The Energy Charter Treaty's Protection of 1.5°C-Incompatible Oil and Gas Assets

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EXECUTIVE SUMMARY

In a recent article in *Science*, we reported that the Energy Charter Treaty (ECT) is the greatest contributor to potential investor claims over the forced stranding of oil and gas assets that do not fit in a 1.5°C carbon budget (Tienhaara et al. 2022). The ECT, the only investment treaty with an exclusive focus on energy, has been ratified by 50 countries, mostly in Europe. We found that the ECT applies to 19 percent of all treaty-protected oil/gas assets that would be excluded from the International Energy Agency (IEA) Net-Zero by 2050 (NZE) energy transition pathway (IEA 2021). The net present value (NPV) of the assets covered solely by the ECT was found to be between $3 billion to $16 billion (depending on the oil price used in the calculation). A further $2 billion to $4 billion worth of projects were "under development" and would need to be cancelled in a more ambitious climate mitigation scenario. These findings were based on a methodology that we acknowledged had limitations. In this policy brief, we address some of these limitations in more detail and provide evidence that our original figures are an underestimate of the true extent of the ECT's protection of 1.5°C-incompatible oil and gas assets.

Key findings:

- Investigations of the corporate structure of two large European oil and gas companies (Equinor and Eni) that are headquartered outside of the ECT indicate that many of their investments in the ECT zone are likely channeled through subsidiaries in the Netherlands (an ECT member).

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- Adding the investments of these two companies alone would increase the NPV protected by the ECT by between $1.4 billion to $5.4 billion.
- Governments should assume that even if investments are not currently structured through subsidiaries in ECT member states, they could easily be restructured and therefore all the 1.5°C-incompatible foreign-owned oil and gas assets hosted in ECT states create potential liability:
  - Depending on the oil price, the range of possible NPVs for the NZE-incompatible foreign-owned oil and gas assets hosted in ECT states is $17.7 billion to $74.2 billion.
  - Depending on the oil price, the range of possible NPVs for the foreign-owned oil and gas assets "under development" hosted in ECT states is $13.7 billion to $37.3 billion.
  - Depending on the oil price, the range of possible total NPVs is $31.4 billion to $111.5 billion.

Policy recommendations:

- As the ECT protects far more oil/gas production than any other treaty, we concluded in the *Science* article that it should be prioritized for termination. We maintain this conclusion but add that our new evidence suggests that the amount of liability to be avoided through termination is much higher.
- Given the evidence that Equinor and Eni are currently enjoying the protection of the ECT even though the countries they are headquartered in either never ratified the agreement (in the case of Norway) or unilaterally terminated it (in the case of Italy), we emphasize that an exclusion of intra-European Union (EU) investor-state disputes under a modernized ECT would be insufficient to reduce the risk of disputes arising over oil and gas assets within the EU. Companies will simply restructure their assets using subsidiaries in non-EU countries like the United Kingdom (UK).

INTRODUCTION

After several years of negotiations to "modernize" the Energy Charter Treaty (ECT), members must decide by June 24, 2022, whether to amend provisions of the treaty, leave it as is or withdraw from it entirely. The ECT is the only international investment treaty with a sectoral focus on energy. It has been ratified by 50 countries, predominantly in Europe, since its signing in 1994, and its aim is to promote and protect energy investments among its member states.

The most controversial aspect of the ECT is the investor-state dispute settlement (ISDS) mechanism. ISDS provides foreign investors the option of pursuing claims for monetary compensation in international arbitration when a government measure negatively impacts their investment.

For EU countries, ISDS under the ECT is particularly problematic. The recent decision of the European Court of Justice in the *Komstroy* case found that investor-state disputes between EU investors and member countries violate EU law (ClientEarth 2021). The ECT Secretariat's summary of the 13th round of reform negotiations indicates that this issue might be resolved in a "modernized" ECT through the exclusion of intra-EU disputes (ECT Secretariat 2022). However, it has been pointed out that firms could easily move their headquarters outside of the EU (as Shell recently did with its relocation to the UK – see Nasralla and Ramikumar 2021) or structure their investments within the EU through subsidiaries in non-EU ECT states to remain protected by the treaty (Eckes and Ankersmit 2022).

A further concern for many countries is that the ECT may limit the ability of states to take measures to mitigate climate change. In the recent article in *Science*, we calculated the potential size of investor claims in ISDS if countries followed the Net Zero Emissions (NZE) pathway proposed by the International Energy Agency (IEA), which sees no new oil and gas investments after December 2021. As our research demonstrates, the ECT protects 19 percent of all treaty-protected oil and gas projects that would be canceled under that scenario, which amounts to between $3 billion to 16 billion in net present value (NPV), depending on the price of oil used in the calculation. If countries acted more ambitiously to decrease fossil fuel supply and canceled projects that are under development but not yet producing oil or gas, then the price tag increases by $2 billion to $4 billion. As such, a coordinated withdrawal from the ECT entirely would reduce the global price tag for climate action by $5 billion to $20 billion.

Importantly, in the *Science* article, we focused on *projects* and the NPVs above reflect the value of projects that are *solely* protected by the ECT. If we look instead at individual investments (many projects involve multiple investors from different countries), then the value protected by the ECT rises to between $8 billion to $34 billion for Scenario 1 (NZE-incompatible) and $3 billion to $7 billion for Scenario 2 ("under development") (see Tables 1 and 2). Some of these investments are also covered by other international investment treaties, which means terminating the ECT would not eliminate all state liability (i.e., it is important that bilateral investment treaties also be terminated).

While these NPVs are higher than those we reported in *Science*, they are still likely a significant underestimate of the actual coverage of the ECT, as we did not investigate corporate structure. Additionally, new research published in *Environmental Research Letters* indicates that our scenarios of climate action would be insufficient to keep warming below 1.5°C and that governments will need to force existing oil and gas developments to be decommissioned early (Trout et al. 2022).

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CORPORATE STRUCTURE

The methodology used in the *Science* study is detailed in the Supplementary Materials for the article. A key limitation of our methodology was the use of location of company headquarters to determine:

1. If a project was "domestic-owned" and should therefore be excluded from our analysis entirely; and

2. If a "foreign-owned" project was covered by a treaty, such as the ECT.

On the first point, we recognise that domestic businesses might be able to structure their investments to benefit from ISDS protection ("round-tripping"), but we consider this to pose less risk than legitimately foreign investments (particularly as a substantial amount of domestic investment in oil and gas is through state-owned enterprises). We do not address this issue in this policy brief.

On the second point, using data on company headquarters was a practical approach because this information was provided in the Rystad UCube database. However, it is an imperfect proxy for determining the nationality of an investor because investment treaties can take different approaches to defining investor nationality, such as using the country in which the company is incorporated. Moreover, many projects that are ultimately owned by a parent company in one country may be structured through subsidiaries based in other countries. Indeed, law firms recommend that companies consider access to treaties when structuring their investments (JonesDay 2021).

The sheer number of projects in the global dataset for the *Science* study made any investigation of corporate structure unrealistic. The number of projects hosted in the ECT region is more reasonable,

but is still beyond our capacity to investigate. To get a sense for how significantly we could have underestimated ECT coverage, we chose to investigate the corporate structure of the top 20 investments (in terms of NPV) that were not protected by the ECT based on the investor's headquarters. We relied on company reports from Orbis. These reports show the location of a company's subsidiaries and how these subsidiaries are related. They do not provide investment-specific information. We supplemented the Orbis data with project information found on the websites of the companies of interest.

We did not find convincing evidence that American, Australian, Canadian or Chinese investors had structured their investments in Kazakhstan, Turkmenistan and the UK through subsidiaries in the ECT region. However, we did find that Equinor – which is headquartered in Norway and majority owned by the state – and Eni, which is an Italian company, both likely structured some of their investments in the ECT region through Dutch subsidiaries.[2] With this knowledge, we returned to the dataset of non-ECT covered (based on investor headquarters) investments and extracted all those made by Equinor and Eni. We then filtered those investments based on whether the company's corporate structure would provide them access to the ECT. We found that adding the protected investments of these two companies would raise the amount of NPV covered by the ECT between $1.2 billion to $5 billion in Scenario 1 (Table 3) and between $181 million to $399 million in Scenario 2 (Table 4), for a total of $1.4 billion to $5.4 billion.

Finally, we note it is also possible for company shareholders to make claims for "reflective loss" (Gaukrodger 2014). While we do not have the necessary data to calculate potential shareholder claims over oil and gas assets that are stranded through government action, we note that recent research indicates that shareholders based in the Organization for the Economic Cooperation and Development (OECD) member states have ultimate ownership of a significant portion of upstream oil and gas assets that are at risk of stranding (Semieniuk et al. 2022). There is substantial overlap between the membership of the OECD and the ECT.

Table 1: Investments in Projects That Do Not Fit in the IEA NZE Pathway (Scenario 1), Hosted in the ECT Region (USD millions)

	NPV (Rystad)	NPV ($50)	NPV ($75)	NPV ($100)
Value of all investments hosted in ECT region	59.8	53.4	128.7	204.4
Value of all foreign* investments hosted in ECT region	21.1	17.7	45.0	74.2
Value of all foreign investments hosted in ECT region with headquarters in ECT region	10.0	8.1	20.2	33.8
Value of all foreign investments hosted in ECT region with headquarters outside ECT region	11.1	9.6	24.8	40.4

Source: Extracted from Tienhaara et al. 2022 dataset (based on Rystad UCube database and UNCTAD Investment Treaty Navigator).
Note: *Determined based on owner headquarters.

[2] We excluded Eni from our *Science* analysis, even though some of its investments could have been protected under the ECT's "sunset clause" (Art. 47.3) because it would have required an assessment of when each investment was made (only investments made prior to Italy's withdrawal would be covered).

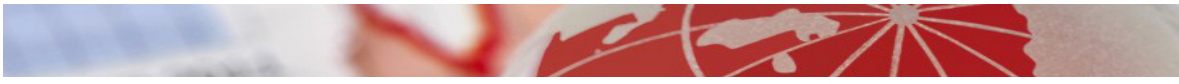

Table 2: Investments in Projects "Under Development" (Scenario 2), Hosted in the ECT Region (USD millions)

	NPV (Rystad)	NPV ($50)	NPV ($75)	NPV ($100)
Value of all investments hosted in ECT region	37.7	37.7	61.0	82.8
Value of all foreign* investments hosted in ECT region	13.7	13.9	25.9	37.3
Value of all foreign investments hosted in ECT region with headquarters in ECT region	2.9	2.8	4.8	6.8
Value of all foreign investments hosted in ECT region with headquarters outside ECT region	10.7	11.2	21.1	30.5

Source: Extracted from Tienhaara et al. 2022 dataset (based on Rystad UCube database and UNCTAD Investment Treaty Navigator).
Note: *Determined based on owner headquarters.

Table 3: Investments that Do Not Fit in the IEA NZE Pathway (Scenario 1), Hosted in the ECT Region and Likely Protected Through Subsidiaries (USD millions)

Company	Subsidiaries	Subsidiary Country	Host Countries	NPV ($50)	NPV ($100)
Equinor	Equinor Azerbaijan Karabagh B.V. Equinor Azerbaijan Ashrafi Dan Ulduzu Aypara B.V	Netherlands	Azerbaijan	210	1049
Eni	AGIP Karachaganak B.V. AGIP Kaspian	Netherlands	Kazakhstan	966	3971
	Eni International B.V.	Netherlands	Albania, Cyprus, Montenegro, UK, Ukraine		
	Eni Ireland B.V.	Netherlands	Ireland		
Total				1176	5020

Sources: Orbis 2022; Eni n.d.; Equinor 2022; Tienhaara et al. 2022.

Table 4: Investments in Projects "Under Development" (Scenario 2), Hosted in the ECT Region and Likely Protected Through Subsidiaries (USD millions)

Company	Subsidiaries	Subsidiary Country	Host Countries	NPV ($50)	NPV ($100)
Equinor	Equinor Azerbaijan Karabagh B.V. Equinor Azerbaijan Ashrafi Dan Ulduzu Aypara B.V	Netherlands	Azerbaijan	65	174
Eni	AGIP Karachaganak B.V. AGIP Kaspian	Netherlands	Kazakhstan	116	225
Total				181	399

Sources: Orbis 2022; Eni n.d.; Equinor 2022; Tienhaara et al. 2022.

THE 1.5°C CARBON BUDGET

The two scenarios for climate action that we focused on in our *Science* article involved oil and gas projects that had not yet begun producing. However, an article that was published shortly afterwards indicates that staying within a 1.5°C carbon budget "may require governments and companies not only to cease licensing and development of new fields and mines, but also to prematurely decommission a significant portion of those already developed" (Trout et al. 2022). The authors do not indicate specific projects that should be retired early (which could result in claims for compensation from impacted investors) and, as such, it is not possible for us to evaluate how much this approach would increase the potential liability of states under the ECT. However, we wish to note that their findings further strengthen our argument that our liability estimates should be considered conservative.

POLICY IMPLICATIONS

The ECT covers a substantial amount of foreign investment in oil and gas projects that cannot proceed if the international community is to keep global warming below 1.5°C. There is significant potential for ISDS disputes to arise under the treaty in coming years as states begin to take more ambitious action to halt dangerous climate change. The implicit or explicit threat of such disputes may result in regulatory chill, delaying necessary policy measures, and divert government resources from the energy transition.

Existing proposals to modernise the ECT are insufficient to deal with the threat that the treaty poses to climate action. EU members must be aware that any exclusion for intra-EU disputes that they negotiate can easily be subverted by oil and gas companies. This is demonstrated in the corporate structure of Equinor and Eni. Norway never ratified the ECT, and yet because it has a subsidiary in the Netherlands, a majority state-owned Norwegian firm can utilize the ECT to sue Azerbaijan. Italy made the sound decision to terminate the ECT several years ago, but the Italian firm Eni still enjoys its protection through its Dutch subsidiary[3] when it invests in multiple ECT member states. It is perfectly reasonable to assume that these and other oil and gas companies have or will restructure their investments through non-EU ECT states like the UK, if necessary, to maintain ECT protection. A coordinated withdrawal from the ECT by EU members would still come with risks because of the sunset clause, but protection would at least be limited to existing investments.

REFERENCES

ClientEarth 2021 "Companies cannot use ECT to sue governments for climate progress, top court says", https://www.clientearth.org/latest/press-office/press/companies-cannot-use-ect-to-sue-governments-for-climate-progress-top-court-says/

ECT Secretariat, Summary of the Thirteenth Negotiation Round on the modernisation of the Energy Charter Treaty (ECT), 16-20 May 2022, https://www.energychartertreaty.org/modernisation-of-the-treaty/

Eckes, C., Ankersmit, L. 2021. "The compatibility of the Energy Charter Treaty with EU law", Amsterdam Centre for European Law and Governance, https://www.clientearth.org/media/2n2po04j/report-on-ect-compatibility-with-eu-law.pdf

[3] Investments made prior to Italy's withdrawal from the ECT may also be protected through the sunset clause.

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Eni n.d. "Our work in Kazakhstan", https://www.eni.com/en-IT/eni-worldwide/eurasia/kazakhstan.html

Equinor 2022. "2021 Annual Report and Form 20-F", https://cdn.sanity.io/files/h61q9gi9/global/83ce4c64e602e203100e1ce2c5de9b2d42ff8192.pdf?equinor-2021-annual-report-and-form-20-f.pdf

Gaukrodger, D. (2014), "Investment Treaties and Shareholder Claims for Reflective Loss: Insights from Advanced Systems of Corporate Law", *OECD Working Papers on International Investment*, 2014/02, OECD Publishing. http://dx.doi.org/10.1787/5jz0xvgngmr3-en

IEA 2021. "Net Zero by 2050: A Roadmap for the Global Energy Sector", https://www.iea.org/reports/net-zero-by-2050

Jones Day 2022 "Climate Change and Investor-State Dispute Settlement" (February), https://www.jonesday.com/en/insights/2022/02/climate-change-and-investorstate-dispute-settlement)

Nasralla, S., Ravikumar, S. 2021. "Shell ditches the Dutch, seeks move to London in overhaul", Reuters, (15 November), https://www.reuters.com/world/uk/shell-proposes-single-share-structure-tax-residence-uk-2021-11-15/

Orbis 2022. https://www.bvdinfo.com/en-gb/our-products/data/international/orbis

Semieniuk, G., Holden, P.B., Mercure, JF. et al. 2022. "Stranded fossil-fuel assets translate to major losses for investors in advanced economies", *Nature Climate Change*, https://doi.org/10.1038/s41558-022-01356-y

Tienhaara, K., Thrasher, R., Simmons, B.A., Gallagher, K. 2022. "Investor-state disputes threaten the global green energy transition", *Science* 376(6594): 701-703.

Trout, K., Muttitt, 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: 064010.