



Investor–State Disputes in the Fossil Fuel Industry

IISD REPORT



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Investor–State Disputes in the Fossil Fuel Industry

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Executive Summary

The fossil fuel industry is the most significant contributor to climate change. As the consequences of burning fossil fuels become increasingly evident, policy-makers across the globe are stepping up their efforts to curb emissions. These actions inevitably aim at curtailing fossil fuel activities. However, under current international investment law (IIL), foreign investments in fossil fuel projects are granted special protection and access to investor–state dispute settlement (ISDS). Through this system, investors can bring claims to international tribunals regarding regulatory measures adopted by a host state that they allege breach their investment privileges under IIL.

This report analyses the trends in investor–state disputes initiated by investors in the fossil fuel industry to understand the extent to which this industry relies on ISDS to protect its investments. The emerging picture is that the fossil fuel industry has been a pioneer of the ISDS system and has been using it extensively to protect its investments. This protection can hinder the development and implementation of measures to tackle climate change and can present a major obstacle for countries seeking to phase out fossil fuels.

The report provides a quantitative analysis of the known investment arbitrations related to the fossil fuel industry (fossil fuel arbitrations)—a total of 231 have been identified. These arbitrations have been identified within a dataset compiled by the author consisting of 1,206 investor–state arbitrations across all sectors based on international investment agreements, national investment laws, and investment contracts. The database comprises all the arbitrations initiated up to December 31, 2020, included in either the International Centre for Settlement of Investment Disputes (ICSID) or the United Nations Conference on Trade and Development (UNCTAD) databases.¹

The main findings are as follows:

- The fossil fuel industry is the most litigious industry in the ISDS system by number of cases, accounting for almost 20% of the total known ISDS cases across all sectors. In comparison, the second most litigious sector, the mining industry, is accountable for 11% of known ISDS cases across all sectors. The vast majority of fossil fuel arbitrations are related to the oil and gas industry (92%). Further, almost half of all fossil fuel cases are related to upstream investments, which comprise all operations from the exploration of new fossil fuel reserves to their extraction.
- There is a widespread lack of transparency. In all, 54% of the concluded fossil fuel cases are confidential—while their existence is known, no case-related documents, such as awards or decisions, have been made public.² Almost one-third of fossil fuel arbitrations have been settled before the tribunal reached a final award, and nearly all of these cases are confidential. The implications of these settlements for public policy and states' regulatory and fiscal space are therefore unknown.

¹ See Section 1. Defining the methodology and categorizing the arbitrations.

² Cases have been considered confidential when they are included in either the UNCTAD Investment Policy Hub or ICSID databases, but none of the documents had been released to the public (e.g., award or claims).



- Over 30% of the publicly available decisions awarded in fossil fuel arbitrations present environmental components, and there has been a recent (but growing) wave of arbitrations initiated to counteract specific climate measures, such as the phasing out of fossil fuels.
- The majority of known fossil fuel cases are decided in favour of investors. This is particularly visible at the merits stage, where investors succeeded in 76% of all cases. Moreover, the average amount awarded in fossil fuel cases—over USD 600 million—is almost five times the amount awarded in non-fossil fuel cases.³
- Investors in the fossil fuel industry base their claims on contracts more frequently than on international investment agreements or domestic investment laws. Further, contract-based arbitrations constitute almost 65% of the fossil fuel arbitrations brought against low-income countries. Accordingly, attention should be paid to investment contracts in addition to international investment agreements (IIAs). Where investors do bring claims based on international agreements, they most frequently do so on the basis of the Energy Charter Treaty (ECT)—with 17% of all fossil fuel cases, the ECT is the single most employed IIA. Moreover, fossil fuel investors have recourse to increasingly complex legal strategies and tend to initiate multiple arbitrations over the same case scenarios.
- Lower middle- and upper-middle-income countries receive the highest number of claims related to fossil fuel investments, while 92% of investors/claimants are from high-income countries (American investors initiated almost 30% of fossil fuel arbitrations).

The prevalence of fossil fuel cases in the ISDS system is particularly concerning in the context of climate change, where phasing out fossil fuels is imperative to stay within the Paris Agreement’s objectives (Allen et al., 2009; Lazarus & Van Asselt, 2018; Muttitt et al., 2016). Article 2.C. of the Paris Agreement states the objective of “Making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development.” Further, there is scientific consensus that to limit global warming to 1.5°C, the majority of all estimated reserves of coal, oil, and gas must not be extracted (Ripple et al., 2019; Welsby et al., 2021).

Moreover, the fossil fuel sector is already using ISDS to challenge state decisions aimed at implementing climate policies. With the adverse impacts of climate change becoming increasingly frequent and intense, states are set to pursue ever-more ambitious and determined climate policies. Based on the findings of this report, we can expect an increase in the use of ISDS by fossil fuel investors to challenge these urgently needed government actions.

³ This average does not include the *Hulley Enterprises v. Russia* case, since it is the largest amount ever awarded in investment arbitration history (USD 40 billion). In comparison, the second largest claim ever awarded—another fossil fuel arbitration—is almost five times smaller. Accordingly, this case was not included in the average because it represents a unique episode rather than a standard award and would hence affect the results.



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Introduction

The fossil fuel sector—namely any activity implicated in the extraction, processing, distribution, supply, transportation, storage, or power generation from coal, oil, and natural gas—is, “by far, the largest contributor to global climate change, accounting for over 75% of [global greenhouse gas] GHG emissions and close to 90% of all carbon dioxide (CO₂) emissions” (Stockholm Environment Institute [SEI] et al., 2019, p. 8). As a response, climate scientists are calling for an organized and planned exit strategy from the world’s dependency on fossil fuels (Allen et al., 2009; Lazarus & Van Asselt, 2018; Muttitt et al., 2016). Further, the majority of estimated reserves for oil, gas, and coal must not be extracted if we are to succeed in limiting warming to 1.5 °C or 2 °C (Ripple et al., 2019; Welsby et al., 2021). The International Energy Agency [IEA] net-zero scenario by 2050 shows that “there is no need for investment in new fossil fuel supply” (IEA, 2021, p. 21). Achieving net-zero emissions by 2050 is necessary to stay within the carbon budget for the target of 1.5 °C of warming (IEA, 2021).

Despite this urgent need to rapidly transition to renewable forms of energy, the world’s energy systems are still highly dependent on fossil fuels. In 2019, fossil fuels supplied 84% of the world’s energy (Ritchie, 2020a), making the energy sector the largest emitter of GHGs and the biggest contributor to climate change. As an example, in 2016, the energy sector accounted for 73.2% of global GHG emissions—more than three times the contribution of the second-largest sector per emissions that year (18.4%), agriculture, forestry and land use (Ritchie, 2020b).

To reverse these trends and implement a successful fossil fuel phase-out and energy transition on a global scale, “large changes in investment patterns” are necessary (Intergovernmental Panel on Climate Change, 2014, p. 26). This need to shift investment from fossil fuels to renewable energy and other low-carbon technologies and infrastructure is recognized in the text of the Paris Agreement (2016), whose Article 2.C. states the objective of “Making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development.” Nonetheless, investment trends are going in a very different direction. Investments in fossil fuel projects were still growing strongly before the COVID-19 pandemic, absorbing half of all energy investments in 2019, for a total of USD 976 billion (IEA, 2020). Moreover, their projected growth was not aligned with the Paris Agreement objectives (SEI et al., 2019).

The shift needed in investment patterns will be harder to achieve if foreign investments in fossil fuel projects continue to be granted special protection under international investment law (IIL). Under this regime, states grant special protection privileges to foreign investors through international investment agreements (IIAs), investment provisions in contracts, and specialized national legislation. There are currently over 2,300 bilateral investment treaties (BITs) and around 320 treaties with investment provisions in force.⁴ These treaties typically cover foreign investment in all sectors, including energy and fossil fuels, regardless of their carbon intensity. One sectoral treaty, the Energy Charter Treaty (1994), grants special

⁴ For the updated numbers, please see the UNCTAD Investment Policy Hub at <https://investmentpolicy.unctad.org/international-investment-agreements>.



protection and access to investor–state dispute settlement (ISDS) to energy sector investors, explicitly the fossil fuel sector (Di Salvatore et al., 2021; Eberhardt et al., 2018). In addition to treaties, 74 countries have adopted laws granting special treatment to foreign investments at the national level (Berge & St John, 2020).

The various instruments forming IIL typically include provisions on ISDS, allowing investors to bring claims of alleged breaches to international arbitral tribunals. In other words, ISDS allows investors to sue governments over measures and actions that allegedly violate the standards of treatment granted to their investments. Through this system, investors can seek compensation for the lost value or profit of their investments. In the last two decades, the number of investment arbitrations has grown exponentially, with consistently high numbers of new cases in recent years (United Nations Conference on Trade and Development [UNCTAD], 2020b). In the context of climate change, this means that foreign investors can potentially sue states for adopting climate measures that could curtail their profit.

IIL and environmental law have historically had very little crossover, but the rise in investment arbitrations related to environmental issues has attracted growing attention from the political arena, civil society, and academic scholarship (Miles, 2019). The possible conflicts between the protection of the environment and the privileges granted to foreign investments emerge clearly when environmental measures (including climate measures) are claimed to violate investment provisions guaranteed under IIAs. Growing scholarly literature has been focusing on the conflicting nature of such a relationship (Bernasconi-Osterwalder & Johnson, 2010; 2019; Brauch, 2020; Miles, 2008, 2019; Sachs et al., 2020; Viñuales, 2012, 2016). Another branch has focused on the threat that IIL can pose to public policy implementation, especially climate policy (Cotula, 2020a; Cotula & Tienhaara, 2013; Lobel & Fermeiglia, 2018; Tienhaara 2009, 2018; Tienhaara & Cotula, 2020). Further, research has been carried out around the theory that such special protection under IIL can induce regulatory chill in host states (Berge & Berger 2019; Brown, 2013; Tienhaara, 2018; Van Harten & Scott, 2016; Werksman et al., 2003). Lastly, many scholars advocate for the realignment of investment treaties and contracts with the Sustainable Development Goals (Cotula & Tienhaara 2013; Johnson et al., 2019) or an overall modernization of IIL to foster climate action (Tienhaara & Cotula, 2020). A series of proposals have been formulated, such as redesigning the ECT (Bernasconi-Osterwalder & Brauch, 2019) or the proposal for a treaty on sustainable investment for climate change (Brauch et al., 2019).

To date, no comprehensive quantitative analysis of the arbitrations initiated in the fossil fuel sector has been carried out. This report intends to fill this gap and provide a quantitative analysis of the extent to which the fossil fuel sector has used ISDS mechanisms to protect its investments. To do so, it examines global trends and patterns in investor–state disputes launched by this industry. It pays particular attention to disputes in low-income countries, those involving the energy sector, and those that challenge measures taken to protect the climate and/or the environment. This is a quantitative analysis based on a dataset compiled by the author using information gathered from UNCTAD’s Investment Policy Hub and the International Centre for Settlement of Investment Disputes (ICSID).⁵

⁵ See Section 2 on methodology.



Section 1 of this report explains the methodology adopted; Section 2 considers the historical evolution and the current general trends of fossil fuel arbitrations; Section 3 considers regional trends within this sector; Section 4 looks at the composition of the investor–claimants; Section 5 looks at fossil fuel arbitrations related to environmental or climate measures; and Section 6 explores the impact that the special treatment accorded to fossil fuel investment has on climate and environmental measures. The report ends with some general conclusions.



1.0 Defining the Methodology and Categorizing the Arbitrations

To identify global trends and patterns in investor–state arbitrations in the fossil fuel industry, this research adopts a quantitative approach. Quantitative methods are not frequently used in legal research (Chui, 2007) because of the apparent limitation they impose on the legal assessment of primary sources such as arbitral awards (which are decided on a case-by-case basis). The limitation of adopting this method hence lies in the lack of analysis of the legal peculiarities of each arbitration. However, this methodology is adopted in this report because it seeks to statistically understand the extent to which fossil fuel industry actors have used ISDS to protect their investments. Exceptionally, for the sake of identifying arbitrations that are related to environmental issues in Section 5, a qualitative analysis of the content of several awards has been carried out.

To be statistically relevant, quantitative analysis requires a sufficient amount of data. As a result of the expansion of the ISDS caseload (UNCTAD, 2020b) in the last two decades, there is now a large enough sample of cases to draw relevant conclusions, especially in the fossil fuel industry.

To identify known investment arbitrations related to the fossil fuel industry, a first dataset was gathered of all investor–state disputes included in UNCTAD’s latest data release (2020) and in the ICSID caseload.⁶ All the cases from UNCTAD’s database⁷ have been included in this dataset, together with all the ICSID’s investor–state arbitrations that were not included in the UNCTAD dataset (most of them are contract-based arbitrations). This process generated a sample of 1,206 investor–state arbitrations that encompass several areas of economic activity.

This study considers only international arbitrations as opposed to domestic arbitrations. It also considers only arbitrations initiated by one or more investors against their host state; any commercial arbitration—i.e., arbitration between private persons—is not part of the dataset generated for this report. The legal basis for these arbitrations is either an IIA, a national investment law, an investment contract, or some combination of these, and the main administering institutions are ICSID, Permanent Court of Arbitration, Stockholm Chamber of Commerce, International Chamber of Commerce, and the London Court of International Arbitration. Arbitrations may also be conducted on an *ad hoc* basis, without an administering institution.

From this dataset, adopting the definition of energy investments embedded in the ECT, 374 energy-related cases were identified, of which 226 concern fossil fuels investments. Specifically, the disputes identified are all related to an “Economic Activity in the Energy Sector”

⁶ The cases from ICSID were downloaded from the ICISD Database available at <https://icsid.worldbank.org/cases/case-database>.

⁷ With the exclusion of an investment arbitration that I found to be repeated: *Apotex v USA* (I) and (II). Both cases seem to refer to the same arbitration, and the awards published in the UNCTAD Investment Policy hub are the same. See here <https://investmentpolicy.unctad.org/investment-dispute-settlement/cases/309/apotex-v-usa-i->; <https://investmentpolicy.unctad.org/investment-dispute-settlement/cases/353/apotex-v-usa-ii->



(Art.1(5)), and specified sources and technologies were categorized according to the definition of Energy Materials and Products and Energy-Related Equipment of the ECT (Art.1.4 and 1.4 bis). Then, seven non-energy fossil fuel-related cases were identified, all related to the petrochemical industry. In other words, fossil fuels are all “hydrocarbon-containing materials of biological origin” (Kopp, 2020), such as coal, petroleum, natural gas, oil shales, bitumen, tar sands, and heavy oils—coal, oil, and gas in all forms. Accordingly, investments in the fossil fuel industry are defined for the purpose of this research as investments in any activity related to the extraction, processing, distribution, supply, transportation, storage, or power generation from coal, oil, or gas.

The totality of fossil fuel arbitrations thus amounts to 231, and these arbitrations are labelled as “fossil fuel arbitrations.” All other arbitrations are referred to as “non-fossil fuel arbitrations.”

A further seven fossil fuel arbitrations have been identified as “historical arbitrations” that are not included in either UNCTAD or ICSID. They correspond to the waves of arbitrations initiated against nationalization campaigns that took place in Libya in the 1970s and in Iran soon after. As the label suggest, these arbitrations are considered in this report for their historical relevance, but they are not counted in the sample. Consequently, these arbitrations will also not be considered when drawing a comparison with non-fossil fuel arbitrations.⁸

The complete list of fossil fuel arbitrations is available in Annex I and Annex II. For the sake of clarity and conciseness, arbitrations throughout the report will be identified with their short name, while the proper reference will be available in Annex I and Annex II.

Table 1. Total sample of arbitrations and fossil fuel arbitrations

Name	Source	Sample	Fossil fuel arbitrations
UNCTAD database	UNCTAD, Investment Dispute Settlement Navigator: full data release as of 31/07/2020 (Excel format), available at https://investmentpolicy.unctad.org/investment-dispute-settlement .	1,046	187
ICSID	https://icsid.worldbank.org/cases/case-database	160	45
Historical arbitrations	Bishop, 1998; Bowett, 1978; Von Mehren & Kourides, 1979 – https://jusmundi.com/en/	-	7

⁸ Due mention of their inclusion in an analysis or graph will be made.



One obstacle to developing these datasets, and a limitation of this research, is the limited transparency in ISDS⁹ (e.g., the amount awarded to an investor might not be disclosed). This report relies only on investor–state arbitrations that are publicly known or at least recorded in either the UNCTAD Investment Policy Hub or ICSID specifically to minimize this obstacle. Indeed, both UNCTAD and ICSID provide essential and reliable data on each arbitration, such as the economic sector or the applicable IIA, and the sample is large enough to conduct sound quantitative analysis. Where basic information was not available to properly categorize each arbitration (e.g., the type of fuel used in a power plant or if a mining operation included coal), an attempt has been made to gather data from other sources, such as IARReporter or official statements. The choice of relying uniquely on these databases means that cases resolved outside of ICSID that are also not captured in the UNCTAD Database are excluded from the sample used for this report. The number of 231 fossil fuel arbitrations is likely to be an underestimate of the real number of disputes related to fossil fuel investments.

⁹ The lack of transparency in ISDS has raised heated debates in the academic, civil, and political world, especially when arbitrations concern investments that have a wider impact on the public, such as projects in the extractive industry or great public works. Accordingly, over the years, various reforms or attempt of reform have been made, such as the 2013 UNCITRAL Arbitration Rules on Transparency (Johnson & Bernasconi-Osterwalder, 2013). See also the work of Maupin (2013).



2.0 The Fossil Fuel Industry and International Investment Law

This section gives a general overview of how the fossil fuel industry has made use of ISDS and IIL more broadly. While the first part provides historical background on the ties between the fossil fuel industry and IIL, the remaining sections explore the general trends of fossil fuel arbitrations: the frequency of fossil fuel arbitrations; their temporal evolution; their transparency and outcomes; the costs associated with such arbitrations; the prevalent type of fossil fuel activities engendering investment disputes; and the legal basis for arbitration claims.

2.1 The Historical Link

Fossil fuels acquired particular importance during the two industrial revolutions, when humanity started using them to produce iron, generate power, and fuel machinery and engines (Pirani, 2018). Although their use can be traced back to as early as 1800, a net increase in their consumption can be seen since 1850, with rapid growth after 1950 (Ritchie & Roser, 2017), especially for coal and oil, which ignited the development process of Global North economies, and they have been a central driver of growth of such economies in the last half century.

A good indicator of the importance that fossil fuels have acquired in the global economy can be traced to post-war Europe and the global economic crisis: the European Union as we know it today is an evolution of the European Coal and Steel Community (Alter & Steinberg, 2007), and there are essential interlinkages between oil crises and global financial crises such as the two recorded in the mid-seventies (Venn, 2016). The advent of gas can be dated to the end of the Second Industrial Revolution, becoming a successful energy fuel, and its use is now globally widespread as a household fuel (Pirani, 2018). Subsequently, as these fuels acquired significant historical, political, and economic weight, the interest of the economic actors involved in this industry in protecting such investments grew nationally and internationally.

Nicolás Perrone (2021) has carried out an extensive analysis of the political history that led to the development of the modern IIL regime. He traces the contemporary development of IIL and its enforcement mechanism, ISDS, back to the global lobbying of a group of wealthy bankers, managers, and influential stakeholders that he collectively calls the “norm entrepreneurs.” They are the ones responsible for the theorization of the “New International Economic Order” in which corporations emerge as the new powerful actors of the global free market economy. IIL was shaped in this context, the objective being the pursuit of profit in contrast with “[c]ommunism, decolonisation, and state economic intervention in their own countries” (Perrone, 2021, p. 51). In other words, their goal was to develop the world economic system into a global liberal market, and the rhetoric adopted was that “capital flow would play a pre-dominant role in developing the economies and increasing the standards of living everywhere” (Perrone, 2021, p. 61). This rhetoric is widespread today amongst the promoters of this regime, who infer that the protection of foreign investments almost automatically promotes development, especially in developing countries (Rivkin



et al., 2015). However, research on this correlation shows no evidence that IIL effectively promotes development (Jacobs, 2017; Yackee, 2012). At the same time, there is widespread evidence of the negative effects of certain investments on the local environment and populations, especially in the extractive and fossil fuel sectors (Cotula, 2020b; Papyrakis et al., 2019; Roe, 2018).

In the 1960s, these norm entrepreneurs included bankers and other representatives of wealthy industries but also executives of the most important fossil fuel companies, such as Royal Dutch Shell, Total, Rio Tinto, and Standard Oil of New Jersey (Perrone, 2021, p. 55). This group of norm entrepreneurs pushed for the protection of their assets abroad under international law. Although the Magna Carta on International Investment—an international convention for the protection of foreign interests drafted by the norm entrepreneurs—did not materialize, there is evidence that this group of lobbyists contributed to the creation of ICSID and the “development and clarification of the ICSID Convention” (Perrone 2021, p. 56). Thus, representatives of the fossil fuel industry played a critical role in the development of current IIL and ISDS.

In parallel, some of the early contract-based arbitrations in the oil industry¹⁰ have played an essential role in the internationalization of concession contracts, defining concession contracts in the extractive industry as investments (Cantegreil, 2011; Sornarajah, 2017, p. 343). Today, this definition has been integrated into most IIAs with similar wording: “Investments means ... e) business concessions required for conducting economic activities and having financial value conferred by law or under a contract, including any concession to search for, cultivate, extract or exploit natural resources.”¹¹ Further, the industry has also been involved in the early arbitrations at ICSID. In the first dispute ever brought to ICSID—the *Holiday Inns S.A. and others v. Morocco* (ICSID Case No. ARB/72/1)—“others” stands for Occidental Petroleum Corporation, a pioneer of the ISDS system.¹²

Thus, the fossil fuel industry has contributed significantly to the development and shaping of IIL, and it is today the most litigious industry in the ISDS system, as will be shown in the next section.

2.2 Investor–State Disputes by Sector

Fossil fuel investments and the energy sector have dominated the ISDS caseload: with almost a third (31%) of the sample (1,206), the energy sector is the most litigious under IIL (See Table 2 and Figure 1). Even if the arbitrations relating to coal investments (21) were also added to the mining industry category, the mining industry’s share of investment arbitrations would only rise to 13%, leaving the energy sector the undisputed leader.

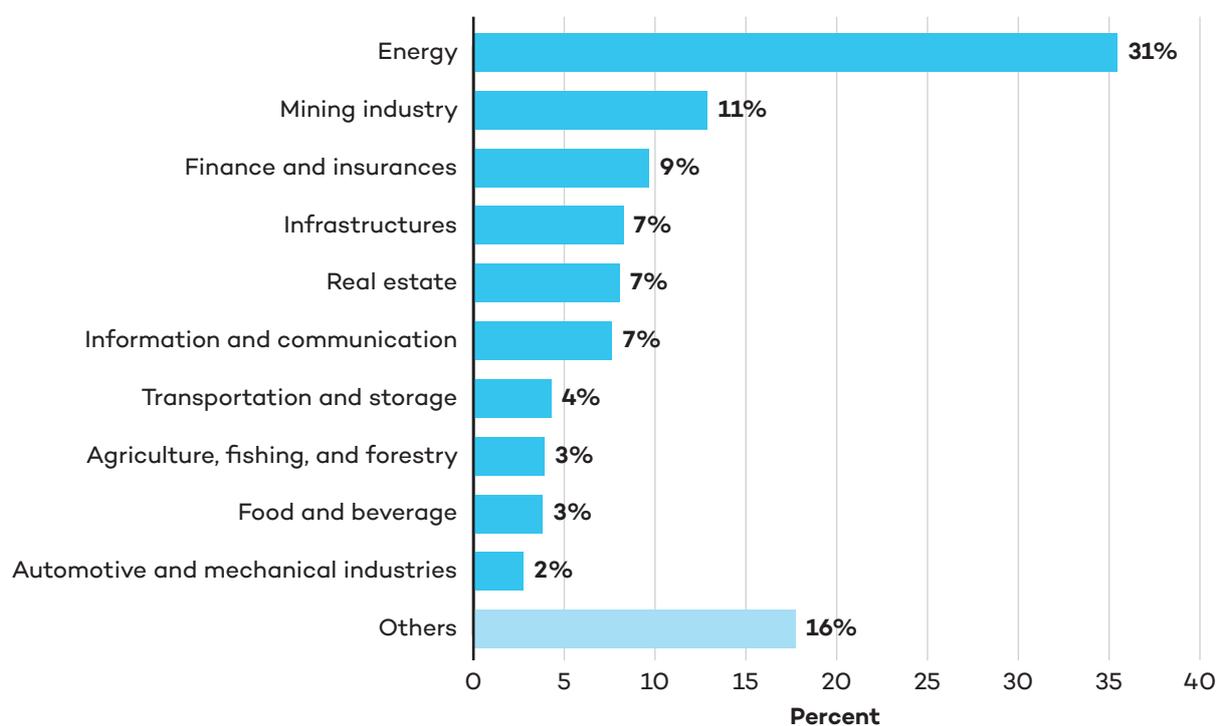
¹⁰ These arbitrations are referred to in this report as “historical fossil fuel arbitration.” The complete list can be found in Annex II.

¹¹ Agreement on Investment among the Governments of the Hong Kong Special Administrative Region of the People’s Republic of China and the Member States of the Association of Southeast Asian Nations (ASEAN investment agreement 2017) (adopted November 12, 2017, entered into force July 17, 2019), Art. 1.e.

¹² This arbitration is not included in the fossil fuel arbitrations dataset.

**Table 2.** Top 10 most litigious economic sectors in IIL

	Economic sector	Number of investor–state arbitrations
1	Energy	374
2	Mining industry	134
3	Finance and insurance	102
4	Infrastructure	87
5	Real estate	85
6	Information and communication	80
7	Transportation and storage	45
8	Agriculture, fishing, and forestry	41
9	Food and beverage	40
10	Automotive and mechanical industries	29

Figure 1. Percentage of arbitrations per economic sector

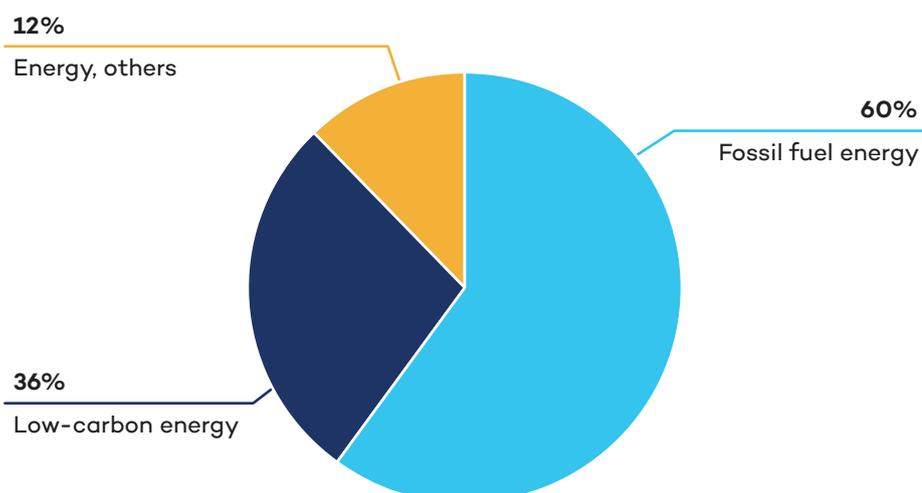
Note: Others includes all the other categories (chemical industry; construction industry; tourism and hospitality; professional, scientific, and technical activities; other industries; administrative and support service activities; arts, entertainment, and recreation; textiles; tobacco industry; transportation and storage; human health and social work activities; services and trade; defence and security; electronics; manufacturing; tech industry; information and communication) and 26 cases where the economic sector was not identifiable.

Source: Author diagram.

**Table 3.** Energy-related investment arbitrations

Type of energy	Number of investor–state arbitrations
Low carbon	104
Fossil fuels	226
Unknown*	44

Note: The category “unknown” comprises all the energy cases that are not specifically identifiable as fossil fuel-related or low carbon, such as energy providers that do not declare the origin of the energy they distribute or cases that were not identifiable because they were not disclosed. In the second case, these arbitrations were only classifiable as energy arbitrations because they were either labelled as such in the ICSID caseload or based on the ECT.

Figure 2. Percentage of arbitrations by type of energy in the energy sector

Note: The category “unknown” comprises all the energy cases that are not specifically identifiable as fossil fuel-related or low carbon, such as energy providers that do not declare the origin of the energy they distribute or cases that were not identifiable because they were not disclosed. In the second case, these arbitrations were only classifiable as energy arbitrations because they were either labelled as such in the ICSID caseload or based on the ECT.

Source: Author diagram.

As shown in Table 3 and Figure 2, the large majority of energy arbitrations are related to fossil fuel investments. Out of the 374 energy cases, 226 are fossil fuel arbitrations, which correspond to 60% of all arbitrations in the energy sector.

Furthermore, five fossil fuel arbitrations are not included in the above figures because they are not related to the energy sector but are part of the petrochemical industry.¹³ If included, these five cases raise the total number of fossil fuel arbitrations to 231, which corresponds to 19% of the total dataset (1,206), overwhelmingly outnumbering any other economic sector. **In other**

¹³ Listed in Annex 1.



words, for every five arbitrations, one is initiated regarding a fossil fuel investment, making the fossil fuel industry by far the most litigious industry under IIL.

2.3 Types of Fossil Fuels

Among the 238 fossil fuel arbitrations (including the historical ones), the ones related to oil and gas investments are predominant (92%), with 141 arbitrations related to the oil industry and 103 related to the gas industry. Even when not considering the historical arbitrations related to the oil industry (six out of seven), with the total number falling to 135, the total number of oil-related arbitrations alone would equal all the cases initiated in the mining industry altogether (the second most litigious sector, see above, Section 2.2).

Table 4. Number of arbitrations by fuel type

Type of fossil fuel	Number of arbitrations
Coal	19
Gas	76
Oil	116
Oil and gas	25
Coal and gas	2

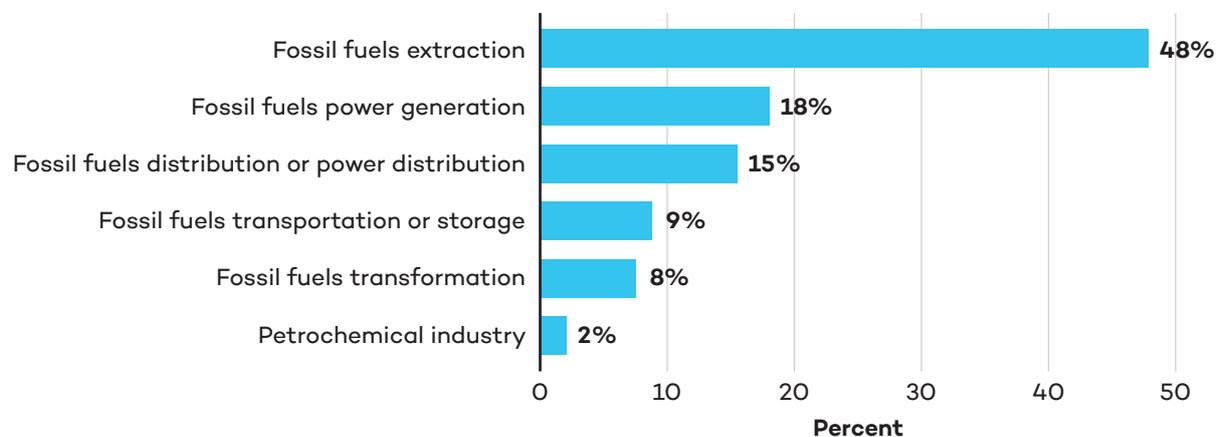
As shown in Figure 3, the great majority of claims within fossil fuel arbitrations are related to investments in the upstream sector, which includes all the operations for the exploration of new fossil fuel reserves and their extraction (labelled as fossil fuels extraction in Figure 3). The protection of upstream investments is particularly problematic in the context of climate change. As discussed in the introduction, there is scientific consensus that investment in new fossil fuel supply must not exceed the remaining carbon budget to stay within the Paris Agreement objectives (IEA, 2021, p. 21). Moreover, the development of new infrastructure and fossil fuel-related activities brings a high risk of putting host states in a position of carbon lock-in, creating inflated expectations on assets that will likely soon be stranded (Bos & Gupta, 2018; Erickson et al., 2015; Lazarus & Van Asselt, 2018).

Further, a high share of fossil fuel arbitrations is related to power generation investments. In 2019, fossil fuels supplied 84% of the world’s energy, making the energy sector the largest emitter of GHGs (Ritchie, 2020a). Hence, in the context of climate change, there is a consensus that a global switch from fossil fuel-generated energy to low-carbon energy sources is urgent (IEA, 2021, p. 21). The special treatment granted by IIL to such investments thus contrasts with the urgent measures needed for the energy transition since it can potentially prevent the transition from carbon-intensive power plants to low-carbon ones. As an example of the protection granted to fossil fuel investments, Tienhaara and Cotula (2020) point out that at least 75% of the foreign-owned coal power plants that need to be retired early in line with the Paris Agreement are covered by at least one treaty with ISDS. As will be



demonstrated in Section 5.2 of this report, claims have already been brought against measures in line with the Paris Agreement obligations to phasing out carbon-intensive industries.

Figure 3. Fossil fuel arbitrations divided by economic subsector

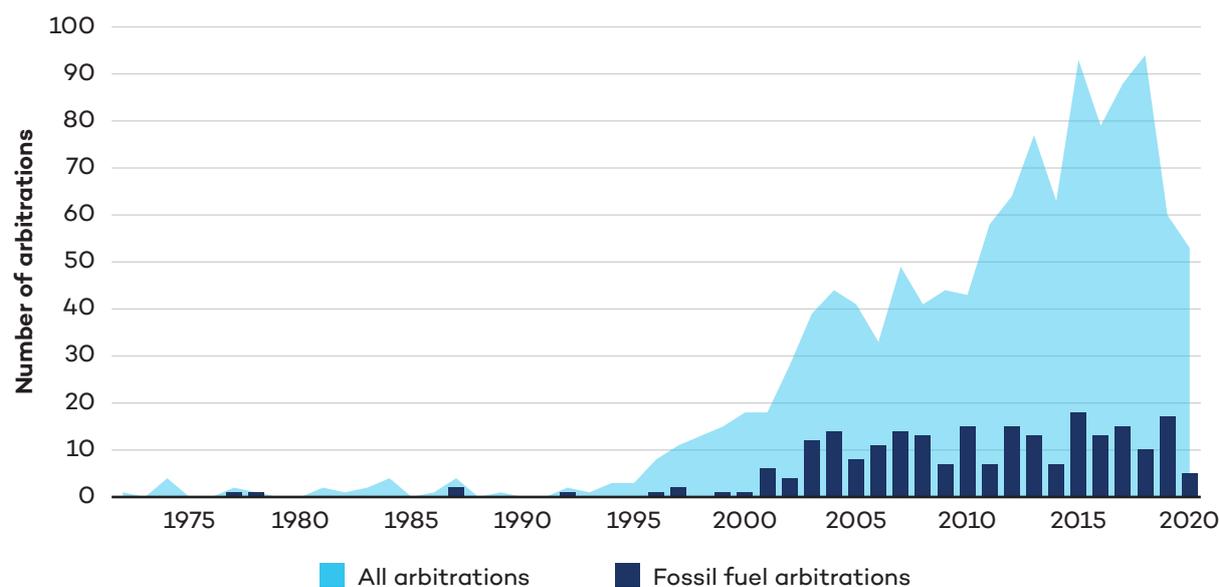


Source: Author diagram.

2.4 Historical Evolution

Investment arbitrations have sharply increased in the last two decades, from an average of 4.1 arbitrations per year between 1972 and 1999 to an average of 53 arbitrations per year between 2000 and 2020. In this context, the number of fossil fuel arbitrations has also risen sharply in the last two decades, going from 0.5 arbitrations per year in 1972–1999 to 10.5 arbitrations per year on average between 2000 and 2020.

Figure 4. Investment arbitrations and share of fossil fuel arbitrations per year



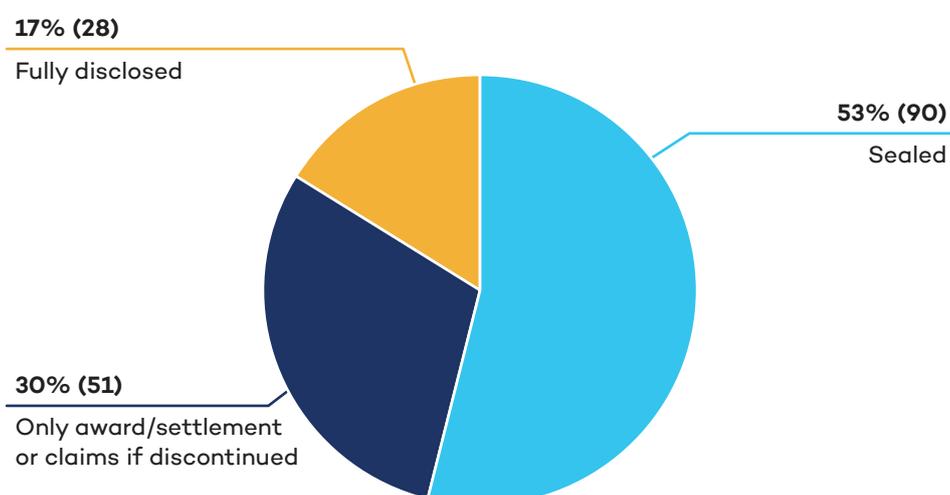
Source: Author diagram.



2.5 Transparency and Outcomes

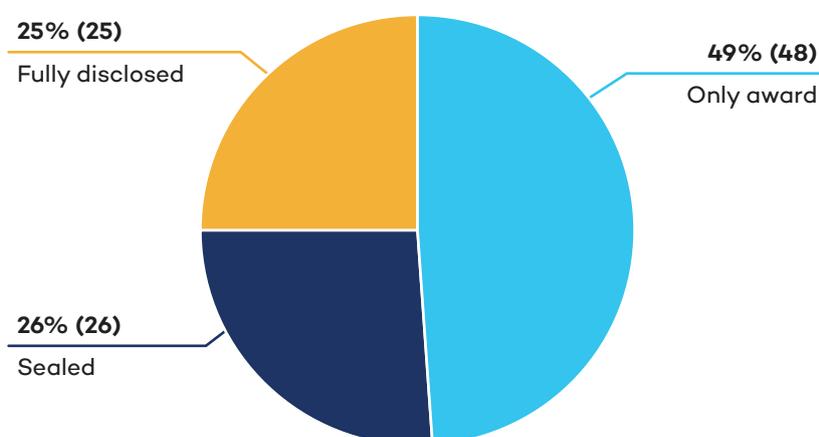
Among the 231 fossil fuel arbitrations, 61 (a quarter of the total) are still pending, and 170 have been concluded. Of the arbitrations that have been concluded, which include arbitrations that were settled or discontinued, only 28 have been fully disclosed. In contrast, 51 have only partially been disclosed (i.e., the award, the settlement agreement, or the reasons for discontinuance was publicly available at ICSID, UNCTAD, ITALAW websites, or through government official websites), and a staggering 91 were known (registered in either UNCTAD or ICSID), but with case-related documents undisclosed; such arbitrations are labelled “sealed” in Figures 5 and 6.

Figure 5. Concluded fossil fuel arbitrations (169), shares of sealed, disclosed, and partially disclosed arbitrations



Source: Author diagram.

Figure 6. Fossil fuel arbitrations awards (99) – shares of sealed, disclosed, and partially disclosed arbitrations



Source: Author diagram.



Of the arbitrations in which the arbitral tribunal rendered a decision, half of them have been made fully available to the public, and only 25 have been fully disclosed. A quarter of them are sealed. Furthermore, almost a third of fossil fuel arbitrations (Figure 7) have been settled between the parties, and nearly all the settled agreements are confidential (46/53), rendering any public access to information (and, with it, a critical review) impossible. It can be inferred that there is a widespread lack of transparency in fossil fuel arbitrations and that this trend increases when disputes are settled before the arbitral tribunal emits an award.

During the last decades, transparency in the management of the public good has become one of the most important principles to enable good governance and accountability. Indeed, an increase in transparency can be seen worldwide (Meijer, 2014) and also in the IIL regime, which has long been criticized for its lack thereof. In 2013, new UNCITRAL arbitration rules were issued to attempt to increase transparency in ISDS.¹⁴ These apply to disputes arising under IIAs referring to UNCITRAL Rules after 2013 or IIAs covered by the Mauritius Convention. In any event, they set an international standard for transparency in treaty-based ISDS. Nevertheless, many disputes are still litigated under IIAs that allow one of the disputing parties to block transparency. Transparency has been recognized internationally as fundamental for the correct management of environmental issues, especially when dealing with major infrastructure (such as energy) that serves wider public purposes. Such recognition is embedded in the United Nations Economic Commission for Europe Aarhus Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, which establishes a series of rights of the public to access information and justice in environmental matters.

Because of their size and purpose, fossil fuel energy projects are of crucial interest for the public good. The economic size of such projects, their wider impact on the local environment and populations, the involvement of public entities, and the purpose of providing energy are all features that have wide impact on the public good. Hence, transparency and access to information is crucial in these cases.

As shown in Figure 7, 32% of the concluded arbitrations have been decided in favour of the investor, while 23% have been decided in favour of the host state. Moreover, a third of the total arbitrations have been settled between the investor and the host state before the respective arbitral tribunals reached a decision. This indeed reflects the tendency of arbitral tribunals to encourage the parties to settle disputes, reinforcing the level of secrecy of this regime.

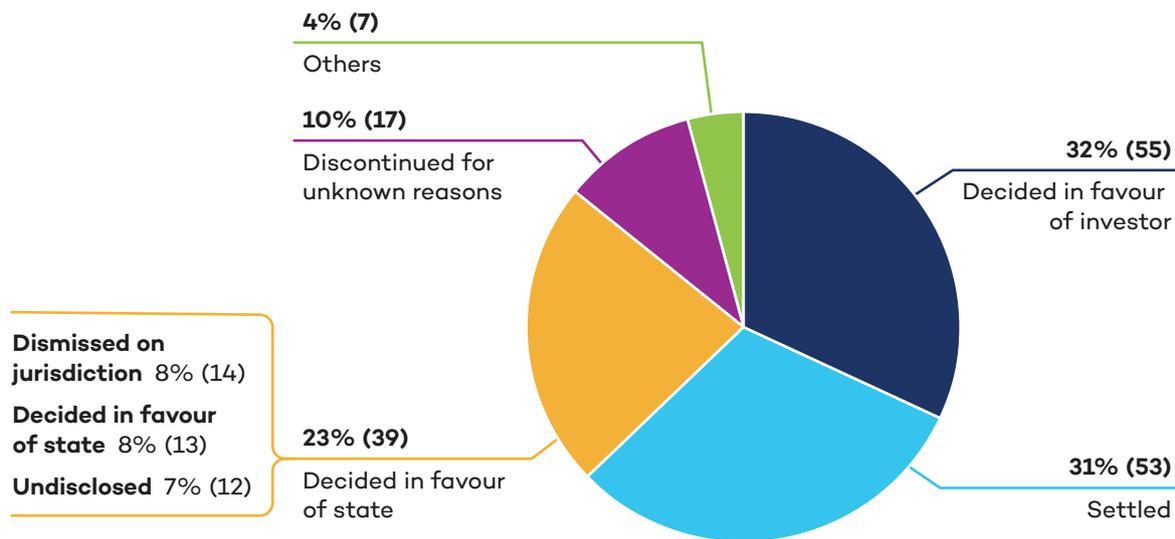
Host states, which are in the respondent's position, have to make counterarguments to dismiss any claim brought by the investor. Even when the tribunal might lack jurisdiction over a case, it is still the responsibility of the respondent state to prove it. If the tribunal considers that it has no jurisdiction over the claim, the latter is dismissed, and the case is “decided in favour of the state.” As shown in Figure 7, half of the disclosed arbitrations decided in favour of the host state were dismissed on jurisdictional grounds. In other words, in these cases, the tribunal did

¹⁴ UN, *UNCITRAL rules on transparency in treaty-based investor-state arbitration*. <https://uncitral.un.org/en/texts/arbitration/conventions/transparency#:~:text=The%20Rules%20on%20Transparency%2C%20effective,arbitrations%20arising%20under%20investment%20treaties.&text=The%20Convention%20is%20an%20efficient%20and%20flexible%20mechanism%20for%20recording%20such%20agreement>



not reach a decision in favour of the host state based on an analysis of the merits of the case but because it lacked jurisdiction over the matter.

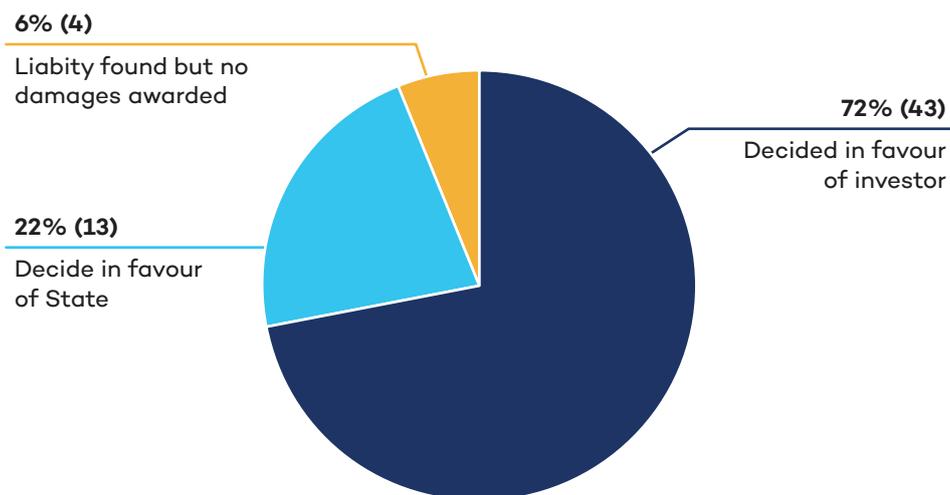
Figure 7. The outcome of concluded fossil fuel arbitrations, total number, and percentage



Note: Others include seven arbitrations that include: five cases where liability was found but no damages were awarded (*Gazprom v. Lithuania*, *AES v. Kazakhstan*, *Al-Bahloul v. Tajikistan*, *Rompetrol v. Romania*, *Cervin and Rhone v. Costa Rica*), one case that was abandoned (*RSM v. Ecuador*—while the case has not been concluded, since 2010 no tribunal has been constituted (Bohmer, 2020)) and one case where the investor retired the claim (*Financial Performance Holdings v. Russia*).

Source: Author diagram.

Figure 8. The outcome of disclosed fossil fuel arbitrations decided on the merits (60)



Source: Author diagram.



As shown in Figure 8, when considering the decisions of fossil fuel arbitrations concluded on the merits, the share of arbitrations decided in favour of the investor rises sharply. This result is based only on the share of disclosed arbitrations where the award was published, as the legal reasoning behind each decision is known only in these cases.

In conclusion, of the 60 disclosed arbitral awards, only 13 were decided in favour of the state based on the merits, while 43 have been decided in favour of the investor, which corresponds to over 70% of total disclosed fossil fuel arbitrations. In other words, of the fossil fuel arbitrations that reach the merits stage, almost three out of four are decided in favour of the investor.

Furthermore, the average time it takes to dismiss a claim for lack of jurisdiction is 2.69 years. More broadly, arbitral tribunals take an average of 4.5 years to issue an award in favour of the investor or the state.¹⁵

2.6 The Legal Basis

BITs are the most frequently used IIAs in both fossil fuel arbitrations and non-fossil fuel arbitrations (Figure 9 and 10). The proportion of arbitrations initiated that claim a breach of contractual obligations and plurilateral investment treaties is much higher in fossil fuel arbitrations than in non-fossil fuel arbitrations. Contract-based investment arbitrations are twice as frequent in fossil fuel arbitrations than in non-fossil fuel arbitrations.

The higher share of claims based on plurilateral investment treaties (PITs) (which is unusual since there are only a few PITs) results from the frequent recourse to the Energy Charter Treaty (1994) (ECT). Out of the 42 PIT-based arbitrations in the fossil fuel industry, 41 claim a breach of the ECT, making the ECT the single most employed IIA in fossil fuel arbitrations (41), followed by the Ecuador–USA BIT (1993), with 11 arbitrations, the Argentina–USA BIT (1991), with 10 arbitrations, and NAFTA (1992), which is the applicable IIA in nine arbitrations.

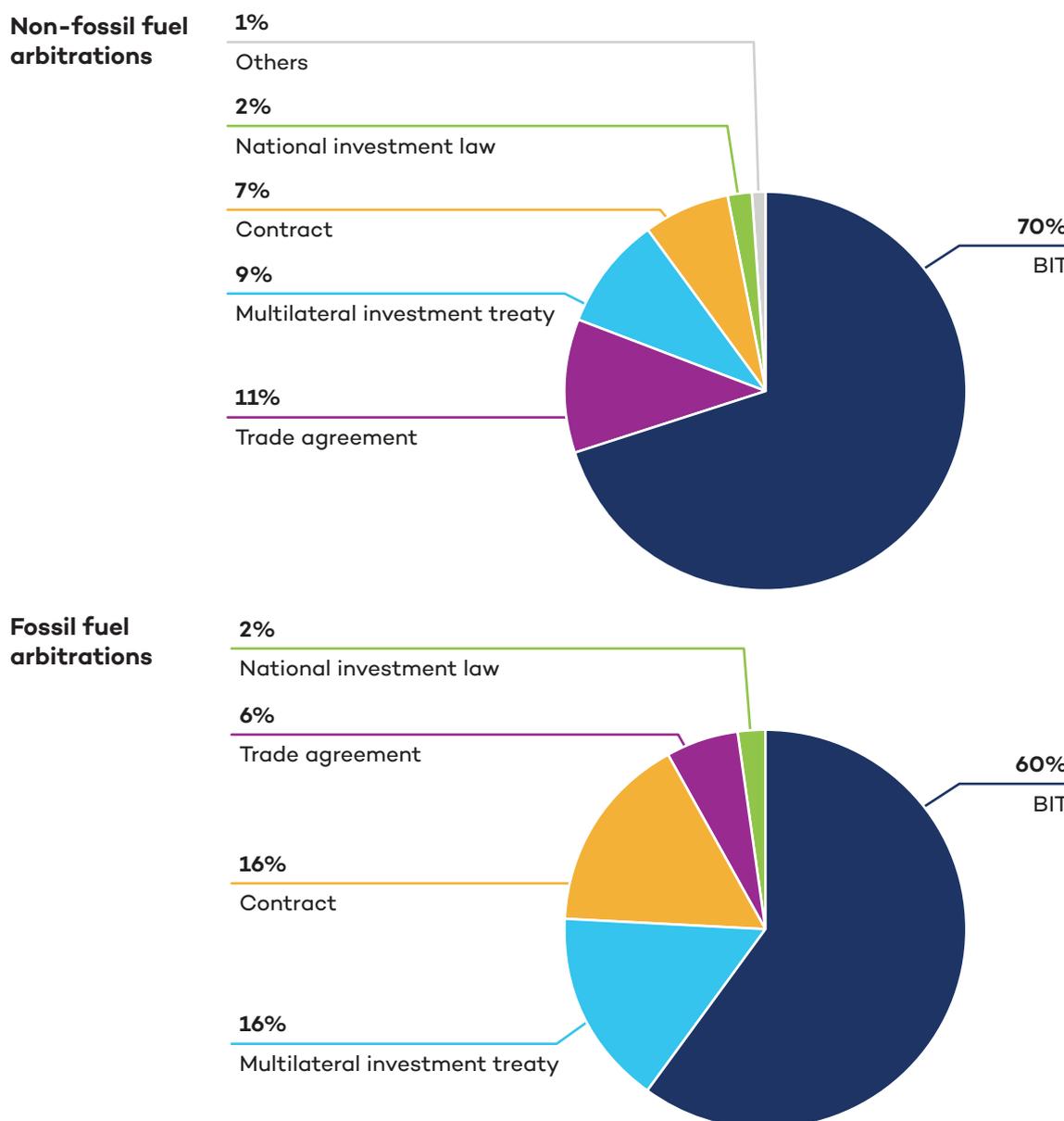
The ECT is a plurilateral investment agreement that binds its 55 member states to grant special standards of treatment to investors of other member states. This treaty is particularly controversial and has been at the centre of heated debates because it affords extensive privileges to investments covering almost any type of activity in the fossil fuel industry. Indeed, this report classifies an arbitration as related to the fossil fuel industry according to the definitions laid down in the ECT (see Section 1). Several authors—and an increasing number of policy-makers—argue that the ECT poses a substantial threat to the implementation of climate measures.¹⁶

¹⁵ The average comprises only arbitrations that have been decided in favour of a state or of an investor, excluding settled, discontinued, and the “others” outcome listed in Figure 7.

¹⁶ The debate on the ECT is broad and falls out of the scope of this report. For further information, see Tienhaara and Downie (2018); Bernasconi-Osterwalder and Brauch (2019); Eberhardt et al. (n.d.); Sachs et al. (2020).



Figures 9 and 10. Legal basis for arbitration claims in fossil fuel and non-fossil fuel sectors



Note: “Others” consists of the cases where the underlying legal basis is not available and four cases based on a comprehensive economic agreement (e.g., Treaty on Eurasian Economic Union [2014]).

Source: Author diagrams.

2.7 The Cost of Fossil Fuel Arbitrations

In monetary terms, as shown in Table 5, the amount claimed, and the amount awarded in fossil fuel arbitrations is generally greater than in non-fossil fuel arbitrations. The average claim in fossil fuel arbitrations— 1.4 billion USD—is more than double the average claimed in non-fossil fuel arbitrations. There is also a great disparity in the amounts awarded: the average



amount awarded in fossil fuel arbitrations—over 600 million USD—is almost five times the amount awarded in non-fossil fuel arbitrations.

Table 5. The average amount claimed and awarded for fossil fuel and non-fossil fuel arbitrations

Average amount claimed in fossil fuel arbitrations	USD 1.4 billion
Average amount claimed in non-fossil fuel arbitrations	USD 560.8 million
Average amount awarded or settled for fossil fuel arbitrations	USD 608.6 million
Average amount awarded or settled for non-fossil fuel arbitrations	USD 126.0 million

These averages were calculated excluding the highest and lowest amounts for each category. This choice was made to convey a more realistic result since, as it is reported in Table 6, the largest award in investment arbitration history (USD 40 billion) is related to a fossil fuel investment. In comparison, the second-largest claim ever awarded by an investment arbitral tribunal (still in the fossil fuel industry) is almost five times smaller. Thus, the inclusion of this one award, which represents a rather extreme and unique phenomenon as opposed to a typical and recurring event, would distort the results.

Continuing the analysis of the economic impacts of fossil fuel arbitrations, among the 10 largest amounts ever awarded in investment arbitration, eight are related to fossil fuel investments. In another IISD report, Bonnitcha and Brewin (2019) highlight how there has been a general rise in the amount awarded by international arbitral tribunals, generating a series of concerns about compensation under investment treaties (Bonnitcha and Brewin 2019). It emerges from their study that there is widespread inconsistency in the way tribunals attribute compensation, making them unpredictable. Bonnitcha and Brewin (2020, p. 5) also highlight how tribunals, by not taking into account important contextual factors, have deemed states' rationale for adopting certain measures to be irrelevant for determining compensation. This reasoning can have significant repercussions for adopting legitimate climate policies that inevitably would curtail fossil fuels' investments profits. In turn, if a state is found guilty of a breach of an investment provision when adopting climate measures, it might be obliged to compensate the investor for lost profits. This implies that taxpayers' money would be used to compensate private interests against the adoption of measures for the (global) public good.

In addition to the amounts awarded by investment tribunals, the costs for arbitral proceedings are also generally very high. According to the last report published by the British Institute of International and Comparative Law, the average party costs are around USD 4.7 million for respondent states and USD 6.4 million for investors. Tribunals' fees and expenses in turn average at USD 1 million. (Hodgson et al., 2021) If these costs can be prohibitive for small and medium-sized enterprises, they do not constitute an obstacle for wealthy global fossil fuel corporations. On the contrary, as will be shown in the following sections of this report, big energy companies have shown a tendency to recourse to ISDS on multiple occasions, and nearly all claimants come from high-income countries.

**Table 6.** Top 10 largest amounts ever awarded

Arbitration	Year	Applicable IIA	Income level of the host state	Sector	Outcome	Amount claimed	Amount awarded
<i>Hulley Enterprises v. Russia</i>	2005	ECT (1994)	High Income	Fossil fuels extraction	Decided in favour of investor	USD 91.2 billion	USD 40.0 billion
<i>ConocoPhillips v. Venezuela</i>	2007	Netherlands–Venezuela BIT (1991)	Upper middle income	Fossil fuels extraction	Decided in favour of investor	USD 30.3 billion	USD 8.4 billion
<i>Veteran Petroleum v. Russia</i>	2005	ECT (1994)	High income	Fossil fuels extraction	Decided in favour of investor	USD 18.7 billion	USD 8.2 billion
<i>Repsol v. Argentina</i>	2012	Argentina–Spain BIT (1991)	Upper middle income	Fossil fuels extraction	Settled	USD 10.5 billion	USD 5.0 billion
<i>Eureko v. Poland</i>	2003	Netherlands– Poland BIT (1992)	High income	Insurance	Settled	USD 10.0 billion	USD 4.4 billion
<i>Tethyan Copper v. Pakistan</i>	2012	Australia–Pakistan BIT (1998)	Lower middle income	Mineral Extraction	Decided in favour of investor	USD 8.5 billion	USD 4.1 billion
<i>Unión Fenosa v. Egypt</i>	2014	Egypt–Spain BIT (1992)	Lower middle income	Fossil fuels transformation	Decided in favour of investor	USD 3.2 billion	USD 2.0 billion
<i>Yukos Universal v. Russia</i>	2005	ECT (1994)	High income	Fossil fuels extraction	Decided in favour of investor	USD 4.1 billion	USD 1.8 billion
<i>Occidental v. Ecuador (II)</i>	2006	Ecuador–USA BIT (1993)	Upper middle income	Fossil fuels extraction	Decided in favour of investor	USD 1.0 billion	USD 1.8 billion
<i>Mobil and others v. Venezuela</i>	2007	Netherlands–Venezuela BIT (1991)	Upper middle income	Fossil fuels extraction	Decided in favour of investor	USD 14.7 billion	USD 1.6 billion



The high cost of such litigations and the considerable amounts awarded to fossil fuel companies inevitably increase the cost of adopting climate measures that run counter to the industry’s interests. In perspective, these arbitrations can have significant repercussions for the public finances of low- and lower-middle-income countries and may act as a deterrent for the adoption of climate measures.

2.8 Multiple Fossil Fuel Arbitrations

Another trend that has emerged in this analysis is that the fossil fuel industry tends to initiate multiple arbitrations over the same case scenarios. Three categories have been identified: a) when several investors in the same projects initiate arbitration at the same time over the same dispute (e.g., several arbitrations have been initiated from different stakeholders regarding the Dabhol Energy project); b) when several investors from different projects have initiated arbitral proceedings against a specific measure adopted by a host state (e.g., against the Argentinian emergency measures adopted to counteract the 2001 financial crisis); and c) when the same investor initiates several arbitral proceedings around the same project over time (e.g., *RSM v. Grenada*).

a) Several Investors in the Same Projects Initiating Arbitral Proceedings at the Same Time Over the Same Dispute

Fossil fuel projects are generally large in terms of both monetary investment and physical size and generally involve several investors such as international corporations, financial institutions, and other shareholders (Daintith, 2017). Hence, the alleged interference of a host state with one project might potentially engender a series of investment arbitrations initiated by each stakeholder. As shown in Table 7, several disputes translated into a series of arbitral proceedings.

Table 7. Series of arbitrations initiated around the same project

Short case name	N.	Project/company invested in	Amount awarded
<i>ConocoPhillips v. Venezuela</i>	704	Heavy oil project in the Orinoco Oil Belt	USD 8.4 billion
<i>Mobil and others v. Venezuela</i>	723	Heavy oil project in the Orinoco Oil Belt	USD 1.6 billion
<i>Cairn v. India</i>	276	Cairn India Limited	USD 1.2 billion
<i>Vedanta v. India</i>	257	Cairn India Limited	Pending
<i>ABN Amro v. India</i>	807	Dabhol Energy Project	Non-pecuniary relief
<i>ANZEF v. India</i>	810	Dabhol Energy Project	Non-pecuniary relief
<i>Bechtel v. India</i>	853	Dabhol Energy Project	USD 160.0 million



Short case name	N.	Project/company invested in	Amount awarded
<i>BNP Paribas v. India</i>	812	Dabhol Energy Project	Non-pecuniary relief
<i>Credit Lyonnais v. India</i>	820	Dabhol Energy Project	Non-pecuniary relief
<i>Credit Suisse v. India</i>	821	Dabhol Energy Project	Non-pecuniary relief
<i>Erste Bank v. India</i>	824	Dabhol Energy Project	Non-pecuniary relief
<i>Offshore Power v. India</i>	832	Dabhol Energy Project	Non-pecuniary relief
<i>Standard Chartered Bank v. India</i>	836	Dabhol Energy Project	Non-pecuniary relief
<i>Electrabel v. Hungary</i>	706	Dunamenti Power plant	Decided in favour of state
<i>ENGIE and others v. Hungary</i>	211	Dunamenti Power plant	Unknown
<i>Técnicas Reunidas v. Ecuador</i>	763	Esmeraldas Oil Refinery	Unknown
<i>WorleyParsons v. Ecuador</i>	1,003	Esmeraldas Oil Refinery	Pending
<i>Chevron v. Philippines</i>	987	Malampaya Deepwater Gas-to-Power Project	Pending
<i>Shell Philippines v. Philippines</i>	249	Malampaya Deepwater Gas-to-Power Project	Pending
<i>Allawi v. Pakistan</i>	472	Gas import terminal at Port Qasim	Decided in favour of state
<i>Progas Energy v. Pakistan</i>	507	Gas import terminal at Port Qasim	Decided in favour of state
<i>Corral v. Morocco</i>	50	Government seizure of SAMIR	Pending
<i>The Carlyle Group and others v. Morocco</i>	99	Government seizure of SAMIR	Pending
<i>Alicia Grace and others v. Mexico</i>	36	PEMEX/OSA	Pending
<i>PACC v. Mexico</i>	86	PEMEX/OSA	Pending
<i>Littop v. Ukraine</i>	308	Ukratnafta	Pending



Short case name	N.	Project/company invested in	Amount awarded
<i>Tatarstan v. Ukraine</i>	253	Ukrtatnafta	Pending
<i>Tatneft v. Ukraine</i>	692	Ukrtatnafta	USD 112.0 million
<i>Financial Performance Holdings v. Russia</i>	365	Yukos	Claim retired
<i>Hulley Enterprises v. Russia</i>	785	Yukos	USD 40.0 billion
<i>Luxtona v. Russia</i>	380	Yukos	Pending
<i>Renta 4 S.V.S.A and others v. Russia</i>	727	Yukos	USD 2.0 million
<i>RosInvest v. Russia</i>	797	Yukos	USD 3.5 million
<i>Veteran Petroleum v. Russia</i>	803	Yukos	USD 8.2 billion
<i>Yukos Capital v. Russia</i>	470	Yukos	Pending
<i>Yukos Universal v. Russia</i>	805	Yukos	USD 1.8 billion
<i>Ampal-American and others v. Egypt</i>	473	(EGM) East Mediterranean Gas	Discontinued for unknown reasons
<i>Maiman and others v. Egypt</i>	497	(EGM) East Mediterranean Gas	Pending

Among the fossil fuel arbitrations initiated around the same project, two disputes are worth noting since they generated nine and eight investment arbitrations, respectively. The first set of arbitrations was initiated against India between 2003 and 2004 regarding the Dabhol power project. This project was India's largest investment project at the time (USD 2 billion secured in loans), and a consortium of foreign investors led by the U.S. firm Enron was building and running the power plant. The dispute and the factual circumstances spanning the construction and subsequent operation of this huge power plant are highly complex, concern a period from the mid-1990s to 2005, and involve several courts, from national courts to an interstate arbitration between India and the United States (Bettauer, 2009; Paterson, 2006). The details of the dispute are beyond the scope of this report, but it is important to note that this project was riddled with controversies, public opposition, and corruption scandals on both the side of the United States and at the highest level of Indian politics (Hepburn, 2019; Pirani 2018). Further, there has been evidence of human rights abuses of the local population and substantial allegations of corruption and bribery on the side of Enron (Roy, 2010).¹⁷ Notwithstanding the public relevance of such a dispute/scandal, all of the related arbitrations were settled, and none has been disclosed, raising some concerns over this system's transparency when dealing with such important public interest issues.

¹⁷ Enron collapsed at around that (2001), constituting the biggest failure in U.S. corporate history. For further information see: Bondarenko (n.d.).



The second set of arbitrations concerns the Russian government’s expropriation of assets owned by the former energy company Yukos. This set of arbitrations regards the alleged and proved persecution by Russian authorities of Yukos managers and assets. In essence, the tribunal considered in the *Yukos Capital v. Russia* award (January 18, 2014) that Russia engaged in a calculated effort to destroy Yukos in the guise of tax collection (Hepburn, 2014). The Yukos cases comprise the highest amount ever awarded in ISDS, which have cumulatively amounted to USD 50.1 billion so far (two arbitrations are still pending).

As shown in Table 7, different investors in the same project initiated other sets of arbitrations around the same disputes. What is interesting to note from this first result is the possibility that several arbitrations can be initiated around a single project, given the wide (and wealthy) variety of actors involved in fossil fuel projects.

b) Several Investors From Different Projects Initiating Arbitral Proceedings Against a Specific Measure Adopted by a Host State

Another group of arbitrations has been initiated against specific measures adopted by host states, as shown in Table 8.

Table 8. Series of arbitrations initiated against the same measures

Short case name	N.	Project/company invested in	Amount awarded
<i>BG v. Argentina</i>	854	Measures adopted to stem the Argentinian financial crisis	USD 185.2 million
<i>BP v. Argentina</i>	814	Measures adopted to stem the Argentinian financial crisis	Unknown (settled)
<i>Camuzzi v. Argentina (I)</i>	855	Measures adopted to stem the Argentinian financial crisis	Unknown (settled)
<i>Camuzzi v. Argentina (II)</i>	856	Measures adopted to stem the Argentinian financial crisis	Unknown (settled)
<i>Chilectra and others v. Argentina</i>	857	Measures adopted to stem the Argentinian financial crisis	Discontinued for unknown reasons
<i>CMS v. Argentina</i>	917	Measures adopted to stem the Argentinian financial crisis	USD 133.2 million
<i>El Paso v. Argentina</i>	861	Measures adopted to stem the Argentinian financial crisis	USD 43.0 million
<i>Enron v. Argentina</i>	918	Measures adopted to stem the Argentinian financial crisis	USD 106.2 million
<i>Gas Natural v. Argentina</i>	866	Measures adopted to stem the Argentinian financial crisis	Unknown (settled)
<i>LG&E v. Argentina</i>	900	Measures adopted to stem the Argentinian financial crisis	USD 57.4 million



Short case name	N.	Project/company invested in	Amount awarded
<i>Mobil v. Argentina</i>	830	Measures adopted to stem the Argentinian financial crisis	USD 196.2 million
<i>Pan American v. Argentina</i>	877	Measures adopted to stem the Argentinian financial crisis	Unknown (settled)
<i>Pioneer v. Argentina</i>	879	Measures adopted to stem the Argentinian financial crisis	Unknown (settled)
<i>Sempra v. Argentina</i>	905	Measures adopted to stem the Argentinian financial crisis	USD 128.0 million
<i>Total v. Argentina</i>	841	Measures adopted to stem the Argentinian financial crisis	USD 269.9 million
<i>Wintershall v. Argentina</i>	847	Measures adopted to stem the Argentinian financial crisis	Decided in favour of State
<i>AEI v. Bolivia</i>	657	2008 Bolivian nationalization	USD 121.0 million
<i>Guaracachi v. Bolivia</i>	596	2008 Bolivian nationalization	USD 28.9 million
<i>Oiltanking v. Bolivia</i>	602	2008 Bolivian nationalization	USD 16.4 million
<i>Pan American v. Bolivia</i>	603	2008 Bolivian nationalization	USD 357.0 million
<i>Burlington v. Ecuador</i>	666	Tax law 42-2006	USD 379.8 million
<i>City Oriente v. Ecuador</i>	ARB/ 06/21	Tax law 42-2006	Unknown (settled)
<i>Encana v. Ecuador</i>	863	Tax Law 30 April 1999	50/50
<i>Murphy v. Ecuador (I)</i>	684	Tax law 42-2006	Decided in favour of state
<i>Murphy v. Ecuador (II)</i>	560	Tax law 42-2006	USD 20.0 million
<i>Occidental v. Ecuador (I)</i>	902	Tax Law 30 April 1999	USD 71.5 million
<i>Occidental v. Ecuador (II)</i>	751	Tax law 42-2006	USD 1.8 billion
<i>Perenco v. Ecuador</i>	689	Tax law 42-2006	USD 416.5 million
<i>DTEK v. Russia</i>	1,017	Russian expropriation of Crimean assets after its invasion	Pending
<i>Naftogaz and others v. Russia</i>	237	Russian expropriation of Crimean assets after its invasion	Pending
<i>Stabil and others v. Russia</i>	332	Russian expropriation of Crimean assets after its invasion	USD 34.5 million



Short case name	N.	Project/company invested in	Amount awarded
<i>Ukrnafta v. Russia</i>	339	Russian expropriation of Crimean assets after its invasion	USD 44.5 million
<i>ConocoPhillips v. Venezuela</i>	704	Venezuela nationalization	USD 8.4 billion
<i>Eni Dación v. Venezuela</i>	707	Venezuela nationalization	USD 700.0 million
<i>Mobil and others v. Venezuela</i>	723	Venezuela nationalization	USD 1.6 billion
<i>Opic Karimum v. Venezuela</i>	ARB/ 10/14	Venezuela nationalization	Decided in favour of state
<i>Saint Patrick Properties v. Venezuela</i>	248	Venezuela nationalization	Pending
<i>Saint-Gobain v. Venezuela</i>	510	Venezuela nationalization	USD 29.6 million
<i>Universal Compression v. Venezuela</i>	612	Venezuela nationalization	USD 442.0 million
<i>Venoklim v. Venezuela (I)</i>	ARB/ 12/22	Venezuela nationalization	Decided in favour of state
<i>Venoklim v. Venezuela (II)</i>	180	Venezuela nationalization	Pending
<i>Williams Companies and others v. Venezuela (I)</i>	577	Venezuela nationalization	Settled
<i>Williams Companies and others v. Venezuela (II)</i>	1,002	Venezuela nationalization	Pending

Most of the measures referred to in Table 8 and the way arbitral tribunals dealt with them sparked controversies at different levels. For example, Argentina has faced 16 arbitrations just from the fossil fuel industry¹⁸ in response to the adoption of emergency measures during its financial bankruptcy of 2001.¹⁹ The controversy linked to the ability of private entities to challenge public emergency measures to recover economic losses is very high, even more so in times of global crisis such as the Covid-19 global pandemic, where emergency measures could be challenged in arbitral tribunals (Daria Davitti et al. 2020). Hence, the details of each measure fall out of the scope of this research, but it is sufficient to note here that this second bulk of arbitrations shows how a certain measure, or set of measures, can be contested by a bulk of investors in this sector. In turn, the fact that one measure could engender such an

¹⁸ Argentina has received the highest number of investment arbitrations (62), including non-fossil fuel arbitrations, of which 43 are related to the financial crisis according to the author's database.

¹⁹ For more information on the investment arbitrations initiated against the Argentinian emergency measures, see: Perrone (2021).



avalanche of arbitral claims can be an important deterrent for the adoption of public policy measures aiming at meeting climate change obligations.

On a side note, all of the arbitrations in Table 8 have been initiated against a South American state (Argentina, Bolivia, Ecuador and Venezuela) except for the four initiated against Russia for the expropriation of assets after the annexation of Crimea. This reflects the geographical repartition of fossil fuel arbitrations as exposed in the next section.

c) The Same Investor Initiates Several Arbitral Proceedings Around the Same Project Over Time.

The last bulk of arbitrations includes all the cases where the same investor, or its parent company, has initiated more than one arbitration over time in respect of the same dispute.

Table 9. Series of arbitrations initiated by the same investor or parent company around the same dispute

Short case name	N.	Amount awarded
<i>African Petroleum and APCL v. Gambia</i>	ARB/17/39	Unknown (settled)
<i>APCL v. Gambia</i>	117	Unknown (settled)
<i>Petronor and APCL v. Gambia</i>	ARB/17/38	Pending
<i>African Petroleum v. Gambia (I)</i>	ARB/14/6	Unknown (settled)
<i>African Petroleum v. Gambia (II)</i>	ARB/14/7	Unknown (settled)
<i>Caratube v. Kazakhstan (I)</i>	667	USD 3.2 million
<i>Caratube v. Kazakhstan (II)</i>	ARB/13/13	USD 40.4 million
<i>Chevron and TexPet v. Ecuador (I)</i>	743	USD 77.7 million
<i>Chevron and TexPet v. Ecuador (II)</i>	621	Pending
<i>Standard Chartered Bank (SCB) v. Tanzania, United Republic of (I)</i>	607	Decided in favour of State
<i>SCB v. Tanzania, United Republic of (II)</i>	ARB/10/20	USD 148.4 million
<i>SCB v. Tanzania, United Republic of (III)</i>	ARB/15/41	USD 185.4 million
<i>Glencore and others v. Colombia (II)</i>	8	Pending
<i>Glencore International and C.I. Prodeco v. Colombia (I)</i>	219	USD 19.1 million
<i>WRB v. Grenada (I)</i>	ARB/97/5	Unknown (settled)
<i>WRB v. Grenada (II)</i>	ARB/17/13	USD 58.4 million
<i>Itera v. Georgia (I)</i>	677	Discontinued
<i>Itera v. Georgia (II)</i>	642	Unknown (settled)



Short case name	N.	Amount awarded
<i>Fuchs v. Georgia</i>	712	Unknown (settled)
<i>Kardassopoulos v. Georgia</i>	788	Pending
<i>Mobil and Murphy v. Canada (I)</i>	722	Pending
<i>Mobil v. Canada (II)</i>	314	Pending
<i>Niko Exploration v. Bangladesh (I)</i>	ARB/10/11	Decided in favour of state
<i>Niko Exploration v. Bangladesh (II)</i>	ARB/10/18	Decided in favour of state
<i>Niko Exploration v. Bangladesh (III)</i>	ARB/19/18	Pending
<i>Nova Scotia Power v. Venezuela (I)</i>	686	Pending
<i>Nova Scotia Power v. Venezuela (II)</i>	562	Pending
<i>JKX Oil & Gas and Poltava v. Ukraine</i>	302	USD 11.8 million
<i>Poltava v. Ukraine</i>	ARB/15/9	Discontinued
<i>Repsol SA v. Ecuador (I)</i>	ARB/01/10	USD 13.7 million
<i>Repsol SA v. Ecuador (II) (and others)</i>	ARB/08/10	Discontinued
<i>RSM v. Grenada (I)</i>	ARB/05/14	Decided in favour of state
<i>RSM v. Grenada (II)</i>	606	Decided in favour of state
<i>Westmoreland v. Canada (I)</i>	105	Discontinued
<i>Westmoreland v. Canada (II)</i>	1,001	Pending
<i>AES v. Hungary (I)</i>	912	Unknown (settled)
<i>AES v. Hungary (II)</i>	697	Decided in favour of state
<i>Tullow Uganda v. Uganda (I)</i>	ARB/12/34	Pending
<i>Tullow Uganda v. Uganda (II)</i>	ARB/13/25	Discontinued

This section shows the capacity of fossil fuel economic actors—from oil corporations to financial institutions to shareholders—to flood a country with investment arbitrations. They have shown the capacity to initiate arbitrations several times over the same dispute (the four cases initiated by African Petroleum against the Gambia shown in Table 9); to initiate several arbitrations at the same over the same projects by different stakeholders (e.g., the Dabhol power plant), or to initiate arbitral proceedings against a specific measure or series of measures (e.g., the 16 fossil fuel arbitrations initiated against the Argentinian emergency measures adopted to counteract the 2001 financial crisis). These trends can act as a strong deterrent for host states when adopting public policy measures, such as those in line with the Paris Agreement objectives.

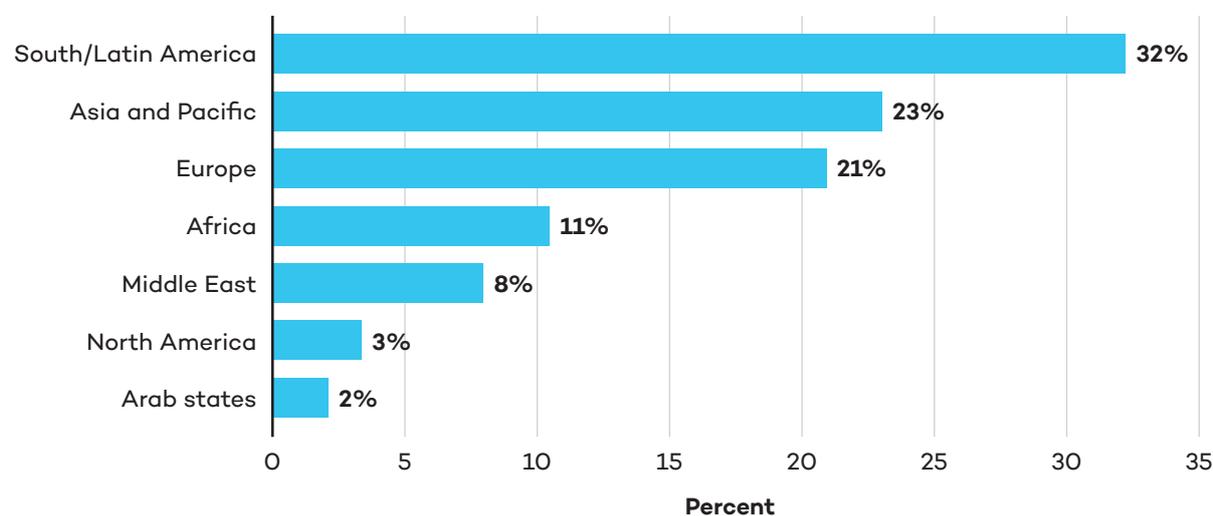


3.0 Regional Trends

This section examines the regional distribution of fossil fuel arbitrations. First, the analysis shows the repartition of fossil fuel arbitrations according to the host state. The second section breaks down fossil fuel arbitrations according to the investors' nationality. The last section shows what types of legal bases (either IIAs, investment contracts, or national investment laws) are the most recurrent depending on the economic region. This last section categorizes the host states according to their gross national income (GNI).

3.1 Fossil Fuel Arbitrations According to the Host State

Figure 11. Fossil fuel arbitrations geographically broken down according to the region of the host state



Source: Author diagram.

The distribution of fossil fuel arbitration is geographically unequal, with almost a third of the total fossil fuel litigations against South American host states (Figure 11). In contrast, few claims have been brought against the Arab states or North America. This first result reflects the series of arbitrations initiated against South American states exposed in the previous section.

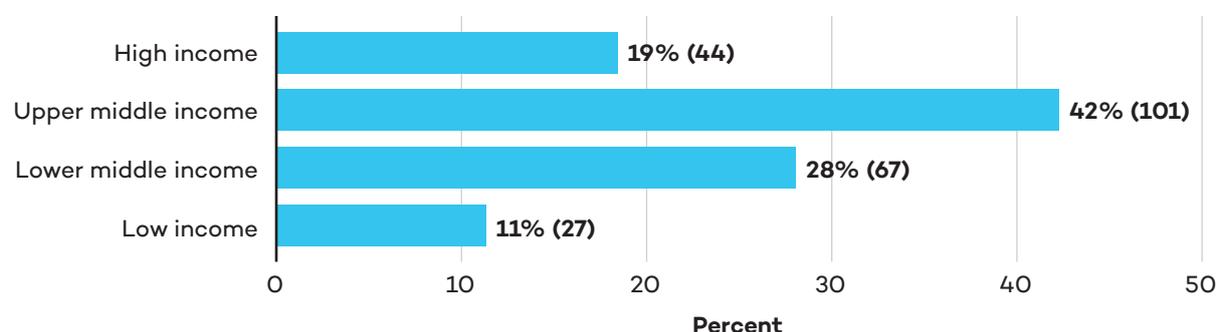
To have a more precise indication of the arbitration rate in each region, their total number must be analyzed in relation to the total number of countries in each region since each arbitration is brought against one state. Accordingly, Table 7 shows that the results are very different when adjusting the number of arbitrations to the number of countries in each region.

**Table 10.** Ratio of arbitration per country for each region

Rank	Region of the respondent state	N of arbitrations	N of countries in the region	Ratio arbitration: countries
1	North America	8	2	4:1
2	Middle East	19	12	1.6:1
3	South/Latin America	77	51	1.5:1
4	Europe	50	58	0.9:1
5	Asia and Pacific	55	67	0.8:1
6	Africa	25	47	0.5:1
7	Arab States	5	10	0.5:1

It emerges that North America receives the lowest number of claims and sits in the front row with 2.6 claims per country. Nonetheless, this result is distorted because the sample for this region is too small to conduct any valuable quantitative analysis: there are only two countries included in this region (Canada and the United States). For all the other regions, the ratio of arbitrations to country can provide more insight into the frequency of fossil fuel arbitrations per region. The Middle East becomes the second most sued region, and South America remains the leader with 1.5 claims per state. These results generally reflect the location of fossil fuel resources and their historical exploitation.

Analyzing the arbitrations according to the income of the host states conveys additional analytical depth. The countries have thus been classified according to their GNI following the Organisation for Economic Co-operation and Development classification (2020).

Figure 12. Percentage of fossil fuel arbitrations according to the income group of the respondent state

Source: Author diagram.

The results shown in Figure 12 reflect the ones shown in the previous section that illustrate how the fossil fuel industry tends to initiate multiple arbitrations around the same case scenarios. This is clear when considering the shares of arbitrations per country, as shown in Table 11.

**Table 11.** The top 10 countries that have faced the highest number of arbitrations

Rank	Country	Region	Income level	N of arbitrations
1	Argentina	South/Latin America	Upper middle income	18
2	Ecuador	South/Latin America	Upper middle income	18
3	Venezuela	South/Latin America	Upper middle income	16
4	India	Asia and Pacific	Lower middle income	13
5	Russian Federation	Europe	High income	13
6	Kazakhstan	Asia and Pacific	Upper middle income	10
7	Ukraine	Europe	Lower middle income	7
8	Bangladesh	Asia and Pacific	Low income	6
9	Canada	North America	High income	6
10	Egypt	Middle East	Lower middle income	6

The highest share of arbitrations has been initiated against upper-middle-income countries, which reflects the numerous arbitrations against Argentina, Ecuador, and Venezuela. The high share of fossil fuel arbitrations initiated against lower-middle-income countries also reflects a specific cluster of arbitrations against India; in this case, out of the 13 arbitrations against India, nine are related to the Dabhol power plant. This reasoning also applies to the share of arbitrations initiated against high-income countries. Russia is included in this last category, and the eight arbitrations related to the Yukos saga (see Section 2.8) constitute eight of the total 13 arbitrations faced by Russia.

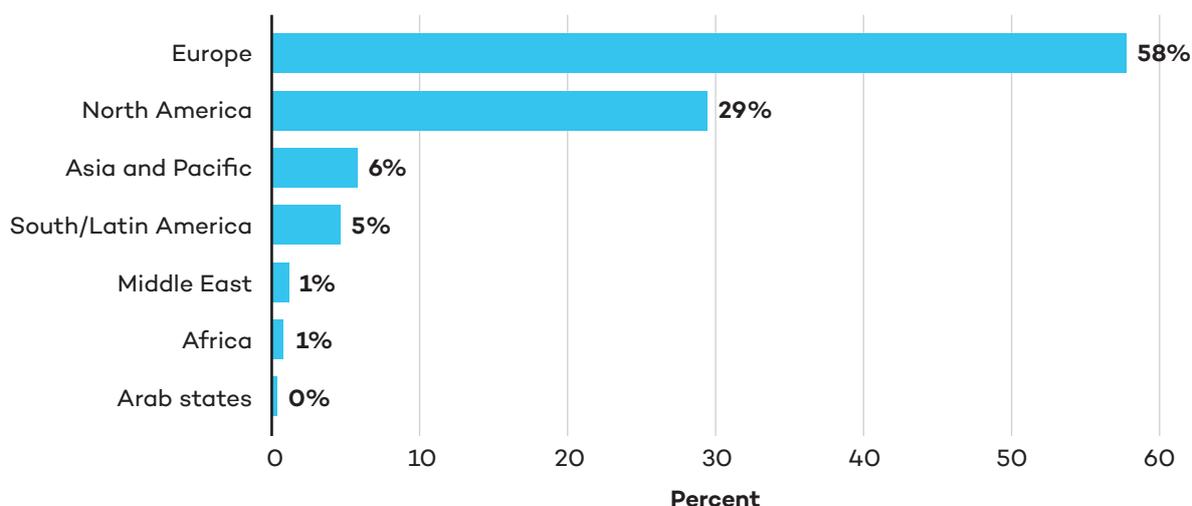
3.2 Fossil Fuel Arbitrations According to Investors' Nationalities

Carrying out the same exercise according to investors' nationalities, the results are biased toward the Global North.²⁰

²⁰ Note on the methodology: there are 258 investors, since in 26 cases there were more than one investor.



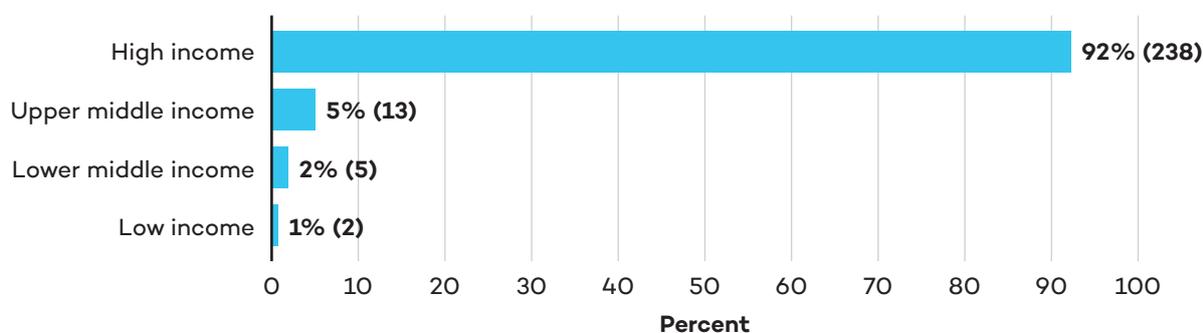
Figure 13. Nationality of investors in fossil fuel arbitrations divided into regions



Source: Author diagram.

Figure 13 shows the significant share of European and North American claimants, categorized as high-income regions, reflecting the results shown in Figure 14. The fact that the great majority of claimants are from high-income countries reflects the prohibitive costs of initiating an investment arbitration, as shown in Section 2.7.

Figure 14. Composition of the income level group of the investor(s)



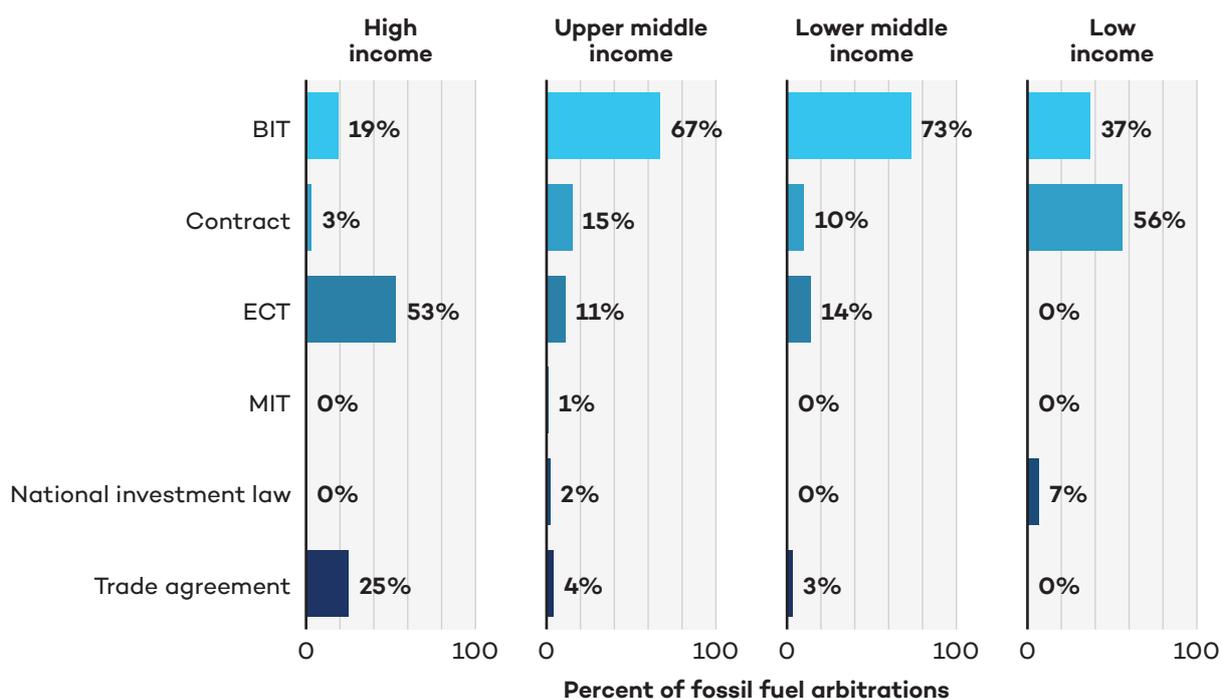
Source: Author diagram.

While Figure 14 is self-explanatory, Table 12 shows that, although a higher share of the claimants are European, almost 30% (27.52%) of fossil fuel arbitrations are initiated by American investors. UK and Dutch investors follow right after, with a combined number of arbitrations equal to U.S. investors.

**Table 12.** Top 10 home states per investor initiating an arbitration

Rank	Country	Region	Income level	N of arbitrations
1	United States	North America	High Income	71
2	United Kingdom	Europe	High Income	38
3	Netherlands	Europe	High Income	33
4	Spain	Europe	High Income	10
5	France	Europe	High Income	9
6	Australia	Asia & Pacific	High Income	7
7	Cyprus	Europe	High Income	6
8	Germany	Europe	High Income	6
9	Luxembourg	Europe	High Income	6
10	Switzerland	Europe	High Income	6

3.3 Legal Basis for Arbitrations Claims According to Host State GNI

Figure 15. Legal basis for arbitration claims according to the income level of the respondent state

Source: Author diagram.



As shown in Figure 15, a notable emerging trend is a rise in contract-based litigations in low-income countries. As shown in Section 2.6, contract-based litigations constitute only 7% of non-fossil fuel arbitrations. In contrast, contract-based litigations have a much higher share of fossil fuel arbitrations, which can be explained by having a closer look at low-income countries.

Out of the 28 fossil fuels related claims brought against low-income countries, 18 (almost 65%) are contract based. Many contracts for large natural resource investments provide access to ISDS, and, in some cases, the liability clause may require that disputes over environmental damage be resolved in arbitration (Cotula & Tienhaara, 2013, p. 306).

On the other hand, lower-middle- and upper-middle-income countries see a predominance of claims based on BITs, while high-income countries mainly receive claims of breach of the ECT or trade agreements such as NAFTA.

Further, since ISDS is only available to foreign investors and does not cover domestic companies, this system will be more accessible to wealthy global corporations with branches scattered around the globe. Accordingly, they can pick the jurisdiction that is most favourable to them, given their global reach (only half of the fossil fuel arbitrations are initiated by the owner of the investment).



4.0 The Investor–Claimants

This section explores the composition of the claimants in fossil fuel arbitrations, and the following two subsections consider: a) the corporations that have demonstrated a particular appetite for ISDS and b) the involvement of the so-called “carbon majors” in ISDS. Before diving into the data, it is important to note that corporations in the fossil fuel industry are generally global in nature, with various subsidiaries and shareholders scattered around the world. This extensive reach allows them to choose the applicable investment agreement or jurisdiction among their many branches. As a matter of fact, the analysis shows that over one-third of all fossil fuel arbitrations are initiated either by a shareholder (27%) or by a financial institution involved in the investment (5%).

4.2 Litigious Corporations

Over the years, several corporations have initiated various investment arbitrations, showing a good knowledge and appreciation of the ISDS system.

Table 13. The list of the most litigious investors

N of Arb.	Corporation	Total awarded	Decided in favour of the investor	Decided in favour of the state	Settled	Pending	Discontinued
7	ExxonMobil Corp	USD 1.8 billion	3	0	3	0	1
6	RSM	Unknown	1	3	0	0	2
5	African Petroleum	Unknown	0	0	3	2	0
5	Murphy Oil Corp	USD 47.6 million	3	1	0	0	1
5	Chevron Corp	USD 229.7 million	1	1	1	2	0
4	Occidental Petroleum Corp	USD 1.8 billion	2	0	2	0	0
4	Repsol SA	USD 5.1 billion	1	1	1	0	1
4	Royal Dutch Shell PLC	Unknown	0	0	1	2	1
4	SCB	USD 333.8 million	2	1	1	0	0

While most of the corporations listed in Table 13 are well known global oil and gas corporations, SCB is a financial institution from Hong Kong, and RSM is an oil and gas company based in Denver, but very little information on this company is traceable online, and it is not listed as a major global oil and gas corporation.



Interestingly, RSM has a “prodigious appetite for litigation” (Peterson, 2010), having pursued the second highest number of arbitrations among the big oil corporations. Without much success, it has initiated arbitrations against Grenada (two), the Central African Republic, Ecuador, Saint Lucia, and Cameroon; however, the tribunal upheld the claims in only one case (against the Central African Republic).

4.3 The Carbon Majors

The Climate Accountability Institute has carried out extensive research on the contribution of fossil fuel companies to climate change. Their aim is to quantify the potential emissions from proven recoverable reserves held by the fossil fuel companies and attribute their responsibility for climate change to each of them. In their report launching the Carbon Majors Database, Griffin (2017) compiles a list of the 100 most polluting fossil fuel companies, listing “41 public investor-owned companies; 16 private investor-owned companies; 36 state-owned companies; and 7 state producers” (Griffin 2017, p. 5). The report estimates that these companies are responsible for 71% of the global industrial GHG emitted since 1751, and amongst them, the top 25 are responsible for more than half of global industrial GHG emissions (Griffin 2017, p. 8). Further, he notes that a “huge acceleration in the extraction of fossil fuels has doubled their contribution to global warming since 1988” (Griffin, 2017, p. 7).

As shown in Table 14, the carbon majors are amongst the most litigious companies in ISDS, and they have shown great expertise at utilizing international investment arbitration. It thus comes as no surprise that Exxon Mobil has its own legal division for investment disputes.

Table 14. Share and total amount awarded per carbon major

Corporation	N. of arbitrations initiated	Carbon major ranking	Total known amount awarded
Gazprom OAO	3	3	Unknown
ExxonMobil Corp	7	5	USD 1.8 billion
Royal Dutch Shell PLC	4	9	Unknown
BP PLC	2	11	Unknown
Chevron Corp	5	12	USD 229.7 million
Total SA	2	19	USD 269.9 million
ConocoPhillips	3	21	USD 8.8 billion
Eni SPA	3	30	USD 700.0 million
Glencore PLC	2	43	USD 19.1 million
Repsol SA	4	46	USD 5.1 billion
Anadarko Petroleum Corp	1	47	Unknown
Occidental Petroleum Corp	4	55	USD 1.8 billion



Corporation	N. of arbitrations initiated	Carbon major ranking	Total known amount awarded
Tatneft OAO	1	57	USD 112.0 million
Encana Corp	1	66	Unknown
Westmoreland Coal Co	1 ²¹	88	Unknown
Noble Energy Inc	1	95	USD 70.0 million
Murphy Oil Corp	5	96	USD 47.6 million

In total, carbon majors have initiated 46 arbitrations, 33% of the total fossil fuel arbitrations, of which 24 were initiated by the Top-25 carbon majors alone. In other words, one out of three arbitrations has been initiated by a carbon major, and this number reflects only those that are publicly known. The total amount awarded by arbitral tribunals to carbon majors is USD 19 billion, and since this sum totals only the disclosed awards, this amount is likely to be much higher, given the proportion of sealed arbitrations.

Table 15. Share and total amount awarded per carbon major

Outcome	Number
Decided in favour of investor	17
Settled	13
Pending	8
Discontinued	5
Decided in favour of state	6

As shown in Table 15, the great majority of the cases (30 of 46) initiated by a carbon major have been either decided in favour of investors or settled before the decision was reached. Only six cases have been decided in favour of the host state. This result reflects the great legal ability that these corporations have developed to shield their economic profit from regulatory measures.

²¹ This arbitration has been counted as one here since it is the same conflict, but the company had to reinstate the proceedings after going bankrupt and restructured.



5.0 The Rise of Environmental ISDS Disputes

Investors began challenging environmental measures through ISDS in the 1990s. Since then, the relationship between IIL and the protection of the environment remains controversial, and “the regulatory and litigation risks it entails is taking increasingly recognisable shape” (Viñuales 2019, p. 12). Most IIAs were created without due consideration of the need of host states to mitigate or adapt to climate change or implement urgent measures to protect the environment. In the last two decades, the number of investment disputes targeting environmental or climate measures has risen steeply and is expected to increase further (Miles, 2019).

The conflict between the protection of the environment and the privileges granted to foreign investments becomes apparent when environmental measures (that include climate measures) are claimed to breach investment provisions guaranteed under IIAs, investment contracts, or national investment laws.²² In the context of the fossil fuel industry, a host state is likely to find itself facing the impossibility of simultaneously meeting its obligations under the Paris Agreement and its obligations to protect fossil fuel investments (Brauch, 2020; Miles, 2008; Sachs et al., 2020; Tienhaara, 2009, 2018; Viñuales, 2012).

Viñuales (2016, p. 17) defines investment disputes with environmental components as disputes that arise

from the operations of investors (i) in environmental markets (e.g., land-filling, waste treatment, garbage collection, pesticides/chemicals, energy efficiency, emissions-reduction, biodiversity compensation, etc.) and/or (ii) in other activities, where their impact on the environment or on certain minorities is part of the dispute (e.g., tourism, extractive industries, pesticides/chemicals, water extraction or distribution) and/or (iii) to disputes where the application of domestic or international environmental law is at stake.

Accordingly, Viñuales identifies 117 investment disputes with environmental components that were filed between 1970 and 2015 (Viñuales 2019). His analysis highlights how environmental issues have been increasingly present in investment arbitrations, showing a growing intersection of these two fields of law. Further, he also points out that there has been a steep increase in arbitrations with environmental components in the last decade, with more than half of the arbitrations included in the dataset filed after 2012 (Viñuales 2012, 2016, 2019).

Of Viñuales’ dataset, 13 arbitrations are related to a fossil fuel investment.

²² For further analysis of the conflicting nature of these two legal regimes, please see the work carried out by Viñuale (2012, 2016, 2019).

**Table 16.** Fossil fuel arbitrations with environmental components

Short case name	Year filed	Legal basis for claim	Economic subsector	Status	Amount claimed	Amount awarded (or settled)
<i>Plama v. Bulgaria</i>	2003	ECT (1994); Bulgaria–Cyprus BIT (1987)	Fossil fuels transformation	Decided in favour of state	USD 146.0 million	Unknown
<i>Chevron and TexPet v. Ecuador (I)</i>	2006	Ecuador–USA BIT (1993)	Fossil fuels extraction	Decided in favour of investor	USD 649.0 million	USD 77.7 million
<i>Paushok v. Mongolia</i>	2007	Mongolia–Russian Federation BIT (1995)	Fossil fuels extraction	Pending	USD 1.0 billion	Unknown
<i>Perenco v. Ecuador</i>	2008	Ecuador–France BIT (1994)	Fossil fuels extraction	Decided in favour of investor	USD 1.4 billion	USD 416.5 million
<i>Burlington v. Ecuador</i>	2008	Ecuador–USA BIT (1993)	Fossil fuels extraction	Decided in favour of investor	USD 1.5 billion	USD 379.8 million
<i>Chevron and TexPet v. Ecuador (II)</i>	2009	Ecuador–USA BIT (1993)	Fossil fuels extraction	Pending	Unknown	Unknown
<i>Niko Exploration v. Bangladesh (I)</i>	2010	Contract	Fossil fuels extraction	Pending	Unknown	Unknown
<i>Niko Exploration v. Bangladesh (II)</i>	2010	Contract	Fossil fuels extraction	Dismissed on jurisdiction	Unknown	Unknown
<i>Mamidoil v. Albania</i>	2011	Albania–Greece BIT (1991); ECT (1994)	Fossil fuels transportation or storage	Decided in favour of State	USD 23.0 million	Unknown
<i>Churchill Mining and Planet Mining v. Indonesia</i>	2012	Indonesia–UK BIT (1976); Australia–Indonesia BIT (1992)	Fossil fuels extraction	Decided in favour of State	USD 1.3 billion	Unknown



Of the 73 fossil fuel arbitrations in which a decision has been awarded and disclosed, in addition to the 13 arbitrations listed in Table 16, another arbitration has been identified as having environmental components. Following Viñuales’s methodology, *WRB v. Grenada (II)* falls within this category since the dispute is related to the shift from fossil fuel energy to renewable sources.

Further, among the fossil fuel arbitrations, nine cases have been identified as related to indirect environmental measures. Eight cases²³ were brought against Ecuador for the imposition of taxes on oil activities to be redirected toward the public good. One case, *Cervin Investissements and Rhone Investissements v. Republic of Costa Rica*, was brought against Costa Rica for the adoption of a series of measures to fix tariffs on petroleum operation based on the criteria of “social equity, environmental sustainability, energy conservation and economic efficiency.”²⁴

Given the lack of disclosure, it is highly possible that the amount of fossil fuel arbitrations dealing with environmental issues (23 so far) is higher than portrayed here. On the other hand, a series of arbitrations specifically tackling climate measures have recently emerged, but are still pending.

Climate measures include the prohibition of certain activities, the imposition of energy standards, and the withdrawal of rights held by economic operators in carbon-intensive industries. Foreign investors might challenge these measures in ISDS (Brauch et al., 2019; Lobel & Fermeglia, 2018; Miles, 2008; Sachs et al., 2020). Indeed, a recent wave of arbitrations has been initiated explicitly against specific climate measures.

Tienhaara and Cotula have carried extensive analyses on the impacts of investment arbitrations on environmental measures and human rights. In a recent report (Tienhaara & Cotula, 2020), they analyze how investors are already resorting to ISDS to sue states over measures to phase out fossil fuels, and how this trend is likely to increase (Tienhaara & Cotula 2020, p. 1). Table 17 shows the fossil fuel arbitrations that have been initiated to counter a particular climate measure, according to Tienhaara and Cotula (2020, p. 17), with the addition of two extra cases.

The authors have identified an additional two cases where a company threatened to have recourse to arbitration (*Vermilion v. France and Uniper v. The Netherlands*). While Vermilion’s threat has not materialized since the publication of their report, *Uniper v Netherlands* was launched in 2021. Further, a similar case was initiated against the Netherlands by RWE (Reuters, 2021a, 2021b).

²³ *City Oriente v. Ecuador; Occidental v. Ecuador (II); Mobil and Murphy v. Canada (I); Murphy v. Ecuador (I); Repsol SA v. Ecuador (II) (and others); Murphy v. Ecuador (II); Cervin Investissements and Rhone Investissements v. Republic of Costa Rica; Mobil v. Canada (II)*.

²⁴ *Cervin Investissements and Rhone Investissements v. Republic of Costa Rica*, Award, art. 115.

**Table 17.** Fossil fuel arbitrations initiated to challenge a climate measure

Short case name	Year	Applicable IIA	Sector of investment	Outcome
<i>Vattenfall v. Germany (I)</i>	2009	ECT (1994)	Fossil fuels power generation	Settled
<i>Lone Pine v. Canada</i>	2013	NAFTA (1992)	Fossil fuels extraction	Pending
<i>TransCanada v. USA</i>	2016	NAFTA (1992)	Fossil fuels transportation or storage	Discontinued ²⁵
<i>Rockhopper v. Italy</i>	2017	ECT (1994)	Fossil fuels extraction	Pending
<i>Westmoreland v. Canada (I) and (II)</i>	2018/ 2019	NAFTA (1992)	Fossil fuels extraction	Discontinued/ Pending
<i>Uniper v The Netherlands</i> ²⁶	2021	ECT (1994)	Ban on coal-produced energy	Pending
<i>RWE v The Netherlands</i> ²⁷	2021	ECT (1994)	Ban on coal-produced energy	Pending

Lastly, Tienhaara and Cotula (2020, p. 27) point out that 75% of the foreign-owned coal power plants that need to be retired early in line with the Paris Agreement are covered by at least one treaty with ISDS. This could likely put any regulatory action to phase out the dirtiest of the fossil fuels at risk, especially in developing countries where “assets such as coal power plants are often younger ... so investors are more likely to suffer financial losses in the transition to cleaner forms of energy” (Tienhaara & Cotula, 2020, p. 32).

Little is known of these arbitrations so far, and the outcome is still to be decided in the cases listed above, rendering a comprehensive analysis impossible at the moment of writing. Nonetheless, it can be inferred that there will likely be an increase in investment arbitrations targeting climate measures, given that climate change obligations require states to cut their emissions drastically.

In total, out of the 73 arbitral awards of fossil fuel arbitrations that have been disclosed, 23 cases are related to an environmental issue. In other words, a third (31%) of all fossil fuel arbitrations are related to environmental issues. This percentage does not consider all arbitrations related to climate measures since many are still pending. Given the climate commitments made by many governments, this percentage is expected to rise quickly.

²⁵ This arbitration has been relaunched in 2021 after the Biden administration cancelled the project (Bohmer, 2021a).

²⁶ This arbitration is not included in the dataset of this report since it was last updated in December 2020. See Tienhaara and Cotula (2020) and Bohmer (2021c).

²⁷ This arbitration is not included in the dataset of this report since it was last updated in December 2020. See Bohmer (2021b).



6.0 Conclusions and Recommendations

As this report has shown, IIL, and especially ISDS, plays an essential role in protecting fossil fuel investments. It is clear from this report that the fossil fuel industry has been relying on ISDS for special protection, with almost 20% of the total known ISDS cases initiated by an investor in the fossil fuel sector. Carbon majors—the most polluting fossil fuel producers in the coal, oil, and gas industries—have used ISDS widely to protect their fossil fuel investments, initiating 33% of the total fossil fuel arbitrations and securing a total of USD 19 billion in awards.

The report also highlights the consistent increase in arbitrations initiated to challenge environmental and climate measures. In fossil fuel arbitrations alone, over 30% of the publicly available decisions awarded are environment-related. There has also been a recent rise in claims initiated to counteract specific climate measures, such as phasing out fossil fuels.

In light of these developments, IIAs must be reassessed to ensure that they do not undermine the goals and objectives set out under the United Nations Framework Convention on Climate Change. Accordingly, parties to the IIAs should amend, terminate, or withdraw from any existing IIAs that are not aligned with climate objectives (in the context of the ECT, see Bernasconi-Osterwalder et al., [2021] and Brauch [2021]). Some scholars advocate for the realignment of investment treaties and contracts with the Sustainable Development Goals (Cotula & Tienhaara 2013; Johnson et al., 2019) or a modernization of IIL as a whole to foster climate action (Tienhaara & Cotula, 2020). Another option could be to suspend or otherwise exclude ISDS for all fossil fuel investments at a multilateral level.

In addition to IIAs, governments should also reassess ISDS and other relevant provisions in investment codes and investment contracts, especially since contract-based arbitrations are twice as frequent in fossil fuel arbitrations than in non-fossil fuel arbitrations, and they correspond to almost 65% of the arbitrations brought against low-income countries. So far, contract-based provisions have passed under the radar of policy-makers and scholars, who have mainly focussed on the impact of IIAs.

Lastly, there is a need to improve transparency in ISDS, especially when investments have a significant impact on the public, including by contributing to climate change. While transparency has improved to some extent with respect to treaty-based arbitrations, investor–state disputes pursuant to national laws and investment contracts remain largely secret.



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Annexes

Annex I. Fossil Fuel Arbitrations

Annex II. Historical Fossil Fuel Arbitrations

Annex I and II can be downloaded in Excel format from this link: <https://www.iisd.org/system/files/2022-01/investor-state-disputes-fossil-fuel-industry-annex.xlsx>.

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