



# Green Technology Disputes in Stockholm

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# 1 The Arbitration Institute of the Stockholm Chamber of Commerce

The Arbitration Institute of the Stockholm Chamber of Commerce (SCC) was founded in 1917 and has handled international disputes since the 1970's. Most disputes at the SCC are decided under the Arbitration Institutes of the Stockholm Chamber of Commerce (SCC Rules). The SCC has also adopted rules for Expedited Arbitration and frequently acts as appointing authority under the UNCITRAL Arbitration Rules.

In 2018, parties from 43 different jurisdictions appeared in disputes before the SCC. Outside Sweden, the most common party nationalities in SCC proceedings in 2018 were Russia, Germany and Ukraine.

The SCC also plays a leading role internationally as a forum for resolving disputes between states and foreign investors. SCC started to register arbitration under investment treaties ("investment treaty arbitration") in 1993. By the end of 2018, the SCC had registered a total of 106 investment treaty disputes, of which 74% have been administered under the SCC Arbitration Rules.

Most of the investment disputes under the SCC Arbitration Rules arose from bilateral investment treaties (BITs) and from the Energy Charter Treaty (ECT). Based on data from the UNCTAD Investment Policy Hub and from SCC internal research, 11% of investment treaty arbitration cases globally up to 31 December 2018 have been registered with the SCC.

Sweden and the SCC are listed as a forum for investment treaty arbitration in at least 120 BITs, as well as in the ECT. Of these 120 BITs, 61 agreements provide that the SCC Arbitration Rules are to apply to disputes arising out of the agreement. The remaining 60 BITs stipulate that the SCC is to act as Appointing Authority under the UNCITRAL Arbitration Rules or that Sweden is to be the legal seat of the dispute (Hope, 2018).

## SCC CASELOAD 2005-2018



## 2 Green technology disputes at the SCC

Globally, climate change litigation is on the rise.<sup>1</sup> The trend is clear, especially following adoption of the Paris Agreement on Climate Change in 2015, where for the first time, governments from 196 countries agreed to a specific climate target.

The United Nations Environment Programme (UNEP) reported that as of March 2017, climate change cases had been filed in 24 countries, with 654 cases filed in the United States and over 230 cases filed in all other countries combined.<sup>2</sup>

Climate change litigation is defined as “cases brought before administrative, judicial and other investigatory bodies that raise issues of law or fact regarding the science of climate change and climate change mitigation and adaptation efforts”. These cases mostly consist of citizens’ lawsuits challenging the inadequacy of climate policies and environmental impacts of development projects.<sup>3</sup>

Parallel with the rise of global climate change litigation, the SCC has seen an increase in commercial disputes involving green technology. For the purpose of this study, green technology or clean technology could be defined as any process, product or service that reduces negative environmental impacts in support of the Paris Agreement on climate change.<sup>4</sup> It includes a wide range of technologies, such as renewable energy, sustainable waste management and organic food production, to name a few. These companies are playing a key role in the transformation to a low carbon economy by providing specific sustainable technology solutions.

More financing is targeting green technologies. According to the UNEP and Bloomberg New Energy Finance, global investment in renewable energy surpassed USD 270 billion in 2017.<sup>5</sup> In addition, there is an increasing trend for companies to construct and operate renewable energy installations onsite.<sup>6</sup>

However, much more investment is needed to keep the temperature level as agreed in the Paris Agreement.<sup>7</sup>

The green technology sector consists of normal commercial activities which need an effective legal framework as an accelerator.<sup>8</sup> Arbitration, as an efficient dispute resolution mechanism, has an important role to play in putting power behind the words

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<sup>1</sup> United Nations Environment, *The Status of Climate Change Litigation: A Global Review*, (UNEP: 2017), p. 10.

<sup>2</sup> *Ibid.*

<sup>3</sup> *Ibid.*

<sup>4</sup> [https://en.wikipedia.org/wiki/Clean\\_technology](https://en.wikipedia.org/wiki/Clean_technology)

<sup>5</sup> Frankfurt School-UNEP Centre/BNEF 2018, *Global Trends in Renewable Energy Investment 2018* (Frankfurt School of Finance and Management GmbH 2018), p. 11.

<sup>6</sup> David Gardiner et.al., *Power Forward: Why the World’s Largest Companies Are Investing in Renewable Energy* (WWF, Ceres, Calvert Investment 2012), p. 4

<sup>7</sup> International Institute for Applied Systems Analysis, “Meeting Paris climate targets will require a substantial reallocation of global investments”, 18 June 2018, available at [www.iiasa.ac.at](http://www.iiasa.ac.at).

<sup>8</sup> Annette Magnusson, “Climate Disputes and Sustainable Development: Bridging the enforceability gap” in *International Arbitration in the Energy Sector*, (Oxford University Publishing 2018), p. 398.

of commercial contracts in this sector. Moreover, clean technology companies could also benefit from protection under investment treaties signed by their government and the host state government. Most investment treaties today include arbitration as a dispute resolution mechanism.

The SCC has a long experience in resolving disputes in sectors in most need of transition, such as energy and infrastructure.<sup>9</sup> Further, the SCC has seen that more companies in the green technology sector are resorting to arbitration. As companies and organizations are entering a transition towards a low carbon economy, this type of case is expected to increase in number, based on both commercial contracts and investment treaties.

In the past few years, the SCC has explored the role of arbitration in advancing environmental goals. One example is the publication of a 2017 report “Bridging the climate change policy gap” following an international conference on the same theme in late 2016. The report addresses strategies to enhance investments in green technology and how international arbitration could play a role in safeguarding these investments.<sup>10</sup>

Also in 2017, the SCC launched a crowdsourcing exercise, the Stockholm Treaty Lab. The Lab is a global innovation competition that challenged experts from relevant disciplines to draft a new international treaty that, if implemented by states, could increase investments in support of the Paris Agreement targets. The competition – which has attracted innovators from all over the world – concluded in 2018 and the submissions are now published on the Stockholm Treaty Lab website.

Against the above backdrop, this study aims to provide an understanding of the nature of green technology disputes at the SCC and to explore issues that are common to these cases. Further, it seeks to consider whether the particularities of cases have required specific procedural features in the arbitration itself.

This study is divided into two parts: the first part concerns green technology disputes arising under commercial contracts while the second part concerns green technology disputes arising under investment treaties. Both parts present the types of business, the types of claims and the amount(s) in dispute. An analysis of the cases will also be provided.

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<sup>9</sup> See SCC Statistics available at [www.sccinstitute.com](http://www.sccinstitute.com)

<sup>10</sup> Arbitration Institute of the Stockholm Chamber of Commerce, *Bridging the Climate Change Policy Gap: the Role of International Arbitration*, (SCC: 2017), available at [www.sccinstitute.com](http://www.sccinstitute.com)

# PART I:

## SCC GREEN TECHNOLOGY COMMERCIAL DISPUTES 2014--2018

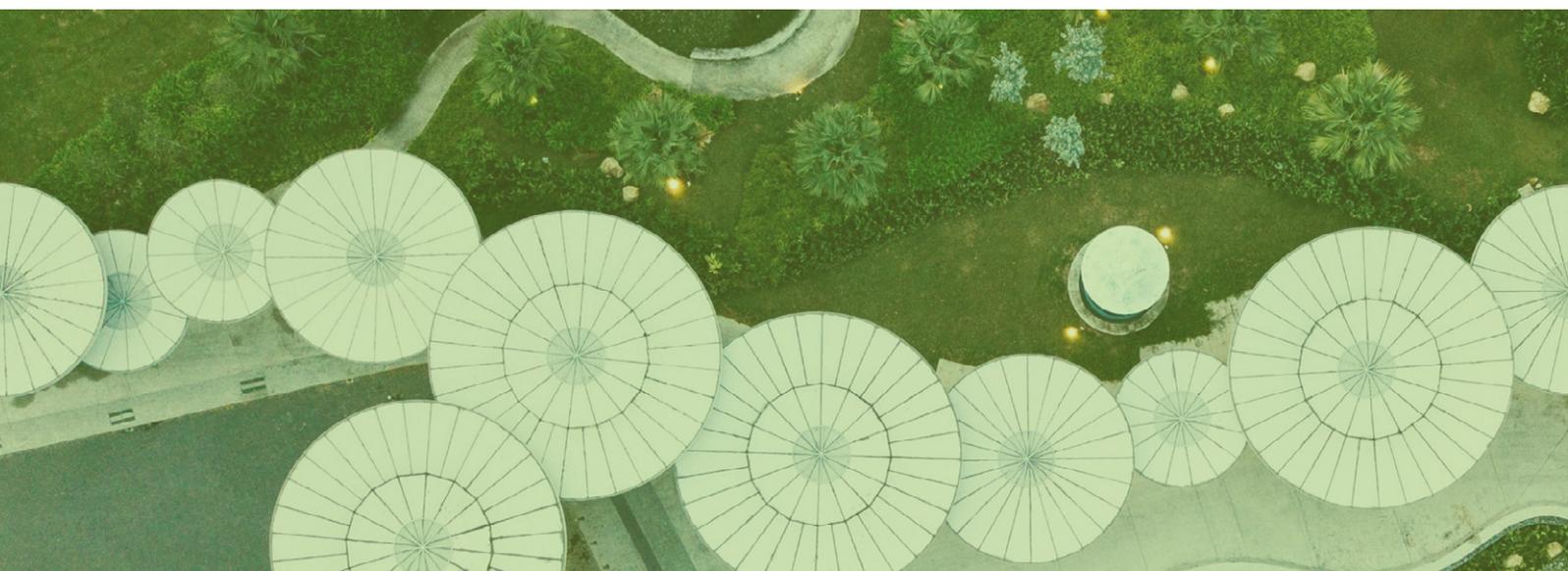
### 1 Introduction

This part focuses on green technology disputes arising from commercial contracts. It first presents basic facts and figures that can be extracted from green technology commercial cases registered at the SCC between 2014–2018 (hereinafter “**Green Technology Commercial Disputes**”). For example, the types of green technology, types of contract and the average amount in dispute are addressed. The second part provides an overview of the substance of the disputes and an analysis of specific procedural features of Green Technology Commercial Disputes.

### 2 Methodology

All SCC cases registered between 2014 and 2018 in domestic and international disputes were reviewed in order to identify cases where one or both parties used a type of green technology as part of its main business activity. Cases where the language of arbitration was neither English nor Swedish are excluded.

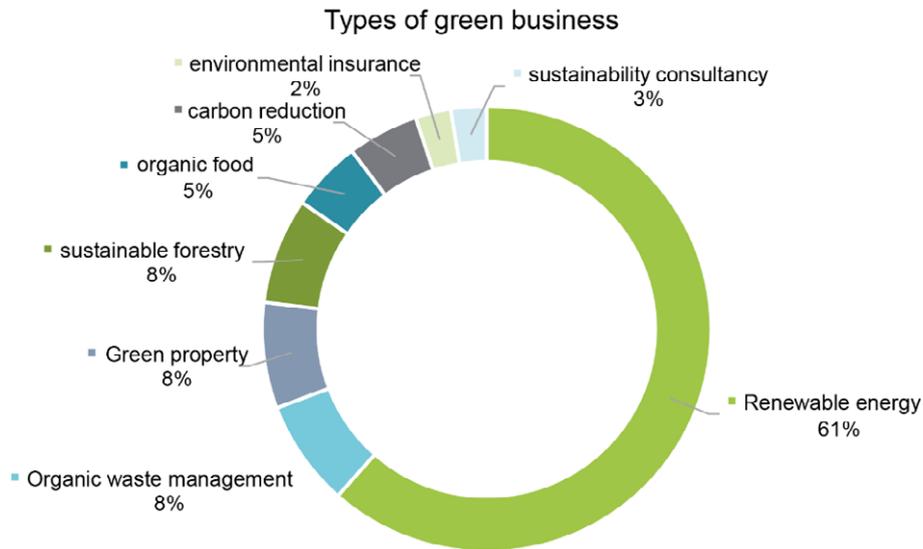
From this review, it was found that between 2014–2018, the SCC registered thirty-one Green Technology Commercial Disputes. The statistics provided below are retrieved from these thirty-one cases.



### 3 The numbers on Green Technology Commercial Disputes

#### The parties

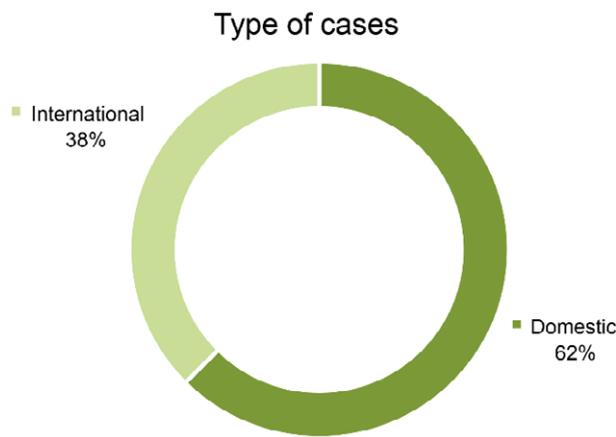
The majority of the parties who appeared in Green Technology Commercial Disputes pursued business activity in the renewable energy sector (61%), while the rest in organic waste management, organic food, and sustainable forestry. Parties consisted of not only private companies, but also an economic association and a university.



Companies from Europe and Asia have appeared as parties in Green Technology Commercial Disputes. Swedish parties are the most frequently appearing, followed by German and Norwegian parties.

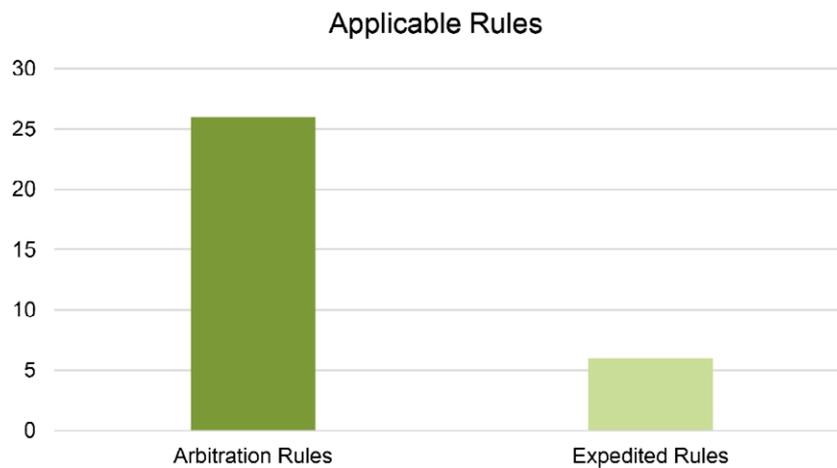
Nationality of Parties		
Denmark	Iceland	Singapore
Estonia	Finland	Norway
Sweden	Germany	Russia
The Netherlands		

Some 38% of disputes are international disputes, which means that one of or both parties are non- Swedish parties. Meanwhile 62% of disputes are domestic disputes, which means that both parties are Swedish parties.



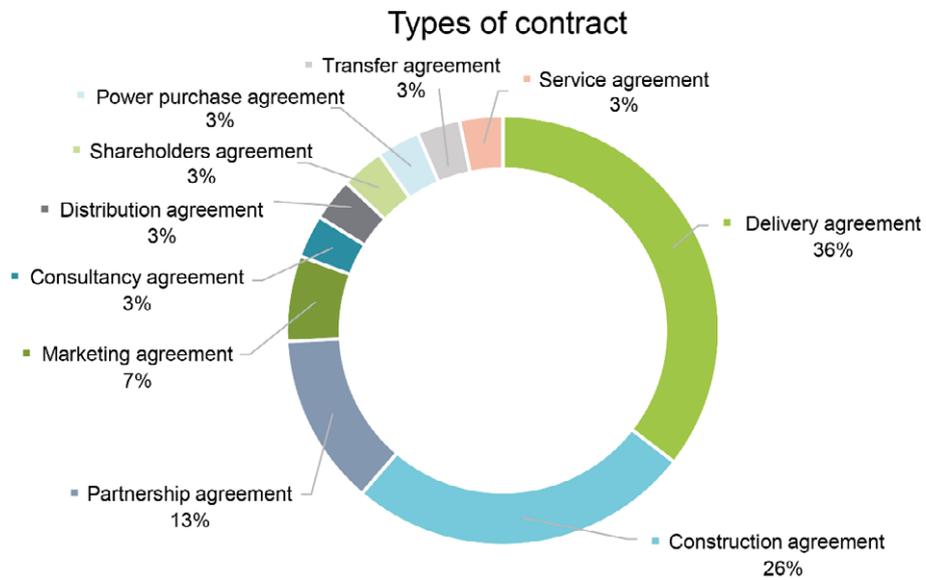
## The disputes

The majority of Green Technology Commercial Disputes were predominantly registered under the SCC Arbitration Rules (81%), while the rest were registered under the SCC Rules for Expedited Arbitration (19%).

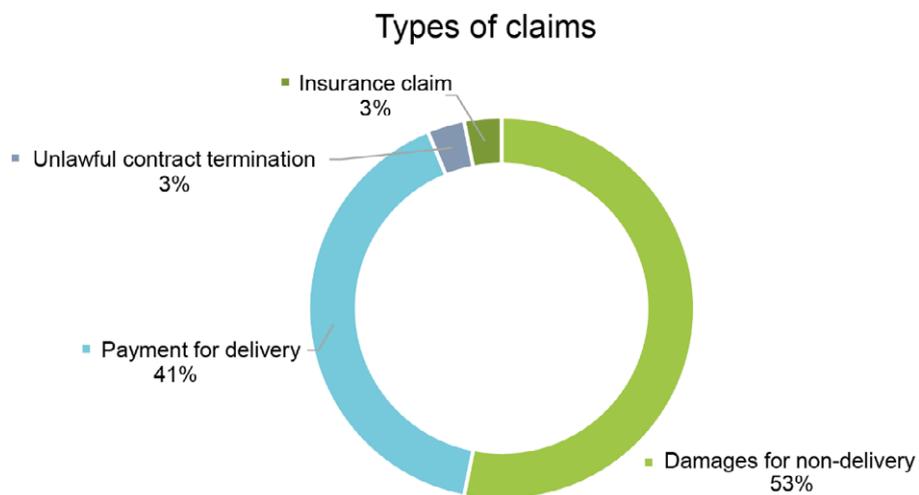


Claims range from EUR 72,000 to EUR 198,891,500 with an average amount in dispute of EUR 13,938,348.

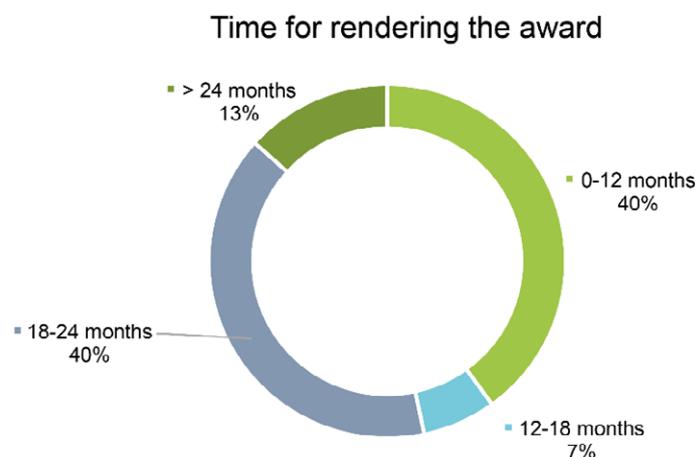
Most disputes arose from delivery agreements (36%), followed by construction agreements (26%) and partnership agreements (13%).



Claims mostly concerned damages for non-delivery (53%), such as unsatisfactory performance of work ordered, and failure to pay for delivery (41%).



The average length of a dispute from registration of the case to rendering of the award is 16 months. The shortest dispute length that resulted in an award was 6 months and the longest was 31 months.



## 4 The substance of Green Technology Commercial Disputes

In terms of the substance of disputes, Green Technology Commercial Disputes could be divided into three types: (1) disputes arising directly or in connection with an international climate agreement or climate policy, (2) disputes that are technical in nature and (3) non-technical disputes.

### Disputes that arose directly from or in connection with international climate agreements or climate policy

At the centre of the climate change regime is the United Nations Framework Agreement on Climate Change (UNFCCC). The UNFCCC was adopted in 1992 with the objective to “stabilize greenhouse gas concentration in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system”. The UNFCCC contains general provisions and serves as an umbrella agreement, where parties could negotiate more specific agreements or protocols to implement the Convention.<sup>11</sup> The Kyoto Protocol and the Paris Agreement represent the most important legal frameworks under the UNFCCC so far.

The Kyoto Protocol sets reduction targets for certain greenhouse gases only for certain countries, the so-called “Annex I countries”. It further regulates mechanisms to achieve these targets. The landmark Paris Agreement on climate change was adopted in 2015 as a result of the 21<sup>st</sup> Conference of the Parties to the UNFCCC. The agreement marks

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<sup>11</sup> United Nations Framework Convention on Climate Change, adopted on 9 May 1992, entered into force 21 March 1994



the first time that 196 countries agreed to a specific climate goal, which is to limit warming to 1.5 to 2 degrees Celsius above pre-industrial levels. The goal is to be achieved by requiring each state party to prepare, communicate and maintain a climate plan, or the so-called nationally determined contributions (NDCs). This climate plan will reflect each country's ambition for reducing its emissions.

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*Green technology actors can resort to arbitration to resolve disputes concerning projects to implement the mechanisms under the Kyoto Protocol or the NDCs.*

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Neither the Kyoto Protocol nor the Paris Agreement includes arbitration as part of the dispute resolution mechanism. The Kyoto Protocol relies on a compliance mechanism to guide the parties in meeting their reduction targets. The Paris Agreement, on the other hand, includes provisions that foresee a mechanism to ensure both implementation and compliance. However, to date, the Conference of the Parties to the UNFCCC has not further elaborated on the details of these provisions.

Despite no mention of arbitration, arbitration still plays an important role in achieving the objectives of both the Kyoto Protocol and the Paris Agreement. Green technology actors can resort to arbitration to resolve disputes concerning projects to implement the mechanisms under the Kyoto Protocol or the NDCs. These projects – for example construction of a wind farm – might entail ordinary commercial activities and be regulated by commercial contracts.

The SCC has registered precisely this type of case.

Case 121/2014 concerned a project that aimed to implement the Joint Implementation mechanism under the Kyoto Protocol. The Joint Implementation mechanism allows industrialized countries to meet part of their GHG emission reduction by financing emission reduction projects in other countries. The dispute emanated from withdrawal from the Protocol by the claimant's host state. The claimant argued that this situation represented a lack of host country approval and therefore the project could not be implemented.

Parties have also brought a claim in connection with a regional or national climate policy. Examples of this are disputes arising from policies regulating renewable energy or emissions trading. Case 151/2017 concerned the transfer of a bioenergy plant from the respondent as the seller, to the claimant as the buyer. The claimant argued that the respondent failed to transfer the plant's emission rights to its account within the European Union emissions trading scheme in due time. As a result, the claimant was ordered to pay a penalty by the Environmental Protection Agency. The claimant therefore claimed reimbursement of this penalty payment.

## Disputes that are technical in nature

As described above, Green Technology Commercial Disputes have predominantly arisen from construction agreements, for example agreements for construction of biofuel installations, wind farms, and green buildings. These cases typically involve a high amount in dispute and entail complex technical questions. It is thus not uncommon that parties or arbitrators have sought to obtain evaluations from experts.

Most of the technical cases have concerned renewable energy facilities, from wind farm to biogas installation. The facilities supply electricity either to the public grid or for a specific purpose, for example, powering a factory. The typical issue was whether a renewable energy facility fulfilled the contractual standards, for example whether it was able to produce the agreed amount of power or to prevent environmental risks. Another common issue was whether the contractor was entitled to reimbursement for additional work incurred in construction.

Case 011/2015 concerned a series of software systems that regulated wind turbines. The claimant wind farm operator asserted that it had the right to full access to the software. The respondent, on the other hand, argued that it had provided access to the software as agreed in the contract and that full access could not be provided for reasons of safety and protection of intellectual property.

In case 086/2015, which concerned a partnership to build a wind farm, the claimant argued that an event of default under the agreement had occurred because the grid connection was no longer available for the wind farm. The claimant further maintained that it had the right to transfer its shares in the project back to the respondent.

## Non-technical disputes

The remaining cases were launched by parties in the green technology sector, although the substance of the dispute did not deal with climate policy or technical questions. Use of the SCC Arbitration Rules of Expedited Arbitration ("Expedited Rules") is more commonly found in this type of case.

The most common central issue is unpaid delivery of a wide range of green technology products and services. Case 008/2017, for example, concerned unpaid delivery of wind energy converters from a German supplier to a Swedish customer. Meanwhile, in case 096/2018, the claimant brought a claim for payment for consultancy services in connection with share issuance for the respondent, an organic food producer. Finally, case 015/2015 arose from a distribution agreement where the respondent agreed that the claimant was to be exclusive distributor of the respondent's bioenergy products. The claimant alleged that the respondent had breached the agreement by directly selling its products in certain countries.

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*Arbitration is attractive not only for more conventional companies such as banks and energy companies, but also for a newer and growing industry such as green technology.*

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The smaller end of the cases dealt with employment issues. Case 053/2016 concerned transfer of pension liabilities following transfer of the main assets of a green technology company. In case 093/2016, the claim against the respondent was for reasons of unlawful termination of a consultancy contract. The respondent pursued a business in sustainable buildings.

The above cases suggest that arbitration is attractive not only for more conventional companies such as banks and energy companies, but also for a newer and growing industry such as green technology. The trend is parallel with the increasing presence of green business in general.

## 5 Specific procedural features in Green Technology Commercial Disputes

The results of two surveys, the International Centre for Energy Arbitration (ICEA) Survey and the Queen Mary University of London/PricewaterhouseCoopers (QMUL/PwC) Survey, shed some light on what parties expect from dispute resolution procedure.<sup>12</sup> It appears from the results that if it is not possible to avoid legal proceedings, parties value a mechanism that is rather expeditious.<sup>13</sup> Further, in the ICEA survey, parties ranked the expertise of the decision maker as the most important feature of a dispute resolution mechanism.<sup>14</sup>

Arbitration at the SCC offers just that. It is guided by a couple of principles as embodied in its rules: efficiency and party autonomy. All versions of the SCC Arbitration Rules – from 1999, 2007 and 2010 – require both the arbitral tribunal and the SCC to deal with

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<sup>12</sup> Simon Manner and Tilman Niedermaier, “Renewable Energy Disputes” in *International Arbitration in the Energy Sector* (Oxford University Publishing 2018), p. 102.

<sup>13</sup> *Ibid.*, p. 103.

<sup>14</sup> *Ibid.*



arbitration in an expeditious manner. Further, the efficiency principle could be found in the provisions on emergency arbitrators and SCC Rules for Expedited Arbitration.

In the 2017 SCC Arbitration Rules, a new Article 2 was added. This requires that not only the SCC and the tribunal “act in an efficient and expeditious manner” but also that the parties should do so, too. Similarly, Article 28 requires the tribunal and the parties to “adopt procedures enhancing the efficiency and expeditiousness of the proceedings.” The principle of efficiency is further enshrined in the provisions on joinder, multiple contracts, consolidation and summary procedure.<sup>15</sup>

Party autonomy, on the other hand, means that parties are free to choose the law governing their contracts, the arbitration rules, seat and language of the arbitration. Most importantly, parties are free to appoint their arbitrator as decision-maker.

## Use of efficiency tools under SCC Rules

Green Technology Commercial Disputes have benefited from the efficiency tools under SCC Rules. Expeditious and efficient arbitration mean that parties can resume their business operations as usual at the soonest. Parties can also specifically request a declaratory judgment, that is, to request the arbitral tribunal to order the respondent to perform a specific act. Speedy arbitration is thus of paramount importance.

Case 11/2015, for example, concerned access to software systems regulating wind turbines. It was crucial for the dispute to be resolved expeditiously to ensure safe and optimal functioning of electricity generation. The award in this case was rendered within 11 months after registration of the case and 10 months after referral of the case to the tribunal.

More arbitration cases at the SCC are registered under the Expedited Rules. In 2018, more than one-third of the 152 new cases were registered under the Expedited Rules. In an expedited arbitration, the dispute is heard by a sole arbitrator, there is often no hearing, and page and time limitations are imposed on the parties’ written submissions.

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<sup>15</sup> Anja Havedal Ipp, “International Arbitration in Stockholm: Modern, Efficient ADR with Century-Old Roots”, (New York Dispute Resolution Lawyer Fall 2018, vol. 11 No. 2), p. 79.

As a result, the fees are lower. The parties must agree on the application of these rules, either in the arbitration agreement or in a separate agreement after a dispute has arisen.<sup>16</sup>

Almost 20% of Clean Technology Commercial Disputes were registered under the Expedited Rules. One of them was case 064/2018 which arose from a construction agreement in which the respondent agreed to build a biogas system for the claimant. The claimant alleged that the respondent was delayed in the construction work and the work that had been performed suffered from errors so significant that the biogas facility could not be used. The award was rendered within six months from registration of the case.

Case 125/2014 arose from a partnership agreement between a university and a waste management company. Both parties agreed to undertake a research project concerning construction of a biofuel installation. The claimant alleged that the respondent had failed to pay for its share of the project. Within four months from registration of the case, the sole arbitrator rendered an award.

## Importance of technical expertise

Drawing from the principle of party autonomy, the SCC Rules and Expedited Rules allow parties to choose any individual as arbitrator, given he or she has legal capacity and is independent and impartial.<sup>17</sup> The SCC does not maintain a list of arbitrators, and in case of appointment by the SCC Board, the Board takes into account the circumstances and expertise required in each case. The parties and the SCC Board can also appoint a sole arbitrator, which will result in lower fees and faster proceedings.

The possibility to appoint decision-maker is especially important for cases concerning green technology. This type of case, as noted earlier in this article, entails complex technical questions and requires specific expertise. What is more, green technology is expanding at a fast pace not only in terms of size but also in terms of type. In other words, green technology in the future might cover many more technologies that are yet to be developed today. It is therefore becoming more important that the parties and SCC Board are not limited to a list of arbitrators in making the appointment.

To date, it appears that the parties and the SCC Board have not specifically considered expertise in climate change or green technology in the appointment of arbitrators. This could be explained by the fact that the green technology sector is relatively new. However, there is a tendency that arbitrators with expertise in energy and construction arbitration are getting more appointments in Green Technology Commercial Disputes.

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<sup>16</sup> *Ibid.*, p. 80.

<sup>17</sup> Celeste E. Salinas Quero, "Appointment of Arbitrators under the SCC Rules", (American Bar Association Section of International Law 2013, vol. 1, issue 1), p. 53.

Use of experts, on the other hand, is frequently found in Green Technology Commercial Disputes. The SCC Rules provide opportunities for parties to call on experts, who can submit their testimony in the form of signed statements. The rules further require an appointed expert to attend a hearing for examination, unless otherwise agreed by the parties. The tribunal may also appoint experts to address specific questions in the dispute, after consultation with the parties.<sup>18</sup>

In most Green Technology Commercial Disputes, different experts were appointed by either party. The tribunal was therefore tasked with weighing between different expert opinions.

Case 062/2016 arose from a construction contract in which the respondent was to construct a biofuel combustion plant for the respondent. The biofuel was to use grain waste from the claimant's beer production. The claimant claimed that there were significant errors in the plant that made it unable to reach its maximum functionality. The respondent's expert explained that this situation was caused by the generation of certain chemicals caused by the use of grain waste and therefore there was no error in construction. The claimant's expert disagreed. The tribunal in the end relied on the respondent's expert because the claimant's expert provided no data to support his opinion.

In case 064/2018, the sole arbitrator referred to an opinion by an assessor to calculate the value of construction work for a biogas plant. In this case, the claimant for whom the respondent did the work claimed that the work had no value since the biogas plant suffered from major errors. The respondent, on the other hand, claimed full payment of the contract price. The assessor performed his calculation based on the documentations review and a site visit.

## Cross-border enforcement

Among Green Technology Commercial Disputes, almost 40% are international cases. This means that at least one of the parties is from outside Sweden. These cases benefit from the Convention on the Recognition and Enforcement of Foreign Arbitral Awards (the "New York Convention"), which enables cross border recognition and enforcement of arbitral awards. This recognition is currently lacking for court judgments. The New York Convention enjoys wide participation by 159 states. In practical terms, this means that an award from an arbitration case seated in Stockholm could be enforced in all those states.

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<sup>18</sup> Arbitration Rules of the Arbitration Institute of the Stockholm Chamber of Commerce.

## PART II

# SCC Green Investment Disputes 2012–2018

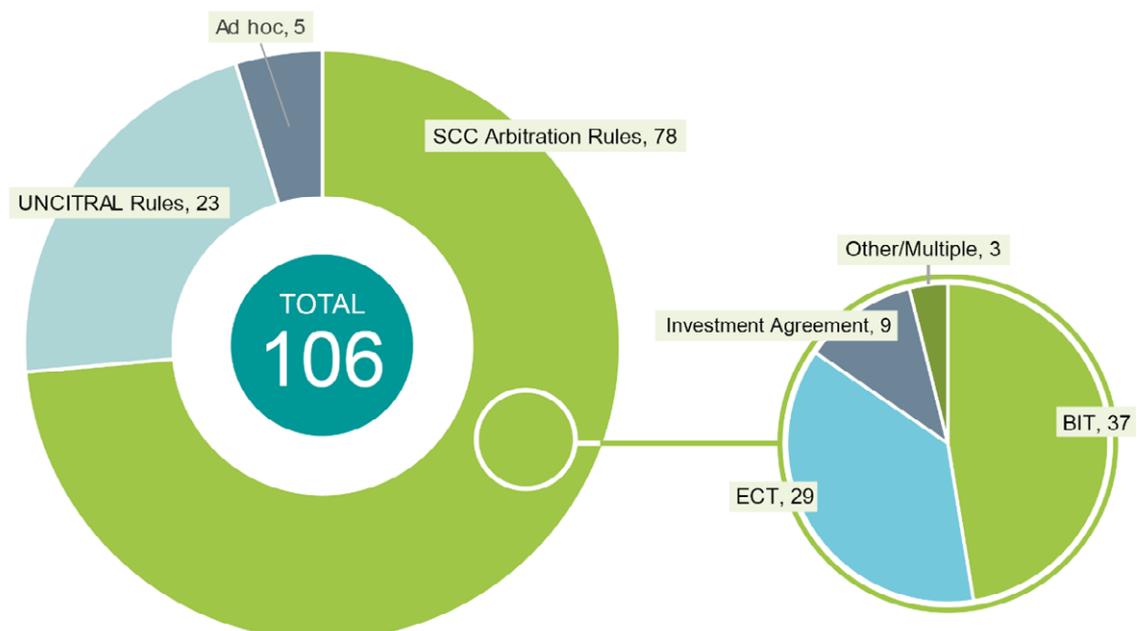
## 1 Introduction

The SCC has always been a global player in the resolution of investment treaty disputes. It has administered the second highest number of investment treaty arbitration cases after the dispute resolution organ of the World Bank: the International Center for Settlement of Investment Disputes. Investment treaty disputes at the SCC cover a wide range of investment types, from energy and infrastructure to banking and finance.

This part focuses on investment treaty arbitration at the SCC where the investor has an investment in the green technology sector in the host state's territory. It provides information on the sector, the applicable rules and the amount in dispute. Further, an analysis of publicly-available awards will be provided to consider whether the disputes have required specific procedural features.

### INVESTMENT TREATY ARBITRATION 1993–2018

Applicable rules 1993–2018



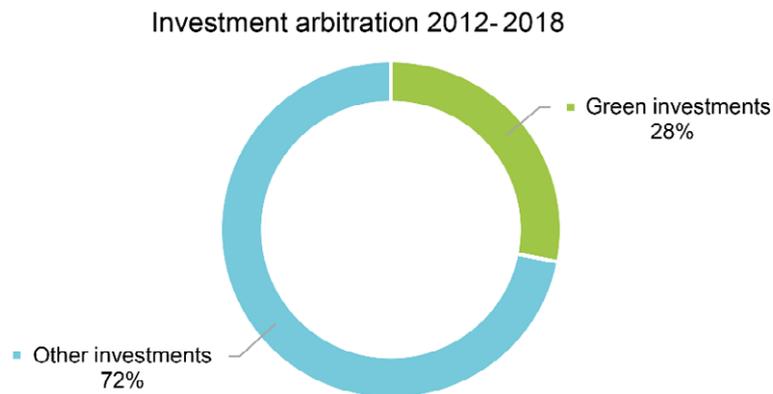
## 2 Methodology

All SCC investment treaty arbitration cases registered between 2012 and 2018 were reviewed in order to identify cases where the investor or claimant has an investment in the green technology sector in the host state's territory. Green technology could be defined as any process, product or service that reduces negative environmental impacts in support of the Paris Agreement on climate change.<sup>19</sup>

From this review, it was established that sixteen green investment treaty arbitrations were registered at the SCC between 2012 – 2018 (hereinafter “**Green Investment Disputes**”). The statistics below are retrieved from these sixteen cases. Moreover, analysis of the cases will be conducted by reviewing five awards publicly available on [www.italaw.com](http://www.italaw.com).

## 3 The numbers on Green Investment Disputes

Between 2012–2018, fifty-seven investment treaty arbitration cases were registered at the SCC. Sixteen of them (28%) fall under the category of Green Investment Disputes.



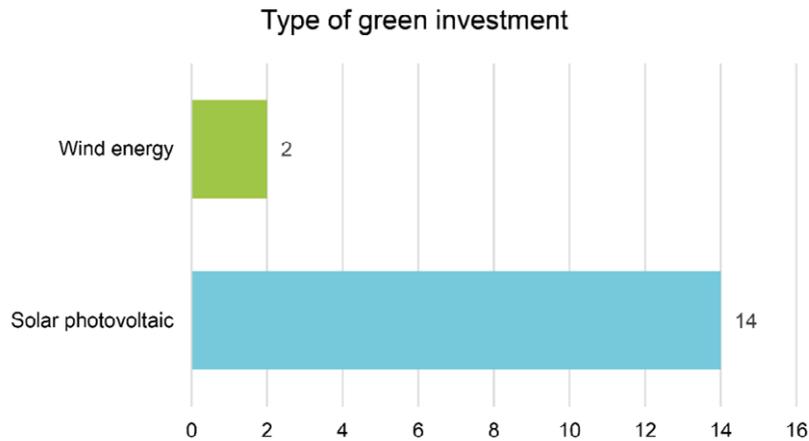
Of these sixteen cases, fourteen were administered under SCC Arbitration Rules while in two cases the SCC acted as appointing authority under the UNCITRAL Arbitration Rules.



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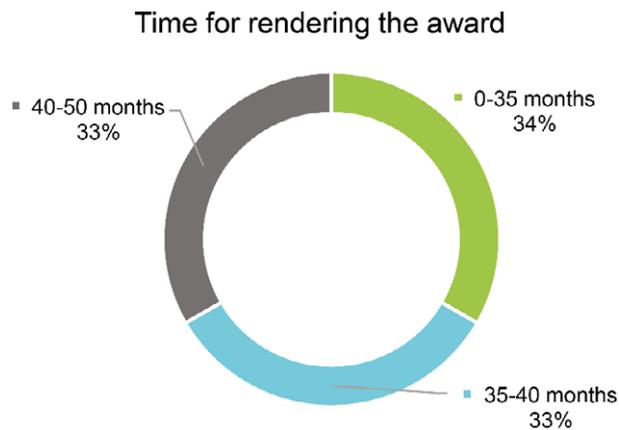
<sup>19</sup> Wikipedia, (n. 4)

Most SCC Green Investment Disputes concerned investment in solar photovoltaics, while the rest dealt with investments in wind energy.



Claims range from EUR 6,070,000 to EUR 830,300,000 with an average amount in dispute of EUR 88,132,578.

The average length of a dispute from registration of the case to rendering an award is 37.5 months. The shortest dispute length that resulted in an award is 33 months and the longest is 44 months.



## 4 The substance of Green Investment Disputes

All sixteen SCC Green Investment Disputes concerned investments in the renewable energy sector and were brought under the Energy Charter Treaty (ECT). The ECT is the only binding multilateral instrument dealing with inter-governmental cooperation in the energy sector. The purpose of the ECT is “to promote long-term cooperation in the

energy field, based on complementarities and mutual benefits, in accordance with the objectives and principles of the Charter”.<sup>20</sup>

Under the ECT, contracting parties must accord substantive protection to foreign investors in their territory. These protections include, among others, fair and equitable treatment (FET), constant protection and security, most-favoured nation (MFN) treatment, national treatment and protection against unreasonable and discriminatory measures. Further, Article 13 prohibits nationalization or expropriation of the investment and exceptions to that general prohibition.<sup>21</sup>

Article 26 of the ECT regulates investment disputes between private investors and contracting states and extends to investors the right to bring a claim to arbitration to resolve such disputes. The SCC Arbitration Rules is one of two preferred venues in the ECT for such disputes. As of 31 December 2018, the SCC had administered twenty-nine cases brought under the treaty.

Between 2012 and 2018, tribunals rendered a final award in five cases within the SCC Green Investment Disputes category. All the awards are published on [www.italaw.com](http://www.italaw.com), and may be accessed for free by the public. The analysis below is based on the awards published on that website:

No	SCC Green Investment Disputes (concluded between 2012–2018)	Date of award (publicly available on <a href="http://italaw.com">italaw.com</a> )
1.	Charanne and Construction Investments v. The Kingdom of Spain (“ <i>Charanne</i> ”)	21 January 2016
2.	Isolux Infrastructure Netherlands B.V v. The Kingdom of Spain (“ <i>Isolux</i> ”)	17 July 2016
3.	Novenergia II – Energy & Environment (SCA) (Grand Duchy of Luxembourg), SICAR v. The Kingdom of Spain (“ <i>Novenergia</i> ”)	15 February 2018
4.	Foresight Luxembourg Solar 1. S.AR1, et.al. v. The Kingdom of Spain (“ <i>Foresight</i> ”)	14 November 2018
5	Greentech Energy Systems A/S, Novenergia II Energy and Environment and Novenergia Italian Portfolio SA v. Italian Republic (“ <i>Greentech</i> ”)	23 December 2018

<sup>20</sup> Kaj Hober, “Overview of Energy Charter Treaty Cases” in *International Arbitration in the Energy Sector*, (Oxford University Publishing, 2018), p. 175.

<sup>21</sup> Energy Charter Treaty, adopted in December 1994, entered into force in April 1998, art. 13.



Four out of the five disputes deal with changes in a special regulatory regime in Spain that provides incentives and subsidies for investments in the solar photovoltaic sector. The special regime includes a system of premium and regulated tariffs to remunerate electricity production originating from photovoltaics.

Claimants in these cases alleged that these changes were unlawful. In *Charanne*, for example, the claimant argued that Spain had violated the ECT by establishing a time limit for incentive payments for photovoltaic installations, limiting the operational hours of the photovoltaic installations and requiring that the solar photovoltaic owners pay tolls for use of transport and distribution networks.<sup>22</sup> These measures, according to the claimant, deprived them of a “substantial value” of their investment and therefore constituted indirect expropriation. The claimant further argued that the changes frustrated their legitimate expectations.<sup>23</sup>

One award, *Greentech*, concerned a claim against Italy. The dispute arose from an investment of a total of 134 solar photovoltaic plants in Italy. The claimants alleged that they were induced to make those investments by Italian regulations and contractual provisions that provided financial incentives. Among the most important incentives were tariff premiums lasting for a twenty-year period. The claimants alleged that, beginning in 2012, Italy implemented a series of measures that diminished the value of the incentives and therefore violated the investment protection standard under the ECT.<sup>24</sup>

Even though these cases arose from investment in renewable energy, none of the awards contained substantive arguments related to obligations under international climate agreements or climate policy in general. In *Novenergia*, the tribunal merely notes that the policy being targeted in the case was “clearly enacted with the objective of ensuring that the Kingdom of Spain achieved its emissions and RE targets”. It appears that tribunals so far have not been tasked with balancing the obligations under international investment law and climate change law.<sup>25</sup>

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<sup>22</sup> *Charanne and Construction Investments v. Spain*, SCC Case No. V062/2012, Final Award issued on 21 January 2016, unofficial translation by Mena Chambers available on [www.italaw.com](http://www.italaw.com).

<sup>23</sup> *Ibid.*

<sup>24</sup> *Greentech Energy Systems A/S, Novenergia II Energy and Environment and Novenergia Italian Portfolio SA v. Italian Republic*, Final Award issued on 23 December 2018 available on [www.italaw.com](http://www.italaw.com), para 11 and 12.

<sup>25</sup> Annette Magnusson, n.8, p. 393

## 5 Specific procedural features

The SCC started to administer investment treaty disputes in the early 1990's. However, disputes that concerned green investments, particularly in the solar photovoltaic field, started to arise only in 2012. It is thus interesting to review publicly-available awards to understand whether these disputes have required specific procedural features in the proceedings.

A review of the five arbitral awards in SCC Green Investment Disputes reveals a couple of procedural features that were unique to these disputes. The first was that these cases required specific expertise in renewable energy, taxation and finance. The second was that the tribunals allowed third-party participation through *amicus curiae* brief submissions.

### The need for specific expertise

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*In cases that deal with a new technology and a new legal landscape, the flexibility for parties to choose a decision maker is all the more important.*

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Most of the SCC Green Investment Disputes concern investments in solar photovoltaics, which is a relatively new technology. It is thus not surprising that resolution of disputes related to this type of energy requires a certain degree of specific technical expertise. The expertise might also need to be updated over time as the technology advances.

While solar photovoltaics started to be developed in the 1990's, it was not until after 2010 that the field gained momentum on a worldwide scale and started to compete with conventional energy sources. It is also considered renewable energy, and therefore represents an attractive solution in efforts to mitigate climate change. By 2015, some 30 countries had reached grid parity, which means that solar photovoltaic cells can generate power at a cost equal to or less than the price of power from a normal grid.<sup>26</sup>

On the regulatory side, governments began to offer financial incentives to encourage further development and expansion of solar photovoltaic cells. In 2007, for example, Spain introduced a regulation on feed-in-tariffs, which attracted an unprecedented

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<sup>26</sup> K. Branker, et.al., A Review of Solar Photovoltaic Levelized Cost of Electricity, Renewable and Sustainable Energy Reviews, 15(9), 4470-4482.

[http://digitalcommons.mtu.edu/materials\\_fp/28/](http://digitalcommons.mtu.edu/materials_fp/28/); "[Levelized Cost of Electricity—Renewable Energy Technologies](#)" (PDF). *www.ise.fraunhofer.de. Fraunhofer ISE. November 2013.*

p. 4; "[Crossing the Chasm](#)" (PDF). *Deutsche Bank Markets Research. 27 February 2015.*

p. 9.



boom in the deployment of solar photovoltaics.<sup>27</sup> The legal regime that regulates solar photovoltaics can therefore also be considered relatively new.

In cases that deal with a new technology and a new legal landscape, the flexibility for parties to choose a decision maker is all the more important. In SCC Green Investment Disputes, appointments have been made of arbitrators with established experience in investment treaty arbitration, specifically in energy arbitration. Further, some cases used Spanish as the language of arbitration, and therefore arbitrators who speak Spanish have obtained more appointments.

Use of experts has been crucial in SCC Green Investment Disputes. All awards rendered have referred to opinions of experts, mostly in finance and taxation as the modified regime concerned tax treatments and incentives. Specifically, most experts in SCC Green Investment Disputes contributed their expertise in methods and calculations to determine the economic impact of the modified regulations. This determination is key in order to evaluate whether there was a breach of the investment protection standards under the ECT.

The tribunal in *Isolux* referred to calculations by experts to determine the profitability of the investment before and after modification of the special regime. The profitability principle, according to the tribunal, is to be respected when the regulations are changed. Referring to the calculations of the expert, the tribunal concluded that the modified regime still provided a guarantee of the profit that the claimant had expected at the time it made the investment. The tribunal thus found no breach of the fair and equitable treatment standard in the ECT.<sup>28</sup>

In *Charanne*, the experts gave specific opinions on the lifespan of photovoltaic plants. This calculation was central in determining whether the claimant was able to enjoy the tariffs promised under the special regime. The claimant asserted that their expectation was to be able to exploit the plant for a period of between 35 to 50 years without making any essential modifications and thus enjoying the tariffs.<sup>29</sup> The tribunal, however, relied

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<sup>27</sup>Pablo del Rio and Pere Mir-Artigues, *A Cautionary Tale: Spain's Solar PV Investment Bubble* (Global Subsidies Initiative and International Institute for Sustainable Development, February 2014), p.1.

<sup>28</sup> *Isolux Infrastructure Netherlands B.V v. The Kingdom of Spain*, Final Award issued on 17 June 2016 available on [www.italaw.com](http://www.italaw.com), para 780 – 811.

<sup>29</sup> *Ibid.*, para 529.

on the opinion of the respondent's expert that the maximum lifespan of the plants would not exceed 30 years without making essential modifications.<sup>30</sup> The tribunal concluded that the changes in the legal regime extended the application of the tariffs to the first 30 years of the plant's life and therefore could not violate the legitimate expectations clause in the ECT.

Another example of expertise sought in SCC Green Investment Disputes is calculation of quantum. Quantum is the next important question when the tribunal has found a breach of the ECT. It is not uncommon that experts disagree as to the methods for calculating quantum. The tribunal is therefore tasked with weighing between these different opinions.

In *Foresight*, the claimants considered that an income-based valuation, specifically the discounted cash flow method, is appropriate, whereas the respondent proposed an asset-based valuation in the calculation of quantum. In concluding that the discounted cash flow method is appropriate, the tribunal referred to the *Novenergia* award, which mentioned: "the (discounted cash flow) method has been broadly accepted by numerous tribunals as the only method which can accurately track value through time". The tribunal conclusion also shows that even though an award in investment arbitration is not binding on other tribunals, in practice tribunals could refer to earlier awards.

## Third party participation

Over the past fifteen years, tribunals have increasingly allowed third party participation in investment treaty arbitration through submission of *amicus curiae* briefs.<sup>31</sup> These briefs are mostly submitted in cases involving the public interest. The term *amicus curiae* refers to "a person or organisation not party to the dispute but with a perspective or an interest in interjecting from which a court or tribunal might benefit." Normally, they are not parties to disputes, although they have interests that might be affected by the outcome of the arbitration.<sup>32</sup>

In the early days of third-party participation in investment arbitration, *amicus curiae* briefs were filed by non-governmental organizations and civil society groups. *Methanex Corporation v. the United States of America* was the first known investment arbitration case that allowed a third party to participate by submitting *amicus curiae* briefs. The dispute arose under the investment chapter of the North American Free Trade Agreement (NAFTA) and was administered under the UNCITRAL Arbitration Rules. It concerned a measure by the Government of California to ban substances produced by a Canadian investor on the basis of potential health risks. Several Canadian NGOs petitioned the tribunal to submit *amicus curiae* briefs.<sup>33</sup> In later cases, indigenous

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<sup>30</sup> Charanne and Construction Investments v. Spain, (n. 22), p. 527.

<sup>31</sup> Sophie Lamb, et.al., "Recent Developments in the Law and Practice of Amicus Briefs in Investor-State Arbitration", (Indian Journal of International Law 2017, Volume 5, Issue 2), p. 72.

<sup>32</sup> *Ibid.*

<sup>33</sup> Eugenia Levine, "Amicus Curiae in International Investment Arbitration: The Implications of An Increase in Third-Party Participation", (Berkeley Journal of International Law 2011, Volume 29, Issue 1), p. 209.

populations and international organizations such as the World Health Organization have also filed *amicus curiae* briefs.

Arbitration under the SCC Rules and Expedited Rules is in principle confidential, except if agreed otherwise by the parties. The older versions of the SCC Rules do not include specific provisions on third-party participation. In practice, tribunals could admit or reject a request for submission of *amicus curiae* briefs provided that the efficiency principle is respected. There could also be occasions where non-parties apply to attend the hearings or obtain access to all the documentation in the proceedings. In this case, both parties must specifically agree to waive the confidentiality principle.

The 2017 version of the SCC Rules recognizes that investment treaty arbitration may touch upon the interests of non-parties who can bring an important perspective to adjudication of the dispute. It thus introduced Appendix III on Investment Treaty Disputes. The appendix provides that third parties may apply or be invited by the tribunal to make a written submission in the arbitration. The written submission must meet a set of criteria, such as the nature and significance of the interest of the third party in the arbitration and whether the submission brings a perspective distinct from that of the disputing parties. These provisions, however, do not change the duty of confidentiality of both the SCC and the tribunal.<sup>34</sup>

In the SCC Green Investment Disputes context, it is not uncommon for a third party to apply to intervene in the proceedings through submission of *amicus curiae* briefs. This is a distinct characteristic of these cases compared to other investment treaty arbitration cases at the SCC. To date, tribunals have allowed a request to intervene by the European Commission, while maintaining the proceedings as confidential. In its *amicus curiae* briefs for *Isolux*, the Commission has challenged the jurisdiction of the tribunals on the basis that submission of intra-European disputes to international arbitration violated the EU treaties.<sup>35</sup>

## Conclusions

This study has shown that an increasing number of green businesses have chosen to resolve their disputes by arbitration at the SCC. In line with the transformation to a low-carbon economy required by the Paris Agreement, green technology and green investment will continue to expand. As a result, it can be expected that disputes involving green business will also increase.

Green businesses have benefited from the efficiency tools provided by the SCC Rules and Expedited Rules. Further, the possibility to use technical expertise has been especially important in resolving both Green Technology Commercial Disputes and Green Investment Disputes.

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<sup>34</sup> Celeste E. Salinas Quero, “2017 SCC Rules – Key Changes”, available at [www.sccinstitute.com](http://www.sccinstitute.com)

<sup>35</sup> *Isolux Infrastructure Netherlands B.V v. The Kingdom of Spain*, (n. 28).



## About the author

Andrina is a lawyer and researcher with main interests in sustainable development. She came to Sweden in 2013 as a Swedish Institute Scholar and worked as a legal counsel at the SCC following her graduation. Between 2015 - 2019, Andrina worked as a consultant in SCC where she conducted research and managed projects focusing on the interplay between international arbitration and sustainable development. Since 2016, Andrina also worked pro bono as COO for IT for Children, a Swedish non-profit organization that works to expand free IT education for school children in Ghana. Prior to coming to Sweden, Andrina was an associate at Mochtar Karuwin Komar Attorneys at Laws and specialized in energy projects.

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*The opinions expressed in this report are the author's own,  
and do not necessarily reflect those of the SCC.*