

**THE ENERGY CHARTER TREATY'S LIMITATIONS ON
STATES' RIGHT TO REGULATE**

An obstacle to climate change action?

**ENERGICHARTERTRAKTATENS INDSKRÆNKNINGER AF
STATERS RET TIL AT LOVGIVE**

En udfordring for imødekommelse af klimaforandringer?

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ABSTRACT

States are, worldwide, increasingly becoming aware of the need to take actions to mitigate and adapt to climate change. Expectedly, energy-related investments will show pivotal for the green transition. In that regard, this thesis considers the potential role of the Energy Charter Treaty's (ECT) investment protection standards, namely, to which extent the standards' restrictions on states' right to regulate might both deter states from taking climate change action and, at the same time, promote and attract investments.

For those purposes, the thesis reviews, first, the context, aim and scope of the ECT to correctly understand its potential alignment with climate change. To establish the basic framework of the ECT, consideration is also offered to the two interrelated ECT regimes of investment protection and investor-state dispute settlement. Subsequently, to clarify the interests at stake, the state's right to regulate vis-à-vis the protection of the investor is reviewed.

The exercise of balancing the interests at stake has been the subject of numerous ECT cases. Accordingly, the thesis analyses and discusses a number of selected cases with the aim of establishing general criteria and elements taken into consideration by arbitral tribunals, interpreting the often vague and indeterminate investment protection standards of the ECT.

Despite inconsistencies and contradictions in ECT jurisprudence, the analysis shows that states' regulatory modifications might, generally, risk amounting to indirect expropriation or frustrating the investors' legitimate expectations. A number of elements are shown to qualify the examination of those standards, particularly the political, economic and regulatory environment of the particular state as well as the acts and omissions by the state, namely the state's due consideration to the investors that are affected by the adverse regulatory measures.

After having considered the rise in significance of climate change in a legal context, for instance by becoming a matter of human rights, the thesis finally discusses the role of the ECT in climate change action. On the one hand, the ECT is found fit for promoting low-carbon investments by offering investors the promise of stability. However, states must, when inducing investors, be mindful of the ECT to maintain as much regulatory flexibility as possible. On the other hand, the ECT might obstruct states' ambitious climate change regulation by protecting fossil fuel investors. While states' mindfulness of the ECT will allow states a larger regulatory space, the extent of the ECT's restrictions is, regrettably, close to impossible to predict, being subject to the factual circumstances and the predilections of the individual tribunal.

RESUMÉ

Behøvet for imødekommelse af klimaforandringerne anerkendes i stigende grad på verdensplan. Mange løsningsmuligheder er foreslået, men en gennemgående fællesnævner er i høj grad behovet for investeringer, særligt i den enorme energisektor, der endnu er afhængig af produktion fra fossile brændsler. Til vurdering af, om energichartertraktaten (Traktaten) fremmer eller hindrer den grønne omstilling, søger denne fremstilling at afdække omfanget af Traktatens investeringsbeskyttelser, navnlig i lyset af disses indskrænkninger i staters ret til at lovgive.

I afhandlingen redegøres således først og fremmest for Traktatens kontekst og formål, herunder de for nærværende afhandling relevante mekanismer; investeringsbeskyttelse og investeringsvoldgift. Herefter illustreres de i nogen grad modsatrettede interesser, dvs. statens ret til at lovgive hhv. investorens beskyttelse.

Disse interesser må afvejes ved en tvists opståen, hvilket har været genstanden for adskillige sager under Traktaten. Ved at analysere og diskutere en række udvalgte afgørelser søger afhandlingen at udlede nogle generelt anvendelige kriterier, som fremtidige voldgiftsretter må forventes at tage i betragtning til fortolkning og uddybning af Traktatens vage investeringsbeskyttelser.

Uoverensstemmelser og modsigelser i retspraksis til trods fremgår det af afhandlingens analyse, at staters reguleringer kan risikere at konflikte med Traktatens beskyttelser mod indirekte ekspropriation og af investorens berettigede forventninger. Vurderingen af om en stats regulering er i strid disse standarder vises i analysen at kunne baseres på flere elementer og kriterier, navnlig det politiske, økonomiske og regulatoriske miljø i staten såvel som statens handlinger og udfaldelser, særligt forstået som hvorvidt staten har taget hensyn til berørte investorer.

Afhandlingen finder herefter, at klimaforandringer i stigende grad er relevante i en juridisk kontekst, særligt henset til den nylige udvikling, hvorefter det er blevet et spørgsmål om menneskerettigheder. I dette lys diskuteres slutteligt Traktatens forventede dobbeltrolle i imødekommelse af klimaforandringerne. Traktaten har, først og fremmest, potentiale til at tiltrække grønne investeringer ved at love stabilitet til investorer. For at minimere investeringsbeskyttelsernes negative indvirkning på staters ret til at lovgive, må stater dog være opmærksomme på Traktaten. Traktaten kan, til gengæld, også være en hindring for den grønne omstilling ved at beskytte fossile investeringer. Også i denne henseende kan stater aktivt påvirke deres regulatoriske frihed, men er i høj grad efterladt med en fundamental usikkerhed, da udfaldet af en sag afhænger af sagens fakta, og (ofte i højere grad) sindsstemningen blandt det pågældende voldgiftstribunal.

LIST OF ABBREVIATIONS

<i>Art.</i>	Article
<i>BIT</i>	Bilateral investment treaty
<i>e.g.</i>	Exempli gratia
<i>ECHR</i>	European Convention of Human Rights
<i>ECT</i>	Energy Charter Treaty
<i>ECtHR</i>	European Court of Human Rights
<i>EEC</i>	European Energy Charter
<i>et al.</i>	Et alia
<i>EU</i>	European Union
<i>FDI</i>	Foreign direct investment
<i>FET</i>	Fair and Equitable Treatment
<i>FPS</i>	Full Protection and Security
<i>GHG</i>	Greenhouse gas
<i>i.a.</i>	Inter alia
<i>i.e.</i>	Id est
<i>ibid.</i>	Ibidem
<i>id.</i>	Idem
<i>IIA</i>	International investment agreement
<i>ISDS</i>	Investor-state dispute settlement
<i>p.</i>	Page
<i>para.</i>	Paragraph
<i>paras.</i>	Paragraphs

<i>pp.</i>	Pages
<i>PPA</i>	Power Purchase Agreement
<i>RESs</i>	Renewable Energy Support Schemes
<i>UNFCCC</i>	United Nations Framework Convention on Climate Change
<i>VCLT</i>	Vienna Convention on the Law of Treaties
<i>WTO</i>	World Trade Organisation

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1 INTRODUCTION

This section seeks to, first, present the topic and relevance of the present thesis in section 1.1, followed by the thesis' problem statement in section 1.2, delimitation in section 1.3, methodology in section 1.4 and, finally, structure in section 1.5.

1.1 PRESENTATION

Momentarily surpassed by the coronavirus pandemic, climate change is plausibly the most extensive and imperative concern in the Western World. In recent times, states have increasingly acknowledged that climate change represents “*the single biggest threat to development*” and that “*urgent action*” is doubtlessly required,¹ leading to international commitments such as the target in the Paris Agreement to keep the increase of the global temperature well below 2°C.²

In the fight against climate change, energy is crucial. The use of energy is not only indispensable for human life,³ it accounts for two-thirds of the total greenhouse gas (GHG) emissions globally.⁴ Mitigating and adopting to climate change, therefore, must first and foremost be centred on energy. With the renewable energy share of energy consumption in 2018 merely amounting to 10.5 % and global energy demand continuously rising,⁵ investments in especially low-carbon energy sources are essential in combatting climate change. In fact, recently, it was estimated that a tremendous amount of USD 676 billion must be invested annually in renewable power generation capacity in the coming decade.⁶

Generally, states are either not capable or willing to undertake all of their long-term and capital-intensive energy investments themselves,⁷ and rely, in lieu, on attracting foreign direct investments (FDI). To promote FDI, states have traditionally entered into international investment agreements (IIAs), promising adequate protection of foreign investments from abuse of powers by governments. The Energy Charter Treaty (ECT) is such an IIA. However noble states' intentions may be when acceding IIAs, the ECT – as other IIAs – has recently been subject to

¹ UN Report on SDG (2016), para. 89

² Art. 2(1)(a) Paris Agreement

³ Bruce (2013), p. 2

⁴ IEA World Energy Outlook (2016), p. 21

⁵ IRENA 2050 Outlook (2020), p. 21, 23

⁶ *id.*, p. 95

⁷ OECD Sustainable Energy Investments (2013), p. 6

criticism. The ECT has, for instance, been accused to “*kill the Paris Climate Agreement*”⁸ and to “*undermine EU’s new green deal*”.⁹

In essence, critics are concerned with the ECT’s investment protection regime which restricts the states’ regulatory flexibility. As such, the fear of meeting compensation claims from affected fossil fuel investors may lead to a so-called regulatory chill, whereby states abstain from making noteworthy regulatory amendments – despite combatting climate change might entail states to revolutionise their regulatory regimes.¹⁰ And so, it is argued, the ECT discourages bold transitions to low-carbon production.¹¹

Simultaneously, others emphasise the ECT as the answer to all climate change prayers. Adherers to that thought find that different features of the ECT may “*foster solutions to global warming*”¹² and “*add force to the words of climate change obligations*”.¹³ In that view, the investment protections afforded by the ECT may reduce investment risk and thus make investments in sustainable energies attractive.¹⁴

The question therefore arises as to who are right; the detractors or the admirers - will the ECT obstruct or foster climate change action? This thesis attempts to provide an answer to that question.

1.2 PROBLEM STATEMENT

The above-raised question will be attempted answered by considering the following problem statement:

How is the state’s right to regulate balanced with the protection of the investor’s investment under the Energy Charter Treaty and how might those restrictions on the state’s regulatory flexibility impact climate change mitigation and adaption?

⁸ <https://www.forbes.com/sites/davekeating/2019/09/05/a-little-known-eu-investor-dispute-treaty-could-kill-the-paris-climate-agreement/#10bec27d4ecf>

⁹ <https://www.theguardian.com/business/2019/dec/09/energy-treaty-risks-undermining-eus-green-new-deal>

¹⁰ Brauch, et al. (2019), p. 20; Coop & Seif (2018) p. 221; Bruce (2013), p. 3

¹¹ Bernasconi-Osterwalder & Brauch (2019), p. 4

¹² Sussman (2011)

¹³ Magnusson (2019), p. 1020

¹⁴ Sussman (2011), p. 528

1.3 DELIMITATION

This thesis focuses on the ECT's investment protection standards eligible to limit states' right to regulate and considers the role of these in the fight against climate change. Several elements are in that regard essential for delimiting the scope of the thesis.

First, the thesis is centred entirely on the ECT. With thousands of different IIAs in force,¹⁵ it would be an insurmountable task, exceeding the extent of this thesis, to consider each and all. As the vast majority of IIAs are bilateral investment treaties (BIT), the impact of the ECT, which is a multilateral treaty, is naturally larger. Other high-impact multilateral treaties include the Economic Community of West African States and the North American Free Trade Agreement.

With its scope narrowed to the energy sector exclusively, the ECT is "*a unique instrument*",¹⁶ deserving special attention. Correspondingly, of all investment protection treaties – across sectors – the ECT is by far the most frequently invoked (in 121 of 942 cases as of 2015).¹⁷ Arguably, the ECT is one of the most important multilateral investment treaties.¹⁸ Remarkably, the investment protection standards that are further examined in this thesis are largely stipulated in all IIAs and the assessment of the ECT may therefore show illustrative on a generic level.

Second, while the ECT offers numerous investment protection standards, focus is mainly on those that are expected or have shown to limit a state's regulatory flexibility. Other aspects of the ECT that may be of relevance in the context of climate change are merely included insofar that they might illuminate the answers sought. Notably, the ECT's investment protection regime applies to FDI only.¹⁹ The thesis does therefore not take into account a state's right to regulate in intern matters, that is, in regard to domestic investments.

Third, the ECT's limitations on the state's right to regulate is considered in relation to climate change only. Furthermore, for reasons of simplicity, the thesis refers to climate change obligations in a broad and generic sense, refraining from involving the variety of special regulation in existence. The essential climate change instruments considered come within the United Nations

¹⁵ Rivkin, et al. (2015), p. 131

¹⁶ Foreword to Consolidated ECT (2016)

¹⁷ UNCTAD Fact Sheet on ISDS (2019), p. 3

¹⁸ Gallagher (2018), p. 256; Benson, et al. (2019), p. 52; Verburg (2019), p. 426; Sussman (2011), p. 516

¹⁹ Section 2.3

Framework Convention on Climate Change (UNFCCC).²⁰ Given the nature of the ECT, climate change actions are narrowed to those concerning energy-related investments only.

Regrettably, the limited extent of the thesis has not allowed consideration of the EU regulation on climate change, including renewable energy. It must be noted, however, that the observations of the thesis are particularly relevant in the EU-context; with the EU aiming at being the first climate neutral continent in the world, the European energy sector is doubtlessly subject to radical (regulatory) changes.

1.4 METHODOLOGY

As an over-arching approach, this thesis utilises an inductive method²¹ to determine the current state of play on the ECT's limitations on the state's right to regulate in the context of climate change. While elements of *de lege ferenda* reflections occasionally occur, the scope of the thesis is to outline and compare the regimes of investment protection and climate change to determine their interrelationship. Thus, it is essentially concerned with *de lege lata*, achieved by applying a traditional legal dogmatic method.²² While some parts of the thesis are either predominantly of describing, analysing or discussing character, all parts contain elements of each.

Initially, the thesis describes the context and the relevant features of the ECT. This section relies primarily on the ECT itself and seeks clarification by reviewing secondary literature. A similar approach is applied in the subsequent review of the state's right to regulate and the investment protection.

Obedient to the inductive approach of the thesis, the following section analyses relevant ECT jurisprudence with the aim of identifying and capturing the different elements and conditions that previous ECT tribunals have found necessary to assess whether a state's regulatory measures violated the ECT's investment protection standards and thus were outside the state's allowed regulatory flexibility.

The thesis' considerations of climate change in a legal context – methodically mirroring the approach of assessing the state's right to regulate – are in the final section compared to the

²⁰ Section 5.1

²¹ See Schwarzenberger (1965)

²² Blume (2014)

ECT's investment protection regime. Observations are provided on potential synergetic as well as detrimental effects of states' concurrent obligations under both of the regimes.

As appears, the thesis considers international law only. Due to considerations of expediency – in an international perspective – a transnational approach is taken in the application of the abovementioned traditional legal dogmatic method, focusing less on divergences in national legal systems.

The primary sources of the thesis are namely the ECT and jurisprudence hereunder. Given the abundance of ECT case law on the state's right to regulate, the limited timeframe and extent available for present purposes have required a thorough selection of the cases to be analysed. The selection of cases has been conducted by considering mainly two elements: First, the general acknowledgment of the decision in the view of legal authorities, including subsequent tribunals and legal scholars. Second, the recentness of the decision. Thus, secondary to distinguished decisions, the most recent decisions have to some extent been preferred in the selection, inspired by *lex posterior* considerations.

Notably, due to the limited extent of the thesis, often, views of tribunals are cited without contextualizing the case. The facts of the analysed cases are therefore referenced only when appropriately serving illustrative purposes. Also, the research and selection of case law was closed on April 30, 2020. However, a mere two weeks later, the award in another relevant case was published.²³ Although the case is not included in this thesis, on the face of it, the observations and conclusions of the thesis are nevertheless unaffected.

The greatest methodological insecurity of the thesis lies in the nature of international investment arbitration. Despite often examining identical investment protections of the ECT, tribunals have rendered inconveniently inconsistent decisions both in terms of determining the scope of the investment protection standards and in the tribunals' structural examination of claims. This inconsistency is attributable to several reasons.

First, arbitral decisions are often structured according to the claims brought before the tribunal, which is subject to the claimant's discretion. Second, tribunals often cite 'judicial economy' as

²³ *Sun Reserve (2020)*

reason for not examining all claims after having established a breach of the ECT.²⁴ Third, as expressed by an ECT tribunal “*binding precedent is alien to international investment arbitration*” and tribunals are therefore not bound by previous decisions.²⁵ Accordingly, international investment tribunals are not bound by domestic judgments either; such are merely considered ‘facts’.²⁶

While not bound by a doctrine of precedent, ECT tribunals do however regularly cite decisions of previous ECT tribunals and pay careful attention to them, especially if previous decisions rise to the level of a *jurisprudence constante*.²⁷ Additionally, ECT tribunals often cite tribunals established under different IIAs, examining investment protection standards that bear a remarkable resemblance to those found in the ECT. However, such cross-IIA citation must be treated with care.²⁸ First, because the investment protections exist in a broad range of different formulations under different IIAs. Second, and more importantly, because every treaty must always be interpreted in accordance with its object and scope.²⁹

Accordingly, this thesis examines how the ECT’s substantive protections owed to investors may limit a state’s right to regulate by analysing the prominent jurisprudence under the ECT. For purposes of clarification and elaboration, jurisprudence under other IIAs (referred to as non-ECT) is included when deemed appropriate, predominantly when the ECT tribunal in question specifically cited such non-ECT jurisprudence in its decision.

1.5 STRUCTURE

The aim of this thesis is first, in section 2, to provide an overview of the broader context of the ECT in order to comprehend its object and scope. Ultimately, this is of relevance to interpret the ECT correctly.³⁰

Second, a brief introduction to the state’s right to regulate and the investor’s right of protection is provided in section 3, to understand the interests at stake.

²⁴ See e.g. *Eiser (2017)*, paras. 353-356; *Masdar (2018)*, para. 667; *Nykomb (2003)*, pp. 33-34; *Stadtwerke (2019)*, para. 364

²⁵ *Mamidoil (2015)*, para. 565

²⁶ *PV Investors (2020)*, para. 603

²⁷ See e.g. *BayWa (2019)*, para. 317

²⁸ Dolzer & Schreuer (2012), p. 236; P. Dumberry (2016), p. 149

²⁹ Art. 31(1) Vienna Convention on the Law of Treaties (VCLT)

³⁰ *ibid.*

Third, section 4 provides an analysis of ECT jurisprudence on how, and on which grounds, tribunals have previously balanced the interests of the state vis-à-vis the investor, i.e. determined the state's allowed regulatory flexibility. This section is essential in understanding whether, and to which extent, states may pass climate change regulation without incurring liability under the ECT.

Fourth, for the purpose of identifying states' interests in and obligations to make regulatory amendments aimed at mitigating and adapting to climate change, states' commitments under international law on climate change are revised and analysed in section 5.

Fifth, on that backdrop, section 6 compares the state's right to regulate under the ECT with the state's interest in passing climate change regulation and discusses how the ECT may be able to both foster and obstruct climate change action.

Finally, the thesis is concluded in section 7.

2 THE ENERGY CHARTER TREATY

In a brief manner, this section seeks to outline the basics of the ECT. This entails understanding the ‘Energy Charter’ context, which, besides the ECT, particularly includes the European Energy Charter (EEC). Rightfully, the broader ‘Energy Charter’ context also includes the Energy Charter Protocol on Energy Efficiency and Related Environmental Aspects, the 1998 Trade Amendment and the 2015 International Energy Charter.

However, while the broader ‘Energy Charter’ context should indeed be borne in mind, this thesis predominantly centres on the ECT itself; the only ‘Energy Charter’-instrument granting legally binding provisions, on which disputes between states and investors can be settled. As evident in the following, regard must also be had to the EEC which affects the interpretation of the ECT.

Accordingly, section 2.1 describes the context of the EEC and the ECT. Narrowing the scope, section 2.2 describes the aim and scope of the ECT, and section 2.3 considers the investment protection regime of the ECT, before section 2.4 describes the ECT’s investor-state dispute settlement regime. Finally, section 2.5 briefly considers whether the ECT can be discarded.

2.1 THE ‘ENERGY CHARTER’ CONTEXT

As the cold war came to an end and the Soviet Union faced dissolution, the European countries glimpsed a potential mutually beneficial East-West cooperation in the energy sector; whereas Russia and its neighbouring countries possessed vast energy resources but lacked critical capital to utilize the potential, several of the countries in Western Europe showed sound and stable economies but lacked diversification in their sources of energy supply.³¹

Accordingly, the EEC was proposed in February 1991 and agreement on its substance was reached in December 1991, where it was adopted by more than 50 states – mostly European countries, but also e.g. USA, Canada, Australia and Japan.³² In essence, the ambition of the EEC was to foster Eastern economic development by promoting investment security, which

³¹ An Introduction to the ECT (2004), p. 13. See also Iacob & Cirlig (2016), p. 72; Vorburger & Petti (2018), p. 1302

³² A Reader’s Guide (2002), p. 8; Vorburger & Petti (2018), p. 1302; Bamberger, et al. (2001), p. 173

in turn would enhance the relationship of trade and investment between East and West and entail improved security of energy supply for all.³³

Being a solely political declaration, the EEC is a non-binding instrument, merely showcasing the intentions and good will of the adherents to engage in energy-related trade, create conditions to stimulate investments, respect state sovereignty, etc.³⁴ Acceding to the EEC did, however, also entail a commitment to negotiate in good faith a ‘Basic Agreement’³⁵ – what ultimately became the ECT.

Open for signature from 17 December 1994³⁶, the ECT entered into force on 16 April 1998.³⁷ At this writing, the original 50 signatories³⁸ has increased to 53 signatory countries plus the EU and the Euratom in their supranational capacity.³⁹ However, the Russian Federation and Italy, which originally signed the ECT, have both withdrawn their accedence,⁴⁰ following substantial ECT-based disputes.

Contrary to the EEC, the ECT is a legally-binding multilateral instrument, pursuant to which investors benefit from admitted legal rights, accordingly binding states by certain obligations.⁴¹

2.2 THE AIM AND SCOPE OF THE ECT

The EEC cannot be completely disregarded, however. With its foundation in the EEC, the objective of the ECT is to implement the basic concept hereof, namely “*to catalyse economic growth by means of measures to liberalise investment and trade in energy*”.⁴² The purpose of the ECT – as stipulated in art. 2 – reflects this coherence:

“This Treaty establishes a legal framework in order to promote long-term co-operation in the energy field, based on complementarities and mutual benefits,

³³ Preamble and Title 1 (Objectives) EEC. See also Muchlinski (1996), p. 205; Bamberger, et al. (2001), p. 173

³⁴ Title 1 (Objectives) EEC; A Reader’s Guide (2002), p. 8

³⁵ Title 3 (Specific Agreements) EEC

³⁶ Art. 38 ECT

³⁷ A Reader’s Guide (2002), p. 8

³⁸ Of the original signatories to the EEC, only USA and Canada did not sign the ECT

³⁹ See ECT Website

⁴⁰ Rightfully, the Russian Federation merely signed the ECT, it never ratified the treaty and therefore only applied the ECT provisionally

⁴¹ Bamberger, et al. (2001), p. 176; Hobér (2018)

⁴² Preamble ECT

in accordance with the objectives and principles of the [European Energy] Charter.”⁴³

In terms of substantiating the rather abstract objectives of the EEC, the Energy Charter Secretariat has described the fundamental aim of the ECT as to “*strengthen the rule of law on energy issues, by creating a level playing field of rules [...], thus minimising the risks associated with energy-related investments and trade*”.⁴⁴

Of specific interest for present purposes, the ECT, in its preamble, specifically recalls international environmental agreements, including the UNFCCC and recognises “*the increasingly urgent need for measures to protect the environment*”.⁴⁵

Overall, the ECT can be organized in five broad categories: (i) Provisions protecting and promoting foreign energy investments. (ii) Trade provisions based on the WTO rules. (iii) Obligations regarding free energy transit. (iv) Provisions on energy efficiency to reduce the negative environmental impact of the energy cycle. (v) Dispute resolution mechanisms.

While the ECT in its entirety has been enthusiastically described as unparalleled,⁴⁶ one-of-its-kind⁴⁷ and the most innovative modern economic treaty,⁴⁸ particularly the combined investment and dispute resolution regime has attracted considerable attention.

2.3 THE INVESTMENT PROTECTION REGIME

To minimise risks associated with energy-related investments, the ECT provides substantive protections for foreign investors, choosing to invest in ECT-countries. Before the context of the investment protections is briefly provided in section 2.3.2, initially, the notion of investor and investment is considered in section 2.3.1.

2.3.1 The notion of investor and investment

Naturally, the investment protections of the ECT apply to ‘investors’. The notion of investor is, though not limitless, very broadly referred to under art. 1(7) ECT, from which it appears

⁴³ Art. 2 ECT

⁴⁴ An Introduction to the ECT (2004), p. 14

⁴⁵ Preamble ECT

⁴⁶ An Introduction to the ECT (2004), p. 13

⁴⁷ Hobér (2018), p. 175

⁴⁸ Bamberger, et al. (2001), p. 208

that the ECT limits the scope of protected investors to natural persons or legal entities with ties to the contracting parties of the ECT.⁴⁹

Despite meeting the prerequisites of art. 1(7)(a) ECT, an investor is not *per se* granted the substantial protection under part III of the ECT; the regime only protects ‘investments’.⁵⁰ For those purposes, art. 1(6) ECT defines ‘investment’ as “*every kind of asset, owned or controlled directly or indirectly by an Investor*”. Reflecting the particular aim of the ECT, art. 1(6) proceeds to limit the scope of the ECT investment protection regime to “*any investment associated with an Economic Activity in the Energy Sector*.”⁵¹

Hence, the substantive investment protections under the ECT are granted when a natural person or legal entity with ties to a contracting state of the ECT, in the area of another contracting state of the ECT, has invested in any kind of asset associated with an economic activity in the energy sector.

2.3.2 Substantive investment protections

Essentially, the aim of the investment protections of the ECT is to promote foreign investments in ECT countries. By protecting investments from the most important political risks in the state, investors’ confidence in the state is assumed to increase, resulting in more capital being invested in the state with less reticence on the side of the investor.⁵²

The substantive investment protections are found in part III of the ECT. The investment protections are numerous and include general protections (such as the obligation to provide ‘fair and equitable treatment’⁵³), non-discrimination standards (such as the obligation to accord investors the better of ‘national treatment or most-favoured-nation treatment’⁵⁴) and a prohibition of unlawful expropriation.⁵⁵

While to date, a whole 15 different protection standards have been alleged breached, the minority are of relevance for present purposes. Those investment protection standards that are

⁴⁹ Art. 1(7)(a) ECT

⁵⁰ Art. 26(1) ECT. See section 2.4

⁵¹ Art. 1(6) ECT

⁵² A Reader’s Guide (2002), p. 19

⁵³ Art. 10(1) ECT

⁵⁴ Art. 10(7) ECT

⁵⁵ Art. 13 ECT

indeed of relevance in the context of the state's right to regulate are described in section 3.2 and at this point it thus suffices to stress the context and aim of the ECT's investment protections; to promote investments.

2.4 INVESTOR-STATE DISPUTE SETTLEMENT

The ECT provides dispute settlement mechanisms that differ substantially, depending on the character of the dispute, i.e. whether the dispute is related to investment, trade, transit, competition or environment. Furthermore, in relation to investment disputes, the ECT distinguishes between investor-state and state-state disputes.

For present purposes, merely the investor-state dispute settlement (ISDS) regime is of greater relevance. Essentially, the ISDS regime of the ECT is provided with the objective of reinforcing the investment protections, allowing the investor recourse to adjudicators in the case of a dispute.⁵⁶

Under the ECT, disputes between contracting states and investors of another contracting state regarding a state's alleged breach of any of the investment protections are subject to settlement in accordance with art. 26, allowing investors to choose between: (i) domestic courts of the state, (ii) any applicable, previously agreed dispute settlement procedure or (iii) international arbitration or conciliation in accordance with the ECT.⁵⁷ As the ECT states have in advance given their "*unconditional consent*" to resolve ECT-related investment disputes by arbitration,⁵⁸ the choice of dispute settlement is enjoyed by the investor exclusively.

While comprehensive literature on international arbitration can be found elsewhere,⁵⁹ it deserves mentioning that international arbitration is, in its essence, merely a 'party-tailored' method of resolving disputes where the parties consent to have their dispute settled by one or more adjudicators (arbitrators).⁶⁰ The principle of party-autonomy is fundamental for the parties to opt for international arbitration – especially in the energy sector where disputes are complex of nature and often regard substantial amounts of money. Investors thus seem to prefer

⁵⁶ An Introduction to the ECT (2004), p. 16; A Reader's Guide (2002), p. 19

⁵⁷ Art. 26(2) ECT. See also A Reader's Guide (2002), p. 53; Benson, et al. (2019), p. 35

⁵⁸ Art. 26(3)(a) ECT

⁵⁹ See e.g. Moses (2017); Born (2014)

⁶⁰ Moses (2017), p. 1; Blackaby & Partasides, et al. (2015), p. 2

their dispute being settled by skilled and experienced adjudicators of their choosing, on neutral ground, subject to the rules they prefer – all of which international arbitration can offer.⁶¹

A tribunal established under art. 26 ECT shall decide the dispute in accordance with the provisions of the ECT and rules and principles of international law.⁶² Once the tribunal has rendered its award, the decision “*shall be final and binding upon the parties*”.⁶³ Finally, any arbitration under art. 26 ECT shall, at the request of either the investor or the state, be held in a state that is a party to the New York Convention,⁶⁴ which ensures that a rendered decision is enforceable against the losing party within national courts of any state that is a party to the New York Convention.⁶⁵

Consequently, the investment protections of the ECT are substantiated by arbitral tribunals, competent to render final, binding and fully enforceable decisions.

2.5 CAN THE ECT BE DISCARDED?

States dissatisfied with the consequences of the ECT might expectedly wish to discard the ECT. However, the ECT is far from easily disregarded as any amendments of the ECT requires the highly unlikely unanimity vote.⁶⁶ Also instant withdrawal of the ECT is dissatisfactory, as the ECT will protect existing investments for 20 years even if withdrawn from, pursuant to the so-called sunset clause in art. 47 ECT.

Rather, the best option for states to limit the effects of the ECT is to adopt an *inter se* modification of the ECT, that is, an agreement to modify the ECT between a number of like-minded states.⁶⁷ Naturally, such *inter se* modification merely protects the state from a limited number of states’ aggrieving investors.

The ECT can therefore not be easily discarded and an assessment of its limitations on states’ regulatory flexibility is highly relevant.

⁶¹ Sussman (2011), p. 518; Dolzer & Schreuer (2012), pp. 350 et seq.

⁶² Art. 26(6) ECT

⁶³ Art. 26(8) ECT

⁶⁴ The United Nations Convention on the Recognition and Enforcement of Foreign Arbitral Awards (1958)

⁶⁵ There are to date 163 state parties to the New York Convention

⁶⁶ Art. 36(1)(a) of the ECT

⁶⁷ Art. 41 of the VCLT

3 THE INTERESTS AT STAKE

Having established the origin and context of the ECT, this section narrows the scope by considering the interests at stake in the exercise of balancing the state's right to regulate with the protection of the investment. Accordingly, first, a clarification of the notion of 'the right to regulate' is provided in section 3.1. Second, the essential investment protections of the ECT capable of limiting the state's right to regulate are listed and briefly described in section 3.2.

3.1 THE STATE'S RIGHT TO REGULATE

It hardly needs stating that the authority to enact new regulation is possessed by the state in its sovereign capacity. However, some thought must be given to clarify the notion of 'the state's right to regulate' in order to later be able to identify which limitations the ECT imposes hereon.

The state's right to regulate originates from the international legal principle of state sovereignty. The notion of state sovereignty has been identified as "*a competence, immunity or power, and in particular as the power to make autonomous choices (so-called sovereign autonomy)*".⁶⁸ In international law, the right to regulate includes several variations of autonomy, particularly (i) the right to provide the legal framework for the public order of the state and (ii) the rights and obligations to protect the public interests of the state's citizens.⁶⁹ Thus, subject to limitations on the state sovereignty imposed by international law, the state is, essentially, free to provide and amend the legal framework it deems necessary.

However, reality does not reflect this somewhat simple presentation. Above all, because state sovereignty logically includes the empowerment to delegate (or voluntarily accept restrictions on) the authority of the state. Naturally, states are entitled to incur contractual and international obligations – an entitlement frequently employed by states, i.a. when acceding treaties under international law. Consequently, when states sign and accede IIAs, they admit certain limitations on their right to regulate.⁷⁰ Accordingly, the tribunal in *ADC* expressed its view on the coherence between the principle of state sovereignty and IIAs by stating the following:

"[...] while a sovereign State possesses the inherent right to regulate its domestic affairs, the exercise of such right is not unlimited and must have its boundaries.

⁶⁸ Besson (2013), p.71

⁶⁹ Levashova (2019), p. 25. See also e.g. Staker (2014), p. 316

⁷⁰ Coop & Seif (2018), p. 221

[...] [T]he rule of law, which includes treaty obligations, provides such boundaries. Therefore, when a State enters into [an IIA] it becomes bound by it and the investment protection obligations it undertook therein must be honoured rather than be ignored by a later argument of the State's right to regulate.”⁷¹

In terms of investment protection under the ECT, the states' rational basis for admitting such restraints on their sovereignty may be illuminated by the basic aim of the ECT's investment-regime: To promote foreign investments in contracting states.⁷² However, as the present thesis seeks to illustrate, the investment protections of the ECT are far from absolute in limiting the states' right to regulate. Accordingly, the objectives of the EEC are undertaken by the contracting states “*[w]ithin the framework of State sovereignty*”.⁷³

Notably, when this thesis continuously refers to ‘limitations on a state's right to regulate’ or the like, it should be understood to refer only to the right to enact non-compensable regulation. Rightly, the ECT's substantive investment protections do not restrict nor even affect the state's right to regulate as such. The ECT does, however, oblige states to redress the damage suffered by investors whose protection and rights under the ECT were violated. Every reference to a state's right to regulate should be read in this (i.e. the correct) context.

3.2 INVESTMENT PROTECTIONS OF THE ECT

Of the investment protections in part III of the ECT, four standards of protection appear essential in the context of limiting the state's right to regulate: (i) Fair and Equitable Treatment; (ii) Full Protection and Security; (iii) the Prohibition against Unreasonable and Discriminatory Measures and, finally, (iv) the Prohibition against Unlawful Expropriation. The content and scope of each standard is outlined in the following.

3.2.1 Fair and Equitable Treatment

The ECT, as the vast majorities of IIA's,⁷⁴ obliges contracting states to accord Fair and Equitable Treatment (FET) to investments. Art. 10(1) ECT thus stipulates (in part):

⁷¹ *ADC (2006)*, para. 423

⁷² Section 2.2

⁷³ Title I (Objectives) EEC

⁷⁴ A 2014-survey by Dumbery showed that only 50 BITs of a total of 1,964 did not entail an FET standard. See Dumbery (2016), p. 145

*“Each Contracting Party shall, in accordance with the provisions of this Treaty, encourage and create stable, equitable, favourable and transparent conditions for Investors of other Contracting Parties to make Investments in its Area. Such conditions shall include a commitment to accord at all times to Investments of Investors of other Contracting Parties fair and equitable treatment.”*⁷⁵

While it may seem that the cited sentences of art. 10(1) ECT stipulates two separable provisions, it is generally acknowledged that the provisions shall be treated collectively as the basis for the ECT’s FET standard.⁷⁶ The vague FET standard has been found to comprise several elements, including a contracting state’s obligations to; act transparently and with due process; refrain from arbitrary or discriminatory measures and provide a stable and transparent regulatory environment in light of the investor’s reasonable and legitimate expectations.⁷⁷

In general, it “*is widely accepted that the most important function of the fair and equitable treatment standard is the protection of the investor’s reasonable and legitimate expectations.*”⁷⁸ The complex and multifaceted notion of the investor’s reasonable and legitimate expectations under the ECT is developed and clarified in case law and is therefore accordingly analysed in greater detail in section 4.2.

3.2.2 Full Protection and Security

Pursuant to the following sentence of art. 10(1) ECT, investments “*shall also enjoy the most constant protection and security*”.⁷⁹ Despite apparent resemblance, this ‘FPS’ standard differs materially from the FET standard; where the FET standard protects the investment from *the state’s* wrongful injuries, the FPS standard generally obliges the state to protect the investment from *a third party’s* wrongful injuries.⁸⁰

⁷⁵ Art. 10(1) ECT, first and second sentence

⁷⁶ See e.g. *Antaris (2018)*, para. 365; *Antin (2018)*, para. 533; *BayWa (2019)*, para. 458; *Blusun (2016)*, para. 315; *Eiser (2017)*, para. 382; *Isolux (2016)*, paras. 764-766; *Plama (2008)*, para. 163

⁷⁷ *Electrabel (2012)*, para. 7.74; Benson, et al. (2019), pp. 45-46; Miljenić (2018), p. 54

⁷⁸ *Electrabel (2012)*, para. 7.75

⁷⁹ Art. 10(1) ECT, third sentence

⁸⁰ Benson, et al. (2019), p. 49; *Electrabel (2012)*, para. 7.83; *Saluka (2006)*, para. 484; *Hydro Energy (2020)*, para. 566

However, some opine the existence of an overlap between the FET and the FPS standard, including the protection of a stable regulatory framework.⁸¹ The overlap appears evident in cases where tribunals have examined the circumstances of the FPS claim under the FET claim.⁸²

3.2.3 The Prohibition against Unreasonable and Discriminatory Measures

Third sentence of art. 10(1) ECT not only stipulates the FPS standard, it also prohibits states from impairing investments by “*unreasonable and discriminatory measures*”⁸³ – the so-called ‘non-impairment standard’.

Whereas unreasonable measures have been described as such that are “*not founded in reason or fact but on caprice, prejudice or personal preference*”,⁸⁴ measures are discriminatory when “*like persons [are] being treated in a different manner in similar circumstances without reasonable or justifiable grounds*”.⁸⁵ Essentially, the intent of the state need not be to discriminate – measures with discriminatory effects suffice to breach the provision.⁸⁶ For measures to breach the non-impairment standard, the impairment must be significant.⁸⁷

3.2.4 The Prohibition against Unlawful Expropriation

Corresponding to the well-known standard of expropriation under international law, art. 13(1) ECT stipulates that an expropriation is unlawful, “*except where such Expropriation is: (a) for a purpose which is in the public interest; (b) not discriminatory; (c) carried out under due process of law; and (d) accompanied by the payment of prompt, adequate and effective compensation.*”⁸⁸ Compensation shall amount to the fair market value of the expropriated investment.⁸⁹

The prohibition not only covers direct nationalisation or expropriation (being a possession taking by the state), the four criteria similarly applies “*to a measure or measures having effect equivalent to nationalisation or expropriation*”⁹⁰ – i.e. indirect expropriation. While some cases regarding direct

⁸¹ Dolzer & Schreuer (2012), p. 267; *AES Summit* (2010), para. 13.3.2; *National Grid* (2008), paras. 187, 189

⁸² See e.g. *PV Investors* (2020), para. 634

⁸³ Art. 10(1) ECT, third sentence

⁸⁴ *Plama* (2008), para. 184; Miljenić (2018), p. 69

⁸⁵ *Plama* (2008), para. 184; *Hydro Energy* (2020), para. 577; *Coop & Seif* (2018), p. 246

⁸⁶ *Electrabel* (2012), para. 7.152; Miljenić (2018), p. 70

⁸⁷ *Electrabel* (2012), para. 7.152; Benson, et al. (2019), p. 49

⁸⁸ Art. 13(1) ECT

⁸⁹ *ibid.*

⁹⁰ *ibid.*

expropriation indeed has been brought under the ECT, the majority of cases claiming breach of art. 13(1) are concerned with (alleged) indirect expropriation.⁹¹

Recent developments of the prohibition against indirect expropriation have to a large extent related to so-called regulatory expropriation, where regulative measures taken by the state have affected the value of the investment.⁹²

⁹¹ Whereas direct expropriation merely has been considered in four cases, claimants have invoked indirect expropriation in 29 ECT arbitrations at this time of writing. See ECT Website.

⁹² Section 4.1

4 JURISPRUDENCE ON THE ECT'S LIMITATIONS ON THE STATE'S RIGHT TO REGULATE

Particularly sparked by Spain's, Italy's and the Czech Republic's legal reforms, rolling back subsidy schemes for renewable energy production, i.a. by reducing feed-in tariffs, imposing new taxes and retrospectively reducing subsidies (hereinafter referred to as the '*green energy cases*'), the majority of ECT arbitrations has concerned the state's right to regulate vis-à-vis the protection of the investment.

The commonly invoked provisions of the ECT in cases concerning adverse regulatory measures are art. 10(1) and art. 13(1). Jurisprudence demonstrates that claims under art. 13(1) ECT are generally simpler than art. 10(1) claims, which uncertain scope and substance often give rise to broader reflections and comprehensive appreciations by tribunals. Therefore, jurisprudence on art. 13(1) ECT is analysed first in section 4.1. Against that backdrop, art. 10(1) ECT is subject to consideration in section 4.2. Finally, the jurisprudence on the ECT's limitations on the state's right to regulate is summarised in section 4.3.

4.1 ARTICLE 13(1) OF THE ECT

As briefly established, art. 13(1) ECT prohibits unlawful expropriation – direct as well as indirect. In the context of investors seeking compensation for a loss suffered by a state's amendments of the regulatory framework, investors have in numerous cases claimed that the state's regulatory measures had an effect tantamount to expropriation, i.e. that the state had indirectly expropriated the investment. The following selected decisions illustrate the approach by tribunals in assessing such claims.

In the first case under the ECT regarding a state's right to regulate, *Nykomb*, the tribunal assessed whether Latvia's changes to its energy law had an effect equivalent to expropriation of the Swedish company Nykomb's investment in the Latvian company Windau. In short, the claim was based on an undertaking by the state-owned company Latvenergo to purchase electricity from Windau for twice the regular tariff for an eight-year period.⁹³ However, in accordance with a later amendment of Latvia's energy law, Latvenergo reduced payments to the considerably lower tariff equal to 75 % of the regular tariff.

⁹³ *Nykomb* (2003), p. 29

Having established that, when examining a state's changes to the regulatory framework, the “*decisive factor [...] must primarily be the degree of possession taking or control over the enterprise*”,⁹⁴ the tribunal dismissed the expropriation claim.⁹⁵ While the tribunal therefore refrained from considering the regulation's effect on the investment's value, the tribunal laid the foundation for future expropriation claims under the ECT; a strict approach.

The tribunal in *AES Summit* was the first ECT tribunal to hold that a state's measures may amount to indirect expropriation when the investment is “*deprived, in whole or significant part, of its value*”⁹⁶ – a standard that has been reiterated, albeit rephrased, by almost every subsequent tribunal.⁹⁷ The case concerned Hungary's modifications to the regulatory framework for energy operators, which allowed Hungary to reintroduce regulatory prices for electricity. The tribunal, noting that the regulatory pricing did not interfere with the ownership or use of the investment and that the investor (AES) continued to receive substantial revenues, dismissed the expropriation claim.⁹⁸

The tribunal in *Mamidoil* stressed that an expropriation claim will not succeed merely by showing loss of value or deprivation of benefits; such effects must be related to “*an indirect deprivation of one or several of [the] essential characteristics [of property]*”.⁹⁹ The tribunal substantiated its argument by holding that:

“[...] a further extension into the sphere of damages, loss of value and profitability, without regard to the substance and attributes of property, would deprive the [expropriation] claim of its distinct nature and amalgamate it with other claims”.¹⁰⁰

Put differently, the tribunal ascertained that, as expropriation per se centres on the essence of property, a loss of value not related to an interference with the control or use of the investment cannot be considered an indirect expropriation.

⁹⁴ *id.*, p. 33

⁹⁵ *ibid.*, p. 33

⁹⁶ *AES Summit* (2010), para. 14.3.1

⁹⁷ See the following, especially in relation to the ‘substantial deprivation’ criteria

⁹⁸ *AES Summit* (2010), para. 14.3.2-14.3.3

⁹⁹ *Mamidoil* (2015), para. 569

¹⁰⁰ *id.*, para. 570

Later, the tribunal in *Charanne* (the first of the ‘green energy cases’) was tasked to examine whether Spain’s changes to its renewable energy framework, reducing the feed-in tariff for solar energy production, amounted to indirect expropriation of the claimant’s investment. The claimants argued that the regulatory amendments had “*reduced the profitability of [the investment]*” and that “*a loss of profitability of this magnitude is generally considered serious in the business environment.*”¹⁰¹ However, the tribunal bluntly dismissed the claimant’s arguments, as such reasoning:

*“[...] would lead to the conclusion that any measure affecting profitability of a company could be considered an expropriation by the mere fact that it entails a decrease in profits and, therefore, in value. This, of course, cannot be the case. For a measure to be considered as equivalent to an expropriation, its effects must be of such a significance that it could be considered that the investor has been deprived, in whole or in part, of its investment.”*¹⁰²

A similar approach was taken by the tribunal in *BayWa*, one of latest ‘green energy cases’. The case also examined Spain’s renewable energy regulation, including later amendments that were not considered in *Charanne*. The claimants argued i.a. that the overall effect of Spain’s regulatory measures amounted to an indirect expropriation as the project would not generate dividends to the shareholders until at least 2024 due to the loss suffered. Corresponding to the *Charanne* tribunal’s bluntness, the *BayWa* tribunal dismissed the claimants’ argument:

*“But this is to confuse the financial impact of change in the subsidy regime with the taking of property. On that view, any significant cost or burden on an investor could be equated to expropriation, pro tanto, by the entity responsible for the cost or burden [...]. Within broad limits, the loss of advantages is not to be equated to the taking of rights.”*¹⁰³

In a general sense, ECT tribunals have considered a state’s adverse regulatory measure unlawful indirect expropriation when the measure has led to a ‘substantial deprivation’, i.e. a loss of all significant economic value of the investment, considered equivalent to a deprivation of one or

¹⁰¹ *Charanne* (2012), para. 463

¹⁰² *id.*, para. 465

¹⁰³ *BayWa* (2019), para. 431

several essential characteristics of property – as opposed to the mere profitability of the investment.¹⁰⁴

This mirrors the so-called “sole-effect doctrine” developed in non-ECT jurisprudence, where liability arises, regardless the character of the measure, on basis of the economic result suffered by the investor. Curiously, the tribunal in *Hydro Energy* – the most recent ECT decision – was the first of the cases analysed in this thesis to introduce the counterpart approach; the “police powers doctrine”.¹⁰⁵ In essence, the police powers doctrine stipulates that a state’s bona fide measures cannot amount to expropriation if the measures are non-discriminatory and protecting legitimate public welfare objectives.¹⁰⁶ While the *Hydro Energy* tribunal emphasised its adherence to the doctrine, it rejected the art. 13(1) claim by reference to the effects of Spain’s measures – as every other ECT tribunal thus far.¹⁰⁷

Considering that no ECT tribunal has yet found a state’s regulatory measures to have an effect ‘equivalent to nationalisation or expropriation’¹⁰⁸, tribunals seemingly approach art. 13(1) ECT conservatively, reserving the scope of the provision for rare circumstances, well-assured that art. 10(1) ECT might not require an equally high threshold.

4.2 ARTICLE 10(1) OF THE ECT

In the light of the extensive ECT jurisprudence, art. 10(1) ECT appears inevitable for tribunals tasked with balancing the investor’s protection against the state’s right to regulate. Besides having been repeatedly invoked by investors, art. 10(1) ECT is yet the only provision that tribunals have found was breached by a state’s adverse regulatory measures.¹⁰⁹

Art. 10(1) may, as outlined in section 3.2, *prima facie* be understood to encompass various separable substantive investment protection standards, including the FET standard, the FPS standard and the non-impairment standard. However, the practical application is not equally

¹⁰⁴ See e.g. *Blusun (2016)*, para. 398; *Charanne (2012)*, para. 464; *Electrabel (2012)*, para. 6.62; *Isolux (2016)*, para. 839; *Novenergia (2018)*, para. 727; *BayWa (2019)*, para. 422; *Hydro Energy (2020)*, para. 531

¹⁰⁵ *Hydro Energy (2020)*, para. 534

¹⁰⁶ *ibid.* For non-ECT jurisprudence, see *Metbanex (2005)*, part IV, chapter D, para. 7; *Saluka (2006)*, para. 262; *Bear Creek (2017)*, para. 471

¹⁰⁷ *Hydro Energy (2020)*, para. 537

¹⁰⁸ The wording of art. 13(1) ECT

¹⁰⁹ See ECT Website

clear-cut; tribunals have generally found it a challenging task to define the content and scope of the individual standards as free-standing and separable obligations.

The *Plama* tribunal, for instance, recognized that international investment tribunals have generally found a strong correlation between the FET standard and the non-impairment standard.¹¹⁰ The distinction between those standards is further obliterated by the curiosity of the tribunals in *Electrabel*, *Mamidoil* and *Charanne* applying the same test for examining the FET standard as developed and applied by the *AES Summit* tribunal in its examination of the non-impairment standard.¹¹¹ Likewise, the tribunal in *PV Investors* found similarities in the standards in art. 10(1) ECT when dismissing every additional claim under art. 10(1) by reference to its initial dismissal of the FET claim.¹¹²

Remarkably, an unusual pragmatic approach was taken by the *RREEF* tribunal. Rather than getting lost in academic reflections, the tribunal considered art. 10 ECT in its entirety to constitute the applicable FET standard, rendering any distinctions redundant.¹¹³ For present purposes, it is of no avail to discuss the accuracy of the tribunal's aberrant assertion. It is, however, beneficial to adopt a similar approach to the matters in question.

Indeed, persisting to distinguish between the standards entailed in art. 10(1) ECT would, for the purposes of clarifying the ECT's limitations on the state's right to regulate, be unduly formalistic. Depending on the factual circumstances of the case, the different standards must be recognized as factors, each comprising a piece of the complete puzzle, illuminating different aspects of relevance for the tribunal's examination – closely interrelated and at times overlapping.

Therefore, the analysis provided in this section is structured in an effort of outlining – in a cohesive and intuitive order – the broad variety of considerations expressed by tribunals examining art. 10(1) ECT in the context of adverse regulatory measures. In the matter of structure, the section is inspired by the three-step approach found in jurisprudence on the investor's legitimate expectations, considering: First, whether the investor had legitimate expectations that

¹¹⁰ *Plama* (2008), para. 183

¹¹¹ *AES Summit* (2010), para. 10.3.7; *Electrabel* (2012), para. 8.34; *Mamidoil* (2015), para. 791; *Charanne* (2012), para. 515

¹¹² *PV Investors* (2020), paras. 623, 634

¹¹³ *RREEF* (2019), paras. 258-260

the legal framework would not be modified. Second, whether the investor in fact relied on those expectations. Third, whether the state's regulatory measures frustrated the investor's legitimate expectations.¹¹⁴

As the second 'step' is determined exclusively on factual circumstances, it is not pertinent to the matter at hand. Evidently, the first and third 'step' are due considerations of the interests at stake; the investor's investment protection and the state's right to regulate. The following analysis of art. 10(1)'s limitations on the state's right to regulate is correspondingly bifurcated. Thus, the elements of the investor's protection are under scrutiny in section 4.2.1, whereas the conditions for the state's exercise of its regulatory sovereignty are subject to examination in section 4.2.2.

The analysis shows that in view of the investor's protection, the standard of 'legitimate expectations' is the substantial element under assessment, whereas the remaining art. 10(1) standards primarily show their justification when examining the acts of the state.

4.2.1 The investor's legitimate expectations

The concept of legitimate expectations as part of the investor's right to FET under the ECT was originally hesitantly considered by the *Plama* tribunal. In contrast to the tribunal's shy approach, the investor's legitimate expectations is now acknowledged to be the primary element of FET.¹¹⁵ And although tribunals have indeed adopted different (and sometimes conflicting) approaches to examining the investor's legitimate expectations, some unity appears when analysing ECT jurisprudence. Four basic standpoints that are generally not contested by tribunals may briefly be summarized as follows:

First: an investor's legitimate expectations may, as stated by the *Plama* tribunal, be defined as "*the "reasonable and justifiable" expectations that were taken into account by the foreign Investor to make the Investment.*"¹¹⁶

¹¹⁴ *AES Summit* (2010), para. 9.3.17. See also e.g. *Plama* (2008), para. 176; *BayWa* (2019), para. 459; *Antaris* (2018), para. 360

¹¹⁵ Section 3.2. See also Levashova (2019), p. 113

¹¹⁶ *Plama* (2008), para. 176

Second; while the determination of whether the investor actually relied on its legitimate expectations is subjective of nature, the assessment of what the investor legitimately could have expected “*must be based on an objective standard or analysis*”.¹¹⁷ The *AES Summit* tribunal qualified the objective standard to be that of a “*reasonably informed business person*”.¹¹⁸

Third; as indicated by the *Plama* tribunal in the above cited definition, the investor’s legitimate expectations must be assessed at the time of investment.¹¹⁹ The supposition is intuitive and closely related to the second ‘step’; i.e. whether the investor relied on its legitimate expectation.

Fourth; tribunals have consistently held that the legitimacy of the investor’s expectations are always subject to a factual analysis of the circumstances of the specific case, rather than considering the FET standard in the abstract.¹²⁰

Notwithstanding such case-specificity, the analysis of ECT jurisprudence conducted in the present thesis identify three considerations that have generally been vital to tribunals’ examination of whether investors had legitimate expectations capable of limiting the state’s right to regulate.¹²¹ Tribunals have first considered (i) whether the state had provided specific commitments to the investor. Absent such specific commitments, tribunals have involved more liberal considerations to assess the investor’s generic expectations, which include (ii) the investor’s expectations of a stable regulatory framework and (iii) the political, economic and regulatory environment of the state. Notably, in cases where tribunals have found that specific commitments existed, the latter two (more liberal) considerations have been needless and hence omitted.¹²²

4.2.1.1 *Specific commitments*

Tribunals examining art. 10(1) ECT have consistently held that an investor’s expectations are legitimate when they are based on specific commitments made by the state to the investor. However, the level of specificity required by tribunals differs. The *Masdar* tribunal (in one of the ‘green energy cases’) outlined two schools of thought on the question of which commit-

¹¹⁷ *Charanne* (2012), para. 495. See also e.g. *Electrabel* (2012), para. 7.76; *Watkins* (2020), para. 517; *PV Investors* (2020), para. 613; *Isolux* (2016), para. 777

¹¹⁸ *AES Summit* (2010), para. 9.3.34

¹¹⁹ See e.g. *AES Summit* (2010), para. 9.3.8; *PV Investors* (2020), para. 575; *National Grid* (2008), para. 173

¹²⁰ See e.g. *AES Summit* (2010), para. 9.3.40; *Watkins* (2020), para. 517; *PV Investors* (2020), para. 573

¹²¹ See also Levashova (2019), p. 116, referring to alike elements identified in her dissertation on the FET standard

¹²² See e.g. *Masdar* (2018); *NextEra* (2019)

ments can give rise to protected legitimate expectations: The one that emphasises that commitments must be specific towards the investor, such as stabilisation clauses (a direct undertaking from the state, promising the particular investor that its investment will be protected from regulatory amendments), and the one that accepts commitments resulting from the general regulatory framework.¹²³

Starting with the former, the *Masdar* tribunal emphasised that this school of thought is of the view that specific commitments giving rise to legitimate expectations cannot result from general regulations, as that would interfere with the state's regulatory sovereignty. As the tribunal stated, it espouses the principle, “*that a stabilisation commitment made in a law is just as much subject to change as all the other dispositions of the law in question.*”¹²⁴

The tribunals in *Masdar* and *NextEra* (both were ‘green energy cases’) examined whether Spain had made specific commitments to the respective investors. As stressed by the investors, the regulatory regime in force at the time of investment ‘guaranteed’ a reasonable rate of profitability and contained stabilisation clauses which ensured that subsequent amendments would not affect existing plants.¹²⁵ While the *Masdar* tribunal conveniently refrained from drawing a conclusion,¹²⁶ the tribunal in *NextEra* emphasised that it did not find the regulatory framework in and of itself sufficient to give rise to legitimate expectations, as the framework “*was based on legislation and legislation can be changed.*”¹²⁷

However, both tribunals found that the ‘guarantees’ in the general regulatory regime were subsequently reiterated directly towards the respective investors. In *Masdar*, the investor had received specific letters from Spanish officials, expressly stating that the investment would benefit from the applicable regulatory framework and that the regulatory regime would apply to the investment throughout its operating life.¹²⁸ In *NextEra*, the investor i.a. received numerous statements in writing from Spanish officials and showed internal memoranda reporting on meetings with Spanish officials (which were undisputed by Spain).¹²⁹ Both *Masdar* and *NextEra*

¹²³ *Masdar* (2018), para. 490

¹²⁴ *id.*, para. 504. Such reasoning originates from Charanne, see *Charanne* (2012), para. 493

¹²⁵ *Masdar* (2018), paras. 499-503; *NextEra* (2019), paras. 421-422

¹²⁶ *Masdar* (2018), para. 521

¹²⁷ *NextEra* (2019), para. 584

¹²⁸ *Masdar* (2018), paras. 516-519

¹²⁹ *NextEra* (2019), para. 588

received general statements to industry, press releases, presentations and reports distributed to potential investors to attract them.¹³⁰ These reiterations considered as a whole were by the tribunals considered to constitute specific commitments.¹³¹ Thus, the investors' expectations of unaltered benefits (*Masdar*) and legal security (*NextEra*) were legitimate.

The other school of thought finds that specific commitments giving rise to protected legitimate expectations “*can result from general statements in general laws or regulations.*”¹³² Such narrative and perception is evident in the United Nations Conference on Trade and Development's (UNCTAD) publication on FET, where the conducted study of published arbitral decisions suggested that an investor may derive legitimate expectations from:

*“[...] rules that are not specifically addressed to a particular investor but which are put in place with a specific aim to induce foreign investments and on which the foreign investor relied in making his investment.”*¹³³

Coincident with UNCTAD's conclusions, professor Tawil argued, in his dissenting opinions in *Charanne* and *Isolux* (both were ‘green energy cases’), that legitimate expectations can be generated from the regulatory framework in force at the time of investment, especially when the stated purpose of the investor-friendly regulation was to attract investments in a certain sector of the economy.¹³⁴

Spain's renewable energy regulation was also under scrutiny by the tribunals in *9REN*, *Cube* and *Watkins*, which all found that the general regulation contained specific commitments eligible of giving rise to legitimate expectations.¹³⁵

Adding only to the perplexity of the matter, and serving as an interim conclusion of this section, the latest decisions on art. 10(1) ECT (published within a few months), examining the same regulatory framework, eminently illustrate the existing obscurity and disunity: One tribunal has found the state's general regulation to contain specific commitments;¹³⁶ one tribunal has found

¹³⁰ *Masdar* (2018), para. 509; *NextEra* (2019), para. 588

¹³¹ *id.*, para. 520; para. 596

¹³² *Masdar* (2018), para. 490

¹³³ UNCTAD FET Study (2012), p. 69

¹³⁴ *Charanne* (2012), dissenting opinion of Prof. Dr. Guido Santiago Tawil, para. 5; *Isolux* (2016), dissenting opinion of Prof. Dr. Guido Santiago Tawil, para. 4

¹³⁵ *9REN* (2019), para. 294; *Cube* (2019), paras. 397, 404; *Watkins* (2020), para. 526

¹³⁶ *Watkins* (2020), para. 526

that the regulatory framework did not and could not constitute a specific commitment made to the investor;¹³⁷ and yet another tribunal has held that while it found that one law in and of itself could not be a specific commitment, the regulatory framework as a whole (starting with regulation from 1997) had as a leitmotiv to guarantee reasonable rates of return to investors, i.e. was a specific commitment.¹³⁸

4.2.1.2 *A stable regulatory framework*

However, specific commitments are not indispensable to establish that the investor had legitimate expectations.¹³⁹ Absent specific commitments, tribunals have generally assessed the legitimacy of the investor's expectations on the basis of broader considerations. An often-raised question is whether the investor's expectations of a stable regulatory framework were legitimate.

Considering the specific reference to 'stable conditions' in the first sentence of art. 10(1) ECT and the broader EEC context, accentuating the need for regulatory stability, it is generally acknowledged in ECT jurisprudence that stability of national legal frameworks is certainly protected by the FET standard under the ECT – probably even more than under other IIAs.¹⁴⁰

Despite tribunals' differing methodical approaches to stability, for present purposes, it is deemed appropriate to understand stability as a minimum standard for what the ECT investor can legitimately expect.¹⁴¹ The question then arises as to what degree of stability is legitimate to expect?

The answer is, of course, not straightforward. Therefore, clarification may preliminarily be sought by considering what is *not* legitimate to expect by an investor. For instance, the tribunals in *Antaris* and *PV Investors* both referred to the non-ECT tribunal in *EDF*, holding that the investor:

¹³⁷ *Hydro Energy (2020)*, para. 596

¹³⁸ *PV Investors (2020)*, para. 616

¹³⁹ See e.g. *Electrabel (2012)*, para. 7.78; *Antaris (2018)*, para. 360; *BayWa (2019)*, para. 59

¹⁴⁰ See especially *Watkins (2020)*, para. 540. See also e.g. *Plama (2008)*, para. 173; *Isolux (2016)*, para. 765; *Eiser (2017)*, paras. 378-382; *Charanne (2012)*, paras. 477, 484; *PV Investors (2020)*, p. 566

¹⁴¹ As held by e.g. *Antaris (2018)*, paras. 365-399; *BayWa (2019)*, paras. 477-496; *PV Investors (2020)*, para. 567

*“may not rely on a bilateral investment treaty as a kind of insurance policy against the risk of any changes in the host State’s legal and economic framework. Such expectation would be neither legitimate nor reasonable.”*¹⁴²

Hence, an expectation of stability is only legitimate if it realizes the fluctuating nature of regulation. As originally held by the *AES Summit* tribunal:

*“[a] legal framework is by definition subject to change as it adapts to new circumstances day by day and a state has the sovereign right to exercise its powers which include legislative acts.”*¹⁴³

Equally, the *Electrabel* tribunal established that an investor must expect the state to maintain some “regulatory flexibility” to modify its regulation in the public interest.¹⁴⁴ Similarly, the oft-cited *Charanne* tribunal stressed that investors cannot legitimately expect that the regulatory framework will remain unchanged for the lifetime of the investment.¹⁴⁵ Admitting such regulatory stabilisation clause would be inappropriate, as “circumstances may change”.¹⁴⁶

Now, returning to the question of what degree of stability may legitimately be expected, the *Charanne* tribunal provided some clarity by asserting that investors can legitimately expect that, when modifying the regulation, “the [state] will not act unreasonably, disproportionately or contrary to the public interest.”¹⁴⁷ This entails, the tribunal held, that modifications must not be “capricious or unnecessary” and shall not “suddenly and unpredictably eliminate the essential characteristics of the existing regulatory framework”¹⁴⁸

Later, the *Eiser* tribunal, which assessed the same regulatory regime (including later amendments), adopted a similar reasoning by finding that investors may legitimately expect that a state “would not drastically and abruptly revise the regime, on which their investment depended”.¹⁴⁹

¹⁴² *EDF (2009)*, para. 217. See *Antaris (2018)*, para. 360(10); *PV Investors (2020)*, para. 578

¹⁴³ *AES Summit (2010)*, para. 9.3.29

¹⁴⁴ *Electrabel (2012)*, para. 7.77

¹⁴⁵ *Charanne (2012)*, paras. 499, 503

¹⁴⁶ *id.*, para. 503

¹⁴⁷ *id.*, para. 514

¹⁴⁸ *id.*, para. 517

¹⁴⁹ *Eiser (2017)*, para. 387

Also the *Blusun* tribunal expressed similar views in yet one of the ‘green energy cases’. The tribunal held that investors may legitimately expect that a state’s amendments to a regulatory framework are:

*“done in a manner which is not disproportionate to the aim of the legislative amendment, and should have due regard to the reasonable reliance interests of recipients who may have committed substantial resources on the basis of the earlier regime.”*¹⁵⁰

The reasoning of the *Blusun* tribunal, which has been reiterated by the latest ECT tribunals,¹⁵¹ is thus closely related to an assessment of the state’s regulatory measures.¹⁵² Arguably, an investor may always legitimately expect a minimum level of stability of the regulatory framework in as much as amendments to the framework are not unreasonable, disproportionate or discriminatory.

To summarize, while no investor can legitimately expect that (absent specific commitments) the regulatory regime is frozen and not subject to changes, the investor may rest on the assurance in art. 10(1) ECT that the state is restricted from arbitrary modifications (such as a complete transformation) of its regulatory framework without due consideration to investors that have invested on the basis of that regulation. The extent of the protection of the investor’s legitimate expectation of a stable regulatory framework must therefore be determined in the light of the state’s regulatory measures.

4.2.1.3 *The political, economic and regulatory environment of the state*

In the objective assessment of which expectations a reasonably informed businessperson would have had at the time of investment, tribunals have emphasised the context of the state in which the investment was made. Of relevant factors, ECT tribunals have especially given due consideration to the political, economic and regulatory environment of the state.

The *Mamidoil* tribunal, for instance, particularly emphasised the circumstances of Albania when considering the investor’s legitimate expectations. The case concerned Albania’s adverse regulatory measures which i.a. affected the investor Mamidoil’s business of importing and selling

¹⁵⁰ *Blusun* (2016), para. 319(5)

¹⁵¹ See e.g. *BayWa* (2019), para. 460; *PV Investors* (2020), para. 583; *Hydro Energy* (2020), para. 568

¹⁵² Section 4.2.2

oil products in Albania. At the time of investment, Albania had just emerged from “*a highly repressive and isolationist communist regime*”,¹⁵³ facing challenges of building a modern state administration by drafting and implementing new regulation.¹⁵⁴ To this end, the tribunal stressed the investor’s awareness of Albania’s dilapidated situation with no stability.¹⁵⁵ In Albania, the tribunal concluded, an investor could not legitimately expect a level of stability of the legal regime corresponding to those of e.g. UK, USA or Japan – such expectation would be irrational.¹⁵⁶

The *Mamidoil* tribunal found i.a. support in the non-ECT arbitration *Parkerings*, which concerned Lithuania’s transition from its past as a Soviet Union country to candidate for the EU.¹⁵⁷ In the case, the tribunal held that legislative amendments necessary for the transition were to be regarded as likely by any businessman and, accordingly, that no investor could have legitimately expected a “*stable legal ground*”.¹⁵⁸ Using a similar reasoning for the opposite argument, Gary Born asserted, in his dissenting opinion in *Antaris*, that an investor may legitimately expect certainty, stability and rule of law when investing in an EU member state.¹⁵⁹

In terms of the regulatory environment of the state, recent ECT tribunals have adopted a sort of ‘baseline approach’ to determine the level of regulatory stability that was ordinary and thus legitimate to expect.¹⁶⁰ For instance, the tribunal in *PV Investors* held that the regulatory measures in dispute should be viewed in the context of the entirety of the Spanish regulatory framework.¹⁶¹ As the disputed measures were part of a regulatory regime that had been subject to continuous changes since the inception in 1997, the tribunal asserted that such “*propensity for change should have been clear to any reasonable operator investing in this sector*” and held that the investor could not have legitimately expected to receive the economic benefits of the disputed measures for the lifespan of the investment.¹⁶²

¹⁵³ *Mamidoil* (2015), para. 625

¹⁵⁴ *id.*, para. 628

¹⁵⁵ *id.*, para. 625

¹⁵⁶ *id.*, paras. 626, 629

¹⁵⁷ *Parkerings* (2007), para. 335

¹⁵⁸ *id.*, paras. 333, 306

¹⁵⁹ *Antaris* (2018), dissenting opinion by Gary Born, para. 77

¹⁶⁰ See e.g. *Isolux* (2016); *Stadtwerke* (2019); *PV Investors* (2020)

¹⁶¹ *PV Investors* (2020), para. 601

¹⁶² *id.*, para. 602

A different aspect of the regulatory environment is domestic jurisprudence on the regulatory measures in question. For example, in *Charanne*, *Stadtwerke* and *PV Investors*, the tribunals emphasised judgements of the Spanish Supreme Court having held that modifications to the regulatory framework in question were to be expected by investors. While not binding for the tribunals, the judgements were of factual relevance, as the tribunals found that a reasonable and prudent investor would have adjusted expectations accordingly.¹⁶³

Some tribunals have, when considering the environment of the state, focused on the investor's diligent conduct, i.e. whether the investor has performed a proper due diligence investigation. It has been argued that the investor's protection under art. 10(1) ECT is contingent on the due diligence performed.¹⁶⁴ While others have contended that view,¹⁶⁵ it is beyond the scope of present thesis to join such discussions. It thus suffices to establish that some tribunals may give effect to the investor's due diligence.

In an attempt of summarizing how tribunals have considered whether the circumstances of the state were of such nature that the investor's expectations of stability were not legitimate, inspiration may be sought in the *Charanne* award, holding that, in essence, it was a matter of whether the state's regulatory measures in question were "*reasonably foreseeable*" at the time of investment.¹⁶⁶

4.2.2 The state's measures

Having considered the investor's legitimate expectations, the spotlight must, in order to determine whether a state's regulatory measures violated art. 10(1) ECT, be turned on the aspects of the state's measures.

It must be recalled that the assessments of the investor's expectations and the state's measures are closely interrelated. Notably, as the basis for the investor's expectations moves away from the most specific commitments (such as stabilisation clauses) towards more indefinite and

¹⁶³ *Stadtwerke* (2019), para. 277; *Charanne* (2012), para. 508; *PV Investors* (2020), para. 603

¹⁶⁴ See e.g. *Mamidoil* (2015), para. 634; *Charanne* (2012), para. 505; *Stadtwerke* (2019), para. 264.

¹⁶⁵ See e.g. *Isolux* (2016), para. 781; *PV Investors* (2020), para. 613; *Antaris* (2018), dissenting opinion by Gary Born, paras. 73-74

¹⁶⁶ *Charanne* (2012), para. 505

broadly defined fact-specific circumstances, gradually, the relevance of an assessment of the state's measures increases.

Generally, tribunals adhere to a balancing approach of the protection of the investor vis-à-vis the sovereignty of the state.¹⁶⁷ It appears from ECT jurisprudence that different factors have been considered essential for determining to which side the scales should tip. Ignoring synonymous discrepancies, the majority of tribunals have followed the line of reasoning originating from the *AES Summit* tribunal which based its examination of the state's measures on a 'two-legged' approach; (i) whether the state pursued a rational public policy objective and (ii) the reasonableness of the act of the state in relation to that policy.¹⁶⁸ The analysis of jurisprudence conducted in this thesis suggests that a 'third leg' should be added to the approach; (iii) considerations of the state's margin of appreciation.

4.2.2.1 *The objective of the regulatory measures*

Candidly, some tribunals have diminished the necessity of assessing whether the state's measures pursued a rational public policy. The *Blusun* tribunal for example held that such judgment should be trusted to the authorities of the state.¹⁶⁹ However, these tribunals represent a negligible minority. The vast majority have emphasised that, for a state's regulatory measures to not violate art. 10(1) ECT, the state must pursue a legitimate policy objective.

In *AES Summit*, for instance, concerning Hungary's reintroduction of regulatory pricing, the tribunal established that a "*rational policy is taken by a state following a logical (good sense) explanation and with the aim of addressing a public interest matter*".¹⁷⁰ One of Hungary's arguments for reintroducing regulatory prices was the failure to agree on amendments to the PPA with the generator. The tribunal held that the objective of Hungary's measures would not be legitimate if the regulation was based on public policy aimed only at Hungary using its state sovereignty to interfere in contractual relationships.¹⁷¹ However, the tribunal concluded that the aim of Hungary's measures was to combat so-called luxury profits earned by generators – which was a "*perfectly*

¹⁶⁷ See e.g. *Electrabel (2015)*, para. 154; *Antaris (2018)*, para. 360(9); *9REN (2019)*, para. 254; *Watkins (2020)*, para. 521; *PV Investors (2020)*, para. 577

¹⁶⁸ *AES Summit (2010)*, para. 10.3.7

¹⁶⁹ *Blusun (2016)*, para. 318. Similarly, see *BayWa (2019)*, para. 480

¹⁷⁰ *AES Summit (2010)*, para. 10.3.8

¹⁷¹ *id.*, paras. 10.3.12-10.3.13

valid and rational policy objective”.¹⁷² As such, the tribunal found that an objective of reducing costs for the benefits of consumers “*may well give rise to legitimate reasons for governments to regulate or re-regulate.*”¹⁷³

In *Electrabel*, Hungary’s regulatory measures were once again under scrutiny by an ECT tribunal. In the case, Dunamenti – a subsidiary of the Belgian company Electrabel – based its claims on two measures taken by Hungary; (i) the reintroduction of regulatory prices for electricity and (ii) Hungary’s premature termination of a Power Purchase Agreement (PPA) with Dunamenti.

As regards the former, the tribunal found that Hungary legitimately addressed the generators’ high level of profits and concluded that Hungary’s reintroduction of price regulation was “*a rational and reasonably appropriate measure*”.¹⁷⁴ As regards the latter, Hungary decided to terminate the PPA to ensure compliance with EU competition law, a concern based on the European Commission’s decision, stating that Hungary’s PPAs constituted unlawful state aid.¹⁷⁵ For its assessment of the legitimacy of the policy objective, the tribunal relied on the *AES Summit* criteria¹⁷⁶ and concluded that Hungary’s objective, “*the alignment of its electricity sector with the EU market and the elimination of distortions to competition within and without Hungary*”, was a legitimate government policy.¹⁷⁷

The tribunal also held that Hungary’s objective was to comply with its international obligations and asserted that Hungary can entail international responsibility (e.g. under the ECT) only for its own wrongful acts.¹⁷⁸ As EU law obliged Hungary to implement the decision of the Commission (i.a. to terminate the unlawful PPAs),¹⁷⁹ the tribunal therefore concluded that the “*act by the Commission cannot give rise to liability for Hungary under the [ECT].*”¹⁸⁰

Remarkably, the tribunal deemed it necessary to reject the investor’s claim that Hungary’s objective was to protect the state budget and “*keep the money*”,¹⁸¹ which (as stated by recent ECT

¹⁷² *id.*, para. 10.3.34

¹⁷³ *id.*, para. 10.3.34

¹⁷⁴ *Electrabel (2012)*, para. 8.34

¹⁷⁵ *id.*, para. 6.5

¹⁷⁶ *Electrabel (2015)*, para. 179

¹⁷⁷ *id.*, para. 215

¹⁷⁸ *Electrabel (2012)*, para. 6.72

¹⁷⁹ *id.*, paras. 6.73, 6.86

¹⁸⁰ *id.*, para. 6.76

¹⁸¹ *Electrabel (2015)*, para. 214

tribunals) also would be a legitimate objective. The *Electrabel* tribunal thus indicated that legitimacy is nuanced and that some legitimate objectives are more commendable than others.

Of the many subsequent ‘green energy cases’ under the ECT, so far, no tribunal has found the state’s objective to be illegitimate. Curiously, even the *Blusun* tribunal, notwithstanding the above-cited rejection of the need to consider the objective of the state’s measures, assessed the legitimacy of Italy’s measures by examining whether they pursued a public interest.¹⁸² The tribunal accepted the public interest objective of Italy’s regulatory measures, as they were adopted to implement the EU Renewable Energy Directive 2009/28.¹⁸³

As such, it may be derived from ECT jurisprudence that the state’s objective is legitimate when the state pursues efforts of accommodating and limiting unexpected consequences of regulation – be it for the benefits of the consumers or the taxpayers.¹⁸⁴ Furthermore, tribunals have acknowledged states’ objective of compliance with international obligations.¹⁸⁵ ECT tribunals have not, however, been presented with broader areas of public policy, such as protection of human rights, public health and the environment. Fortunately, such matters have been thoroughly assessed by non-ECT tribunals, the jurisprudence of which may appropriately be outlined briefly for purposes of inspiration.

Regulating in the interest of protecting human rights have been found legitimate by several tribunals, including *Glamis* (concerning human rights of indigenous people) and *AWG* (concerning the right to have access to water). An objective of protecting the public health is also legitimate, according to the tribunals in *Apotex* (concerning regulation affecting import of pharmaceutical drugs) and *Philip Morris* (concerning tobacco regulation). Finally, protection of the environment was considered a legitimate objective by the tribunals in *Metalclad* (concerning operation of a hazardous landfill) and *Chemtura* (concerning refusal to register the pesticide lindane).

¹⁸² *Blusun* (2016), paras. 331, 343

¹⁸³ EU Directive 2009/28 of 23 April 2009 on the promotion of the use of energy from renewable sources.

¹⁸⁴ See e.g. *Antaris* (2018), para. 444; *Mamidoil* (2015), para. 662; *BayWa* (2019), paras. 479-480; *Stadtwerke* (2019), para. 319; *PV Investors* (2020), para. 627

¹⁸⁵ See e.g. *Electrabel* (2012), para. 6.76; *Blusun* (2016), para. 331; *PV Investors* (2020), para. 591

Generally, non-ECT tribunals have held that compliance with international obligations other than those under the applicable IIA justifies the legitimacy of the state's objective.¹⁸⁶ Furthermore, as emphasised by i.a. the tribunal in *Philip Morris*, a state's margin of appreciation is widened when the state pursues severe objectives (i.e. the protection of public health, human rights and the environment).¹⁸⁷

While some non-ECT tribunals have found the objective of a state's measures illegitimate on the basis of the state primarily pursuing political motives,¹⁸⁸ such view does not appear from ECT jurisprudence. For example, the *Electrabel* tribunal stressed that “*politics is what democratic governments necessarily address*”¹⁸⁹ and the *AES Summit* tribunal correspondingly held that:

“[...] the fact that an issue becomes a political matter [...] does not mean that the existence of a rational policy is erased. [...] In fact, it is normal and common that a public policy matter becomes a political issue; that is the arena where such matters are discussed and made public.”¹⁹⁰

To summarize, it appears that the assessment of the legitimacy of the objective of the state's regulatory measures should be observed in the light of the state's admitted regulatory powers under the ECT; to adapt to changing economic, political and legal circumstances.¹⁹¹

While, at this time, no ECT tribunal has found a state's objective illegitimate, the examination of the objective of a state's measures is far from binary – let alone redundant. Tribunals have used their ‘valuation’ of the severity of the objective as the basis for assessing the character of the measures and have allowed a wider margin of appreciation when the measures pursue severe objectives particular worthy of protection.

4.2.2.2 *The character of the regulatory measures*

The character of the state's regulatory measures must be assessed in the light of the investor's legitimate expectations and the legitimate objective pursued by the state. Naturally, when the investor's legitimate expectations are based on a specific commitment, any regulatory measure

¹⁸⁶ See e.g. *Urbaser (2016)*, para. 624; *Philip Morris (2016)*, para. 401; *Chemtura (2010)*, para. 138

¹⁸⁷ *Philip Morris (2016)*, para. 399, referring to *Electrabel (2012)* and *Glamis (2009)*.

¹⁸⁸ See Levashova (2019), pp. 195-200 and the cases cited therein

¹⁸⁹ *Electrabel (2012)*, para. 8.23

¹⁹⁰ *AES Summit (2010)*, paras. 10.3.23-10.3.24

¹⁹¹ *Eiser (2017)*, para. 362

against the commitment will frustrate the expectations, regardless the character of the measures. Accordingly, an assessment of the character of the state's measures is predominantly interesting for expectations that are not based on a specific commitment of stabilisation.

Expectations based on general reliance on stability of the regulatory regime must, as previously stated, accept appropriate changes to the regime, although the state is far from unrestricted.¹⁹² Illustratively, the *Eiser* tribunal asserted that, in a wide sense, the range of lawful regulatory measures is confined by fundamental changes to the regulatory regime without due consideration of existing investments made in reliance on the prior regime.¹⁹³ Equally, tribunals have held that a state's measures would breach art. 10(1) ECT, were they “*radical*”¹⁹⁴ or “*drastic*”.¹⁹⁵ Simultaneously, states are not required “*to elevate unconditionally the interests of the foreign investor above all other considerations in every circumstance*”.¹⁹⁶

In their assessment of the character of the regulatory measures, tribunals have applied numerous principles, including discrimination, reasonableness and proportionality. Without apparent divergence, tribunals have also referred to arbitrariness, unfairness, abusiveness, irrationality and inequity. The following focuses on outlining the elements adopted by tribunals to assess the character of the state's regulatory measures rather than insisting on upholding a formal discussion on semantics.

Discrimination is, however, still largely distinguishable from the remaining principles referred to by tribunals and accordingly deserves specific mentioning – albeit briefly, as discrimination is rarely the focal point of tribunals assessing whether a state's regulatory measures breached art. 10(1) ECT. Illustrative in this regard is the *Charanne* case, where the investor (which had invested in a PV facility) argued that Spain's amendments to the regulatory regime were discriminatory, as rules relating to voltage sags provided a larger compensation for wind generation compared to PV facilities.¹⁹⁷ The tribunal found the argument unconvincing and stressed that “*the State may well apply different rules to different industrial sectors without violating the obligation not*

¹⁹² Section 4.2.1.2

¹⁹³ *Eiser* (2017), para. 363. See also *Electrabel* (2012), para. 7.77

¹⁹⁴ *Watkins* (2020), para. 521

¹⁹⁵ *RREEF* (2019), para. 379

¹⁹⁶ *Electrabel* (2015), para. 165

¹⁹⁷ *Charanne* (2012), para. 538

to discriminate in international law.”¹⁹⁸ Treating materially different sources of energy production differently is therefore not necessarily discriminatory.¹⁹⁹ The character of the state’s regulatory measures must therefore be assessed primarily on other principles.

In its examination of the character of Hungary’s reintroduction of regulatory pricing, the *AES Summit* tribunal understood reasonableness as to mean that:

”[...] there needs to be an appropriate correlation between the state’s public policy objective and the measure adopted to achieve it. This has to do with the nature of the measure and the way it is implemented.”²⁰⁰

In its assessment of the suitability of Hungary’s measures, the tribunal considered first that Hungary had attempted to make generators voluntarily renegotiate the price structure of the PPAs. When unsuccessful, Hungary introduced the regulatory pricing by a vote in the Hungarian parliament. Emphasising that the parliament believed that the measures were the best option at the moment, the tribunal found Hungary’s measures to be “reasonable, proportionate and consistent with the public policy expressed by the parliament,” and thus not in breach of art. 10(1) ECT.²⁰¹

The tribunal in *Electrabel* elaborated that it found the *AES Summit* approach to include “the requirement that the impact of the measure on the investor be proportional to the policy objective sought.”²⁰² After emphasising the difficult situation of Hungary, having to balance the interests of both investors and tax-payers in times of a global financial crisis and massive political and economic changes,²⁰³ the tribunal concluded that compensating 85% of the investor’s stranded costs was “reasonably related” to the legitimate policy objective of e.g. eliminating distortions to competition.²⁰⁴

In *PV Investors*, the tribunal expressed concordant views on the examination of art. 10(1) ECT.²⁰⁵ The tribunal held that Spain’s amendments to its renewable energy regulation,

¹⁹⁸ *Charanne* (2012), para. 538

¹⁹⁹ See similarly *Electrabel* (2015), para. 175

²⁰⁰ *AES Summit* (2010), para. 10.3.9

²⁰¹ *id.*, paras. 10.3.35-10.3.36

²⁰² *Electrabel* (2015), para. 179

²⁰³ *id.*, paras. 213-216

²⁰⁴ *id.*, para. 214

²⁰⁵ *PV Investors* (2020), para. 626

prompted by the economic crisis, “*were not unreasonable, arbitrary, and disproportionate*”.²⁰⁶ Specifically, the tribunal concluded that Spain’s measures were suitable to achieve the pursued objectives of reducing the tariff deficit, as Spain had chosen “*a middle course*” in terms of imposing the burden partially on producers, partially on consumers and partially on taxpayers.²⁰⁷

In its assessment of the correlation between the policy sought and the measure taken, the tribunal in *BayWa* took into consideration whether the measures were necessary for the objective. The tribunal was tasked with examining Spain’s changes to its renewable energy regulation which entailed several modifications of the regulatory regime, including a ‘claw-back’ mechanism which considered past remuneration and deducted ‘excessive profits’ from future payable subsidies.²⁰⁸ The tribunal held that such retrospectivity was frustrating the investor’s legitimate expectations of stability, as the measures had:

*“[...] not been shown to have been necessary to resolve the tariff deficit problem, which would have been solved in any event by the Disputed Measures without much further delay and without the element of claw-back of payments earlier lawfully made.”*²⁰⁹

Finally, tribunals have asserted that state’s measures must have due consideration to the investors affected by the measures. Stemming from the *AES Summit* tribunal’s considerations of the investor’s possibility to still receive a reasonable return²¹⁰ and the *Electrabel* tribunal’s emphasis on the measure’s impact on the investor,²¹¹ the tribunal in *Blusun* eventually held that amendments to the regulatory framework should not be:

*“[...] disproportionate to the aim of the legislative amendment, and should have due regard to the reasonable reliance interests of recipients who may have committed substantial resources on the basis of the earlier regime.”*²¹²

²⁰⁶ *id.*, para. 630

²⁰⁷ *id.*, para. 628

²⁰⁸ *BayWa (2019)*, paras. 488-490

²⁰⁹ *id.*, para. 496

²¹⁰ *AES Summit (2010)*, paras. 10.3.37-10.3.44

²¹¹ *Electrabel (2015)*, para. 179

²¹² *Blusun (2016)*, para. 319(5)

The tribunal concluded that Italy's measures were not disproportionate, i.e. as they were a response to a fiscal need and as the reduction in subsidies was closely related to the reduction in the cost of PV technology. The measures furthermore had due regard to the investor, as they did not abolish already qualified incentives and provided a reasonable period of time for adapting to the regulatory amendments.²¹³

Notably, the tribunal in *Eiser* adopted what may be called an 'effect on investment' test to assess the character of the state's measures. After having briefly accepted that Spain pursued a legitimate public policy problem with the tariff deficit,²¹⁴ taking into consideration that Spain introduced an "entirely new regulatory approach",²¹⁵ the tribunal concluded that Spain's regulatory measures "deprived Claimants of essentially all of the value of their investment",²¹⁶ as the value of the investment was at the time approximately € 4 million, compared to the original investment of € 125 million. Therefore, the tribunal held, Spain's measures violated art. 10(1) ECT.²¹⁷

It appears from the outlined ECT cases that, in the examination of the character of the state's regulatory measures, tribunals have generally considered whether there was an appropriate correlation between the policy sought and the state's measures by three main elements, namely whether the measures; (i) were suitable to achieve the objective, (ii) were necessary for the objective and (iii) had due consideration to the affected investors.

4.2.2.3 *The state's margin of appreciation*

In the overall examination of whether the character of the state's measures, in the light of the objective sought, frustrated the investor's legitimate expectations, tribunals have generally allowed a high measure of deference by reference to state sovereignty. Without divergence in substance, tribunals have also referred to the state's 'scope of discretion' or its 'margin of appreciation'. All synonymous expressions of tribunals' reticence are for reasons of simplicity referred to as the state's margin of appreciation.

In essence, the state's margin of appreciation provides states some freedom to act without incurring liability under the ECT. As the tribunal in *AES Summit* illustratively asserted, art. 10(1)

²¹³ *id.*, paras. 342, 364

²¹⁴ *Eiser* (2017), para. 371

²¹⁵ *id.*, para. 389

²¹⁶ *id.*, paras. 413, 418

²¹⁷ *id.*, paras. 418, 486(b)

ECT is “*not one of perfection*”,²¹⁸ and only measures that are “*manifestly unfair or unreasonable*” may infringe the standard.²¹⁹ Thus, not every imperfection of the state’s measures will breach art. 10(1). While the tribunal noted that Hungary had made sub-optimal procedural shortcomings in its reintroduction of regulatory pricing, Hungary had not acted “*outside the acceptable range of legislative and regulatory behaviour*”.²²⁰

Similarly, the *Electrabel* tribunal was reticent to hold Hungary to account under the ECT’s investment protections without allowing Hungary “*a wide scope of discretion to determine the exact contours of the measure*”.²²¹ The tribunal elaborated its view by stating:

“[T]he decision by a State may be reasonable under the ECT’s FET standard even if others can disagree with that decision. A State can thus be mistaken without being unreasonable.”²²²

The tribunal immediately thereafter stressed that Hungary’s regulatory measures were taken in turbulent economic times in which Hungary’s economy was “*facing severe financial and fiscal constraints*”,²²³ thus indicating that the margin of appreciation widens as the objective sought increases in necessity and severity.

Subsequent tribunals – including the latest ECT decision in *Hydro Energy* – have in abundance confirmed the views of the tribunals in *AES Summit* and *Electrabel*.²²⁴ However, as neither of the tribunals have provided appreciable nuances, there is, for present purposes, no point in meticulously reciting these.

In summary, ECT tribunals allow states a margin of appreciation in determining the regulatory measures necessary for the objective sought. The width of the margin depends largely on the severity and legitimacy of the objective and is a determining factor in assessing the character of the regulatory measures.

²¹⁸ *AES Summit* (2010), para. 9.3.40

²¹⁹ *id.*, para. 9.3.40

²²⁰ *id.*, para. 9.3.73

²²¹ *Electrabel* (2015), para. 180

²²² *id.*, para. 180

²²³ *id.*, para. 181

²²⁴ See e.g. *Antaris* (2018), para. 360(9); *9REN* (2019), para. 254; *BayWa* (2019), para. 459; *PV Investors* (2020), para. 626; *Hydro Energy* (2020), para. 589

4.3 BALANCING THE STATE'S RIGHT TO REGULATE WITH THE INVESTOR'S PROTECTIONS

At this point, hopefully, it appears that ECT tribunals have exercised the balancing approach of the protection of the investor vis-à-vis the state's right to regulate in somewhat diverging fashions, subject to discrepancies based on the factual circumstances or the discretion and preference of tribunals.

Numerous investors have claimed that the state's regulatory measures amounted to an indirect expropriation of the investment. However, ECT tribunals have generally held that art. 13(1) ECT faces a high threshold, as a state's adverse regulatory measure is only to be considered unlawful indirect expropriation when the measure has deprived the investment of all significant value, equivalent to a deprivation of property.²²⁵ No tribunal has yet found a violation of art. 13(1) ECT in the context of a state's regulatory measures.

As to art. 10(1) ECT, tribunals have consistently held that the examination of the restrictions on the state's regulatory sovereignty by the investment protections in art. 10(1) entails a balancing approach of the interests of the investor vis-à-vis the state.²²⁶ When considering the investor's interests, tribunals tend to examine the legitimate expectations of the investor.

Legitimate expectations may arise if the state provides specific commitments to the investor – be it specific towards the particular investor in letters, promises or otherwise.²²⁷ Subject to which school of thought the tribunal adheres to, specific commitments may also be found to stem from general regulation providing guarantees to investors.²²⁸

Absent specific commitments, investors may as a minimum expect a certain level of regulatory stability, i.e. that states refrain from arbitrary, drastic and abrupt changes to the regulatory framework.²²⁹ The level of stability that was legitimate to expect is largely affected by the political, economic and regulatory environment of the state, as the legitimacy is objectively assessed.²³⁰

²²⁵ See e.g. *Mamidoil (2015)*, para. 569; *Charanne (2012)*, para. 465; *Electrabel (2012)*, para. 6.53

²²⁶ See e.g. *Electrabel (2015)*, para. 154; *9REN (2019)*, para. 254; *PV Investors (2020)*, para. 577

²²⁷ *Masdar (2018)*, para. 490

²²⁸ *9REN (2019)*, para. 294; *Cube (2019)*, paras. 397, 404; *Watkins (2020)*, para. 526

²²⁹ Section 4.2.1.2

²³⁰ *Electrabel (2012)*, para. 7.76; *Mamidoil (2015)*, para. 626; *PV Investors (2020)*, paras. 602, 613

To determine whether the state's measures frustrated the investor's legitimate expectations, three considerations are essential: (i) Whether the state pursued a rational public policy objective, (ii) the character of the act of the state in relation to that policy and (iii) whether the act was within the state's margin of appreciation.

Assessing the objective sought, tribunals have especially stressed the state's right and need to adapt its regulation to changing economic, political and legal circumstances, including its international obligations.²³¹

When considering the character of the state's regulatory measures, tribunals have as an overarching requirement considered whether there was an appropriate correlation between the policy sought and the state's measures.²³²

Finally, tribunals generally admit states a reasonable margin of appreciation, the width of which increases with the legitimacy and severity of the objectives sought.

Having established the elements shaping states' regulatory flexibility, it must be considered to which extent states do indeed need such flexibility to address climate change.

²³¹ *Eiser (2017)*, para. 362

²³² *AES Summit (2010)*, para. 10.3.9

5 CLIMATE CHANGE IN A LEGAL CONTEXT

Climate change, sustainable development, green transition and the like are not only on the lips of the civilian population but on the agenda and negotiation table for politicians, scientists and corporations. This section briefly presents climate change in a legal context in the sense that section 5.1 outlines the most essential climate change regulation (in relation to energy) and section 5.2 provides some clarity on different courts' views on climate change as a legal doctrine.

5.1 CLIMATE CHANGE REGULATION

Even before the drafting of the ECT had finalized, an essential international instrument on reducing greenhouse gas (GHG) emissions to address climate change had been signed; the UNFCCC. Signed in 1992 and entering into force in 1994, the UNFCCC has as its stated objective to “[stabilise] greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.”²³³ The UNFCCC is – despite its age – still considered one of the most significant instruments in its area.²³⁴ Accordingly, to date, 197 countries have ratified the UNFCCC.²³⁵

With the UNFCCC merely formulating a provision to limit GHG emissions as a non-binding aim,²³⁶ it is not acknowledged due to its legal obligations. Rather, the UNFCCC was the first successful instrument centred on the problem of climate change – and it has provided a unique framework in the area.²³⁷ The most influential feature of the UNFCCC is probably the Conference of the Parties (COP) stipulated in art. 7, which on annual meetings functions as the “*supreme body*” of the UNFCCC.²³⁸ The most significant COPs have been COP3 and COP21 which adopted the Kyoto Protocol and the Paris Agreement respectively.

The 1997 Kyoto Protocol may be seen as to operationalize the UNFCCC, yet in a narrower scope; the Kyoto negotiations were focused on limiting and reducing GHG emissions by specific legally binding commitments for Annex I parties only, i.e. developed countries, including

²³³ Art. 2 UNFCCC

²³⁴ Bodansky, et al. (2017), p. 118

²³⁵ UNFCCC Website

²³⁶ Art. 4(2) UNFCCC. See Bodansky, et al. (2017), p. 120

²³⁷ Bodansky, et al. (2017), p. 158

²³⁸ Art. 7.2 UNFCCC

the EU in its supra-national capacity.²³⁹ Due to its binding emission reduction targets and its subsequent key role in developing a climate regime (including future climate agreements), the Kyoto Protocol has been argued to be “*one of the most complex and ambitious environmental agreements ever negotiated.*”²⁴⁰

The emission reduction targets were individually determined for each of the parties; overall, at least a five per cent reduction of GHG emissions against 1990 levels in the first commitment period (2008-2012).²⁴¹ While targets for a second commitment period (2013-2020) were determined in Doha in 2012 (the Doha Amendment), they have not taken effect as the Doha Amendment has merely been accepted by 137 of the required 144 parties.²⁴²

The 2015 Paris Agreement is set to succeed the Kyoto Protocol but deviates the course charted by the Protocol and other past climate efforts. As such, the Paris Agreement is the first international instrument uniting nations in undertaking ambitious efforts of combatting climate change.²⁴³ The essential aim of the Paris Agreement is to “*strengthen the global response to the threat of climate change, in the context of sustainable development and efforts to eradicate poverty*”,²⁴⁴ which includes the well-known obligation to hold the increase of the global temperature well below 2°C, and pursue efforts to limit the temperature increase to 1.5°C, above pre-industrial levels.²⁴⁵

In pursuance of the aim, the Paris Agreement imposes legally binding obligations of conduct on the parties, requiring their best efforts through nationally determined contributions (NDCs) which is expected to progress over time.²⁴⁶ The significance of the Paris Agreement is illustrated by the short period of time elapsed from its conclusion (December 12, 2015) to it entering into force (November 4, 2016) as well as the total of 189 parties that have ratified the Agreement. Notably, the USA has submitted its notice of withdrawal from the Paris Agreement, taking effect on November 4, 2020.²⁴⁷

²³⁹ UNFCCC Website

²⁴⁰ Bodansky, et al. (2017), p. 161

²⁴¹ Art. 3 Kyoto Protocol

²⁴² UNFCCC Website

²⁴³ *ibid.* See also Bodansky, et al. (2017), p. 210

²⁴⁴ Art. 2 Paris Agreement

²⁴⁵ Art. 2(1)(a) Paris Agreement

²⁴⁶ Art. 4(2) and 4(3) Paris Agreement

²⁴⁷ UNFCCC Website

The International Energy Agency has held that the Paris Agreement is “*at its heart an agreement about energy*”.²⁴⁸ Accordingly, achieving the targets of the Paris Agreement requires a transformation of the energy sector,²⁴⁹ which naturally entails reforming the regulatory framework.²⁵⁰

5.2 JURISPRUDENCE ON CLIMATE CHANGE AS A LEGAL DOCTRINE

Within the recent years, climate change lawsuits have blossomed. The cases have concerned various national and international climate obligations, including human rights and the obligations under the UNFCCC. The following briefly considers some of the essential cases.²⁵¹

In the case of *People v. Arctic Oil*, a number of environmental organisations have sued the Government of Norway for an alleged breach of its obligations under the Norwegian Constitution, the Paris Agreement and the European Convention of Human Rights (ECHR) by issuing oil exploration licenses in the Arctic. The Norwegian Court of Appeal dismissed all claims,²⁵² namely by reference to the fact that a ban of Norwegian oil exploration would merely lead to other states’ increase of production to fill the ‘gap’.²⁵³ Essentially, the Court concluded that achieving the targets of the Paris Agreement is subject to the State’s discretion and not a task for the courts to question.²⁵⁴ The case has been appealed to the Norwegian Supreme Court.

In the *Heathrow Expansion* case, the UK Court of Appeal held that the UK Government, in planning a third runway at Heathrow Airport, had failed to take into account ‘government policy’ – an obligation under section 5(8) of the UK Planning Act – by not considering the Paris Agreement.²⁵⁵ Contrary to the view of the UK Government, the Court concluded that “*the Government’s commitment to the Paris Agreement was clearly part of government policy*”.²⁵⁶ Indeed, while the Court doubtlessly required consideration of the Paris Agreement, the reach of the decision

²⁴⁸ IEA World Energy Outlook (2016), p. 21

²⁴⁹ *ibid.*

²⁵⁰ Bruce (2013), p. 3

²⁵¹ In addition to the following, interesting cases include *Gloucester Resources v. Minister for Planning* (2019), considering the UNFCCC in the refusal of an Australian open cut coal mine. See also the *Commission on Human Rights of the Philippines*’ (yet unpublished) report considering the responsibilities of 47 ‘Carbon Major’ companies in climate change’s impact on human rights.

²⁵² *People v. Arctic Oil* (2020), p. 36

²⁵³ *id.*, pp. 29-30

²⁵⁴ *id.*, p. 27

²⁵⁵ *Heathrow Expansion* (2020), paras. 223, 283

²⁵⁶ *id.*, para. 228

might be limited.²⁵⁷ As such, the Court of Appeal explicitly stated that it did not find that the Government's support to an expansion of the airport "*is necessarily incompatible with the United Kingdom's commitment to reducing carbon emissions and mitigating climate change under the Paris Agreement*".²⁵⁸ Rather, the Court held that the Government was merely obliged to reconsider its policy statement regarding Heathrow Airport in the light of the Paris Agreement – in accordance with statutory requirements to consider government policy.²⁵⁹ In this view, the Court of Appeal did not rely on the Paris Agreement directly as legally binding, but on legally binding statutory obligations giving effect to i.a. the Paris Agreement.

Finally, the most prominent 'climate change case' is arguably the *Urgenda* case,²⁶⁰ in which the Supreme Court of the Netherlands upheld prior courts' decisions that the Dutch Government's climate change actions were insufficient and thus in breach of art. 2 (the right to life) and art. 8 (the right to private and family life) of the ECHR. By reference to ECtHR case law, the Supreme Court held that the ECHR imposes positive obligations on states to take 'appropriate measures' to protect the lives of its citizens and to protect the citizens from potentially serious environmental damages, including long-term pollution that could affect the well-being of the population as a whole.²⁶¹

Interestingly, the Court relied on international climate change instruments to establish which measures would be 'appropriate' under the ECHR. By considering the entire UNFCCC context, including the Kyoto Protocol and the Paris Agreement, the Court concluded that there to a large degree is international consensus on the need for Annex I countries (including the Netherlands) to reduce GHG emissions with at least 25-40 % in 2020, compared to 1990.²⁶² Notably, the Court held that the reduction target was not in and of itself a binding rule or agreement.²⁶³ Nevertheless, the Court concluded that the Dutch Government was obliged to adhere to a minimum target of reducing GHG emissions with 25 % in 2020, as such reduction would be

²⁵⁷ Despite heavy media coverage claiming the opposite

²⁵⁸ *Heathrow Expansion (2020)*, para. 285

²⁵⁹ *id.*, para. 285

²⁶⁰ See e.g. references to the decision in *People v. Arctic Oil (2020)*, para. 35 and *Gloucester Resources v. Minister for Planning*, para. 539

²⁶¹ *Urgenda*, para. 5.2.2-5.2.3, 5.3.1

²⁶² *id.*, para. 7.2.11

²⁶³ *id.*, para. 7.1

considered appropriate measures of protection under art. 2 and 8 of the ECHR.²⁶⁴ As such, the Court hence utilized the ECHR to transform diplomatic and political targets under the UN-FCCC into legally binding obligations.

Additionally, the Court stressed that the its conclusion did not amount to taking specific legislative measures and accordingly “*leaves the State free to choose the measures to be taken in order to achieve a reduction in greenhouse gas emissions of 25% in 2020.*”²⁶⁵

While the future of climate change lawsuits is indeed unpredictable, it seems that climate change has definitely become a question of human rights. The significance of the Paris Agreement has also already been stressed by domestic courts, albeit not (yet) directly imposing legally binding obligations. In general, it may be concluded that climate change action is increasingly required (to be considered) by states, exercising their regulatory sovereignty.

²⁶⁴ *id.*, para. 7.5.1

²⁶⁵ *id.*, para. 8.2.7 (free translation)

6 THE ECT – FOSTERING OR OBSTRUCTING CLIMATE CHANGE ACTION?

At this point, it has been established that the ECT entails investment protection standards, capable of limiting states' right to make non-compensable regulatory modifications. Yet, it has too been established that those very same states (among others) are obliged under international law to take climate change action in order to protect the Earth and the lives of the world's population. Now, the question therefore is whether the ECT admits the state sufficient regulatory space to take the climate change actions it intends (and is required to take).

In the context of investments, states might consider especially two general regulatory approaches to climate change action: They may (i) favour renewable energy production (e.g. by providing subsidies, loans and tax exemptions) or (ii) impede fossil fuel energy production (e.g. by imposing taxation measures, removing subsidies and adopting bans).²⁶⁶ Each of these approaches are, in turn, considered in the light of the ECT in section 6.2 and section 6.3 respectively. First, however, for the benefit of properly assessing both approaches, section 6.1 considers the correlation between climate change and the ECT.

6.1 CLIMATE CHANGE IN THE ENERGY CHARTER CONTEXT

It appears from the ECT cases analysed in this thesis that no tribunal has yet studied to which extent climate change impacts the investment protections of the ECT. Coming closest are instances where tribunals have vapidly tossed remarks regarding the environmental benefits of the renewable energy investments.²⁶⁷ Tribunals have, however, consistently stressed that the ECT, as other treaties, must be interpreted in accordance with its object and scope²⁶⁸ – albeit in regard to considerations of regulatory stability.²⁶⁹

The purpose of the ECT, to provide a legal framework “*to promote long-term cooperation in the energy field*”,²⁷⁰ illustrates the apparent lack of distinction between carbon-intensive and low-carbon

²⁶⁶ See illustratively Brauch, et al. (2019), p. 10

²⁶⁷ See e.g. *Eiser (2017)*, paras. 364, 377; *PV Investors (2020)*, paras. 589, 624

²⁶⁸ Art. 31(1) VCLT

²⁶⁹ *Eiser (2017)*, paras. 375 et seq.; *Masdar (2018)*, para. 483; *PV Investors (2020)*, para. 568; *Hydro Energy (2020)*, para. 540

²⁷⁰ Art. 2 ECT

investments in the ECT's investment protection regime.²⁷¹ Recalled must also be the fact that the original objective of the ECT was to unite the Eastern and Western Europe and to strengthen energy security.²⁷² The EEC and the ECT were accordingly mainly centred on providing a stable investment climate rather than combatting climate change.

However, the ECT's explicit mention of the UNFCCC in its preamble gives at least some effect to considerations of climate change in the ECT context.²⁷³ Furthermore, art. 19(1) ECT – although not part of the ISDS-governed part III of the ECT²⁷⁴ – specifically addresses environmental reflections. Acknowledging states' international environmental obligations and “*in pursuit of sustainable development*”, art. 19(1) i.a. stipulates that states; are under a best effort obligation to minimise environmental impacts; agree on the polluter pays principle and; shall “*have particular regard to [...] developing and using renewable energy sources*”.²⁷⁵ Accordingly, the EEC repeatedly refers to environmental protection and improvement, sustainable development and renewable energy.²⁷⁶ Finally, ECT tribunals examining investment protection claims must decide in accordance with rules and principles of international law.²⁷⁷

Admittedly, under the ECT, norms and considerations of climate change cannot dictate the outcome of a disappointed investor's claim as no references to such are entailed in any legally binding provisions. Nonetheless, climate change may influence tribunals' examination of the ECT's investment protection standards as such concerns definitely appear in the wider Energy Charter context.

6.2 FAVOURING RENEWABLE ENERGY INVESTMENTS

Doubtlessly, mitigating and adapting to climate change requires an unprecedented flow of investments in the energy sector.²⁷⁸ To attract and promote low-carbon investments, states may

²⁷¹ Bernasconi-Osterwalder & Brauch (2019), p. 8

²⁷² Section 2.1

²⁷³ See also Karamanian (2016), p. 371; Sussman (2011), p. 529

²⁷⁴ And thus not legally binding. See Bruce (2013), p. 24

²⁷⁵ Art. 19(1) ECT

²⁷⁶ Preamble and Title I (Objectives) EEC

²⁷⁷ Art. 26(6) ECT. See section 2.4. See also art. 31(3)(c) VCLT

²⁷⁸ IEA World Energy Outlook (2016), p. 22

favour renewable energy investments by providing investor-friendly regimes, so-called Renewable Energy Support Schemes (RESs).²⁷⁹ This gives rise to two basic considerations: First, to which extent the ECT is able to promote investments (section 6.2.1). Second, whether states can create low-carbon incentives and still maintain their regulatory flexibility (section 6.2.2).

6.2.1 The ECT – Promoting investments?

When advocating the ECT's potential to foster the green transition, proponents of the ECT generally accentuate the ECT's combination of the investment protection regime in part III and the ISDS regime, reinforcing said protections.²⁸⁰ Arguably, risk-averse investors may demand a certain level of stability and protection of the investors' interests before deciding to invest in a particular state – that is, if the investor is not expected to require a significant risk premium on the investment's rate of return.

As previously noted, the investor can legitimately expect a minimum level of stability of the regulatory regime. As such, stability is a distinguishable standard of the ECT's investment protection regime, considering both the wording of art. 10(1) and the broader Energy Charter context, and the investor therefore enjoys a higher protection of stability under the ECT compared to other IIAs.²⁸¹ Indeed, the investment protection is genuine – as evidenced by the 'green energy cases', where the majority of investors were awarded (partial) damages for Spain's, Italy's and the Czech Republic's regulatory modifications to their renewable energy inducing regulation.²⁸²

Notably, it has been argued that the ECT fails to generate an inflow of FDI.²⁸³ However, considering the role of international investment arbitration to develop and enforce a supranational rule of law,²⁸⁴ it may convincingly be argued that the ECT's ISDS regime strongly incentivises the state “*to live by the rules of an investment-friendly climate*”.²⁸⁵ Accordingly, a study conducted by

²⁷⁹ Restrepo (2017), p. 102

²⁸⁰ Section 2.3

²⁸¹ *Eiser* (2017), para. 377

²⁸² As of April 15, 2020, 66 'green energy' arbitrations have been published, 34 of which are still pending and 1 has been discontinued. Of the decided 31 cases, tribunals held in favour of the investor in 19 cases, leaving just 12 cases where no breach of art. 10(1) ECT was found. See ECT Website, chart of cases of April 15, 2020.

²⁸³ Tienhaara & Downie (2018), p. 462. See also Yackee (2011)

²⁸⁴ Rivkin, et al. (2015), p. 151

²⁸⁵ Dolzer (2007), pp. 894-895

the Economist and Columbia Law School reported that 67% of respondent companies were influenced by the existence of an IIA when determining whether to invest in a state.²⁸⁶

Thus, the ECT might attract FDI in renewable energy sources by providing some level of regulatory stability, which is even more important for renewable energy investments, facing higher risks than conventional energy investments.²⁸⁷ Nevertheless, it must not be disregarded that the threat of ISDS may dissuade states from pursuing and adopting ambitious climate change actions.²⁸⁸ The next concern therefore is how – if possible – states wishing to favour renewable energy sources may avoid a later regulatory chill by cautiously considering the ECT from the outset.

6.2.2 Can states maintain their regulatory flexibility?

Ambitious low-carbon inducing regulation may cause undesirable unanticipated effects, necessitating the state to adjust the regulatory framework. However, as the ECT's 'green energy cases' lucidly illustrates, states have forfeited their limitless regulatory flexibility when acceding to the ECT. Contrarily, states are not entirely tied hand and feet by the ECT either. The following seeks to outline how states can maintain some level of regulatory flexibility when passing regulation favouring renewable energies.

Initially, it must be established that states generally need not fear that adjustments of their RESs amount to indirect expropriation under art. 13(1) ECT. As previously stressed, no ECT tribunal has found a breach of art. 13(1) in any of the 'green energy cases', which all concerned a state's modification of its RESs. The threshold for measures to have an effect tantamount to expropriation is high and is considered to require a 'substantial deprivation' of the investments value.²⁸⁹ Revoking RESs will definitely, to some extent, impair the profitability of investments but will seldom destroy their entire value. While unlikely and rare, the probability exists, however, and must be recognised by states which shall always take the effect of the intended regulatory measures into consideration.

²⁸⁶ Economist & Columbia Study (2007), p. 96

²⁸⁷ Restrepo (2017), pp. 102 et seq.; Boute (2012), pp. 613, 617

²⁸⁸ Bernasconi-Osterwalder & Brauch (2019), p. 14

²⁸⁹ Section 4.1

More importantly, states introducing and modifying RESs must be aware of the protection standard in art. 10(1) ECT. Recalling the analysis of art. 10(1), and assuming that the state has not made a specific commitment towards any particular investors, determining the state's regulatory flexibility relies on (i) whether the original regulatory framework (providing the RESs) gave rise to legitimate expectations of the investor and (ii) whether the state's subsequent regulatory measures (modifying said framework) frustrated those expectations.²⁹⁰

Logically, the state's opportunity to later modify its RESs begins with a proper introduction of the regulatory framework. As such, the wording of the provisions, preparatory works, press releases, etc. in relation to introduced RESs might be found by an ECT tribunal to be of a character that gives rise to legitimate expectations of the investor that the framework will remain unaltered.²⁹¹ While the majority of ECT tribunals have indeed held that specific commitments cannot stem from general regulation,²⁹² for the purposes of considering the ECT's potential restraints on states' regulatory flexibility, the extremities of jurisprudence must be assumed a plausible outcome of future disputes – and the most investor-friendly extremity allows general regulation to provide specific commitments.²⁹³ Therefore, only RESs that refrain from providing any guarantees or promises to investors will certainly not be found to constitute specific commitments to investors.

A lack of specific commitments leaves investors with the general expectations of stability that as a minimum are considered legitimate, that is, expectations that a state's subsequent modifications of the RESs are for a public policy objective, are reasonable and proportionate and within the state's margin of appreciation.²⁹⁴ ECT jurisprudence shows that reasons of economy might justify the state's modifications of RESs if the modifications are not arbitrary and have due consideration to affected investors. Abrupt and devastating changes, for instance, might violate art. 10(1) ECT. Contrarily, prospective and out-phasing changes will most likely not frustrate expectations of stability. While the assessment is highly case-specific, essentially, the

²⁹⁰ *AES Summit (2010)*, para. 9.3.17

²⁹¹ See *Masdar (2018)* and *NextEra (2019)* in section 4.2.1.1

²⁹² Section 4.2.1.1

²⁹³ See *9REN (2019)*; *Cube (2019)*; *Watkins (2020)*

²⁹⁴ Section 4.2

question depends on appropriately balanced interests; the state's measures must not unduly overburden the investor.²⁹⁵

States intending to combat climate change by favouring renewable energy investments can thus – by avoiding to provide specific commitments to investors – actively influence the level of flexibility the state later enjoys to amend the regulatory framework, which must be done only with appropriate regard to affected investors. However, although states may render efforts to maintain as much regulatory flexibility as possible, the ECT does inevitably, to some extent, restrict the state's regulatory space.

As such, the ECT thus incentivises states to design sustainable RESs rather than adopting a 'trial and error' approach.²⁹⁶ Notably, both parties have an interest in stability; where the investor seeks risk-minimizing of its long-term investments, the state desires an increase of FDI in renewable energies, crucial for the green transition. In the context of favouring renewable energy investments, the ECT is therefore far from entirely a climate change obstacle, as long as states are mindful of the ECT's investment protections when introducing, implementing and modifying RESs.

6.3 DISFAVOURING FOSSIL FUEL INVESTMENTS

The second type of regulatory instruments in the toolbox of climate change concerned states is measures that impede fossil fuel investments. A characteristic measure, illustrative for present purposes, is outright bans of carbon-intensive energy production. Such measures have not yet been considered by an ECT tribunal, although, in the ECT context, one case concerning Germany's environmental restrictions on the construction of a coal fired power plant has been settled (unpublished),²⁹⁷ one case concerning Germany's abrupt phase out of nuclear energy production is pending²⁹⁸ and some investors have threatened to sue the Dutch Government for its coal phase-out.²⁹⁹

²⁹⁵ See e.g. *Blusun (2016)*, para. 319; *PV Investors (2020)*, para. 628

²⁹⁶ See similarly Restrepo (2017), p. 131

²⁹⁷ *Vattenfall I*

²⁹⁸ *Vattenfall II*

²⁹⁹ Namely Uniper and RWE. See e.g. <https://www.forbes.com/sites/davekeating/2019/12/02/dutch-lawmakers-under-pressure-over-coal-phase-out/>

To assess whether investors, under the ECT, might be entitled to seek redress for any damage suffered from such measures, the following considers, firstly, whether a state's climate change actions, as a principle, could rise to a *jus cogens* norm, trumping the ECT (section 6.3.1). If not, it is considered whether such measures might amount to an indirect expropriation (section 6.3.2) and/or could violate art. 10(1) ECT (section 6.3.3).

6.3.1 Is Climate Change Action a *Jus Cogens* norm?

Jus cogens, the peremptory norms of international constitutional law from which no derogation is permitted,³⁰⁰ is an elusive and disputed concept.³⁰¹ Traditionally, *jus cogens* is understood to be norms satisfying the greater interest of the international community, including genocide, slavery, piracy and crimes against humanity.³⁰²

When examining investment protection standards, also international investment tribunals have an independent obligation to weigh carefully *jus cogens*,³⁰³ including states' peremptory human rights obligations.³⁰⁴ Following the *Urgenda* decision, a correlation between climate change obligations and human rights inevitably exists.³⁰⁵ Accordingly, it may be argued that sustainable development should be considered a *jus cogens* norm, justifying states' violations of IIAs.³⁰⁶

While revolutionary tribunals indeed could exempt states' climate change measures from liability under the ECT by reference to *jus cogens*, such approach would be unprecedented, even in the context of human rights.³⁰⁷ Assuming for the sake of discussion that climate change actions could elevate to a *jus cogens* norm, tribunals would expectedly act vigilantly and demand from states that no other measure could feasibly achieve the aim, which would narrow the scope extensively. Thus, however beneficial such approach to future climate change arbitrations would be (from a pro-climate perspective), it is nevertheless yet highly unlikely to find application.

³⁰⁰ Art. 53 VCLT

³⁰¹ Vadi (2016), p. 358; Karamanian (2016), p. 368

³⁰² *Phoenix Action* (2009), para. 78; Karamanian (2016), p. 368

³⁰³ *Methanex* (2005), part. IV, chapter C, para. 24; *Phoenix Action* (2009), para. 78

³⁰⁴ UNCTAD IIA & Human Rights Study (2009), p. 14; Karamanian (2016), p. 369

³⁰⁵ Section 5.2

³⁰⁶ Karamanian (2016), pp. 368-369

³⁰⁷ UNCTAD IIA & Human Rights Study (2009), p. 14; Shinde (2018), p. 47

6.3.2 Could climate change measures amount to indirect expropriation?

Realistically, tribunals will therefore have to examine whether the state's climate change measures violated the ECT's investment protection regime. Considering first art. 13(1) ECT, tribunals may apply one of the two traditional approaches; either the police powers or the sole-effect doctrine.³⁰⁸

While, under the police powers doctrine, not every public policy objective precludes the state's measures from amounting to indirect expropriation, a state's climate change measures will arguably be of the necessary severity to be considered a legitimate public welfare objective. This is in accordance with the perception of linking climate change with human rights as well as the variety of international law instruments protecting the environment to mitigate climate change.³⁰⁹ Thus, assuming that in the particular case, the state's measures are non-discriminatory and taken in good faith, climate change regulation ought, under the police powers doctrine, not be deemed expropriatory.

Under the sole-effect doctrine, the outcome depends largely on the factual circumstances of the case, as an assessment of whether the investment has been substantially deprived of its value, tantamount to a deprivation of property, naturally must be based on the character of the state's measures and their effect on the particular investment. Clearly, an outright ban of all fossil fuel powered energy production, effective immediately, would be tantamount to expropriation. Equally clearly, a ban of new fossil fuelled energy production would not affect existing investments and thus not expropriate any investments.

While it might be argued that longer-termed phase-outs of fossil fuels lead to less economic losses of investments' value, a phase-out culminating with an outright ban of fossil fuel production would nevertheless, all else equal, amount to an indirect expropriation in violation of art. 13(1) ECT, as such regulatory measure abolishes the investor's use of the investment and thus one of the essential characteristics of property.³¹⁰

That is, if the investor has no alternative use of the investment. However, often, fossil fuelled energy production may retrofit carbon capture technologies, convert to consume e.g. natural

³⁰⁸ Section 4.1

³⁰⁹ Section 5

³¹⁰ *Nykomb (2003)*, p. 33; *AES Summit (2010)*, paras. 14.3.2-14.3.3; *Mamidoil (2015)*, para. 569

gas and biomass or the site of the investment may be utilised to transit and store energy.³¹¹ If such (or other) conversions of the investment are feasible, without being inappropriately expensive, the state's regulatory measures might not be expropriatory – which is especially true the longer the timeframe of the phase-out, considering that technology rapidly evolves.

This leads to the rather indeterminate conclusion that, applying the sole-effect doctrine, state's climate change actions will largely, but not necessarily, be considered an indirect expropriation under the ECT.

It is, naturally, indeterminate which doctrine will be applied in future ECT disputes. Thus far, ECT tribunals have examined regulatory expropriation under the sole-effect doctrine, notwithstanding that several respondent states have invoked their police powers in the dispute.³¹² Tribunals' lack of reference to the states' police powers may be because the tribunal in question did not adhere to the doctrine or, arguably, because the tribunal had found it redundant to consider the doctrine as the states' objectives did not amount to a legitimate public welfare objective.

With the *Hydro Energy* tribunal having introduced the police powers doctrine to ECT jurisprudence, the forecast for climate change arbitrations under the ECT is left wide open. Arguably, considering the urgent necessity of climate change actions, tribunals should opt for respecting states' police powers, but they are far from obliged to do so. Neither, however, are they obliged to apply the sole-effect doctrine. They are admitted the liberty of choice.

6.3.3 Should the balance tip in favour of the state or the investor?

As may be recalled, the examination of art. 10(1) ECT is a balancing exercise of the investor's legitimate expectations and the state's right to regulate.

6.3.3.1 The legitimate expectations

If the investor's expectations are based on specific commitments, the state does not enjoy any regulatory flexibility. Therefore, when fossil fuel investments have received any specific commitment³¹³ from the state, the outcome of the exercise is close to predetermined and the state

³¹¹ See e.g. DEA Technology Report (2016), pp. 45-105; IRENA 2050 Outlook (2020), pp. 159-169

³¹² See e.g. *Charanne* (2012), para. 842; *Eiser* (2017), para. 351; *Mamidoil* (2015), para. 527

³¹³ The views discussed in section 6.2.2 regarding the different schools of thought on the matter applies equally in this relation.

is not allowed to breach the commitments by invoking its need or obligations to take climate change action.

Assuming that no specific commitments has been made, the investor may rely on its expectations of stability under the ECT, protecting the investor from drastic and abrupt changes to the regulatory regime.³¹⁴ It may in this regard be argued that a reasonably informed businessperson in the energy sector could not legitimately expect that fossil fuel production would be endorsed in eternity, as climate change has been a political and scientific topic for decades.³¹⁵ Also under the ECT (from 1994), climate change is acknowledged in non-binding provisions, which arguably could contribute to jeopardizing the legitimacy of an investor's expectations of a stable fossil fuel regulation. The weight of these arguments naturally decreases concurrently with the age of the investment; rapidly rising climate change concerns implies that expectations of unaffected fossil fuel investments were significantly easier considered legitimate in 1998 compared to 2018 – and the investor's expectations must be assessed at the time of investment.

As a minimum, the expectation of stability should generally be construed narrower for fossil fuel investors, as it could only have been reasonable foreseeable that states will pass the legislative amendments necessary for mitigating climate change.³¹⁶ The extent of the legitimacy of such expectations depends largely on the year of investment, the political environment of the particular state as well as other considerations as to the 'baseline' regulatory environment of the state, domestic jurisprudence, the investor's due diligence, etc.³¹⁷

6.3.3.2 *The regulatory measures*

Nonetheless, the extent of protection of the investor must be determined by considering the state's regulatory measures. While, naturally, this thesis should refrain from conjectures of states' potential future measures, it may serve illustrative to outline generic and advisable considerations for tribunals and states.

Generally, a state's climate change regulation is indisputably adopted in pursuit of a legitimate public policy objective. Mitigating climate change is not only in the public interest but a matter of complying with states' international obligations – both under international environmental

³¹⁴ *Eiser (2017)*, para. 387

³¹⁵ See e.g. the UNFCCC from 1992

³¹⁶ See on foreseeability *Charanne (2012)*, para. 505; *Parkerings (2007)*, para. 333

³¹⁷ Section 4.2.1

law and human rights.³¹⁸ Severer public policy objectives are few. However, a state cannot, by reference to its international obligations, entirely excuse its regulatory measures. Obligations under IIAs are likewise international obligations and states have a strict responsibility to balance its different international obligations, respecting both of them equally.³¹⁹

Thus, insofar as climate change obligations do not rise to *jus cogens* norms,³²⁰ tribunals cannot exempt states from liability under the ECT simply by reference to states' compliance with such obligations, but might allow states a wide margin of appreciation due to the severity of such objectives. Notably, following the reasoning of the *Electrabel* tribunal, states implementing EU regulation should not be liable for the effects of their climate change regulations.³²¹ However, in any case, the EU is also a party to the ECT and investors would in that sense merely seek redress from the EU rather than the individual states.

As to the character of the measures, states must ensure that there is an appropriate correlation between the regulatory measures taken and the objective sought.³²² This entails firstly that the measures are suitable to achieve the objective. States must e.g. consider that the (financial) burden of mitigating and adapting to climate change should not be disproportionately placed solely or mainly on investors.³²³ While an outright ban of fossil fuelled energy production may, all else equal, risk being considered disproportionate if not compensated at all, the balance nears equilibrium if the state for instance subsidises the investor's conversion expenses for the investment's alternative non-fossil use.

Secondly, the state's measures must be necessary for the objectives sought,³²⁴ which, in the context of climate change actions, is subject to a significant margin of appreciation. As such, climate change action is to some extent a leap in the dark, requiring unprecedented modifications of energy production, consumption and infrastructure – and thus regulation. As stressed by the Norwegian Court of Appeal and the Dutch Supreme Court, international obligations on

³¹⁸ Section 5

³¹⁹ *AWG (2010)*, para. 262

³²⁰ Section 6.3.1

³²¹ *Electrabel (2012)*, para. 6.76

³²² *AES Summit (2010)*, para. 10.3.9

³²³ *PV Investors (2020)*, para. 628

³²⁴ *BayWa (2019)*, para. 496

climate change entail wide targets, leaving it to the individual states to ascertain which measures are necessary to achieve those targets.³²⁵

Thirdly, expectedly, the most significant task for states will be to ensure due consideration to the investors affected. An element in such assessment may be the timeframe of the state's regulation. An outright ban, effective immediately, will thus fail to pay regard to affected investors, whereas a long-term phase out of e.g. coal fired power plants might allow the investor to readjust to the change in circumstances and plan for alternative use, potentially subject to technological developments. Notably, longer-term gradual transitions are also in the state's interest; to avoid shortages, albeit not too long as climate change action is required urgently.³²⁶ Consideration for the affected investors may also entail considering to which extent the measures introduced an entirely new regulatory regime and their effect on the investments.³²⁷ As such, states should acknowledge that a 'one size fits all' regulatory approach will most likely violate art. 10(1) ECT.

Finally, states should ensure that the regulatory measures are not discriminatory. However, differentiating between low-carbon and carbon-intensive energy production on an objective basis is not discrimination. Even differentiation between different renewable energy sources is accepted without being considered close to discrimination.³²⁸

As a whole, it is regrettably close to impossible to consider in advance whether a state's climate change regulation disfavouring fossil fuel investments will breach art. 10(1) ECT. Depending on the factual circumstances of the case and the view of the particular tribunal, the state may be given the margin of appreciation that is vital for combatting climate change, or the tribunal may find that the state violated its obligations to protect the investor. While both outcomes are indeed possible, the latter does nonetheless seem the most likely.

³²⁵ Section 5.2

³²⁶ Gallagher (2018), pp. 252-253

³²⁷ *Eiser* (2017), paras. 389, 413

³²⁸ *Charanne* (2012), para. 538

7 CONCLUSION

This thesis opened by questioning the influence of the ECT in the fight against climate change. Having considered the investment protection regime of the ECT and compared it with international climate change commitments, the rather indeterminate conclusion is that the ECT may both foster and obstruct climate change action.

The analysis of ECT jurisprudence has shown that the ECT's dispute settlement regime (ISDS) hampers the possibility of providing unequivocal answers, as tribunals often render inconsistent and at times even irreconcilable decisions. Additionally, examinations of alleged violations of the ECT's investment protections are highly case-specific, which complicates providing generic answers to the raised question. The thesis has therefore attempted to outline (i) how the ECT's fostering effects may be enhanced by states' due care and (ii) how the ECT's obstructing effects may be minimised by both states and tribunals.

In terms of fostering climate change action, the thesis finds that the ECT might show beneficial for attracting the much needed FDI in renewable energies. As such, promoting investments is at the core of the context, aim and scope of the ECT. States must, however, be mindful of the ECT when launching and later modifying RESs, aimed at attracting such FDI. To retain their regulatory flexibility, states must especially abstain from providing specific commitments to investors – directly towards the investors as well as in general regulation.

States' mindfulness assumed, the ECT might thus be an effective instrument in combatting climate change by attracting FDI without states needing to be hesitant to provide RESs, as their regulatory flexibility to amend the RESs lasts, albeit not limitless; under art. 10(1) ECT, states are always barred from making abrupt arbitrary regulatory amendments without due consideration of affected investors.

Whereas the ECT's fostering effects thereby are related to potential future investments, its obstructing effects primarily concern existing (fossil fuel) investments. The thesis accordingly finds that namely art. 13 and art. 10(1) ECT may avert states from adopting ambitious climate regulations, as such regulation might amount to indirect expropriation of the investments and frustrate the investors' legitimate expectations, respectively.

In the examination of art. 13, tribunals may adopt either the 'police powers' or the 'sole-effect' doctrine. Under the former, states' climate change regulation cannot be considered indirect expropriation, as such is pursuing a legitimate public welfare objective. Under the latter, such

regulation is likely considered expropriation, but the particular measures of the state, accommodating the interests of the investor, may exempt the state from liability under art. 13 ECT. The choice of doctrine is entirely within the particular tribunal's discretion.

In the examination of art. 10(1), a pivotal element is whether the particular state has provided specific commitments to existing investments, as states must honour all their specific commitments, regardless the states' wish to take climate change action. Absent such commitments, a balancing approach is required by the tribunal, in which it considers the investor's legitimate expectations on the one hand and the state's measures on the other.

Investors may always legitimately expect a minimum level of stability. Therefore, states seeking to impede fossil fuel investments must, to avoid liability under art. 10(1), ensure that there is an appropriate correlation between the regulatory measures taken and the objective sought, which especially entails that the state must have due regard to affected investors, i.a. by ensuring a longer-term phase-out, encouraging alternative use of the investment and/or providing partial compensation for stranded costs.

Generally, climate change concerns affect the assessment of art. 10(1) ECT in two ways: First, by narrowing what fossil fuel investors legitimately could expect. Second, by widening the states' margin of appreciation in amending the regulatory framework. However, the balancing exercise is largely depending on the factual circumstances of the case as well as the predilections of the tribunal which may (but is not obliged to) allow a wide margin of appreciation to states' regulatory climate change action.

As such, the question of whether a state's climate change actions are non-compensable or not is an arbitrator-lottery where states' diligent mindfulness of the ECT may increase their odds. The biggest mistake for states pursuing green energy ideology would be to underestimate the investment protections of the ECT.

8 BIBLIOGRAPHY

8.1 INDEX OF LEGAL SOURCES AND POLITICAL INSTRUMENTS

Abbreviated reference	Full reference
<i>ECT</i>	Energy Charter Treaty (1994)
<i>EEC</i>	European Energy Charter (1991)
<i>New York Convention</i>	United Nations Convention on the Recognition and Enforcement of Foreign Awards, New York (1958)
<i>Paris Agreement</i>	United Nations Paris Agreement (2015)
<i>UNFCCC</i>	United Nations Framework Convention on Climate Change (1992)
<i>VCLT</i>	Vienna Convention on the Law of Treaties (1969)

8.2 INDEX OF CASES

8.2.1 Domestic litigation

Abbreviated reference

Gloucester Resources v. Minister for Planning (2019)

Heathrow Expansion (2020)

People v. Arctic Oil (2020)

Urgenda (2019)

Full reference

The Australian Land and Environment Court of New South Wales

Decision of February 08, 2019

Case No. [2019] NSWLEC 7

The UK Court of Appeal

Decision of February 27, 2020

Case No. [2020] EWCA Civ 21e4

Norwegian Borgarting Court of Appeal

Decision of January 23, 2020

Case No. 18-060499ASD-BORG/03

Dutch Hoge Raad

Decision of December 20, 2019

Case No. 19/00135

8.2.2 International investment arbitration

Abbreviated reference

Full reference

ECT Cases

9REN (2019)

9REN Holding S.à r.l. v. Kingdom of Spain

Award of May 31, 2019

ICSID Case No. ARB/15/15

AES Summit (2010)

*AES Summit Generation Limited and AES-Tisza Erőmű Kft
v. The Republic of Hungary*

Award of September 23, 2010

ICSID Case No. ARB/07/22

Antaris (2018)

Antaris Solar GmbH and Dr. Michael Göde v. Czech Republic

Award of May 2, 2018

PCA Case No. 2014-01

Antin (2018)

Infrastructure Services Luxembourg S.à. r.l. and Energia Termosolar B.V. (formerly Antin Infrastructure Services Luxembourg S.à. r.l. and Antin Energia Termosolar B.V.) v. Kingdom of Spain

Award of June 15, 2018

ICSID Case No. ARB/13/31

BayWa (2019)

BayWa r.e. Renewable Energy GmbH and BayWa r.e. Asset Holding GmbH v. Kingdom of Spain

Decision on Jurisdiction, Liability and Directions on Quantum of December 2, 2019

ICSID Case No. ARB/15/16

Blusun (2016)

Blusun S.A., Jean-Pierre Lecorcier and Michael Stein v. Italian Republic

Award of December 27, 2016

ICSID Case No. ARB/14/3

Charanne (2012)

Charanne and Construction Investments v. Kingdom of Spain

Award of January 21, 2016 (unofficial English translation)

SCC Case No. V 062/2012

Cube (2019)

Cube Infrastructure Fund SICAV and others v. Kingdom of Spain

Decision on Jurisdiction, Liability and Partial Decision on Quantum of February 19, 2019

ICSID Case No. ARB/15/20

<i>Eiser (2017)</i>	<i>Eiser Infrastructure Limited and Energía Solar Luxembourg S.à r.l. v. Kingdom of Spain</i> Award of May 4, 2017 ICSID Case No. ARB/13/36
<i>Electrabel (2012)</i>	<i>Electrabel S.A. v. Republic of Hungary</i> Decision on Jurisdiction, Applicable Law and Liability of November 30, 2012 ICSID Case No. ARB/07/19
<i>Electrabel (2015)</i>	<i>Electrabel S.A. v. Republic of Hungary</i> Award of November 25, 2015 ICSID Case No. ARB/07/19
<i>Hydro Energy (2020)</i>	<i>Hydro Energy 1 S.à r.l. and Hydroxana Sweden AB v. Kingdom of Spain</i> Decision on Jurisdiction, Liability and Directions on Quantum of March 9, 2020 ICSID Case No. ARB/15/42
<i>Isolux (2016)</i>	<i>Isolux Netherlands, BV v. Kingdom of Spain</i> Dissenting Opinion of Arbitrator Guido Santiago Tawil of July 6, 2016 (unofficial English translation) Award of July 17, 2016 (unofficial English translation) SCC Case No. V2013/153

Mamidoil (2015)

Mamidoil Jetoil Greek Petroleum Products Societe S.A. v. Republic of Albania

Award of March 30, 2015

ICSID Case No. ARB/11/24

Masdar (2018)

Masdar Solar & Wind Cooperatief U.A. v. Kingdom of Spain

Award of May 16, 2018

ICSID Case No. ARB/14/1

NextEra (2019)

NextEra Energy Global Holdings B.V. and NextEra Energy Spain Holdings B.V. v. Kingdom of Spain

Decision on Jurisdiction, Liability and Quantum Principles of March 12, 2019

ICSID Case No. ARB/14/11

Nykomb (2003)

Nykomb Synergetics Technology Holding AB v. The Republic of Latvia

Award of December 16, 2003

SCC Case No. 118/2001

Plama (2008)

Plama Consortium Limited v. Republic of Bulgaria

Award of August 27, 2008

ICSID Case No. ARB/03/24

PV Investors (2020)

The PV Investors v. Kingdom of Spain

Award of February 28, 2020

PCA Case No. 2012-14

RREEF (2019)

RREEF Infrastructure (G.P.) Limited and RREEF Pan-European Infrastructure Two Lux S.à r.l. v. Kingdom of Spain

Award of December 11, 2019

ICSID Case No. ARB/13/30

Stadtwerke (2019)

Stadtwerke München GMBH, RWE Innogy GMBH and others v. Kingdom of Spain

Award of December 2, 2019

ICSID Case No. ARB/15/1

Sun Reserve (2020)

Sun Reserve Luxco Holdings SRL v. Italian Republic

Award of March 25, 2020

SCC Case No. 132/2016

Vattenfall I

Vattenfall AB, Vattenfall Europe AG, Vattenfall Europe Generation AG v. Federal Republic of Germany

ICSID Case No. ARB/09/6

Vattenfall II

Vattenfall AB and others v. Federal Republic of Germany

ICSID Case No. ARB/12/12

Watkins (2020)

Watkins Holdings S.à r.l. and others v. Kingdom of Spain

Award of January 21, 2020

ICSID Case No. ARB/15/44

Novenergia (2018)

Novenergia II - Energy & Environment (SCA) (Grand Duchy of Luxembourg), SICAR v. The Kingdom of Spain,

Award of February 15, 2018

SCC Case No. 2015/063

Non-ECT Cases

ADC (2006)

ADC Affiliate Limited and ADC & ADMC Management Limited v. The Republic of Hungary

Award of October 2, 2006

ICSID Case No. ARB/03/16

Apotex (2014)

Apotex Holdings Inc. and Apotex Inc. v. United States of America

Award of August 25, 2014

ICSID Case No. ARB(AF)/12/1

AWG (2010)

AWG Group Ltd. v. The Argentine Republic

Decision on Liability of July 30, 2010

UNCITRAL

Bear Creek (2017)

Bear Creek Mining Corporation v. Republic of Peru

Award of November 30, 2017

ICSID Case No. ARB/14/21

Chemtura (2010)

*Chemtura Corporation v. Government of Canada (formerly
Crompton Corporation v. Government of Canada)*

Award of August 2, 2010

UNCITRAL

Glamis (2009)

Glamis Gold, Ltd. v. The United States of America

Award of June 8, 2009

UNCITRAL

Metalclad (2000)

Metalclad Corporation v. The United Mexican States,

Award of August 30, 2000

ICSID Case No. ARB(AF)/97/1

Methanex (2005)

Methanex Corporation v. United States of America

Award of August 3, 2005

UNCITRAL

Parkerings (2007)

Parkerings-Compagniet AS v. Republic of Lithuania

Award of September 11, 2007

ICSID Case No. ARB/05/8

Philip Morris (2016)

Philip Morris Brands Sàrl, Philip Morris Products S.A. and Abal Hermanos S.A. v. Oriental Republic of Uruguay

Award of July 8, 2016

ICSID Case No. ARB/10/7

Phoenix Action (2009)

Phoenix Action, Ltd. v. The Czech Republic

Award of April 15, 2009

ICSID Case No. ARB/06/5

Saluka (2006)

Saluka Investments B.V. v. The Czech Republic

Partial award of March 17, 2006

UNCITRAL

Urbaser (2016)

Urbaser S.A. and Consorcio de Aguas Bilbao Bizkaia, Bilbao Biskaia Ur Partzuergoa v. The Argentine Republic

Award of December 8, 2016

ICSID Case No. ARB/07/26

National Grid (2008)

National Grid plc v. The Argentine Republic

Award of November 3, 2008

UNCITRAL

EDF (2009)

EDF (Services) Limited v. Rumania

Award of 8 October 8, 2009

ICSID Case No. ARB/05/13

8.3 INDEX OF AUTHORITIES

8.3.1 Books

Abbreviated reference

Bamberger, et al. (2001)

Full reference

Bamberger, Craig, Linehan, Jan & Waelde, Thomas, *The Energy Charter Treaty*

Chapter 4 in: Roggenkamp, Martha M., Rønne, Anita, Redgwell, Catherine & Guayo, Inigo Del (eds.), *Energy Law in Europe – National, EU and International Law and Institutions*, 1st edition, 2001, Oxford University Press

Benson, et al. (2019)

Benson, Cyrus, Yim, Charlie & Orlowski, Victoria, *The Energy Charter Treaty*

Chapter 2 in: Rowley, J William QC (ed.), *The Guide to Energy Arbitrations*, 3rd edition, 2019, Law Business Research

- Besson (2013)* Besson, Samantha, *The Legitimate Authority of International Human Rights*
- Chapter 2 in: Føllesdal, Andreas, Schaffer, Johan Karlsson & Ulfstein, Geir (eds.), *The Legitimacy of International Human Rights Regimes*, 1st edition, 2013, Cambridge University Press
- Blackaby & Partasides, et al. (2015)* Blackaby, Nigel & Partasides, Constantine with Redfern, Alan & Hunter, Martin, *Redfern and Hunter on International Arbitration*, 6th edition, 2015, Oxford University Press
- Blume (2014)* Blume, Peter, *Retsystemet og Juridiske Metode*, 2nd edition, 2014, DJØF Forlag
- Bodansky, et al. (2017)* Bodansky, Daniel, Brunnée, Jutta & Rajamani, Lavanya, *International Climate Change Law*, 1st edition, 2017, Oxford University Press
- Born (2014)* Born, Gary B., *International Commercial Arbitration*, 2nd edition, 2014, Kluwer Law International
- Coop & Seif (2018)* Coop, Graham & Seif, Isabella, *ECT and States' Right to Regulate*
- Chapter 10 in: Scherer, Maxi (ed.), *International Arbitration in the Energy Sector*, 1st edition, 2018, Oxford University Press

- Dolzer (2007)* Dolzer, Rudolph, *Comments on Treaty Arbitration and International Law*
- In: Berg, Albert van den (ed.), *Arbitration 2006: Back to Basics?*, 2007, International Council for Commercial Arbitration Congress Series no. 13, Kluwer Law International
- Dolzer & Schreuer (2012)* Dolzer, Rudolf & Schreuer, Christoph H., *Principles of International Investment Law*, 2nd edition, 2012, Oxford University Press
- Dumberry (2016)* Dumberry, Patrick, *The Formation and Identification of Rules of Customary International Law in International Investment Law*, 1st edition, 2016, Cambridge University Press
- Gallagher (2018)* Gallagher, Norah, *ECT and Renewable Energy Disputes*
- Chapter 11 in: Scherer, Maxi (ed.), *International Arbitration in the Energy Sector*, 1st edition, 2018, Oxford University Press
- Hobér (2018)* Hobér, Kaj, *Overview of Energy Charter Treaty Cases*
- Chapter 8 in: Scherer, Maxi (ed.), *International Arbitration in the Energy Sector*, 1st edition, 2018, Oxford University Press

Karamanian (2016)

Karamanian, Susan L., *International Energy Trade and Investor-State Arbitration: What Role for Sustainable Development?*

Chapter 18 in: Matsushita, Mitsuo & Schoenbaum, Thomas J. (eds.), *Emerging Issues in Sustainable Development, International Trade Law and Policy Relating to Natural Resources, Energy, and the Environment*, 1st edition, 2016, Springer Nature

Levashova (2019)

Levashova, Yulia, *The Right of States to Regulate in International Investment Law: The Search for Balance Between Public Interest and Fair and Equitable Treatment*, 1st edition, 2019, International Arbitration Law Library, Kluwer Law International

Moses (2017)

Moses, Margaret L., *The Principles and Practice of International Commercial Arbitration*, 3rd edition, 2017, Cambridge University Press

Muchlinski (1996)

Muchlinski, Peter, *The Energy Charter Treaty: Towards a New International Order for Trade and Investment or a Case of History Repeating Itself?*

Chapter 10 in: Wälde, Thomas W. (ed.), *The Energy Charter Treaty: An East-West Gateway for Investment and Trade*, 1st edition, 1996, Kluwer Law International

- Schwarzenberger (1965)* Schwarzenberger, Georg, *The Inductive Approach to International Law*, Library of World Affairs, No. 67, 1965, Stevens
- Staker (2014)* Staker, Christopher, *Jurisdiction*
Chapter 11 in, Evans, Malcolm De (ed.): *International Law*, 4th edition, 2014, Oxford University Press
- Sussman (2011)* Sussman, Edna, *The Energy Charter Treaty's Investor Protection Provisions: Potential to Foster Solutions to Global Warming and Promote Sustainable Development*
Chapter 21 in: Segger, Marie-Claire Cordonier, Gehring, Markus W., et al., *Sustainable Development in World Investment Law*, Global Trade Law Series, 2011, Kluwer Law International
- Vadi (2016)* Vadi, Valentina, *Jus Cogens in International Investment Law and Arbitration*
Chapter 12 in: Heijer, Maarten den & Wilt, Harmen van der (eds.), *Netherlands Yearbook of International Law 2015: Jus Cogens: Quo Vadis?*, 1st edition, 2016, Springer Nature
- Vorburger & Petti (2018)* Vorburger, Simon & Petti, Angelina M., *Arbitrating Energy Disputes*
Chapter 11 in: Arroyo, Manuel (ed.), *Arbitration in Switzerland: The Practitioner's Guide*, 2nd edition, 2018, Kluwer Law International

8.3.2 Legal Articles

Abbreviated reference

Bernasconi-Osterwalder & Brauch (2019)

Full reference

Bernasconi-Osterwalder, Nathalie & Brauch, Martin Dietrich, *Redesigning the Energy Charter Treaty to Advance the Low-Carbon Transition*

Published in: Transnational Dispute Management, TDM 1, 2019

Boute (2012)

Boute, Anatole, *Combatting Climate Change through Investment Arbitration*

Published in: Fordham International Law Journal, 2012, vol. 35, issue 3

Brauch, et al. (2019)

Brauch, Martin Dietrich; Bernasconi-Osterwalder, Nathalie; Touchette, Yanick; Cosbey, Aaron; Gerasimchuk, Ivetta; Sanchez, Lourdes; Garcia, Maria Bisila Torao; Potaskaevi, Temur & Petrofsky, Erica, *Treaty on Sustainable Investment for Climate Change Mitigation and Adaptation: Aligning International Investment Law with the Urgent Need for Climate Change Action*

Published in: Journal of International Arbitration, Kluwer Law International, 2019, vol. 36, issue 1

Bruce (2013)

Bruce, Stuart, *International Law and Renewable Energy: Facilitating Sustainable Energy for All?*

Published in: Melbourne Journal of International Law, 2013, vol. 14, issue 1

Iacob & Cirlig (2016)

Iacob, Iuliana-Gabriela & Cirlig, Ramona-Elisabeta, *The Energy Charter Treaty and Settlement of Disputes – Current Challenges*

Published in: Juridical Tribune (Tribuna Juridica), 2016, vol. 6, issue 1

Magnusson (2019)

Magnusson, Annette, *New Arbitration Frontiers: Climate Change*

Published in: Kalicki, Jean Engelmayer & Raouf, Mohamed Abdel (eds.), “Evolution and Adaptation: The Future of International Arbitration”, ICCA Congress Series, Kluwer Law International, 2019, vol. 20

Miljenić (2018)

Miljenić, Oorsat, *Energy Charter Treaty – Standards of Investment Protection*

Published in: Croatian International Relations Review, 2018, XXIV (83)

Restrepo (2017)

Restrepo, Tomás, *Modification of Renewable Energy Support Schemes under the Energy Charter Treaty*

Published in: Goettingen Journal of International Law, 2017, vol. 8, issue 1

Rivkin, et al. (2015)

Rivkin, David W.; Lamb, Sophie J. & Leslie, Nicola K., *The Future of Investor-State Dispute Settlement in the Energy Sector: Engaging with Climate Change, Human Rights and the Rule of Law*

Published in: Journal of World Energy Law and Business, 2015, vol. 8, issue 2

Shinde (2018)

Shinde, Sheetal N., *Investment and Human Rights: Sensitizing the Arbitration Mechanism to Protect Human Rights in the Host State*

Published in: Indian Journal of Arbitration Law, 2018, vol. 7, issue 2

Tienhaara & Downie (2018)

Tienhaara, Kyle & Downie, Christian, *Risky Business? The Energy Charter Treaty, Renewable Energy, and Investor-State Disputes*

Published in: Global Governance, 2018, vol. 24, issue 3

Verburg (2019)

Verburg, Cees, *Modernising the Energy Charter Treaty: An Opportunity to Enhance Legal Certainty in Investor-State Dispute Settlement*

Published in: Journal of World Investment & Trade, 2019, vol. 20, issue 2-3

Yackee (2011)

Yackee, Jason Webb, *Do Bilateral Investment Treaties Promote Foreign Direct Investment? Some Hints from Alternative Evidence*

Published in: Virgin Journal of International Law, 2011, vol. 51, issue 2

8.3.3 Reports and official publications

Abbreviated reference

Full reference

A Reader's Guide (2002)

The Energy Charter Secretariat: *The Energy Charter Treaty – A Reader's Guide*, 2002

An Introduction to the ECT
(2004)

The Energy Charter Secretariat: “An Introduction to the Energy Charter Treaty” in: *The Energy Charter Treaty and Related Documents – A Legal Framework for International Energy Cooperation*, 2004

Consolidated ECT (2016)

Energy Charter Secretariat: *The International Energy Charter, Consolidated Energy Charter Treaty*, 2016

DEA Technology Report (2016)

Danish Energy Agency and Energinet: *Technology Data – Generation of Electricity and District Heating*, 2020 version, original from 2016

Economist & Columbia Study
(2007)

The Economist Intelligence Unit and Columbia Program on International Investment, *World Investment Prospects to 2011 – Foreign Direct Investment and the Challenge of Political Risk*, 2007

IEA World Energy Outlook (2016)

International Energy Agency: *World Energy Outlook 2016*, 2016

IEC Annual Report (2019)

The Energy Charter Secretariat: *International Energy Charter | Annual Report 2018*, 2019

IRENA 2050 Outlook (2020)

International Renewable Energy Agency: *Global Renewables Outlook: Energy transformation 2050*, 2020

OECD Sustainable Energy Investments (2013)

Organisation for Economic Co-operation and Development: *Enabling Investment in Sustainable Energy Infrastructure*, 2013, Post-2015 Reflections, Element 4, Paper 2

UN Report on SDG (2016)

United Nations Economic and Social Council: *Progress towards the Sustainable Development Goals*, 2016, Report of the Secretary-General

UNCTAD Fact Sheet on ISDS (2019)

United Nations Conference on Trade and Development: *Fact Sheet on Investor-State Dispute Settlement Cases in 2018*, IIA Issues Note, 2019, Issue 2

UNCTAD FET Study (2012)

United Nations Conference on Trade and Development: *Fair and Equitable Treatment*, UNCTAD Series on Issues in International Investment Agreements II, 2012

UNCTAD IIA & Human Rights Study (2009)

United Nations Conference on Trade and Development: *Selected Recent Developments in IIA Arbitration and Human Rights*, UNCTAD IIA Monitor no. 2, 2009

8.3.4 Webpages

Abbreviated reference

Full reference

ECT Website

<https://www.energychartertreaty.org/> (last accessed June 1, 2020)

Forbes on Dutch Coal Phase-Out

<https://www.forbes.com/sites/davekeating/2019/12/02/dutch-lawmakers-under-pressure-over-coal-phase-out/> (last accessed June 1, 2020)

Forbes on ECT and Paris Agreement

<https://www.forbes.com/sites/davekeating/2019/09/05/a-little-known-eu-investor-dispute-treaty-could-kill-the-paris-climate-agreement/#10bec27d4ecf> (last accessed June 1, 2020)

Guardian on ECT and Green New Deal

<https://www.theguardian.com/business/2019/dec/09/energy-treaty-risks-undermining-eus-green-new-deal> (last accessed June 1, 2020)

UNFCCC Website

<https://unfccc.int/process-and-meetings/the-convention/what-is-the-united-nations-framework-convention-on-climate-change> (last accessed June 1, 2020)