GAR Global Arbitration Review

The Arbitration Review of the Americas

2023

Regulatory changes present new sources of renewable energy disputes

The Arbitration Review of the Americas

2023

The Arbitration Review of the Americas 2023 contains insight and thought leadership from 38 pre-eminent practitioners from the region. It provides an invaluable retrospective on what has been happening in some of Latin America's more interesting seats. This edition also contains an interesting think piece on concurrent delay as well as an excellent pair of reviews of decisions in the US and Canadian courts.

Generated: March 7, 2024

Regulatory changes present new sources of renewable energy disputes

Seabron Adamson
Charles River Associates

Summary

IN SUMMARY
DISCUSSION POINTS
REFERENCED IN THIS ARTICLE
INTRODUCTION
ORIGINS OF DISPUTES IN THE RENEWABLES SECTOR
EYES ON MEXICO
SUPPLY CHAIN PROBLEMS MAY TRIGGER DELAYS AND DISPUTES
CONCLUSIONS
ENDNOTES

In summary

Investment in the renewable energy sector in Latin America and the Caribbean continues to be robust, driven primarily by capacity additions in Brazil and a few other countries. While past energy arbitrations have primarily focused on changes in subsidy regimes, renewable disputes may increasingly centre on changes in market and transmission rules. Mexico undertook a comprehensive reform of its power sector in 2013; but proposed regulatory and legal market changes instigated by the López Obrador government have focused attention on the risks of renewable projects in development and operational phases. High energy prices across the region should drive increasing investment in solar and wind generation, but, in the short-term, equipment and other supply chain issues may impact projects.

Discussion points

- Renewable energy capacity continues to grow throughout the region and attract private investment
- Regulatory changes seem a probable new source of future energy disputes
- Controversial legislative changes in Mexico is creating uncertainty and attracted legal challenges

Referenced in this article

- Manuel López Obrador
- Mexico's Federal Electricity Commission
- Mexico's Electricity Industry Law
- Mexico's National Centre for Energy Control

Introduction

Despite the continuing effect of the pandemic on financing, investment and construction in many countries, the Americas continued to see substantial additions to renewable energy capacity in 2021. According to the International Renewable Energy Agency (IRENA), 2021 saw the addition of approximately 13 gigawatts (GW) of new capacity in South America, dominated by Brazil which alone had almost 10 GW of new renewable capacity. Chile, which has one of the best solar resources in the world in the northern Atacama Desert region, had another approximately 2 GW in new additions. The Central America and Caribbean region had about 550 megawatts (MW) of additions, spread over many countries. Mexico, whose recent regulatory developments are discussed in more detail below, had approximately 3

GW of new renewable capacity in 2021.[1] Solar photovoltaic (PV) capacity made up most additions in many of the major countries in the region, including Brazil, Chile and Mexico.[2]

While these renewable capacity additions reflect substantial capital investment – much of it planned prior to the pandemic and recent developments in energy regulation in Mexico – future investment needs are much larger to meet regional climate target commitments. IRENA has estimated that the Latin America and Caribbean region needs US$118 billion per year in investment in renewable energy, transmission lines, energy efficiency and electrification to meet Paris Accord targets.[3]

On a global scale, Bloomberg New Energy Finance estimated global investment in the 'energy transition' of more than US$500 billion in 2020.[4] The International Institute for Applied Systems Analysis has estimated that meeting a climate change target of restricting an increase to 1.5 degrees Celsius could require annual investment of approximately US$1 trillion in renewable power generation up to 2050, along with hundreds of billions more per year required in energy transmission, storage and distribution infrastructure.[5] In a 2021 report on net-zero policies, the IEA called for annual clean energy investment of more than US$4 trillion per year to meet a global net-zero carbon pathway.[6] A significant fraction of this amount would be needed in the renewable energy sector.

Much of this investment would need to come from the private sector and would involve large cross-border investment flows. The scope for international arbitration in the renewable energy sector is therefore likely to rise sharply in the coming years, as new investments create the potential for new commercial and investor–state disputes in the Americas and elsewhere.

Origins of disputes in the renewables sector

Renewable energy projects require large sunk-cost investments and hence – like other infrastructure projects – may create disputes in the development, construction and operational phases. Several specific aspects of the renewable energy sector have the potential for creating disputes that are worth examining briefly.

Dependence on subsidy and other policies

Historically renewable energy generation projects such as wind and solar were typically substantially more expensive than conventional sources of electric generation, and hence investment in the sector required a mixture of direct and indirect policy support from governments. As discussed below, the largest historical driver in renewable energy disputes has been changes in these subsidy or related programmes.

The most common renewable energy support programme in the Americas has been the 'reverse auction' model for procuring renewables. Under this approach, the government or regulatory agency sets an amount of renewable energy to be purchased (often by type of power, such as solar PV) and developers bid to supply the power under a long-term power purchase agreement (PPA) with the utility or other (often governmental) off-taker. The reverse auction model was first developed and implemented in South America and is sometimes referred to as the 'Latin American' model, although it has now been used in more than 50 countries around the world.[7]

The most common renewable support mechanism in Europe, on the other hand, has been the 'feed-in tariff' (FIT). Under this approach, a special FIT price (higher than that for conventional electricity generation) is provided to qualifying projects for a substantial period, often 10 or more years. The level and stability of these prices was designed to make the qualifying projects financially viable. Changes to the FIT prices, however, may have a substantial impact on investors. Changes to FIT prices and rules and related government policies have created a substantial number of arbitrated disputes in Spain, Romania, Italy and other countries. Spain alone has faced approximately 50 claims with respect to its renewable energy policies.[8] Romania has also faced recent claims.[9] The FIT system, which has been involved in many disputes, has not been widely used in Latin America – where the reverse auction approach has dominated.

Financing and contractual structures

Most large solar and wind projects are project-financed. In general terms, project finance may be defined as financing using non-recourse loans made to a special purpose vehicle (SPV) company that owns and often operates the project.[10] Since project finance loans are made without recourse to the assets of the project owner and sponsor, repayment depends critically on the economics of the operational project.

Project finance is a widely recognised and accepted financing technique for many types of projects – not just renewable energy projects. However, it does have characteristics that tend to increase the likelihood of project disputes.

First, project finance is based on complex commercial relationships – between the sponsor, off-taker, lenders and other parties – that are reflected in complex contracts. A project financing depends on a web of complex contractual structures designed to work together. The sheer complexity of negotiating such a set of contracts – which may run to thousands of pages for a complex renewable energy project – can lead to disputes.

Second, the structures of project finance tend to amplify the risks to sponsors. The project sponsor typically does not put its own balance sheet at risk in a project financing as the financing is on a non-recourse basis. However, the lenders may take over and run the project following a default, backed by strong contractual rights in the financing documents with respect to controls of project cash flows, management, etc. In conjunction with the high leverage often associated with renewable energy projects, the risks to equity sponsors may create an 'all or nothing' outcome for project sponsors, increasing the incentive to file a claim if project economics are adversely affected by counterparty or government actions.

Siting and environmental aspects

Utility scale PV and wind projects require a lot of land, and siting and environmental issues can delay or disrupt project development and construction. It is not uncommon for a PV facility to cover more than a square kilometre with solar panels, and large wind projects can require thousands of hectares. Even more land rights are often needed to site the transmission line to interconnect the PV or wind project to the grid. Acquiring the land rights (directly or through leases) and required environmental and other permits necessary to site and build the project can be contentious and trigger disputes with governments and other parties.

Changes in interconnection and electricity market rules

In a previous article, I discussed how interconnection and market rules changes can impact the development and operation of renewable energy projects.[11] Utility-scale wind and solar projects require interconnection to the grid, which is typically subject to complex rules and processes. Transmission grid operators are generally owned by governments or state-owned enterprises, or are at least regulated by government authorities. Changes in interconnection rules and policies may adversely affect projects through delays, increased costs or other means.

After a project has reached its commercial operation date (COD) and has entered service, changes in dispatch and other rules can affect project output and revenues. Once connected, the renewable power project will depend on the grid to transmit the electricity generated to the customer. Changes to rules and policies related to dispatch, curtailment and other operational factors can affect the output economics of an operating project and hence project economics, which may lead to disputes between parties.

Eyes on Mexico

Mexico has seen substantial foreign investment in the renewables sector, but changes in the Mexican power industry have intensified scrutiny on investments in recent years. Mexico launched an ambitious restructuring programme in 2013. This included a constitutional amendment was passed to restructure the state-owned Federal Electricity Commission (CFE).[12] A wide-ranging set of reforms were implemented in the Electric Industry Law (LIE). The LIE ended the CFE's regulatory monopoly, disaggregated the previously vertically-integrated electric sector, and created an independent system operator (ISO) – the National Centre for Energy Control, which was charged with operating the grid and ensuring transmission access and generation dispatch would be non-discriminatory.

The Mexican energy reform package also included direct support mechanisms for renewable energy. A system of clean energy certificates (certificados de energía limpia (CELs)) was implemented to require a minimum level of clean energy production and consumption.[13]

By early 2019 significant issues in the Mexican energy reform were emerging. A renewable auction was delayed and then cancelled by the new Mexican government under President López Obrador.[14] The López Obrador government later allowed conventional hydroelectric resources to count in CEL quantities, with a substantial impact on CEL prices.[15]

In March 2021 additional measures were passed, which included altering the dispatch rules to give priority to CFE generation regardless of cost, with wind and solar dispatched later (along with other independent power generation). These changes also included review of self-supply contracts held by industrial and other large customers, a review of other independent power producer (IPP) contracts with CFE and eliminating future renewables auctions.[16] Changes in transmission tariffs for self-supply contracts and issues connected with interconnections for new generation projects have also been raised.

Many parties objected to the changes, and implementation was halted through 'amparos' which challenged the constitutionality of the March 2021 law.[17] International observers had previously noted the potential for investment treaty claims if the measures were enacted.[18]

In April 2022 the Supreme Court of Justice dismissed a constitutional claim against the 2021 changes. Later in April 2022, the Chamber of Deputies voted against a constitutional reform package related to the energy sector proposed by the party of López Obrador. However, various legal and regulatory uncertainties persist in the sector.[19]

Supply chain problems may trigger delays and disputes

Renewable energy project contracts often have specific deadlines defining when new facilities must be financed, constructed and commissioned. Failure to meet these deadlines can trigger disputes with PPA off-takers, and with lenders and other parties such as engineering, procurement and construction (EPC) contractors. Delays may be behind several claims before the Permanent Court of Arbitration against the Argentine electricity market operator.[20]

The pandemic and current supply chain issues affecting the renewable energy sector may create additional delay-related disputes. Wood Mackenzie projects that 2022 will be a strong year for growth in the Latin American renewable sector, with growth of 9% year-on-year, driven substantially by the solar PV sector and Brazil. However, supply chain constraints, including equipment and transportation availability may be a significant challenge for the sector, as will transmission interconnection issues in some countries.[21]

Finally, 2022 is emerging as a year of very high global energy prices, with high spot oil and liquefied natural gas (LNG) prices. These in turn have often driven high electricity prices in many Latin American and Caribbean countries. Such high prices will likely drive additional demand for renewables such as PV solar and wind in the long run. In the short run, however, high power prices may increase the damages related to delayed renewable projects, if replacement power prices are high. This could stimulate additional disputes between renewable project developers and sponsors and off-takers.

Conclusions

Historically arbitration in the renewables sector has focused on changes in subsidy regimes, as illustrated by the numerous claims made against Spain and other countries. As the renewables sector matures, this is likely to change. While subsidy-related claims are likely to continue at some level, new claims related to transmission interconnection and market rules changes are likely to grow substantially. As the sector grows, commercial disputes related to delays and EPC contract disputes are likely to grow, like those often seen in other infrastructure sectors with large, complex development and construction cycles.

The recovery from the pandemic, the war in Ukraine and other factors have led to high electricity prices across many countries, making PV solar and other renewable technologies even more economically attractive for off-takers, as well as for environmental policy reasons. The next few years look set for rapid growth in the renewables sector, even with equipment and other supply chain problems and the increasing issues related to transmission capacity to interconnect new projects in many countries in the Americas.

Footnotes

[1] International Renewable Energy Agency, Renewable Capacity Statistics 2022, April 2022, available at www.irena.org.

[2] Ibid.

[3] International Renewable Energy Agency, 'Financing Renewable Energy Projects in Latin America and Caribbean Regions', December 2021, available at www.irena.org.

[4] Bloomberg New Energy Finance, Energy Transition Investment Trends: Tracking Global Investment in the Low-Carbon Energy Transition, 2021.

[5] International Institute for Applied Systems Analysis, 'What Investments are Needed in the Global Energy System in Order to Satisfy the NDC and 2 and 1.5 □ C Goals', IIASA Policy Briefs, 2019, available at www.iiasa.at.

[6] International Energy Agency, 'Net Zero by 2050: A Roadmap for the Global Energy Sector', May 2021.

[7] Lisa Viscidi and Ariel Yépez, 'Clean Energy Auctions in Latin America, Inter-American Development Bank', 2019.

[8] Sebastian Perry, 'Spain Marks 50th Renewable Claim as New Reforms Roil Investors', Global Arbitration Review, 21 September 2021.

[9] Cosmo Sanderson, 'Romania Hit with Another Renewables Claim', Global Arbitration Review, 4 May 2022.

[10] S Santosh Raikar and Seabron Adamson, Renewable Energy Finance: Theory and Practice, London: Academic Press, 2020.

[11] Seabron Adamson, 'Renewable Energy Disputes in the Americas: Potential Future Developments', in Arbitration Review of the Americas 2022, Global Arbitration Review, 12 August 2021.

[12] Peter Nance, 'Mexico's New Energy Model: Initial Results from the Mexican Electricity Reform, 2013-18', working paper published by the Wilson Center Mexico Institute, Washington, DC, May 2018.

[13] Semarnat/GIZ, 'Clean Energy Certificates and Emissions Trading in Mexico: Reciprocal Effects and Interactions', November 2018.

[14] Jason Deign, 'Industry Stunned as Mexico Cancels Clean Power Auction', Greentech Media, 4 February 2019.

[15] Jose R Martin, 'Mexican president stands by clampdown against renewable "privileges"', PVTECH, 9 January 2020.

[16] Rebecca Conan, 'Mexico's AMLO sends power counter-reform bill', Argus Media, 2 February 2021. Jones Day, '2021 Mexican Electricity Reform: What Foreign Investors in Mexico Must Know to Protect Their Rights', 10 March 2021.

[17] Jorge Monroy, 'Van por lo menos 30 amparos contra la reforma eléctrica de AMLO', El Economista, 17 March 2021.

[18] Cosmo Sanderson, 'Mexico power bill draws warning of treaty claims', Global Arbitration Review, 3 February 2021.

[19] Fitch Ratings, 'Regulatory Uncertainty Persists with Mexican Energy Reform Rejection', 21 April 2022.

[20] Cosmo Sanderson, 'Argentine grid manager facing third claim', Global Arbitration Review, 3 February 2021.

[21] Leila Garcia de Fonseca, '2022 Outlook: Why 2022 Will Be a Record Year for Latin American Power and Renewables', Wood Mackenzie, January 2022, available at woodmac.com.

IN SUMMARY

Investment in the renewable energy sector in Latin America and the Caribbean continues to be robust, driven primarily by capacity additions in Brazil and a few other countries. While past energy arbitrations have primarily focused on changes in subsidy regimes, renewable disputes may increasingly centre on changes in market and transmission rules. Mexico undertook a comprehensive reform of its power sector in 2013; but proposed regulatory and legal market changes instigated by the López Obrador government have focused attention on the risks of renewable projects in development and operational phases. High energy prices across the region should drive increasing investment in solar and wind generation, but, in the short-term, equipment and other supply chain issues may impact projects.

DISCUSSION POINTS

- Renewable energy capacity continues to grow throughout the region and attract private investment
- Regulatory changes seem a probable new source of future energy disputes
- Controversial legislative changes in Mexico is creating uncertainty and attracted legal challenges

---

REFERENCED IN THIS ARTICLE

- Manuel López Obrador
- Mexico's Federal Electricity Commission
- Mexico's Electricity Industry Law
- Mexico's National Centre for Energy Control

INTRODUCTION

Despite the continuing effect of the pandemic on financing, investment and construction in many countries, the Americas continued to see substantial additions to renewable energy capacity in 2021. According to the International Renewable Energy Agency (IRENA), 2021 saw the addition of approximately 13 gigawatts (GW) of new capacity in South America, dominated by Brazil which alone had almost 10 GW of new renewable capacity. Chile, which has one of the best solar resources in the world in the northern Atacama Desert region, had another approximately 2 GW in new additions. The Central America and Caribbean region

had about 550 megawatts (MW) of additions, spread over many countries. Mexico, whose recent regulatory developments are discussed in more detail below, had approximately 3 GW of new renewable capacity in 2021.[1] Solar photovoltaic (PV) capacity made up most additions in many of the major countries in the region, including Brazil, Chile and Mexico.[2]

While these renewable capacity additions reflect substantial capital investment – much of it planned prior to the pandemic and recent developments in energy regulation in Mexico – future investment needs are much larger to meet regional climate target commitments. IRENA has estimated that the Latin America and Caribbean region needs US$118 billion per year in investment in renewable energy, transmission lines, energy efficiency and electrification to meet Paris Accord targets.[3]

On a global scale, Bloomberg New Energy Finance estimated global investment in the 'energy transition' of more than US$500 billion in 2020.[4] The International Institute for Applied Systems Analysis has estimated that meeting a climate change target of restricting an increase to 1.5 degrees Celsius could require annual investment of approximately US$1 trillion in renewable power generation up to 2050, along with hundreds of billions more per year required in energy transmission, storage and distribution infrastructure.[5] In a 2021 report on net-zero policies, the IEA called for annual clean energy investment of more than US$4 trillion per year to meet a global net-zero carbon pathway.[6] A significant fraction of this amount would be needed in the renewable energy sector.

Much of this investment would need to come from the private sector and would involve large cross-border investment flows. The scope for international arbitration in the renewable energy sector is therefore likely to rise sharply in the coming years, as new investments create the potential for new commercial and investor–state disputes in the Americas and elsewhere.

ORIGINS OF DISPUTES IN THE RENEWABLES SECTOR

Renewable energy projects require large sunk-cost investments and hence – like other infrastructure projects – may create disputes in the development, construction and operational phases. Several specific aspects of the renewable energy sector have the potential for creating disputes that are worth examining briefly.

Dependence On Subsidy And Other Policies

Historically renewable energy generation projects such as wind and solar were typically substantially more expensive than conventional sources of electric generation, and hence investment in the sector required a mixture of direct and indirect policy support from governments. As discussed below, the largest historical driver in renewable energy disputes has been changes in these subsidy or related programmes.

The most common renewable energy support programme in the Americas has been the 'reverse auction' model for procuring renewables. Under this approach, the government or regulatory agency sets an amount of renewable energy to be purchased (often by type of power, such as solar PV) and developers bid to supply the power under a long-term power purchase agreement (PPA) with the utility or other (often governmental) off-taker. The reverse auction model was first developed and implemented in South America and is sometimes referred to as the 'Latin American' model, although it has now been used in more than 50 countries around the world.[7]

The most common renewable support mechanism in Europe, on the other hand, has been the 'feed-in tariff' (FIT). Under this approach, a special FIT price (higher than that for conventional electricity generation) is provided to qualifying projects for a substantial period, often 10 or more years. The level and stability of these prices was designed to make the qualifying projects financially viable. Changes to the FIT prices, however, may have a substantial impact on investors. Changes to FIT prices and rules and related government policies have created a substantial number of arbitrated disputes in Spain, Romania, Italy and other countries. Spain alone has faced approximately 50 claims with respect to its renewable energy policies.[8] Romania has also faced recent claims.[9] The FIT system, which has been involved in many disputes, has not been widely used in Latin America – where the reverse auction approach has dominated.

Financing And Contractual Structures

Most large solar and wind projects are project-financed. In general terms, project finance may be defined as financing using non-recourse loans made to a special purpose vehicle (SPV) company that owns and often operates the project.[10] Since project finance loans are made without recourse to the assets of the project owner and sponsor, repayment depends critically on the economics of the operational project.

Project finance is a widely recognised and accepted financing technique for many types of projects – not just renewable energy projects. However, it does have characteristics that tend to increase the likelihood of project disputes.

First, project finance is based on complex commercial relationships – between the sponsor, off-taker, lenders and other parties – that are reflected in complex contracts. A project financing depends on a web of complex contractual structures designed to work together. The sheer complexity of negotiating such a set of contracts – which may run to thousands of pages for a complex renewable energy project – can lead to disputes.

Second, the structures of project finance tend to amplify the risks to sponsors. The project sponsor typically does not put its own balance sheet at risk in a project financing as the financing is on a non-recourse basis. However, the lenders may take over and run the project following a default, backed by strong contractual rights in the financing documents with respect to controls of project cash flows, management, etc. In conjunction with the high leverage often associated with renewable energy projects, the risks to equity sponsors may create an 'all or nothing' outcome for project sponsors, increasing the incentive to file a claim if project economics are adversely affected by counterparty or government actions.

Siting And Environmental Aspects

Utility scale PV and wind projects require a lot of land, and siting and environmental issues can delay or disrupt project development and construction. It is not uncommon for a PV facility to cover more than a square kilometre with solar panels, and large wind projects can require thousands of hectares. Even more land rights are often needed to site the transmission line to interconnect the PV or wind project to the grid. Acquiring the land rights (directly or through leases) and required environmental and other permits necessary to site and build the project can be contentious and trigger disputes with governments and other parties.

Changes In Interconnection And Electricity Market Rules

In a previous article, I discussed how interconnection and market rules changes can impact the development and operation of renewable energy projects.[11] Utility-scale wind and solar projects require interconnection to the grid, which is typically subject to complex rules and processes. Transmission grid operators are generally owned by governments or state-owned enterprises, or are at least regulated by government authorities. Changes in interconnection rules and policies may adversely affect projects through delays, increased costs or other means.

After a project has reached its commercial operation date (COD) and has entered service, changes in dispatch and other rules can affect project output and revenues. Once connected, the renewable power project will depend on the grid to transmit the electricity generated to the customer. Changes to rules and policies related to dispatch, curtailment and other operational factors can affect the output economics of an operating project and hence project economics, which may lead to disputes between parties.

EYES ON MEXICO

Mexico has seen substantial foreign investment in the renewables sector, but changes in the Mexican power industry have intensified scrutiny on investments in recent years. Mexico launched an ambitious restructuring programme in 2013. This included a constitutional amendment was passed to restructure the state-owned Federal Electricity Commission (CFE).[12] A wide-ranging set of reforms were implemented in the Electric Industry Law (LIE). The LIE ended the CFE's regulatory monopoly, disaggregated the previously vertically-integrated electric sector, and created an independent system operator (ISO) – the National Centre for Energy Control, which was charged with operating the grid and ensuring transmission access and generation dispatch would be non-discriminatory.

The Mexican energy reform package also included direct support mechanisms for renewable energy. A system of clean energy certificates (certificados de energía limpia (CELs)) was implemented to require a minimum level of clean energy production and consumption.[13]

By early 2019 significant issues in the Mexican energy reform were emerging. A renewable auction was delayed and then cancelled by the new Mexican government under President López Obrador.[14] The López Obrador government later allowed conventional hydroelectric resources to count in CEL quantities, with a substantial impact on CEL prices.[15]

In March 2021 additional measures were passed, which included altering the dispatch rules to give priority to CFE generation regardless of cost, with wind and solar dispatched later (along with other independent power generation). These changes also included review of self-supply contracts held by industrial and other large customers, a review of other independent power producer (IPP) contracts with CFE and eliminating future renewables auctions.[16] Changes in transmission tariffs for self-supply contracts and issues connected with interconnections for new generation projects have also been raised.

Many parties objected to the changes, and implementation was halted through 'amparos' which challenged the constitutionality of the March 2021 law.[17] International observers had previously noted the potential for investment treaty claims if the measures were enacted.[18]

In April 2022 the Supreme Court of Justice dismissed a constitutional claim against the 2021 changes. Later in April 2022, the Chamber of Deputies voted against a constitutional reform package related to the energy sector proposed by the party of López Obrador. However, various legal and regulatory uncertainties persist in the sector.[19]

SUPPLY CHAIN PROBLEMS MAY TRIGGER DELAYS AND DISPUTES

Renewable energy project contracts often have specific deadlines defining when new facilities must be financed, constructed and commissioned. Failure to meet these deadlines can trigger disputes with PPA off-takers, and with lenders and other parties such as engineering, procurement and construction (EPC) contractors. Delays may be behind several claims before the Permanent Court of Arbitration against the Argentine electricity market operator.[20]

The pandemic and current supply chain issues affecting the renewable energy sector may create additional delay-related disputes. Wood Mackenzie projects that 2022 will be a strong year for growth in the Latin American renewable sector, with growth of 9% year-on-year, driven substantially by the solar PV sector and Brazil. However, supply chain constraints, including equipment and transportation availability may be a significant challenge for the sector, as will transmission interconnection issues in some countries.[21]

Finally, 2022 is emerging as a year of very high global energy prices, with high spot oil and liquefied natural gas (LNG) prices. These in turn have often driven high electricity prices in many Latin American and Caribbean countries. Such high prices will likely drive additional demand for renewables such as PV solar and wind in the long run. In the short run, however, high power prices may increase the damages related to delayed renewable projects, if replacement power prices are high. This could stimulate additional disputes between renewable project developers and sponsors and off-takers.

CONCLUSIONS

Historically arbitration in the renewables sector has focused on changes in subsidy regimes, as illustrated by the numerous claims made against Spain and other countries. As the renewables sector matures, this is likely to change. While subsidy-related claims are likely to continue at some level, new claims related to transmission interconnection and market rules changes are likely to grow substantially. As the sector grows, commercial disputes related to delays and EPC contract disputes are likely to grow, like those often seen in other infrastructure sectors with large, complex development and construction cycles.

The recovery from the pandemic, the war in Ukraine and other factors have led to high electricity prices across many countries, making PV solar and other renewable technologies even more economically attractive for off-takers, as well as for environmental policy reasons. The next few years look set for rapid growth in the renewables sector, even with equipment and other supply chain problems and the increasing issues related to transmission capacity to interconnect new projects in many countries in the Americas.

Endnotes

1 International Renewable Energy Agency, Renewable Capacity Statistics 2022, April 2022, available at www.irena.org. ^ Back to section

2 Ibid. ^ Back to section

3 International Renewable Energy Agency, 'Financing Renewable Energy Projects in Latin America and Caribbean Regions', December 2021, available at www.irena.org. ^ Back to section

4 Bloomberg New Energy Finance, Energy Transition Investment Trends: Tracking Global Investment in the Low-Carbon Energy Transition, 2021. ^ Back to section

5 International Institute for Applied Systems Analysis, 'What Investments are Needed in the Global Energy System in Order to Satisfy the NDC and 2 and 1.5 C Goals', IIASA Policy Briefs, 2019, available at www.iiasa.at. ^ Back to section

6 International Energy Agency, 'Net Zero by 2050: A Roadmap for the Global Energy Sector', May 2021. ^ Back to section

7 Lisa Viscidi and Ariel Yépez, 'Clean Energy Auctions in Latin America, Inter-American Development Bank', 2019. ^ Back to section

8 Sebastian Perry, 'Spain Marks 50th Renewable Claim as New Reforms Roil Investors', Global Arbitration Review, 21 September 2021. ^ Back to section

9 Cosmo Sanderson, 'Romania Hit with Another Renewables Claim', Global Arbitration Review, 4 May 2022. ^ Back to section

10 S Santosh Raikar and Seabron Adamson, Renewable Energy Finance: Theory and Practice, London: Academic Press, 2020. ^ Back to section

11 Seabron Adamson, 'Renewable Energy Disputes in the Americas: Potential Future Developments', in Arbitration Review of the Americas 2022, Global Arbitration Review, 12 August 2021. ^ Back to section

12 Peter Nance, 'Mexico's New Energy Model: Initial Results from the Mexican Electricity Reform, 2013-18', working paper published by the Wilson Center Mexico Institute, Washington, DC, May 2018. ^ Back to section

13 Semarnat/GIZ, 'Clean Energy Certificates and Emissions Trading in Mexico: Reciprocal Effects and Interactions', November 2018. ^ Back to section

14 Jason Deign, 'Industry Stunned as Mexico Cancels Clean Power Auction', Greentech Media, 4 February 2019. ^ Back to section

15 Jose R Martin, 'Mexican president stands by clampdown against renewable "privileges"', PVTECH, 9 January 2020. ^ Back to section

16 Rebecca Conan, 'Mexico's AMLO sends power counter-reform bill', Argus Media, 2 February 2021. Jones Day, '2021 Mexican Electricity Reform: What Foreign Investors in Mexico Must Know to Protect Their Rights', 10 March 2021. ^ Back to section

17 Jorge Monroy, 'Van por lo menos 30 amparos contra la reforma eléctrica de AMLO', El Economista, 17 March 2021. Back to section

18 Cosmo Sanderson, 'Mexico power bill draws warning of treaty claims', Global Arbitration Review, 3 February 2021. Back to section

19 Fitch Ratings, 'Regulatory Uncertainty Persists with Mexican Energy Reform Rejection', 21 April 2022. Back to section

20 Cosmo Sanderson, 'Argentine grid manager facing third claim', Global Arbitration Review, 3 February 2021. Back to section

21 Leila Garcia de Fonseca, '2022 Outlook: Why 2022 Will Be a Record Year for Latin American Power and Renewables', Wood Mackenzie, January 2022, available at woodmac.com. Back to section

CRA Charles River Associates

200 Clarendon Street,Boston 02116-5092,United States

Tel: +1 617 425 3000

https://www.crai.com/

Read more from this firm on GAR