



# A Legally Sound Oil and Gas Phase-Out

How to design policies  
to mitigate investor-state  
arbitration risks

IISD REPORT

© 2025 International Institute for Sustainable Development  
Published by the International Institute for Sustainable Development  
This publication is licensed under a [Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-nc-sa/4.0/).

## International Institute for Sustainable Development

The International Institute for Sustainable Development (IISD) is an award-winning, independent think tank working to accelerate solutions for a stable climate, sustainable resource management, and fair economies. Our work inspires better decisions and sparks meaningful action to help people and the planet thrive. We shine a light on what can be achieved when governments, businesses, non-profits, and communities come together. IISD's staff of more than 200 people come from across the globe and from many disciplines. With offices in Winnipeg, Geneva, Ottawa, and Toronto, our work affects lives in more than 100 countries.

IISD is a registered charitable organization in Canada and has 501(c)(3) status in the United States. IISD receives core operating support from the Province of Manitoba and project funding from governments inside and outside Canada, United Nations agencies, foundations, the private sector, and individuals.

### **A Legally Sound Oil and Gas Phase-Out: How to design policies to mitigate investor-state arbitration risks**

April 2025

Written by Lukas Schaugg, Indira Urazova, Greg Muttitt, and Suzy Nikiéma

Photo: iStock

### Head Office

111 Lombard Avenue, Suite 325  
Winnipeg, Manitoba  
Canada R3B 0T4

**Tel:** +1 (204) 958-7700

**Website:** [iisd.org](https://iisd.org)

**X:** [@IISD\\_news](https://twitter.com/IISD_news)

## Acknowledgements

This paper draws on discussions with investment law and energy policy experts during a seminar on Legally Sound Approaches to Fossil Fuel Phaseouts in the Context of International Investment Law held in September 2024. The authors would like to thank the participants of the seminar for their insights and contributions to the discussion.

We are grateful to the following individuals for their extensive comments and feedback on the current or earlier versions of this paper:

- Emma Aisbett, The Australian National University
- Nathalie Bernasconi-Osterwalder, International Institute for Sustainable Development (IISD)
- Jonathan Bonnitcha, The University of New South Wales
- Juan Carlos Boue, Curtis
- Anatole Boute, Chinese University of Hong Kong
- Lorenzo Cotula, International Institute for Environment and Development
- Ivetta Gerasimchuk, IISD
- Daniela Guzman, Juan Felipe Parra, and Giovanni Pabon, Transforma
- Steve Kretzmann, The Commission Project, Endgame Strategy LLC
- Michael Lazarus, Stockholm Environment Institute
- Andreas Randøy, Greenpeace Norway
- Konrad Raeschke-Kessler, German Federal Foreign Office
- Elizabeth Sheargold, Monash University
- Stephan Singer, Climate Action Network International
- Kyla Tienhaara, Queen's University
- Beth Walker, E3G

Our heartfelt thanks go to Megan Darby and Isaak Bowers for their exceptional work in helping us shape and refine this paper.

Moreover, the authors thank Martin Švec, Abigail Banks-Hehenberger, and Weitong Shan for background research and for supporting the development of this publication.

All errors and omissions are ours.



## Executive Summary

In the global stocktake at the 28th UN Climate Change Conference, governments agreed to transition away from fossil fuels in a just, orderly, and equitable manner. Several governments are putting this into action with plans to phase out oil and gas production. A managed phase-out is vital to achieve the goals of the Paris Agreement and smooth the transition for oil- and gas-producing economies.

One barrier is the threat of investors suing governments through investor-state arbitration. Some governments have stated that this threat has led them to adopt less ambitious fossil fuel phase-out policies than they otherwise would have adopted.

As more governments commit to phasing out oil and gas exploration and production, mitigation of the risks of investor-state arbitration becomes a key priority. These risks differ over time and depend on the targeted stage of the production cycle. The sooner governments act, the higher the chances of achieving 1.5°C and, crucially, the lower their legal risks. Conversely, governments that postpone phase-out measures make it harder to align fossil fuel production with the Paris goals and expose themselves to additional legal risks.

This brief supports governments committed to the phase-out, particularly in developed countries.<sup>1</sup> It provides policy-makers with tools to mitigate the legal risks of investor-state arbitration when designing and implementing phase-out policies. The brief focuses on oil and gas extraction, the sector in which more arbitrations have been initiated than any other (Di Salvatore, 2021).<sup>2</sup>

Based on our analysis of the decisions of arbitral tribunals, this paper proposes five principles for policy-makers to follow:

- **No new licences.** Stop creating new exploration and production rights. This is the single best way to prevent new arbitration risks from arising.
- **Manage expectations.** Set a long-term framework for phasing out oil and gas production, signalling the end date well in advance. Avoid making any official statements that could be interpreted as encouraging investment in the sector.
- **Build broad authority.** Implement phase-out policy through legislation rather than executive orders. Ground policies in scientific evidence, national constitutions, and legally binding international treaties wherever possible.
- **Use existing powers.** Leverage existing environmental or social regulations. In recent years, courts have also been driving a wider consideration of the climate impacts of new fossil fuel projects.
- **Be consistent.** Apply a phase-out policy equally to all investments in the sector, irrespective of investor nationality.

Oil and gas investors may make threats at all stages of the production cycle. Yet, governments will face greater arbitration risks when taking measures targeting later stages (such as the production phase) as opposed to earlier ones (such as the acquisition and exploration phases).<sup>3</sup> Postponing phase-out measures can create or deepen tensions between avoiding



legal risk and achieving climate goals and a managed transition. Every delay reduces the carbon budget, making a smooth transition increasingly difficult and necessitating more drastic, high-risk phase-out measures to avert catastrophic climate change. That said, measures at all stages—including those targeting already producing fields—will ultimately be needed to meet climate targets.

This brief focuses on mitigating investor-state arbitration risks. It does not address parallel and equally crucial efforts to reform the investor-state dispute settlement system. These reform efforts should remain a priority to address the numerous concerns governments have raised with this system. At the same time, the urgency of climate change and the need to prevent economic disruption from the decline of the fossil fuel industry require governments to explore more immediate risk-reduction strategies at the domestic policy design level, pending the reform of international investment law. We recommend that governments pursue both approaches—systemic reform and policy action—to meet climate goals with minimal disruption.

Our analysis also shows that there is a need to bring together investment law and energy policy expert communities to deepen this work. IISD energy and investment law experts will continue to engage with governments, legal experts, and stakeholders to advance this dialogue and support the development of effective, legally sound phase-out strategies.



# Table of Contents

<b>1.0 Introduction</b>	<b>1</b>
1.1 No New Oil and Gas Fields Should Be Developed to Limit Warming to 1.5°C and Avoid Economic Disruption	1
1.2 Governments Have the Power to Phase Out Oil and Gas Production	2
1.3 Risk of Regulatory Chill From Investor–State Arbitration	3
1.4 Aims and Scope of this Brief	3
<b>2.0 Substantive Legal Provisions and Standards</b>	<b>5</b>
2.1 Fair and Equitable Treatment	5
2.2 Expropriation	6
2.3 Stabilization Clauses in Investor–State Contracts	6
2.4 Necessity and Police Powers	6
<b>3.0 Phase Out Policies at Different Stages of the Oil and Gas Field Life Cycle and Risk Profile</b>	<b>7</b>
3.1 Measures Before Exploration	8
3.2 Measures During the Exploration and Appraisal Phase	9
3.3 Measures During the Production Phase	10
<b>4.0 Conclusion</b>	<b>13</b>
<b>References</b>	<b>14</b>
<b>Endnotes</b>	<b>19</b>

## List of Figures

Figure 1. Comparison of CO <sub>2</sub> emissions committed by developed oil and gas fields and coal mines and remaining carbon budgets at the start of 2023	2
Figure 2. Oil and gas production life cycle and associated investor–state arbitration risks	7

## List of Boxes

Box 1. Incorporating phase-out ambitions in the main regulatory framework for the oil and gas sector	9
--	---



## 1.0 Introduction

As climate change impacts intensify worldwide, there is increasing urgency to reduce greenhouse gas (GHG) emissions to limit global warming to 1.5°C, as agreed by most states under the Paris Agreement. In recent years, there has been growing recognition that measures aimed at restricting the supply of fossil fuels would be necessary to stay on course with 1.5°C-aligned pathways (Stockholm Environment Institute et al., 2023).<sup>4</sup> Beyond Oil and Gas Alliance and the Fossil Fuel Non-Proliferation Treaty Initiative are some of the latest efforts to advance and facilitate a managed phase-out of fossil fuel production. In December 2023, the 28th UN Climate Change Conference concluded with a landmark decision from 198 governments to “transition away from fossil fuels” (United Nations Framework Convention on Climate Change, 2023, para. 28).

At the same time, the dramatic reduction in clean energy technology costs has spurred record-breaking growth in clean energy technologies, so much so that it is starting to displace fossil fuel demand. In this transition, oil- and gas-producing economies are vulnerable to energy price shocks, lost government revenues, stranded assets, and disruption to jobs and communities relying on oil and gas production (Semeniuk et al., 2022). Governments can smooth the path to a more sustainable future by implementing a managed phase-out of fossil fuel production. This briefing helps governments implement a phase-out while minimizing the legal risks.

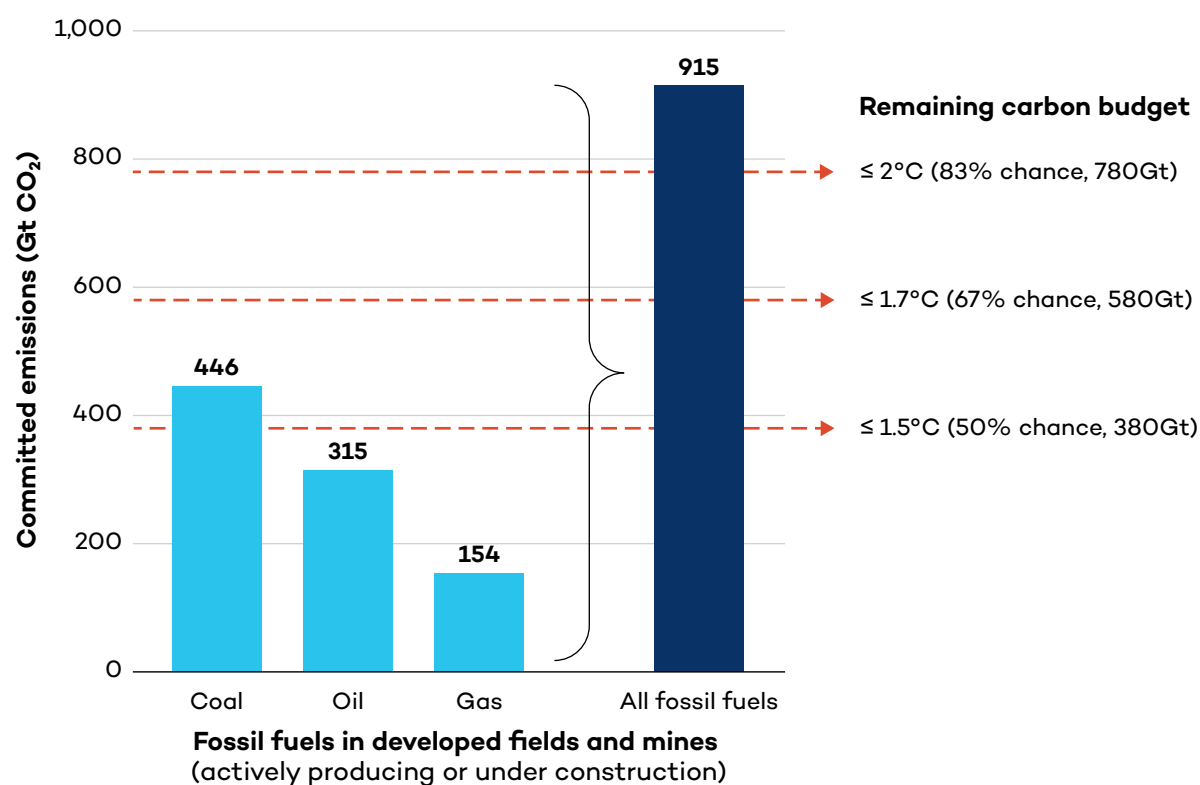
### 1.1 No New Oil and Gas Fields Should Be Developed to Limit Warming to 1.5°C and Avoid Economic Disruption

In 2021, the International Energy Agency (IEA) found that no new oil and gas fields are needed beyond those already in production or under development to achieve net-zero emissions by 2050 while meeting the world’s projected energy needs. Subsequent research has found that the same conclusion follows from all credible 1.5°C scenarios published by universities, intergovernmental organizations, and companies (Bois von Kursk et al., 2022). These conclusions have been reached because declines in oil and gas consumption in 1.5°C scenarios match the expected declines in production from existing fields. Because of the improving economics of clean energy technologies, the IEA expects demand for fossil fuels to peak by 2030, even under conservative estimates of the expected speed of emissions reductions (IEA, 2024). In fact, projected consumption declines faster after 2030, implying that some fields will need to be closed before the end of their economic life (IEA, 2024).

In theory, new oil and gas fields could be opened if existing ones are closed early. In practice, however, once a fossil fuel project is built, it “locks in” or “commits” emissions over its lifetime (Matthews, 2014; Unruh, 2000). In other words, the company has an economic incentive to continue operating a producing field for its full economic life, and political, social, and legal dynamics discourage governments from introducing policies that could lead to early closure. The most viable path consistent with the Paris goals is for no new oil and gas fields to be developed. **This means that many fields in already licenced exploration blocks (i.e., where companies have some legal rights) would need to be left undeveloped.**



**Figure 1.** Comparison of CO<sub>2</sub> emissions committed by developed oil and gas fields and coal mines and remaining carbon budgets at the start of 2023



Source: Trout (2023), reproduced with the author’s permission. Data for oil and gas from Rystad (2023), for coal from Trout et al. (2022), for remaining carbon budgets from International Panel on Climate Change (IPCC, 2021) and Friedlingstein et al. (2022).

Further, production from some existing fields will need to be shut down earlier than planned. As of 2018, committed emissions from already-developed oil and gas fields and coal mines exceeded the remaining 1.5°C carbon budget by 40% (Trout et al., 2022). A 2023 update found this excess had increased to 60% (Figure 1) (Trout, 2023). For measures targeting existing production, which involve greater legal risks, the onus should mainly fall on developed countries to account for the principle of “common but differentiated responsibilities.”

## 1.2 Governments Have the Power to Phase Out Oil and Gas Production

With few exceptions, oil and gas resources are legally owned by the state, which then grants private companies the rights to explore for and extract oil and gas. Governments outline the objectives of oil and gas production, establish fiscal arrangements for production activities, specify the roles of institutions and actors involved in the sector, and oversee extraction activities in line with environmental and other regulations in the country (Cameron & Stanley, 2022).

Governments also have a responsibility to ensure that energy transitions are well managed and just for communities, workers, and others likely to be affected by them. Without well-designed



policy, the process threatens to be volatile, with uncontrolled price swings, disruptions to jobs and economies worldwide, and stranded assets on a large scale (Semieniuk et al., 2022).

### 1.3 Risk of Regulatory Chill From Investor–State Arbitration

There is strong evidence that a rapid phase-out of fossil fuel production is needed to limit global warming to 1.5°C and reduce transition risks for countries. However, investor–state arbitration is “chilling” governments’ fossil fuel phase-out ambitions (Meager, 2022).<sup>5</sup> This form of arbitration allows fossil fuel investors to sue the state they have invested in before an international arbitral tribunal (Center for International Environmental Law, 2024; Cotula, 2023; Di Salvatore et al., 2023; IPCC, 2023, ch. 14, pp. 1505–1506; International Institute for Sustainable Development [IISD], 2024; Tienhaara & Cotula, 2020; Tienhaara et al., 2022). The system is often criticized for its lack of consistency, transparency, and predictability. Tribunals can direct governments to pay foreign investors billion-dollar awards with little public scrutiny (United Nations Commission on International Trade Law [UNCITRAL], 2018), and the decisions of the tribunal are final and binding.

Some governments have stated that the risk of investor–state arbitration from oil and gas companies led them to adopt less ambitious policies for restricting fossil fuel production than they would have otherwise implemented (Meager, 2022; Sachs et al., 2020). Indeed, the current architecture of the international investment regime is generally recognized as a considerable obstacle to climate mitigation policies (Schaugg et al., 2023).

Conversations on how to reform investment treaties and the scope of investor–state arbitration are ongoing at UNCITRAL, United Nations Trade and Development (UNCTAD), the Organisation for Economic Co-operation and Development, and other international forums. By the end of 2024, the European Union (EU) and more than 10 states had formally announced their withdrawal from the Energy Charter Treaty—a multilateral investment treaty specific to the energy sector that has generated the highest number of investor-state arbitration cases (IISD, 2024; Ministry of Foreign Affairs of Portugal, 2024).

### 1.4 Aims and Scope of this Brief

This brief outlines how governments can design oil and gas phase-out policies at national and subnational levels while minimizing the risk of investor–state arbitration. While it aims to be short and accessible to policy-makers—and hence does not present a comprehensive assessment of the evidence—it has been informed by a detailed analysis of arbitral awards—not only in oil and gas but also in other sectors where relevant or similar policies have been enacted and challenged, such as coal and nuclear. The brief has also benefited from discussions with and written reviews by leading external experts in investment law and energy policy.

The brief sets out how governments can evaluate the investor–state arbitration risks associated with oil and gas phase-out policies and explore strategies and policy options to mitigate them. These risks cannot be eliminated as long as investor–state arbitration remains an option for



investors under investment treaties or investor-state contracts. The brief does not examine risks arising from domestic litigation.

The brief focuses on the upstream oil and gas sector, given its importance for the energy transition.<sup>6</sup> More arbitrations have arisen in upstream oil and gas than in any other sector, though not primarily in relation to climate mitigation (Di Salvatore, 2021).

Our analysis suggests that there is often a trade-off between adequate climate policy and avoiding arbitration risk. Some risk mitigation strategies would come at the expense of a rapid, orderly, and just phase-out. Given the paramount public interest underpinning a fossil fuel phase-out, how phase-out policies are designed should not be dictated by investor-state arbitration risks.

Yet, there are also important exceptions to this trade-off. Decisions not to grant new exploration rights and interventions at the earlier stages of the oil and gas production cycle, for instance, can contribute to phase-outs with lower arbitration risks. Full alignment of oil and gas production with the Paris Agreement goals will nevertheless require targeting later stages of the cycle, where risks are greater.

While we propose measures that governments can take to limit arbitration risks at all stages, this trade-off underscores the importance of reforming the investment regime in parallel with implementing phase-out policies. They are complementary and mutually reinforcing: as more governments introduce phase-out measures, the flaws in the investment-state arbitration system become more apparent, clearing pathways for its reform and reducing regulatory chill for more ambitious climate action.



## 2.0 Substantive Legal Provisions and Standards

When implementing oil and gas phase-out policies, the main risk for governments stemming from the investor-state arbitration regime is having to pay compensation to investors. Investor-state arbitral tribunals do not follow a rule of precedent and interpret provisions and standards inconsistently. This means that no absolute conclusions can be drawn from existing practice. States must urgently address these issues through reforming the regime. However, tendencies in arbitral decision making can be identified to inform phase-out policy design.<sup>7</sup> Likeminded governments can collaborate to influence these tendencies—for instance, by filing supportive submissions before arbitral tribunals when fellow governments are facing arbitration claims.

Several legal provisions and standards are relevant for phase-out policy design. Provisions in investment treaties that could give rise to an adverse award include the “fair and equitable treatment” (FET) standard and expropriation. Claimants may also rely on stabilization clauses in investor-state contracts. States can primarily rely on two customary legal principles to defend claims: necessity and police powers.

### 2.1 Fair and Equitable Treatment

Many international investment treaties require states to guarantee FET to investors (Sarmiento & Nikièma, 2022, p. 1). Over 90% of investment treaties include the FET standard, and over 80% of treaty-based investor-state arbitrations involve claims based on it (Sarmiento & Nikièma, 2022).

Some tribunals require clear misconduct of the state, such as denial of justice, coercion, or discrimination, to establish that it has breached FET. Many others are satisfied with “milder” forms of state interference—such as failing to maintain the regulatory environment stable or violating investors’ “legitimate expectations.”

Several tribunals require the state to have breached domestic legal rights to rule that it has violated the investors’ legitimate expectations, while some others accept broader criteria, such as regulatory changes or even measures that impact investors’ business plans (Bonnitcha, 2014). Cancellations of contracts where certain assurances were given to an investor or the sudden withdrawal of regulatory protections have been found to breach legitimate expectations.

Unlike many investment treaties, the practices and unwritten rules of international law—so-called “customary international law”—do not explicitly recognize the FET standard. The customary approach typically requires a higher threshold of mistreatment, such as discriminatory actions by a state against a foreign investor, to establish a breach.

Many tribunals increasingly incorporate proportionality tests in assessing FET breaches in general<sup>8</sup> or legitimate expectations in particular.<sup>9</sup> Typically, this involves examining the state’s authority<sup>10</sup> to adopt a measure, as well as its legitimacy,<sup>11</sup> its suitability,<sup>12</sup> and its necessity.<sup>13</sup> Generally, upstream oil and gas phase-outs are very likely to be found to breach FET when



they interfere with investors' specific rights, use intentionally unfair procedures, or are clearly disproportionate to the state's pursued aim.

## 2.2 Expropriation

Provisions against expropriation are also common in investment treaties. Expropriation usually involves “a loss, or complete or substantial devaluation, of an investment on account of state conduct” (Jarrett, 2020, p. 223; also referring to Yannaca-Small, 2018, para. 22.07). Investment law typically distinguishes between direct and indirect expropriation. Direct expropriation refers to the overt confiscation or forced transfer of property (UNCTAD, 2012, p. 6).<sup>14</sup> In contrast, indirect expropriation occurs when state measures fully or substantially deprive an investor of their investment without formally transferring property (Cox, 2019, para. 5.12).

Expropriation is not illegal per se under international law. For the state's expropriation to be legal, it typically requires a public interest rationale, absence of discrimination, due process, and prompt, adequate, and effective compensation to the investor.

## 2.3 Stabilization Clauses in Investor–State Contracts

Several common clauses in investor–state contracts have implications for phase-out policies and related arbitration proceedings. In particular, stabilization clauses shield investors from adverse effects of regulatory or legislative changes on their investment. Such clauses may freeze the law applicable at the investment's inception,<sup>15</sup> require state compensation if regulatory changes disrupt the contract's economic equilibrium, or create obligations to renegotiate the contract. These clauses heighten the risk of states facing successful claims for breach of contract during oil and gas phase-outs, and their presence can also adversely affect states' prospects in treaty-based claims.

## 2.4 Necessity and Police Powers

States can counter FET, expropriation, and other claims using two legal doctrines of their own: necessity and police powers. The necessity doctrine essentially excuses a state's breach and precludes liability for vital actions during crises to counter severe, imminent threats (United Nations International Law Commission, 2001). Typically, states must show<sup>16</sup> that these actions are exceptional,<sup>17</sup> necessary,<sup>18</sup> and the only available solution and that they do not impair other vital interests.<sup>19</sup>

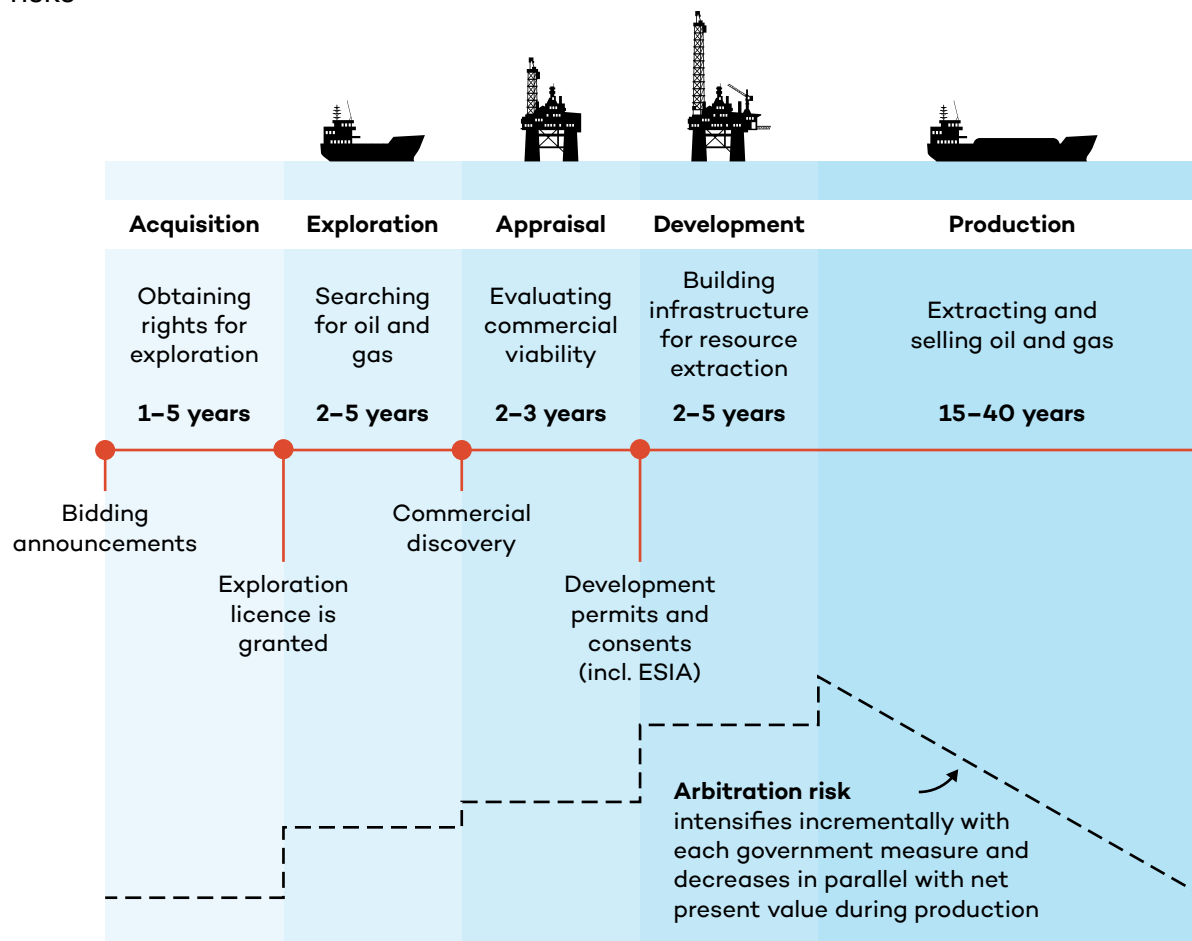
According to the police powers doctrine, regulations and actions taken in the public interest that are made in good faith, non-discriminatory, and proportionate to the state's aim do not constitute expropriation.<sup>20</sup> Key aspects considered when tribunals assess if the doctrine applies to a state's acts include the genuine intent, purpose to protect public welfare,<sup>21</sup> non-discriminatory character,<sup>22</sup> proportionality to the aim,<sup>23</sup> and compliance with due process.<sup>24</sup> When a measure is properly classified under the police powers of a state, it does not constitute expropriation. However, the bar investment tribunals impose on states to successfully demonstrate necessity or police powers is high.



## 3.0 Phase Out Policies at Different Stages of the Oil and Gas Field Life Cycle and Risk Profile

Legal risks differ depending on the stage of the oil and gas development life cycle when the phase-out policy intervenes. The later governments intervene in the life cycle, the higher the investment arbitration risks and the lower the likelihood of successful mitigation (except for fields nearing the end of production). Further, risks primarily depend on a policy's impact on investors' existing exploration and production rights: risks rise where effects on exploration and production rights are specific and significant. This can also have implications for tribunals' calculation of monetary compensation in investor-state arbitration.

**Figure 2.** Oil and gas production life cycle and associated investor-state arbitration risks



Source: Adapted from Trout (2023), with the author's permission.



Moreover, analysis of arbitral practice indicates that following certain principles for policy design—such as including investors in the decision-making process, transparency, and early notice—can help in defending against future challenges. Measures to mitigate risks with phase-out policies include holding prior public consultations,<sup>25</sup> justifying the policies with reference to scientific evidence, and targeting their applications as generally as possible.

**Refraining from granting new exploration and production rights in the first place, instead of revoking them at a later stage, is therefore the option with by far the lowest risks.**

### 3.1 Measures Before Exploration

As noted in Section 2, developing new oil and gas fields is not consistent with 1.5°C pathways. States need to cease issuing new oil and gas exploration licences, which can be anchored in science-backed national phase-out targets within the country’s oil and gas sector framework (see Box 1). Such decisions have already been adopted by Denmark (IEA, 2023), France,<sup>26</sup> and Italy,<sup>27,28</sup> as well as the state of Schleswig-Holstein in Germany (Wehrmann, 2024) and the province of Quebec in Canada (National Assembly of Quebec, 2022). Although not sufficient for meeting Paris Agreement levels alone, this step already signals future industry contraction, encourages redirection of investment toward renewables, and contributes to positive international norms.

Concretely, this step implies that states would be issuing no new exploration licences and concessions.<sup>29</sup> Since it primarily impacts investors involved in ongoing negotiations or bidding rather than those that already have legal rights to exploration or production, it presents fewer legal risks than intervening in later stages of the production cycle. Early risks likely depend on specific bidding rules. Sometimes, these rules include non-discretion provisions which “specify that the government ‘shall’ issue a licence provided that the specified procedures are followed, and criteria are met” (Cameron & Stanley, 2022, p. 67). Investors could seek to demonstrate that the state has violated their “legitimate expectations” or “indirect expropriation” by introducing such rules.<sup>30</sup> However, investors without established contracts or licences are less likely to be able to prove that they have a protected investment, as is necessary for legal standing.<sup>31</sup> Pre-bidding activities rarely qualify, and additional factors, such as shareholding,<sup>32</sup> asset transfers, or construction activities, may be required.

To avoid arbitration claims based on discrimination and mitigate risks of FET and expropriation-based claims, it is preferable for states to apply the policy uniformly to all bidders and negotiating companies. For FET claims, any investor’s legitimate expectations, if they exist at all, would then likely be limited to governments considering bids or negotiating in good faith rather than guaranteeing an exploration right. For expropriation claims, the early stage of the investment may help justify the lawfulness of the measure, especially if it is non-discriminatory,<sup>33</sup> follows due process,<sup>34</sup> and serves a public purpose (UNCTAD, 2012).<sup>35</sup> If the company files an investment arbitration claim, it is unlikely that governments would have to compensate investors for such interventions prior to the granting of exploration rights.



### **Box 1. Incorporating phase-out ambitions in the main regulatory framework for the oil and gas sector**

The first step toward phase-out is to change the main policy framework that outlines the government’s objectives in oil and gas production, commonly expressed in a petroleum law. A Paris-aligned regulatory framework would ideally feature a national phase-out roadmap that assigns government responsibility to regulate oil and gas production, acknowledges Paris Agreement commitments, recognizes scientific considerations on phase-out timing, sets concrete targets for production reduction and phase-out, and outlines detailed action plans with clear timelines. Such policy frameworks are not yet common but are practically feasible: for instance, with the adoption of the North Sea Agreement in 2020, Denmark amended the Danish Subsoil Act to include phase-out objectives and became the biggest oil producer to set a production phase-out date in 2050, although new oil and gas exploration is still allowed in some cases (Danish Ministry of Climate, Energy and Utilities, 2020). Such a framework could be developed and adopted in conjunction with the submission of the country’s nationally determined contribution under the Paris Agreement. Following adoption, governments can introduce concrete phase-out measures aligned with this framework, as discussed in this section.

On their own, oil and gas production restrictions would not be sufficient to achieve the emissions reductions necessary for alignment with the Paris Agreement. Such measures can be complemented by policies that aim to limit oil and gas demand, such as fossil fuel consumption subsidy reform, carbon taxes, emissions and fuel standards, and emissions trading systems, among others. The United Kingdom’s experience in phasing out coal shows that regulation, market and power sector reforms, targeted support for clean alternatives, and public campaigns made the phase-out possible (Rai-Roche, 2024). Indeed, research suggests that regulatory measures have the most emissions reduction potential when used in combination with tax and/or price instruments (Stechemesser et al., 2024), and the fastest way to reduce emissions is through a combination of managed declines in fossil fuel production and demand-side policies (Van Asselt et al., 2024).

## **3.2 Measures During the Exploration and Appraisal Phase**

As noted in Section 2, future carbon emissions from oil and gas fields that are already licensed far exceed levels compatible with 1.5°C pathways. While some states award exploration and production rights as a bundle, others grant them separately. A crucial policy step in countries granting rights separately is to prevent the development of undeveloped licensed reserves by ceasing to grant production rights to holders of exploration rights.

Since this policy would impact investors with secured exploration rights, it carries specific legal risks that exceed those of interventions before exploration. Exploration rights holders will likely meet the criteria of a “protected investment” in an arbitration claim based on an investment treaty, as exploration rights commonly serve as an explicit or implicit basis for a subsequent grant of development and production rights—in the event of a discovery.<sup>36</sup> With



this in mind, governments adopting this policy would also be advised to avoid or withdraw any statements or regulations that could be construed as promises that production rights will be granted to holders of exploration rights.

A finding of a breach of FET or expropriation is more likely once exploration rights have been granted, as was the case in *Rockhopper v. Italy*, where Italy was ordered to pay USD 200 million to the investor.<sup>37</sup> In jurisdictions using flexibly negotiated contracts to regulate oil and gas production, more tailored—and potentially discriminatory—measures may be required, incidentally increasing contract-based arbitration risks (e.g., for breach of stabilization clauses). Where investors prevail on the merits, tribunals may award compensation, including for lost production profits,<sup>38</sup> particularly where commercially viable resources have been discovered.

While such decisions may be vulnerable to claims alleging expropriation, awards of monetary compensation at this stage are likely to be lower than after the investor has made the substantial investments required to develop the oil or gas field. To mitigate risks, governments could prioritize temporarily suspending existing exploration licences, modify automatic extension rules of exploration rights, or not renew rights that have reached their term, particularly where domestic law leaves them room to grant subsequent rights.

Domestic legal practice<sup>39</sup> increasingly suggests that governments' environmental impact assessments of oil and gas projects should include their downstream emissions—that is to say, those that occur when the fuels are consumed. Particularly where the investor has not adequately assessed its downstream emissions or where the emissions are found to be significant and/or inconsistent with achieving climate goals, a government may be able to reject applications for production rights. A clear communication about the inclusion of downstream GHG emissions and their impacts on factors such as public health, the economy, Indigenous rights, and cultural heritage in the environmental impact assessment process could minimize the risk of a successful challenge (Offshore Petroleum Regulator for Environment and Decommissioning, 2024).

### 3.3 Measures During the Production Phase

Future emissions from the world's already producing oil and gas fields would exceed Paris Agreement-aligned carbon budgets. Legal risks notwithstanding, governments should act decisively to also limit production from already producing fields. Targeting producing fields comes with greater legal risks. Without preparatory measures—such as prior notice of a global phase-out date—revoking production rights is likely to trigger arbitration claims and be held in breach of investment protection standards (detailed above). Mining<sup>40</sup> and upstream oil and gas<sup>41</sup> investors have filed arbitrations in similar circumstances.

#### 3.3.1 The Importance of Early Notice

Given such risks, it is advisable to prioritize a managed phase-out approach, clearly outlining a timeline for ending production well in advance. This strategy requires careful policy planning with sufficient lead times but allows for a more orderly transition,<sup>42</sup> significantly reducing legal risks associated with abrupt cancellations of rights. Setting a phase-out timeline could also



help minimize any compensation the state may later be ordered to pay—if the cancellation is challenged—as the later years of production following the end date are the least economically valuable.

This approach could draw inspiration from previous national moratoria on nuclear or coal-fired electricity generation,<sup>43</sup> which were accompanied by communication campaigns emphasizing public interest aims and corroborating scientific evidence. Setting end dates for fossil fuel production is a relatively novel idea, but examples exist. The Netherlands, the United Kingdom, Germany, and the province of Alberta all set phase-out timelines for coal-fired power generation, and Spain set a 2042 deadline for phasing out fossil fuel extraction.<sup>44</sup>

A review of nuclear and coal phase-outs in Europe suggests that early announcement, well in advance of phase-out dates, could reduce arbitration risk. This would allow governments, to some extent, to pre-empt investor claims alleging a lack of due process, transparency, or a predictable and stable regulatory framework (as may be required for claims under the FET standard and stabilization clauses).

If communicated and implemented well in advance, an end date sends a clear policy signal to investors and other stakeholders about the expected production decline. Governments may use the umbrella of an end date to not renew contracts for producing fields that have reached their term. Applying the end date equally to all production rights holders would likely avoid liability based on non-discrimination provisions.

### 3.3.2 Meeting Proportionality Tests

There are also ways for governments to increase the likelihood of an investment arbitration tribunal finding that they acted proportionately in adopting the phase-out policy in question. While this may help defeat allegations of breach of FET, policies affecting production rights will remain at risk of being judged as amounting to expropriation, whether or not they fulfill these conditions.

Proportionality tests typically require that

1. the measure pursues a legitimate public policy aim,<sup>45</sup>
2. the state is authorized to take this measure,<sup>46</sup>
3. the measure is suitable or rationally related to the state’s “pursued aim,”<sup>47</sup> and
4. the measure is the least restrictive means to achieve the “pursued aim.”<sup>48</sup>

Regarding the first element (1), governments may be able to demonstrate the pursuit of a legitimate public policy aim by adopting the measure with express reference to (Center for International Environmental Law, 2024)

- concrete scientific evidence of the social, economic, and environmental impacts of climate change in the country (e.g., specific studies and reports developed for this purpose);
- international legal obligations or commitments of the host state (e.g., United Nations Framework Convention on Climate Change, the Paris Agreement, and nationally



determined contributions; EU law; and advisory opinions of international courts and tribunals<sup>49</sup>); and

- concrete examples of other countries' climate mitigation practices, particularly where they affect investors, and areas of national and international consensus (reports of the IPCC, IEA, or the UN).

Regarding the second element (2), governments may be able to integrate references to provisions in investment treaties underlining the state's "police powers" and "right to regulate" provisions in investment treaties. Moreover, they may also expressly refer to procedural and substantive legal bases for the measure under domestic legislation, preferably using sources of high authority (constitutional law, supreme court decisions, etc.).<sup>50</sup>

Regarding the third element (3), governments could demonstrate the suitability of the measure by referring to scientific evidence that a revocation of production rights can achieve stated GHG emissions reduction goals (e.g., references to similar measures achieving this impact in other states).

Finally, regarding the last element (4), governments may refer to the practical limitations and weaknesses of tackling only fossil fuel demand and relying on emissions trading or carbon taxes, as well as carbon capture and storage. They may also add language demonstrating that less restrictive alternatives were seriously considered but deemed insufficient and emphasize that the chosen policy was selected in preference to other, more restrictive options.

### 3.3.3 Developing an Internationally Legally Binding Instrument

Ideally, groups of states would eventually commit to harmonized oil and gas production end dates in an international legally binding instrument, later to be incorporated into national law. This step could give the end date the character of an international legal obligation equal to other investment-related obligations.<sup>51</sup> Such an instrument could explicitly modify existing investment treaties and exclude the right to investor-state arbitration for fossil fuel investors (Paine & Sheargold, 2023). It could also explicitly address collaboration between its contracting states, particularly home and respondent states, when facing arbitration claims. Such a collaboration could include

- an obligation to prevent arbitral institutions located within their territory from registering contract- or treaty-based claims that relate to oil and gas investments covered by the instrument,
- a home state's obligation to intervene as a non-disputing state party to challenge a tribunal's jurisdiction, or
- an undertaking not to enforce awards rendered in violation of the instrument.

The greater the number of states acceding to such an instrument, the lower the remaining legal risks.



## 4.0 Conclusion

**Early action and clear planning** are the best way for energy policy-makers to minimize investor-state arbitration risks while phasing out oil and gas production. Governments should set end dates for oil and gas production and lead with policies targeting exploration and development rights. This proactive approach reduces legal exposure, strengthens climate ambition, and sends clear signals to markets to shift investment away from fossil fuels.

Governments can also **target producing fields** with a proactive strategy to mitigate legal risks. Policy-makers should provide early and consistent notice to investors, prepare to show their interventions are proportionate to adopted climate goals, and collaborate with like-minded countries in arbitration proceedings. Finally, governments should **pursue parallel strategies to reform international investment law** to remove systemic barriers to ambitious climate action.

With this brief, IISD sets out initial steps governments can take to design oil and gas phase-out policies in a legally sound way. Moving forward, there is an urgent need to bridge the expertise between investment law and energy policy communities to deepen the understanding of this emerging field. IISD will continue to engage with governments, legal experts, and stakeholders to advance this dialogue and support the development of effective, legally sound phase-out strategies.



## References

- Ashurst. (2021, November 9). *Italian oil and gas prospection and exploration halted – An update*. <https://www.ashurst.com/en/insights/italian-oil-and-gas-prospection-and-exploration-halted---an-update/>
- Bois von Kursk, O., Dufour, L., Muttit, G., & Picciariello, A. (Eds.). (2022). *Navigating energy transitions: Mapping the road to 1.5°C*. International Institute for Sustainable Development. [www.iisd.org/system/files/2022-10/navigating-energy-transitions-mapping-road-to-1.5.pdf](http://www.iisd.org/system/files/2022-10/navigating-energy-transitions-mapping-road-to-1.5.pdf)
- Bonnitcha, J. (2014). *Substantive protection under investment treaties. A legal and economic analysis*. Cambridge University Press.
- Boué, J. C. (2024). ‘Lying with numbers’ in international arbitration against states. *Journal of International Dispute Settlement*, 15(1), 5–34. <https://doi.org/10.1093/jnlids/idae007>
- Cameron, P. D., & Stanley, M. C. (2022). *Oil, gas, and mining: A sourcebook for understanding the extractive industries*. World Bank Group. <https://openknowledge.worldbank.org/server/api/core/bitstreams/8f724be6-0c19-5281-8d6f-9ace5061121e/content>
- Center for International Environmental Law. (2024). *Overcoming international investment agreements as a barrier to climate action: A toolkit to safeguard fossil fuel measures from investment treaty claims*. [www.ciel.org/wp-content/uploads/2024/02/Overcoming-International-Investment-Agreements-as-a-Barrier-to-Climate-Action.pdf](http://www.ciel.org/wp-content/uploads/2024/02/Overcoming-International-Investment-Agreements-as-a-Barrier-to-Climate-Action.pdf)
- Cotula, L. (2023). International investment law and climate change: Reframing the ISDS reform agenda. *The Journal of World Investment & Trade*, 24(4–5). [https://brill.com/view/journals/jwit/24/4-5/article-p766\\_9.xml](https://brill.com/view/journals/jwit/24/4-5/article-p766_9.xml)
- Cox, J. (2019). *Expropriation in investment treaty arbitration*. Oxford University Press. <https://doi.org/10.1093/law/9780198804918.001.0001>
- Danish Ministry of Climate, Energy and Utilities. (2020). *Denmark introduces cutoff date of 2050 for oil and gas extraction in the North Sea, cancels all future licensing rounds*. [www.en.kefm.dk/news/news-archive/2020/dec/denmark-introduces-cutoff-date-of-2050-for-oil-and-gas-extraction-in-the-north-sea-cancels-all-future-licensing-rounds](http://www.en.kefm.dk/news/news-archive/2020/dec/denmark-introduces-cutoff-date-of-2050-for-oil-and-gas-extraction-in-the-north-sea-cancels-all-future-licensing-rounds)
- Department for Energy Security and Net Zero. (2024, August). *Certainty for oil and gas industry in light of landmark ruling*. GOV.UK. <https://www.gov.uk/government/news/certainty-for-oil-and-gas-industry-in-light-of-landmark-ruling>
- Di Salvatore, L. (2021, December 31). *Investor–state disputes in the fossil fuel industry*. International Institute for Sustainable Development. <https://www.iisd.org/publications/report/investor-state-disputes-fossil-fuel-industry#:~:text=Through%20a%20process%20known%20as,allege%20breach%20their%20investment%20privileges>
- Di Salvatore, L., Cotula, L., Nanda, A., & Wang, C. Y. (2023, November). *Investor-state dispute settlements: A hidden handbrake on climate action*. IIED & CCSI Briefing. <https://ccsi.columbia.edu/sites/default/files/content/docs/publications/ISDS-A-Hidden-Handbrake-on-Climate-Action.pdf>



- Energy Charter Treaty. (1999, September 30). <https://www.energychartertreaty.org/treaty/energy-charter-treaty/>
- Fonte, G. (2024, September 17). Italy to stop oil and condensates concessions, draft decree shows. *Reuters*. <https://www.reuters.com/business/energy/italy-stop-oil-condensates-concessions-draft-decree-shows-2024-09-17/>
- French Mining Code. (last modification: December 30, 2017; edition: June 27, 2019). [https://rmis.jrc.ec.europa.eu/uploads/legislation/FranceConsolidatedMiningCode\\_English.pdf](https://rmis.jrc.ec.europa.eu/uploads/legislation/FranceConsolidatedMiningCode_English.pdf)
- Friedlingstein, P., O’Sullivan, M., Jones, M. W., Andrew, R. M., Gregor, L., Hauck, J., Le Quéré, C., Luijkx, I. T., Olsen, A., Peters, G. P., Peters, W., Pongratz, J., Schwingshackl, C., Sitch, S., Canadell, J. G., Ciais, P., Jackson, R. B., Alin, S. R., Alkama, ... Zheng, B. (2022). Carbon budget 2022. *Earth System Science Data*, 14(11), 3811–4900. <https://doi.org/10.5194/essd-14-4811-2022>
- Hailes, O. (2023, December). Valuation of compensation in fossil fuel phase-out disputes. (LSE Legal Studies Working Paper No. 23/2023). <https://ssrn.com/abstract=4658851>
- International Energy Agency. (2023). *Denmark 2023: Energy policy review*. [www.iea.org/reports/denmark-2023](http://www.iea.org/reports/denmark-2023)
- International Energy Agency. (2024). *World energy outlook 2024*. <https://www.iea.org/reports/world-energy-outlook-2024>
- International Institute for Sustainable Development. (2024). *New agreement marks first step in addressing energy charter treaty legacy* (Press release). [www.iisd.org/articles/press-release/new-agreement-marks-first-step-addressing-energy-charter-treaty-legacy](http://www.iisd.org/articles/press-release/new-agreement-marks-first-step-addressing-energy-charter-treaty-legacy)
- Intergovernmental Panel on Climate Change. (2021). Summary for policymakers. In V. Masson-Delmotte, P. Zhai, A. Pirani, S.L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M.I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R. Matthews, T.K. Maycock, T. Waterfield, O. Yelekçi, R. Yu, & B. Zhou (Eds.), *Climate change 2021: The physical science basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge University Press (pp. 3–32). [https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC\\_AR6\\_WGI\\_SPM.pdf](https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM.pdf)
- Intergovernmental Panel on Climate Change. (2023). *Climate change 2022: Mitigation of climate change. Working Group III Contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*. [P. R. Shukla, J. Skea, R. Slade, A. Al Khourdajie, R. van Diemen, D. McCollum, M. Pathak, S. Some, P. Vyas, R. Fradera, M. Belkacemi, A. Hasija, G. Lisboa, S. Luz, J. Malley (Eds.)]. Cambridge University Press. <https://www.ipcc.ch/report/ar6/wg3/>
- International Tribunal for the Law of the Sea. (2024, May 21). *Request for an advisory opinion submitted by the Commission of Small Island States on Climate Change and International Law*. [https://www.itlos.org/fileadmin/itlos/documents/cases/31/Advisory\\_Opinion/C31\\_Adv\\_Op\\_21.05.2024\\_orig.pdf](https://www.itlos.org/fileadmin/itlos/documents/cases/31/Advisory_Opinion/C31_Adv_Op_21.05.2024_orig.pdf)



- Jarrett, M. (2020). Implementing the energy transition in the face of investment protection standards. In V. Röben, P. Cameron, & X. Mu (Eds.), *The global energy transition: Law, policy and economics for energy in the 21st century*. Hart Publishing.
- Matthews, H. D. (2014). A growing commitment to future CO<sub>2</sub> emissions. *Environmental Research Letters*, 9, Article 111001. <https://doi.org/10.1088/1748-9326/9/11/111001>.
- Meager, E. (2022). COP26 targets pushed back under threat of being sued. *Capital Monitor*. [www.capitalmonitor.ai/analysis/cop26-ambitions-at-risk-from-energy-charter-treaty-lawsuits/](http://www.capitalmonitor.ai/analysis/cop26-ambitions-at-risk-from-energy-charter-treaty-lawsuits/)
- Ministero dell’Ambiente e della Sicurezza Energetica. (2021, September 30). *Mite: Pitesai trasmesso alla Conferenza Unificata* [in Italian]. Governo Italiano. <https://www.mase.gov.it/comunicati/mite-pitesai-trasmesso-alla-conferenza-unificata>
- National Assembly of Quebec. (2022). Bill 21, An Act mainly to end petroleum exploration and production and the public financing of those activities. <https://m.assnat.qc.ca/en/travaux-parlementaires/projets-loi/projet-loi-21-42-2.html>
- Offshore Petroleum Regulator for Environment and Decommissioning. (2024, October 30). *Consultation on draft supplementary EIA guidance*. GOV.UK. [https://www.gov.uk/government/consultations/consultation-on-draft-supplementary-eia-guidance?utm\\_medium=email&utm\\_campaign=govuk-notifications-topic&utm\\_source=50b2d385-6cf0-4247-9ece-549a15af6612&utm\\_content=immediately](https://www.gov.uk/government/consultations/consultation-on-draft-supplementary-eia-guidance?utm_medium=email&utm_campaign=govuk-notifications-topic&utm_source=50b2d385-6cf0-4247-9ece-549a15af6612&utm_content=immediately)
- Paine, J., & Sheargold, E. (2023, June). A climate change carve-out for investment treaties. *Journal of International Economic Law*, 26(2), 285–304. <https://doi.org/10.1093/jiel/jgad011>
- Rai-Roche, S. (2024, September 3). *Consigned to history: The UK delivers on its promise to phase out coal power*. E3G. <https://www.e3g.org/news/consigned-to-history-the-uk-delivers-on-its-promise-to-phase-out-coal-power/>
- Rajput, A. (2018). *Regulatory freedom and indirect expropriation in investment arbitration*. Wolters Kluwer.
- Reisman, W. M., & Sloane, R. D. (2003). Indirect expropriation and its valuation in the BIT generation. *British Yearbook of International Law*, 74(10), 115–150. <https://doi.org/10.1093/bybil/74.1.115>
- Request for an advisory opinion on the scope of the state obligations for responding to the climate emergency*. (2023). Climate Change Litigation Database. <https://climatecasechart.com/non-us-case/request-for-an-advisory-opinion-on-the-scope-of-the-state-obligations-for-responding-to-the-climate-emergency/>
- Rystad Energy. (2023). UCube Browser v. 2.3.3. <https://www.rystadenergy.com/services/upstream-solution>
- Sachs, L. E., Johnson, L., & Merrill, E. (2020). *Environmental injustice: How treaties undermine human rights related to the environment*. Columbia Center on Sustainable Investment. [https://scholarship.law.columbia.edu/cgi/viewcontent.cgi?article=1070&context=sustainable\\_investment\\_staffpubs](https://scholarship.law.columbia.edu/cgi/viewcontent.cgi?article=1070&context=sustainable_investment_staffpubs)



- Sarmiento, F., & Nikièma, S. H. (2022). *Fair and equitable treatment: Why it matters and what can be done* (IISD Best Practice Series). International Institute for Sustainable Development. [www.iisd.org/system/files/2022-11/fair-equitable-treatment-en.pdf](http://www.iisd.org/system/files/2022-11/fair-equitable-treatment-en.pdf)
- Schaugg, L., Nikièma, S. H., & Bernasconi-Osterwalder, N. (2023, March 8). *Investor-state dispute settlement and fossil fuels: What role for a carveout?* International Institute for Sustainable Development. <https://www.iisd.org/articles/policy-analysis/investor-state-dispute-settlement-fossil-fuels-carveout>
- Semieniuk, G., Holden, P. B., Mecure, J.-F., Salas, P., Pollitt, H., Jobson, K., Vercoulin, P., Chewpreecha, U., Edwards, N. R., & Viñuales. (2022). Stranded fossil-fuel assets translate to major losses for investors in advanced economies. *Nature Climate Change*, 12, 532–538. <https://doi.org/10.1038/s41558-022-01356-y>
- Stechemesser, A., Koch, N., Mark, E., Dilger, E. Klösel, P., Menicacci, L., Nachtigall, D., Pretis, F., Ritter, N., Schwarz, M. Vossen, H., & Wenzel, A. (2024, August 22). Climate policies that achieved major emission reductions: Global evidence from two decades. *Science*, 385(6711), 884–892. <https://doi.org/10.1126/science.adl6547>
- Stockholm Environment Institute, Climate Analytics, E3G, International Institute for Sustainable Development & UN Environment Programme. (2023). *Phasing down or phasing up? Top fossil fuel producers plan even more extraction despite climate promises. Production gap report 2023*. [https://productiongap.org/wp-content/uploads/2023/11/PGR2023\\_web\\_rev.pdf](https://productiongap.org/wp-content/uploads/2023/11/PGR2023_web_rev.pdf).
- Tienhaara, K. (2010). Regulatory chill and the threat of arbitration: A view from political science. In C. Brown & K. Miles (Eds.), *Evolution of investment treaty law and arbitration*. Cambridge University Press. <https://ssrn.com/abstract=2065706>
- Tienhaara, K., & Cotula, L. (2020). *Raising the cost of climate action? Investor-state dispute settlement and compensation for stranded fossil fuel assets*. International Institute for Environment and Development. <https://www.ied.org/sites/default/files/pdfs/migrate/17660IIED.pdf>
- Tienhaara, K., Thrasher, R., Simmons, B. A., & Gallagher, K. P. (2022). Investor-state dispute settlement: Obstructing a just energy transition. *Climate Policy*, 23(9). <https://doi.org/10.1080/14693062.2022.2153102>
- Trout, K. (2023). *Sky's limit data update: Shut down 60% of existing fossil fuel extraction to keep 1.5°C in reach*. Oil Change International. <https://www.oilchange.org/wp-content/uploads/2023/08/skys-limit-data-update-2023-v3.pdf>
- Trout, K., Muttit, G., Lafleur, D., Van de Graaf, T., Mendelevitch, R., Mei, L., & Meinshausen, M. (2022). Existing fossil fuel extraction would warm the world beyond 1.5°C. *Environmental Research Letters*, 17, Article 064010. <https://iopscience.iop.org/article/10.1088/1748-9326/ac6228>
- United Nations Commission on International Trade Law. (2018, November 6). *Report of Working Group III (Investor-State Dispute Settlement Reform) on the work of its thirty-sixth session* (A/CN.9/964). <https://docs.un.org/en/A/CN.9/964>



- United Nations Commission on International Trade Law. (2019, April 9). *Report of Working Group III (Investor-State Dispute Settlement Reform) on the work of its thirty-seventh session* (A/CN.9/970). <https://docs.un.org/en/A/CN.9/970>
- United Nations Conference on Trade and Development. (2012). *Expropriation* (UNCTAD Series on Issues in International Investment Agreements II). [https://unctad.org/system/files/official-document/unctaddiaeia2011d7\\_en.pdf](https://unctad.org/system/files/official-document/unctaddiaeia2011d7_en.pdf)
- United Nations Framework Convention on Climate Change. (2023). *Outcome of the first global stocktake* (FCCC/PA/CMA/2023/L.17). [https://unfccc.int/sites/default/files/resource/cma2023\\_L17\\_adv.pdf](https://unfccc.int/sites/default/files/resource/cma2023_L17_adv.pdf)
- United Nations International Law Commission. (2001). Responsibility of states for internationally wrongful acts, with commentaries (Draft articles). *Yearbook of the International Law Commission*. [https://legal.un.org/ilc/texts/instruments/english/commentaries/9\\_6\\_2001.pdf](https://legal.un.org/ilc/texts/instruments/english/commentaries/9_6_2001.pdf)
- Unruh, G. C. (2000). Understanding carbon lock-in. *Energy Policy*, 28(12), 817–830. [https://doi.org/10.1016/S0301-4215\(00\)00070-7](https://doi.org/10.1016/S0301-4215(00)00070-7)
- Van Asselt, H., Fragkos, P., Peterson, L., & Fragkiadakis, K. (2024). The environmental and economic effects of international cooperation on restricting fossil fuel supply. *International Environmental Agreements: Politics, Law and Economics*, 24(1), 141–166. <https://doi.org/10.1007/s10784-023-09623-9>
- Vandevelde, K. (2010). *Bilateral investment treaties: History, policy and interpretation*. Oxford University Press.
- Wehrmann, J., (2024, May 8). *Northern German state announces end of oil extraction in Wadden Sea by 2041*. Clean Energy Wire. <https://www.cleanenergywire.org/news/northern-german-state-announces-end-oil-extraction-wadden-sea-2041#:~:text=Northern%20German%20state%20Schleswig%2DHolstein,state%27s%20environment%20ministry%20has%20said.>
- Yannaca-Small, K. (2018). Indirect expropriation and the right to regulate: Has the line been drawn? In K. Yannaca-Small (Ed.), *Arbitration under international investment agreements. A guide to the key issues*. Oxford University Press. <https://doi.org/10.1093/law/9780198758082.001.0001>



## Endnotes

- <sup>1</sup> In line with the principle of common but differentiated responsibilities and respective capabilities.
- <sup>2</sup> To date, few of these arbitration measures directly relate to climate mitigation policies. The number of such cases appears to be growing.
- <sup>3</sup> With the possible exception of fields nearing the end of production, which have a lower net present value.
- <sup>4</sup> Oil and gas phase-out measures discussed in this brief will be more effective if coupled with demand-side climate policies, which are equally important for climate mitigation. Options to combine supply- and demand-side policies merit a separate discussion outside the scope of this brief.
- <sup>5</sup> Regulatory chill is understood as the phenomenon of a government failing to “enact or enforce *bona fide* regulatory measures as a result of concerns” about investor-state arbitration (Tienhaara, 2010).
- <sup>6</sup> Coal has significant GHG emission reductions potential, and many of our recommendations could apply to a coal phase-out. However, this brief maintains a narrow focus on upstream oil and gas production for technical accuracy.
- <sup>7</sup> Reviewing existing arbitral jurisprudence is useful because it allows (1) for tendencies to be identified, (2) for the probability of specific legal risks materializing to be estimated approximately, and, as a consequence, (3) for states to adjust policies with the objective of risk reduction.
- <sup>8</sup> *Infinito Gold Ltd v. Costa Rica*, ICSID Case No ARB/14/5, Award (3 June 2021), para. 355; *Hydro Energy 1 Sàrl and Hydroxana Sweden AB v. Kingdom of Spain*, ICSID Case No ARB/15/42, Decision on Jurisdiction, Liability and Directions on Quantum (9 March 2020), para. 573; *Compañía de Aguas del Aconquija SA and Vivendi Universal SA v Argentine Republic*, ICSID Case No ARB/97/3, Award II (20 August 2007), para. 7.4.18, 7.4.26.
- <sup>9</sup> *Silver Ridge Power BV v. Italian Republic*, ICSID Case No ARB/15/37, Award (26 February 2021), para. 474; *Blusun SA, Jean-Pierre Lecorcier and Michael Stein v. Italian Republic*, ICSID Case No ARB/14/3, Award (27 December 2016), para. 319.
- <sup>10</sup> *Athena Investments A/S (formerly Greentech Energy Systems A/S), NovEnergia II Energy & Environment (SCA) SICAR, and NovEnergia II Italian Portfolio SA v. Italian Republic*, SCC Case No 2015/095, Dissenting Opinion of Sacerdoti (23 December 2018), para. 49; *Bernhard von Pezold and Others v. Republic of Zimbabwe*, ICSID Case No ARB/10/15, Award (28 July 2015), para. 467.
- <sup>11</sup> *Ibid.*
- <sup>12</sup> *Sevilla Beheer BV and others v. Kingdom of Spain*, ICSID Case No ARB/16/27, Decision on Jurisdiction, Liability and the Principles of Quantum (11 February 2022), para. 934; *Cairn Energy PLC and Cairn UK Holdings Limited (CUHL) v. Republic of India (I)*, PCA Case No 2016-7, Final Award (21 December 2020), para. 1822; *Watkins Holdings Sàrl and others v. Kingdom of Spain*, ICSID Case No ARB/15/44, Award (21 January 2020), para. 601.
- <sup>13</sup> *RREEF Infrastructure (GP) Limited and RREEF Pan-European Infrastructure Two Lux Sàrl v. Kingdom of Spain*, ICSID Case No ARB/13/30, Decision on Responsibility and on the Principles of Quantum (30 November 2018), para. 465; *PL Holdings Sàrl v. Republic of Poland*, SCC Case No V 2014/163, Partial Award (28 June 2017), para. 335–336; *AES Corporation and Tau Power BV v. Republic of Kazakhstan*, ICSID Case No ARB/10/16, Award (1 November 2013), para. 403.
- <sup>14</sup> *Enron Corporation and Ponderosa Assets, LP v. Argentine Republic*, ICSID Case No ARB/01/3, Award (22 May 2007), para. 243; *Orazul International España Holdings SL v. Argentine Republic*, ICSID Case No ARB/19/25, Award (14 December 2023), para. 935.
- <sup>15</sup> Article 6(3) of the *Bouhajla Concession Agreement between the Tunisian State and DUALEX*, signed in 2009, [www.resourcecontracts.org/contract/ocds-591adf-2236979409/view#/pdf](http://www.resourcecontracts.org/contract/ocds-591adf-2236979409/view#/pdf)



<sup>16</sup> The burden of proof is on the party pleading the defense; *Unión Fenosa Gas, SA v. Arab Republic of Egypt*, ICSID Case No ARB/14/4, Award (31 August 2018), para. 8.39; *Mobil Exploration and Development Inc Suc Argentina and Mobil Argentina SA v. Argentine Republic*, ICSID Case No ARB/04/16, Decision on Jurisdiction and Liability (10 April 2013), para. 1071.

<sup>17</sup> *Impregilo SpA v. Argentine Republic*, ICSID Case No ARB/07/17, Award (21 June 2011), para. 344; *Enron Corporation and Ponderosa Assets, LP v. Argentine Republic*, ICSID Case No ARB/01/3, Decision on the Application for Annulment (30 July 2010), para. 304; *Suez, Sociedad General de Aguas de Barcelona, SA and Vivendi Universal, SA v. Argentine Republic*, ICSID Case No ARB/03/19, Decision on Liability (30 July 2010), para. 236; *AWG Group Ltd v. The Argentine Republic*, UNCITRAL, Decision on Liability (30 July 2010), para. 258.

<sup>18</sup> *Deutsche Telekom AG v. Republic of India*, PCA Case No 2014-10, Interim Award (13 December 2017), para. 284, 285, 288; *CC/Devas (Mauritius) Ltd, Devas Employees Mauritius Private Limited, and Telkom Devas Mauritius Limited v. Republic of India (I)*, PCA Case No 2013-09, Award on Jurisdiction and Merits (25 July 2016), para. 237, 238, 243; *El Paso Energy International Company v. The Argentine Republic*, ICSID Case No ARB/03/15, Award (31 October 2011), para. 613; *Continental Casualty Company v. The Argentine Republic*, ICSID Case No ARB/03/9, Award (5 September 2008), para. 192–198, 234.

<sup>19</sup> International Law Commission, Draft Articles on Responsibility of States for Internationally Wrongful Acts, Art 25(15).

<sup>20</sup> *Saluka v. Czech Republic*, PCA Case No 2001-04, Partial Award (17 March 2006), para. 262; *Methanex Corporation v. United States of America*, UNCITRAL, Final Award on Jurisdiction and Merits (3 August 2005), para. 7.

<sup>21</sup> *Bank Melli Iran and Bank Saderat Iran v Bahrain*, PCA Case No 2017-25, Award (9 November 2021), para. 631; *Casinos Austria International GmbH and Casinos Austria Aktiengesellschaft v. Argentine Republic*, ICSID Case No ARB/14/32, Award of the Tribunal (5 November 2021), para. 336; *Eco Oro Minerals Corp v. Republic of Colombia*, ICSID Case No ARB/16/41, Decision on Jurisdiction, Liability and Directions on Quantum (9 September 2021), para. 636–639, 642, 662; *Philip Morris Brands Sàrl, Philip Morris Products SA and Abal Hermanos SA v. Oriental Republic of Uruguay*, ICSID Case No ARB/10/7, Award (8 July 2016), para. 305; *David Minnotte & Robert Lewis v. Republic of Poland*, ICSID Case No ARB (AF)/10/1, Award (16 May 2014), para. 171; *Les Laboratoires Servier, SAA, Biofarma, SAS, Arts et Techniques du Progres SAS v. Republic of Poland*, UNCITRAL, Award (14 February 2012), para. 507.

<sup>22</sup> *Koch Minerals Sàrl and Koch Nitrogen International Sàrl v. Bolivarian Republic of Venezuela*, ICSID Case No ARB/11/19, Award (30 October 2017), para. 7.19; *Señor Tza Yap Shum v. The Republic of Peru*, ICSID Case No ARB/07/6, Award (7 July 2011), para. 148; *Total SA v. Argentine Republic*, ICSID Case No ARB/04/01, Decision on Liability (27 December 2010), para. 214; *Champion Trading Company and Ameritrade International, Inc v. Arab Republic of Egypt*, ICSID Case No ARB/02/9, Award (27 October 2006), para. 130.

<sup>23</sup> *Olympic Entertainment Group AS v. Ukraine*, PCA Case No 2019-18, Award (15 April 2021), para. 89–90; *Marfin Investment Group v. The Republic of Cyprus*, ICSID Case No ARB/13/27, Award (26 July 2018), para. 829–830; *LG&E Energy Corp, LG&E Capital Corp and LG&E International Inc v. Argentine Republic (LG&E v. Argentina)*, ICSID Case No ARB/02/1, para. 195; *Azurix Corp v. The Argentine Republic*, ICSID Case No ARB/01/12, Award (14 July 2006), para. 311–312.

<sup>24</sup> *Muhammet Çap & Sehil İnşaat Endustri ve Ticaret Ltd Sti v. Turkmenistan*, ICSID Case No ARB/12/6, Award (29 May 2021), para. 958–960; *Quiborax SA, Non Metallic Minerals SA and Allan Fosk Kaplun v. Plurinational State of Bolivia*, ICSID Case No ARB/06/2, Award (16 September 2015), para. 221, 227; *TECO Guatemala Holdings, LLC v. Republic of Guatemala*, ICSID Case No ARB/10/23, Award (19 December 2013), para. 492–493; *El Paso Energy International Company v. The Argentine Republic*, ICSID Case No ARB/03/15, Award (31 October 2011), para. 240.



<sup>25</sup> Public consultations and engagement with stakeholders and communication campaigns on the need for reducing oil and gas production would also be crucial to build public support for phase-out policies. While not the subject of this brief, gaining public support for phase-out policies will be as important as getting the policies right.

<sup>26</sup> In France, no new exclusive prospecting and exploration rights will be granted, per Article L111-9 of the French Mining Code.

<sup>27</sup> In 2019, Italy imposed a moratorium on oil and gas prospecting and exploration activities pending development, by the government, of a plan on “environmentally, socially, and economically sustainable” oil and gas production (Italian Law Decree No 135/2018, converted into Law No 12/2019 and effective as of 13 February 2019). This moratorium was extended until September 2021 (laws No 8/2020, 120/2020, and 21/2021), but the announced plan was never released. Following the end of the moratorium, the Italian Ministry for the Ecological Transition has announced that it will not authorize new exploration (Ministero dell’Ambiente e della Sicurezza Energetica, 2021). Law firms have advertised their availability to advise “on potential rights and entitlements under Italian law and international law” (Ashurst, 2021).

<sup>28</sup> Since 2010, Italy’s policy on oil and gas concessions in coastline areas has been tightened and relaxed several times, with the latest moratorium banning oil and gas production within 12 miles of the coast. In September 2024, Reuters (Fonte, 2024) reported that the government was planning to stop granting concessions for oil and condensates exploration and production. The planned rules would, however, allow gas production from fields within 12 miles of the coast if the potential is estimated at over 500 million cubic metres and if the concession has already been requested.

<sup>29</sup> The Labour government has pledged to stop issuing new oil and gas exploration licences in the North Sea, with industry consultations currently ongoing (Department for Energy Security and Net Zero, 2024).

<sup>30</sup> One example is under the sole effects doctrine; Bonnitca, 2014, pp. 247–255; Reisman & Sloane, 2005, p. 121; Vandeveld, 2010, p. 296; Rajput, 2018, p. 34. See also *Metalclad Corporation v. The United Mexican States*, ICSID Case No ARB(AF)/97/1, Award (30 August 2000), para. 103, 108, 111; *Pope & Talbot Inc v. Government of Canada*, UNCITRAL, Interim Award (26 June 2000), para. 100–102; more recently, *Peteris Pildegovics and SIA North Star v. Kingdom of Norway*, ICSID Case No ARB/20/11, para. 554. Another possibility is that the substantial deprivation test, which assesses indirect expropriation primarily in economic terms, could lead to a finding of expropriation if the economic value is significantly diminished. See *Latin American Regional Aviation Holding S de RL v. Oriental Republic of Uruguay*, ICSID Case No ARB/19/16, Award (13 February 2024), para. 999; *RosInvestCo UK Ltd v. The Russian Federation*, SCC Case No V079/2005, Final Award (12 September 2010), para. 623; *Glamis Gold v. United States of America* (UNCITRAL), Award (8 June 2009), para. 357.

<sup>31</sup> *Salini Costruttori SpA and Italstrade S.p.A. v. Kingdom of Morocco* [I], ICSID Case No ARB/00/4, Decision on Jurisdiction (23 July 2001), para. 52. Many international investment agreements define investment broadly as “every kind of asset, owned or controlled directly or indirectly by an investor” including “any right conferred by law or contract or by virtue of any licences and permits granted pursuant to law” (Energy Charter Treaty, Article 1(6); similar language is found in bilateral investment treaties).

<sup>32</sup> *Parkerings-Compagniet AS v. Republic of Lithuania*, ICSID Case No ARB/05/8, Award (11 September 2007), para. 249–255.

<sup>33</sup> *Nachingwea UK Limited (UK), Ntaka Nickel Holdings Limited (UK) and Nachingwea Nickel Limited (Tanzania) v. Tanzania*, ICSID Case No ARB/20/38, Award (14 July 2023), para. 288; *Stabil LLC and Others v. Russian Federation* (Stabil), UNCITRAL, PCA Case No 2015–35, Final Award (12 April 2019), para. 240–241.

<sup>34</sup> *Nachingwea v. Tanzania*, *supra*, note 33, para. 270; *Stabil v. Russia*, *supra*, note 96, para. 255.



<sup>35</sup> *Nachingwea v. Tanzania*, *supra*, note 33, para. 280; *Sunlodges Ltd and Sunlodges (T) Limited v. The United Republic of Tanzania*, PCA Case No 2018-09, Award (20 December 2019), para. 375; *Stabil v. Russia*, *supra*, note 33, para. 235–236.

<sup>36</sup> Money spent on exploration work in mining has been held to qualify as an investment under the Canada-Peru FTA, *Bear Creek Mining Corporation v. Republic of Peru*, ICSID Case No ARB/14/21, para. 282–285. Investors holding shares in a locally incorporated company are also likely to meet the “investment” standard, see e.g., *CME Czech Republic BV v. The Czech Republic*, UNCITRAL, Partial Award (13 September 2001), para. 375–377.

<sup>37</sup> Rockhopper Italia’s application for an oil field production concession was denied by Italy. This denial stemmed from a law that banned offshore hydrocarbon exploitation within 12 miles of the Italian coast (mentioned above). The tribunal found that the company had a right to be granted a production concession and went on to award EUR 190 million in damages plus interest. See *Rockhopper Italia SpA, Rockhopper Mediterranean Ltd, and Rockhopper Exploration Plc v. Italian Republic*, ICSID Case No ARB/17/14, Final Award (23 August 2022), para 355.

<sup>38</sup> In *Tethyan Copper*, a copper mining investor was awarded USD 4 billion plus interest for failure to grant permits to build and operate a copper mine even though the mine was never built—see *Tethyan Copper Company Pty Limited v. Islamic Republic of Pakistan*, ICSID Case No ARB/12/1, Award (July 12, 2019), para. 278. The amount of compensation likely to be awarded in future investor-state arbitration cases related to phase-out policies is uncertain (Hailes, 2023). Some authors have highlighted a risk of expert manipulation of damages claims at the quantum stage (Boué, 2024).

<sup>39</sup> *R (on the application of Finch on behalf of the Weald Action Group) (Appellant) v. Surrey County Council and others (Respondents)* [2024] UKSC 20 (United Kingdom); *Greenpeace Nordic and Nature & Youth v. Energy Ministry*, Borgarting Lagmannsrett LB-2024-36810-2, (16 May 2024) (Norway); *Held v. Montana*, No CDV-2020-307 (Mont 1st Dist Ct, 14 August 2023) (USA).

<sup>40</sup> *Greenland Minerals A/S (GMAS) v. Government of Greenland and the Government of the Kingdom of Denmark*, Request for Arbitration (22 March 2022); *Eco Oro v. Colombia*, *supra*, note 21; *Severgroup & KN Holdings v. France*, PCA Case No 2022-13, Request for Arbitration (7 June 2021); *Odyssey Marine Exploration, Inc v. United Mexican States*, ICSID Case No UNCT/20/1, Procedural Order No 4 (Provisional Measures) (25 May 2021); *Corcoesto, SA v. Kingdom of Spain*, PCA Case No 2016-26, Award (14 April 2020); *Daniel W Kappes and Kappes, Cassidy & Associates v. Republic of Guatemala*, ICSID Case No ARB/18/43, Decision on Respondent’s Preliminary Objections (13 March 2020).

<sup>41</sup> See e.g., *WalAm Energy Inc v Republic of Kenya*, ICSID Case No AR/15/17, related to the revocation of a licence granted to the Canadian claimant to explore and develop geothermal resources at the Suswa Geothermal Concession in Kenya. See also the related cases of *African Petroleum Gambia Ltd (Block A4) v Republic of Gambia*, ICSID Case No ARB/14/17 and *African Petroleum Gambia Ltd (Block A1) v Republic of Gambia*, ICSID Case No ARB/14/6. These cases are related to The Gambia’s revocations of an Australian international oil company’s two offshore oil licences on the basis that the licences violated the state’s national petroleum law. Settlement was reached in November 2014 when The Gambia reinstated the two licences.

<sup>42</sup> Planning for a managed phase-out would need to involve the following elements, among others: (1) consultations with the oil and gas industry, workers, communities, and other affected stakeholders; (2) preparing oil and gas production scenarios, phase-out timelines, and assessments on economic development, jobs, and energy security; (3) the development of economic diversification plans for oil- and gas-producing regions and the economy as a whole; and (4) establishing international cooperation to establish common ambition, avoid carbon leakage, and mitigate potential impacts.

<sup>43</sup> E.g., *Togo Electricité and GDF-Suez Energie Services v Republic of Togo*, ICSID Case No ARB/06/7 related to the termination of an electricity concession.

<sup>44</sup> Ministry of the Presidency, Justice and Relations with the Courts of Spain (2021), *Law 7/2021*, of May 20, on climate change and energy transition. [www.boe.es/diario\\_boe/txt.php?id=BOE-A-2021-8447](http://www.boe.es/diario_boe/txt.php?id=BOE-A-2021-8447)



<sup>45</sup> *Greentech and NovEnergia v. Italy*, *supra*, note 11, para. 49; *Bernhard von Pezold and others v. Zimbabwe*, *supra*, note 11, para. 467.

<sup>46</sup> *Supra*, note 10.

<sup>47</sup> *Sevilla Beheer and others v. Spain*, *supra*, note 12, para. 934; *Cairn v. India*, *supra*, note 12, para. 1822; *Watkins Holdings v. Spain*, *supra*, note 12, para. 601.

<sup>48</sup> *RREEF v. Spain*, *supra*, note 13, para. 465; *PL Holdings v. Poland*, *supra*, note 13, para. 335–336; *AES v. Kazakhstan*, *supra*, note 13, para. 403.

<sup>49</sup> Advisory proceedings at the International Court of Justice are currently ongoing to clarify the obligations of states concerning climate change (see International Tribunal for the Law of the Sea, 2024; *Request for an advisory*, 2023).

<sup>50</sup> Governments may also refer to domestic court decisions as a legal basis. See for example Supreme Court of Norway (2020, December 22). *Nature & Youth Norway et al. v. State (Ministry of Petroleum & Energy)*, HR-2020-2472-P (Case no. 20-051052SIV-HRET). [https://climatecasechart.com/wp-content/uploads/non-us-case-documents/2020/20201222\\_HR-2020-846-J\\_judgment.pdf](https://climatecasechart.com/wp-content/uploads/non-us-case-documents/2020/20201222_HR-2020-846-J_judgment.pdf)

<sup>51</sup> If both the home and the host state of an investment are contracting parties of such an instrument, it could provide respondent states with a means to fend off arbitration claims at the jurisdictional or merits stages.

©2025 International Institute for Sustainable Development  
Published by the International Institute for Sustainable Development

**Head Office**

111 Lombard Avenue, Suite 325  
Winnipeg, Manitoba  
Canada R3B 0T4

**Tel:** +1 (204) 958-7700

**Website:** [www.iisd.org](http://www.iisd.org)

**X:** [@IISD\\_news](https://twitter.com/IISD_news)



[iisd.org](http://www.iisd.org)