearly unacceptable' due to its adverse impacts on a Ramsar-listed wetland and several listed migratory species under the EPBC Act.

It is possible that there may also be planning impacts that have to be regulated, most commonly noise and adverse impacts on visual amenity. The regulatory framework is intended to ensure that there is an adequate 'separation distance' between the renewable energy project and sensitive uses, such as residential areas. This may lead to land use conflict in the future through the expansion of residential development and its encroachment on renewable power projects, with developers seeking to modify the separation distance to develop as many lots as possible. There are also challenges in regional communities, where landholders express concerns about visual and noise impacts of wind farms and the large footprint of solar farms on arable land. A recent decision of the Victorian Supreme Court makes this point, albeit for an existing and approved wind farm. In ***Uren v Bald Hills Wind Farm Pty Ltd***,[7] the Court ordered that the wind farm operator be restrained from continuing to allow noise from the wind turbines to cause a nuisance at night.

Given the above challenges, ensuring that a project has the correct planning and environmental approvals is crucial.

REGULATORY FRAMEWORK AND DELAYS RELATING TO COMMISSIONING AND CONNECTING TO THE GRID

The generation, transmission and distribution of energy is heavily regulated. The Australian Energy Market Agreement sets out the legislative and regulatory framework for Australia's energy markets. The National Electricity Law, along with the National Electricity Rules and National Electricity Regulations, regulates the national electricity market and electricity networks on the east coast of Australia. Western Australia has separate rules and a different electricity market design.

The energy market is overseen by the Australian Energy Market Commission (AEMC), which establishes the rules for the energy sector and the Australian Energy Regulator (AER), which monitors and enforces the legislation. AEMO manages and operates the gas and electricity markets in southern and eastern Australia.

While there has been significant investment in and development of the technology for energy transition projects, there has been comparatively minimal corresponding investment in the physical infrastructure required to support those projects or connect them to the electricity grid until recently.

The electricity network in outlying areas where many solar and wind farms are located is weak and unable to cope with the substantial number of solar or wind farms seeking to connect to the grid. The West Murray Zone on the border between New South Wales and Victoria is one notable example. In December 2019, AEMO declared a 'system strength gap' and curtailed the generation of some solar and wind farms to protect grid stability and prevent risking power system security. The resulting commercial and legal consequences led to many claims and disputes between offtakers, developers, construction contractors and other parties involved in the projects.

The necessary improvements and investment in the physical infrastructure, initially with minor upgrades and later with major upgrades to the grid, are gradually being undertaken. In the meantime, these issues have been addressed through various regulatory changes.

For example, AEMC introduced new rules in September 2017 to impose stricter modelling data requirements for registration, connection and commissioning of new solar farms. The new requirements have involved additional modelling of the solar farm and the wide area network, that is the network around the generator seeking to connect to the grid. Technical changes to the solar farm, such as the tuning of the inverters, are made during the modelling studies until the results produced indicate GPS compliance and that the operation of the new generator will not impact upon existing generators on the network. However, identifying and resolving the technical changes then retesting the model with the changes in place is time-consuming, thereby causing further delays. Many projects were unprepared for these detailed and time-consuming studies that had to be completed and have faced extensive delays in completing these studies.

Moreover, even if approval to proceed to hold point testing is obtained, there may continue to be delays during the commissioning process as unexpected issues arise that need to be resolved before hold point testing can proceed. Once full commercial operations are achieved, generation may be curtailed by AEMO and the NSP due to the inability of the

network to cope with the number of generators now connected or seeking connection as occurred in the West Murray Zone. As improvements are made to the physical infrastructure, it is anticipated that this will substantially reduce delays to the connection and commissioning processes.

The delays to connection and commissioning have resulted in many disputes arising as parties seek to rebalance the commercial risks and liabilities at a late stage in the project and importantly, before the project is in full commercial operation and generating revenue. Liquidated damages for delays and performance shortfalls have been imposed by offtakers on developers and, in turn, developers on the EPC contractor. Disputes may arise as to the timing and amount of liquidated damages imposed.

Given the extensive delays, it is unsurprising that some EPC contractors have faced difficulties in fulfilling their obligations. Some contractors have even become insolvent as they have been unable to manage the commercial consequences and cashflow difficulties resulting from the delays. In other projects, the developer has terminated the EPC contractor, claiming breach of contract and engaged a replacement contractor to complete the works at the costs of the original EPC contractor. The parties may then dispute liability and who should bear the additional costs incurred.

For some offtakers, the need for solar or wind power to assist with reaching their net zero targets is the overriding objective driving a commercial resolution. In other cases, the offtaker has terminated the PPA due to the significant delays and failure of the developer to achieve the milestone dates. Commercial realities including reduced market prices for energy as compared with the agreed price in the PPA may contribute to the decision to terminate.

Although many of these disputes have been or are being resolved through confidential arbitration proceedings, some disputes have been referred to the courts. It is anticipated that decisions in those cases will soon be publicly available. Such decisions may also result in further adjustments to the underlying contractual framework.

CONSTRUCTION DELAYS RESULTING FROM SUPPLY CHAIN ISSUES AND LABOUR AND RESOURCE SHORTAGES

Construction delays have been exacerbated by labour shortages and supply chain issues, both of which have significantly increased as a result of covid-19.

Labour shortages have impacted all parties involved in renewable energy projects, particularly contractors and subcontractors. Contractors are short-staffed as a result of the spread of covid-19 and various government restrictions and lockdowns. There is also a chronic shortage of skilled labour across the energy, resources and construction sectors, particularly with the restrictions on immigration. Such shortages may adversely impact the construction and commissioning process if, for example, labour with the necessary skills and qualifications are unavailable to complete activities on the critical path. Disputes as to who bears the liability and costs of such delays have arisen and may continue to arise.

Supply chains have been impacted on multiple fronts by covid-19: the import and export of resources and materials required for manufacturing have been slowed down due to shipping delays; labour shortages in manufacturing facilities overseas have reduced production; and the import of finished products, such as solar PV panels, has been substantially delayed. Force majeure claims have also arisen as a result.

Price increases have been another a major issue for the construction of renewable projects. Prices for many resources and materials required have been increasing, partly as a result of covid-19. For example, the price of steel, which is used in many aspects of renewable projects, has increased significantly.

The supply contract for the relevant resource or material may include a price review or price escalation clause that enables the supplier to pass on the price increase to the buyer. However, there is often no corresponding price review or 'fluctuations' clause in the buyer's contract (ie, the construction contract or subcontract for specific works). The price review clause (if any) in the PPA is unlikely to cater for price increases in the supply chain.

Disputes have arisen as to whether the buyer can claim the price increase from the EPC contractor or, in turn, the EPC contractor can claim it from the developer, owner or offtaker, depending on the contractual framework. In most cases, the buyer, who is then responsible for the construction of the works (or specific aspects of the works), will bear the increased cost of the material or resource, unless there is a price review clause in its upstream contract. Other clauses such as force majeure, hardship or change in law clauses may provide some limited assistance but this will depend on the specific terms of the clause.

Unless the parties are able to adopt a pragmatic approach and reach a commercially sensible and amicable solution through a settlement or renegotiation of the contract, the party bearing the costs may have no choice but to try its luck in bringing a claim to recover some of the price increase.

Notably, labour shortages and supply chain delays are also adversely impacting planning and programming of construction activities. Certain construction activities may not proceed until the necessary materials and resources have arrived on-site or the required skilled labour is available. Claims for extension of time, or conversely, liquidated damages, have been arising as a result.

DEFECTS RELATING TO MATERIALS, EQUIPMENT AND TECHNOLOGY

Defects are common in any construction project. While energy transition projects are no exception, defects have and are more likely to arise in projects involving new and unproven technologies. For example, defects have arisen from storage solutions where the technology and construction of the solution are first being tested and changes need to be made. Indeed, it has taken many years for the storage and transportation of liquefied natural gas on board vessels to be optimised. There have been many disputes over tank system defects during that time. Similar issues are anticipated with the storage of hydrogen.

Defects have also arisen where the materials and equipment used for renewable projects are not fit for purpose. Often the materials and equipment required for solar farms in Australia are sourced from Europe or other parts of the world. Those materials and equipment may not be suited, or have not been adapted, to the climatic conditions in Australia. For example, defects have been arising from European inverters that are not suited to Australian conditions. The inverters have been adapted when rectifying the defects.

Defects to material and equipment can result in substantial delays to construction and commissioning and prevent the commencement of commercial operations. It may take a long time to identify the root cause of the defect and to develop a solution to rectify the defect. Tests and proposed solutions may be carried out to no avail. Or it may be that the defective equipment will take many months to be rebuilt and thus will be replaced. In the

meantime the operation of the solar farm may be curtailed substantially or it may not be able to operate at all.

The commercial and legal consequences resulting from such extensive defects will inevitably give rise to claims and disputes being referred to expert determination, arbitration or court proceedings.

PERFORMANCE AND OPERATIONS ISSUES

Achieving commercial operation and passing final acceptance tests does not necessarily mean that the performance and operation of the project will be smooth sailing, particularly in projects integrating multiple technologies. The developer or operator may not be able to meet the generation levels, efficiency requirements or availability percentages required by the PPA. Poor performance may be exacerbated by unplanned outages. Although adjustments can be made in the performance requirements for specified factors outside the developer or operator's control, poor performance may also result in the imposition of performance shortfall liquidated damages by the offtaker depending on the terms of the PPA upstream and by the owner or developer to the operator depending on the terms of the O&M contract downstream.

Defects may arise during the performance and operation of any energy project. Defects with inverters have not only arisen during commissioning but have also arisen during the operation of solar farms. Disputes may arise as to the party responsible for the rectification of those defects as well as liability for consequential delays and losses unless these issues are clearly addressed in the EPC or the O&M contract.

Disputes may also arise as to whether an issue or potential defect should be identified during routine maintenance of the solar or wind farm. However, the routine maintenance schedule in the O&M contract may not detect potential defects before they arise and cause damage.

For example, it is often difficult to identify minor defects that occur on the surface of or within wind turbine blades during operation. Such defects included asymmetrical accumulation of ice, rust and erosion, damage due to impact and extreme weather. Costs associated with disassembly of the blades are usually too high to be commercial. However, there is a current gap in effective technology that can identify these defects without contact, allowing for continuous remote monitoring. While there is experimental technology, such as ultrasound, thermography, strain sensors and acoustic emissions, this has not been implemented without issue. This is a developing space.

Regulatory disputes is another potential source of claims during operations given that a solar or wind farm is operating in a highly regulated market. Regulatory enforcement actions may be commenced if, for example, the farm is not complying with its GPS or not operating in accordance with other regulatory requirements or has contracted to provide some form of system or network support that was not ultimately provided when called upon.

DISPUTE RESOLUTION MECHANISMS

Most agreements for energy transition projects will include extensive dispute resolution mechanisms that seek to provide for the flexible and efficient resolution of disputes during development and construction, as well as comprehensive legal proceedings if litigation or arbitration is required. Choosing mechanisms appropriate for the disputes and carefully drafting the clause will contribute to the effective resolution of disputes.

Multi-tiered dispute resolution clauses commonly included in project agreements provide that:

- disputes are to be initially resolved through negotiations and settlement discussions;
- if the dispute is not resolved, the parties may proceed to mediation (which is usually optional);
- technical or other specific issues that may involve time sensitivities and hence need to be resolved in an efficient manner may be referred to expert determination prior to arbitration or litigation; and
- if the dispute is not resolved, the parties may, as a last resort, refer the dispute to arbitration or litigation.

Expert determination is increasingly becoming an effective tool for efficiently resolving specific issues that have arisen. One of the key benefits of expert determination is that the parties choose an expert who may have the relevant expertise and experience to address the technical issue in dispute. Another benefit is the parties determine the steps required in the process and the timetable. Usually, the matter is resolved within two to six months depending on the complexity of the issues. The parties may provide submissions with supporting documentation and evidence (including witness statements and expert reports) to the expert, which are as detailed or comprehensive as required.

However, referring a dispute to expert determination may be difficult if the parties cannot agree on the issues or questions to be referred. It is a quicker but less rigorous process. Claims are considered with less-developed submissions and supporting evidence (mainly due to the time constraints). Nonetheless, it results in a final and binding determination unless the parties have agreed otherwise. The unsuccessful party cannot appeal or challenge the determination unless there is a manifest error. Hence, parties ought to give careful consideration to whether the determination should be final and binding or subject to arbitration or litigation.

Disputes arising from renewable projects are usually referred to arbitration rather than litigation. This is primarily due to the confidential nature of the arbitral process. It may also be because the project agreements involve foreign parties and enforcement of an arbitral award may be more likely or easier to achieve than enforcement of a court judgment. Arbitration has many benefits, including that parties are able to choose the arbitrators, and the process allows procedural flexibility such that the parties can adopt a process and timetable that suits the specific dispute and that may result in time and cost efficiencies. An arbitral award is final and binding. It cannot be appealed and there are limited grounds on which it can be challenged. This provides finality and closure for the parties involved.

Finally, it is important to carefully draft the dispute resolution clause for the project agreements. As there are multiple contracts involving multiple parties, consideration may need to be given to provide for the joining of additional parties to an arbitration or consolidating multiple arbitrations. It may be that an umbrella dispute resolution contract that applies to all the project agreements would be appropriate.

CONCLUSION

As can be seen from this brief overview, there are many different types of disputes that may arise from energy transition projects. Managing the commercial and legal risks during all

stages of the project is essential to keeping such disputes to a minimum and mitigating issues and claims as they arise. Such challenges are to be expected when implementing greenfield projects, particularly projects that are testing new and developing technologies for the first time. Indeed, similar issues arose when oil and gas projects were first developed. With the pressing need to accelerate the move to net zero, it is essential that these challenges are faced and resolved either commercially or through formal dispute resolution mechanisms.

The authors acknowledge the assistance of Lea Hiltenkamp, Alex Ellem, Emma Northorpe, Connor Barrs and Angie Kim in preparing this article.

Endnotes

1 https://iea.blob.core.windows.net/assets/deebef5d-0c34-4539-9d0c-10b13d840027/NetZeroby2050-ARoadmapfortheGlobalEnergySector_CORR.pdf. Back to section

2 ibid. Back to section

3 ibid. Back to section

4 ibid, page 15. Back to section

5 https://www.iea.org/commentaries/carbon-capture-in-2021-off-and-running-or-another-false-start. Back to section

6 ibid. Back to section

7 [2022] VSC 145. Back to section

Joachim Delaney	jo.delaney@hfw.com
Jo Garland	jo.garland@hfw.com
Nick Longley	nick.longley@hfw.com
Dan Perera	dan.perera@hfw.com
Kate Fisher	kate.fisher@hfw.com

https://www.hfw.com/Home