

# **The Use of Conflict Avoidance Boards in Green Projects: A Conflict Avoidance Blueprint for Global Environmental Sustainability**

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The world is preparing for Glasgow COP26 and the ‘T minus 9’ years needed to reduce emissions by half relative to 2019 levels before 2030 and the stated goals of being climate neutral by 2050.<sup>1</sup> An element in the discussion, which has been largely ignored, is how to deal with climate disputes arising from this global effort. It is not sufficient for states to make commitments to meet reduction goals. These commitments require a mechanism whereby they are objectively monitored and, where not met, can be enforced.

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1 This article was last updated in late October 2021.

In addition, one can also envision a host of inflection points where issues/ conflicts will intersect with many different stakeholders in the process of implementing environmental commitments within states. These include:

- states acting to meet their Glasgow commitments by eliminating or curtailing polluting actors and old energy;
- investor state renewable energy projects that go wrong;
- public-private projects to implement state commitments locally;
- companies implementing environmental sustainability policies;
- enterprises implementing environmental, social and governance (ESG) commitments made to employees, shareholders and the public;
- financial institutions undertaking green financing;
- non-governmental organisations (NGOs) seeking to enforce environmental commitments at a government and corporate level; and
- communities and individuals seeking environmental justice.

Disputes arising in any of these spheres will detract from the ultimate objective to meet reduction goals in the time frame left. It is trite to say that traditional mechanisms of dispute resolution, be they national courts or arbitration, are costly, time-consuming, destructive to relationships and do not ultimately provide an adequate remedy for the environmental issues at hand. While such methods might clarify legal rights between specific parties, this is not the solution to the broader issue of meeting climate goals. To make real progress, we require collaboration and compromise to find lasting solutions. Ultimately, the issues at hand in the context of achieving environmental sustainability goals in the time left require a rethink of current dispute resolution responses. There are also many stakeholders involved in the process, and each has a voice and a need to participate to ensure social adhesion, which simply is not provided by traditional dispute resolution mechanisms. Just as we will have to be innovative in rethinking the way we approach our environment and lifestyles to meet the needed drastic reduction in emissions, traditional methods of dispute resolution will have to be recalibrated to meet the challenges of creating a green environment.

*The Economist* in its 12–18 June 2021 edition summarised the challenge succinctly:

‘A sobering \$35trn or so of investment will be needed in the next decade.

The priority for governments should be to encourage this surge in private investment, in two ways: by easing planning rules, and by helping companies and investors deal with risks. Green bottlenecks are a sign that carbonization is at last shifting from theory to reality. A powerful push is now needed to help make the revolution happen.’

One of those risks is surely that of disputes arising in the transition to a green future.

### **Essential elements**

In reflecting on the essential elements for managing disputes in this green revolution, the following is a starting point:

1. the mechanism needs to be collaborative not adversarial;
2. its primary purpose should be dispute avoidance rather than dispute resolution;
3. it needs to provide scope for a wide participation by stakeholders;
4. it has to be accessible and not restrictive, particularly financially;
5. it has to provide the scope to explore a wide range of possible options;
6. it needs neutral facilitators not decision-makers, to facilitate negotiations allowing parties to develop realistic options to deal with issues arising on projects and to meet broader commitments;
7. it needs to be seen as providing a platform for the exchange of a wide variety of views and to consider expert opinions;
8. facilitators have to be seen as credible and unbiased;
9. facilitators must come from a variety of backgrounds, experience and expertise to be respected and trusted by the parties; and
10. facilitators must be trained in dispute avoidance and mediation skills.

### **Potential advantage of using modified conflict avoidance boards**

Conflict avoidance boards (CABs) may provide the basic structure to meet these requirements and, when modified to include the techniques offered by mediation, may create a novel basis for both avoiding and managing conflict arising in creating a green environment.

CABs have their origins in the dispute board (DB) model. DBs can be classified as dispute resolution boards (DRBs) and dispute adjudication boards (DABs); the former issue non-binding decisions while the latter produce binding decisions. Boards can be ad hoc (convening to hear a specific dispute) or standing (running for the duration of a project). CABs originate from the standing DB mode, meaning that they are formed at the outset of a project and remain in place until final performance.

The Chartered Institute of Arbitrators (CI Arb) launched a set of novel Dispute Board Rules in 2014. These Rules were different from others in the context of emphasising the conflict avoidance element of the board rather than dispute resolution. In particular, the Rules provide for the provision of informal advice in Article 12:

‘The true mission of a Dispute Board is not judicial; rather it is to prevent formal Disputes. The Parties may at any time jointly refer a matter or Dispute to the DB for it to give an informal advisory opinion as a means of Dispute avoidance and/or informally discuss and attempt to resolve any disagreement that may have arisen between the Parties during the performance of the Contract. The DB may provide the requested advisory opinion during a conversation with the Parties, during any meeting or site visit in the presence of both Parties or in a written note to the Parties, or, with the prior agreement of the Parties, provide informal assistance to resolve a disagreement in any other form.’

In fact, the importance of this conflict avoidance role was found to be so integral to the role of the board that in May 2021, the Joint Contracts Tribunal (JCT) adopted the CI Arb Dispute Board Rules, as those to be utilised with its new form of contract and in introducing it stated:

‘The DAB fulfils its avoidance function by providing informal advice under Article 9 of the JCT DAB Rules. The parties can request an informal advisory opinion at any time. This could be done during a site visit or in a written note to the parties. The parties are not bound by it, and the DAB may on its own initiative raise an issue with the parties in order to promote dialogue.’

DBs originated in the United States construction industry in the 1970s, in response to excessive litigation costs and risks faced by contractors and authorities. Dispute boards went global in 1980 when the World Bank insisted on utilising the model in the construction of the El Cajon Dam and Hydropower Station in Honduras. Today, all World Bank funded projects require a DB. DBs have been used internationally in over 2,000 major projects.<sup>2</sup> They are widely used in North America, South America and Asia, and also utilised outside construction and infrastructure including R&D, intellectual property, production sharing and shareholder agreements.<sup>2</sup> They are used as standard practice by various US government departments, including CalTrans and the Departments of Transportation for Colorado, Florida, Idaho and Virginia.<sup>3</sup>

CABs are an improvement on the older DB model, in that they seek not only to resolve conflicts, but to primarily prevent them from occurring. The previous generation of DBs had limited scope, seeking to swiftly resolve formal conflicts, but having a limited dispute avoidance function. The primary function of CABs is dispute avoidance by being embedded in a project and participating in its delivery. By using mechanisms such as horizon

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2 Michael T Kamprath, ‘The Use of Dispute Resolution Boards for Construction Contracts’ (2014) 46(4) *The Urban Lawyer* 807 at 809.

3 Robert Lopez and Alberto Amara, ‘Comparison of Dispute Boards and Statutory Adjudication in Construction’ (2018) 171(2) *Proceedings of the Institution of Civil Engineers – Management, Procurement and Law* 155.

scanning and early issue spotting, utilising the expertise of panel members, they bring matters to the attention of the participating parties at a stage when options for resolving these are still feasible and parties are motivated to find solutions for the good of delivering the project on schedule and at cost.

To use CABs for green projects, certain additional process techniques not traditionally used by DBs will have to be added. In particular, bringing additional stakeholders outside the formal parties into the contract review process will lead to more sustainable outcomes. DBs currently hear experts that the parties might call, as well as other relevant non-parties involved in elements of a project. For green projects, one can postulate the potential stakeholder group being widened to include other climate actors such as community groups and NGOs. The scope to hear from these groups will have to form part of the original contractual mandate between the CAB and the parties (given that implementation of a CAB is a contractual process), whereby it is recognised that the benefit of at least hearing from these groups during the progression of the project will benefit the parties and the project, thereby avoiding potential disputes.

One can postulate a wind farm project, where environmentalists are concerned about the impact on wildlife. Parameters to measure impact might be agreed by all at the outset of the project and then monitored during the life of the project, the CAB giving access to the environmental group for monitoring purposes. Any discrepancies would be discussed by the CAB with the parties and the environmental group and potential workaround options reviewed and agreed.

All of these factors make CABs ideal for green projects, delivering on climate change commitments in a timely and cost-effective manner, while reducing costly and damaging disputes.

### **Financing environmental sustainability is the key to CABs**

Green projects are defined as those that are environmentally ‘friendly’ by virtue of their ability to reduce pollution, reduce fossil fuel consumption or have some other positive effect on the environment by reducing carbon footprints. They create new sources of clean, renewable energy and eliminate older polluting forms of energy and the industries associated with them. In essence, it is a seismic shift for economies, lifestyle and attitudes and thinking that have been with mankind since the Industrial Revolution.

The Organisation for Economic Co-operation and Development (OECD) Business and Finance Outlook for 2020 looked at sustainable and resilient finance.<sup>4</sup> It summarised the requirements to finance the needs of a green global economy to meet climate challenges in the following points:

<sup>4</sup> See n 2 above, 808.

1. 'To finance this change, huge amounts of capital are required and that has been dubbed "sustainable finance", as a practice and policy concept. The volume of "responsible" or "sustainable" financial products and strategies has grown exponentially in the past 10 years, driven largely by increased demand from beneficiaries, as well as policy signals that the financial sector should be a driving force in achieving global sustainability agendas. To date, the focus of these initiatives has largely been on the role of institutional investors and asset owners. Less attention has been paid to how banks can drive sustainability through corporate lending although this represents a significant source of global capital.
2. Growing global debt, diminishing quality, and competitive pressures can have important implications for promoting ESG in corporate finance. On the one hand, ESG integration into lending activities may contribute to higher quality debt stocks and more resilience in the financial sector. For example, early evidence from the period of the COVID-19 pandemic is showing that companies which perform better on ESG have also been slightly more financially resilient in the face of disruptions wrought by the crisis (see below). However, competition from peers and new entrants to the sector threaten to put banks that conduct thorough environmental and social due diligence at a disadvantage in attracting clients, who may be able to access financing more quickly from other sources.
3. Additionally, challenges with respect to in-house capacity of practitioners, quality and availability of ESG data and barriers to collaboration also hinder banks from meaningfully integrating ESG in their lending processes. While there has been significant progress in terms of practice, many banking practitioners are still in early stages of understanding and managing ESG types of risks.
4. As the world braces itself against the current disruptions caused by the COVID-19 crisis, policy makers should also consider how to build back more resilient systems to cope with future shocks, including those predicted to manifest from climate impacts in the near future. Global leaders have regularly underscored that private finance will be needed to achieve many global goals (United Nations, 2015[5]) (G20, 2017[6]). An estimated USD 5-7 trillion a year is needed to realise the 2030 Sustainable Development Agenda (UNEPFI, 2018[7]), and an additional USD 83 billion in energy related investments is needed per year from the period 2016-2050 to limit global warming to 1.5 degrees Celsius (IPCC, 2018[8]). However, such goals do not appear to be fully reflected in many commercial and investment banking practices. For example, research by the European Central Bank has found that corporate lending is less likely to promote lower CO2 emissions than equity capital (Popov, 2019[9]).



5. Given the scale and significance of this part of the sector, strengthening ESG integration in corporate lending practice will be necessary to meet global sustainability goals as well as enhance resiliency in the financial sector.’

Just as the World Bank has, for many years, found that the use of DBs in projects it has funded has resulted in projects delivered on time and at cost with fewer disputes, so too CABs should become a critical element in sustainable funding. As lenders, be they government agencies, private equity or traditional banks, look at funding the green economy, CABs will be an integral part of those contractual arrangements. In turn, companies and industry sectors seeking to meet ESG commitments will have to include CABs in their projects. In addition, their stakeholders will demand it. To ensure that current and future environmental commitments can be met, policy-makers will have to make the inclusion of CABs a criteria for ensuring responsible lending practices. Given the timeframe of 2030 to 2050, this may even have to be done by regulation.

### **Current funder green initiatives**

The financial services industry is promoting various voluntary initiatives to promote sustainable funding. For instance, 92 financial institutions in 32 countries have signed up to the Equator Principles (EP) pursuant to which they commit to only funding projects that appropriately manage social and environmental risks, and with respect to which, a grievance mechanism is designed to receive and facilitate resolution of concerns and grievances about the project’s environmental and social performance. CABs could form part of such a grievance mechanism.

Another initiative is that of the Principles for Responsible Investment (PRI), which now has 2,250 signatories, including asset owners, investment managers and service providers. An element of the PRI is that signatories must report their climate change risks, which includes the risk from disputes.

Insurers are also getting involved in managing climate risks. ClimateWise is a voluntary network of 28 leading insurers, reinsurers, brokers and industry service providers facilitated by the University of Cambridge Institute for Sustainability Leadership. The group is driven by its members who come together to address key sustainability challenges. In particular, members of ClimateWise seek to promote six core principles, which include reducing environmental impact and supporting climate awareness. Each member submits an annual report summarising actions taken within its business to promote these principles across its business activities. CABs can therefore become an integral part of environmental sustainability and the

green economy through a combination of legislation and funders lending criteria. This will ensure that they are employed in every meaningful green project to assist in avoiding destructive disputes.

### **The basics**

CABs are generally established via contract. As described herein, some funders (such as the World Bank and all major development banks) require DBs as standard in projects over a certain value. Similarly, some jurisdictions encourage their usage via legislation or require all contractors on a project to work with a board.

CABs can have any number of board members, depending on how they are structured. Typically, there is a three-member CAB, each party selects a wing member of the panel, with a third member (acting as chair) either appointed directly by the parties or by the parties' board choices. However, this model is sometimes turned on its head, with parties agreeing a chair, who then appoints wing members. A CAB can also have a single member if it is a smaller project and five or more members on large projects.

The establishment of CABs via contracts carries a key benefit in the potential for flexibility around the scale and makeup of the board. Tailoring size and expertise to the project carries benefits for the quality of engagement and ensures value for money. Being able to choose the background, expertise and nationality of board members is an additional benefit. Depending on the project, the balance of board members might be scientists, financial experts, lawyers or engineers, giving the right balance to deal with the complexity of these green projects.

Existing ADR institutions have lists of qualified DB members, which can be consulted for the selection of appointments and are also willing to act as appointing bodies. Some contracts name an institution such as the International Federation of Consulting Engineers (Fédération Internationale Des Ingénieurs-Conseils or FIDIC), CIArb, the International Chamber of Commerce (ICC), Institution of Civil Engineers (ICE), Dispute Resolution Board Foundation (DRBF) or the American Arbitration Association (AAA) as a default nominating authority in case of disagreements or when CABs are established in advance of the awarding of contracts. CAB panellists will typically also be members of various industry representative groups such as the CIArb, ICE or Royal Institution of Chartered Surveyors (RICS), carrying requirements around training, standards and professional ethics. These institutions should be partnered with to ensure that traditional DB membership criteria is enhanced to meet the conflict avoidance emphasis of CABs and the specific requirements of green projects.



CABs can be configured to suit a wide variety of projects. This flexibility makes them ideal for green projects where the subject matter and legal delivery structure can vary greatly. They are particularly ideal for joint ventures and teaming arrangements, which are often used in these projects. They might also be implemented on a national basis to ensure that state commitments made in Glasgow are monitored, and provide a mechanism where performance can be discussed and modified with a broad range of stakeholders, if such commitments are not being met.

CAB members are trained in dispute avoidance techniques and issue spotting, so that matters can be raised with parties, helping them to plan for potential problems arising and to formulate work-around plans to avoid conflict. Having regular meetings with the parties and participating in the project from the outset allows the board to become an integral part of the project, win credibility and respect and be listened to.

This is therefore a far more effective mechanism for allowing communication between parties to continue and realistic solutions to problems to be dealt with collaboratively. In addition, training CAB members in the art of mediation, and the skill associated with it, will make them even more effective in facilitating negotiations between parties and in the basics of formulating realistic options. The process used by CABs and mediation has differences, particularly meeting separately with parties, which is employed within mediations. CABs avoid private meetings to ensure transparency, in the event that they have to perform an adjudicative function. This does not mean, however, that skills used by mediators, such as coaching, reality testing and reframing, as well as assisting parties to reflect on potential options to work around issues, cannot be employed by CAB members.

When dealing with issues arising on a green project, CABs will have to expand their remit, not only to hear from the parties themselves, but also from other stakeholders to ensure that all interests are heard and considered in the ultimate recommendations made. This goes beyond the current remit of most CABs but will be essential to ensuring that robust and lasting solutions with broad social buy-in can be found to avoid future disputes from arising. The lesson from mediation can be adopted here, that all interested stakeholders and not only the parties themselves can be brought into a mediation, so that all interests can be considered in formulating effective options considered by the parties to find resolutions. Given the range of experience and expertise in CAB members, this method of achieving sustainable outcomes will be appreciated by them and, with the consent of the parties, certainly form part of their recommendations or, if needed, adjudicated outcome.

Thinking outside the box on how to restructure our thinking around the use of CABs, and designing processes whereby the widest use of them in

the context of green projects can be employed, is the challenge that ADR institutions and practitioners must now grasp. Reviewing historical forms that DBs have taken on various projects and how they have evolved over time is instructive.

### **Historical forms of DBs**

Large multi-contract projects can benefit from the coordination of a single board covering all contracts. Panellists can be appointed in advance of contracts being awarded, in consultation with a trusted neutral organisation. For the London 2012 Olympics, ICE and other bodies helped to appoint a CAB funded as a project cost, but with contractors splitting the extra cost of any formal referrals.<sup>5</sup>

In some cases, parties have seen benefits in having separate technical and financial panels to deal with different aspects of the project. This was the case in the Channel Tunnel Rail Link for a ten-year, US\$5bn concession project in the United Kingdom that started in 1998.<sup>6</sup> A variant of this was used for the Docklands Light Railway Extension to Lewisham (opened 2000), where the project utilised separate financial and technical panels of three professionals apiece, but selected to have them chaired by the same professional.<sup>7</sup>

A variant of the separate boards model is the utilisation of a group of experts, from which professionals can be selected for their knowledge of the particulars of a specific area of a contract. Hong Kong Airport Authority used a disputes review group of seven members plus a convenor to cover all main contracts (totalling around 20), from which a panel of one or three members (at a referring party's choice) would be selected to hear and determine a referred dispute.<sup>8</sup> This allows for a wide range of technical expertise to be available.

Some projects have used a larger panel with a quorate requirement. The Channel Tunnel had a disputes review board of five people, with a quorum of three.<sup>9</sup>

A regional board can also be established to manage multiple contracts and smaller projects that are overseen by a single authority. The Florida Department of Transportation used a system of regional dispute review boards to manage separate contracts.<sup>10</sup>

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5 OECD [www.oecd.org/finance/oecd-business-and-finance-outlook-26172577.htm](http://www.oecd.org/finance/oecd-business-and-finance-outlook-26172577.htm) accessed 1 December 2021.

6 Peter HJ Chapman, 'The Use of Dispute Boards in Major Infrastructure Projects' (2015) 1(3) *Turkish Commercial Law Review* 219 at 228.

7 *Ibid* 224.

8 *Ibid*.

9 *Ibid*.

10 *Ibid*.

## Cost

Globally, in almost ten per cent of construction projects between eight and ten per cent of the total project cost is legal, with 50 per cent of that expended on disputes.<sup>11</sup> Dispute avoidance is a growing area of interest due to the potential to directly save on legal expenses, and the potential for indirect savings when projects run more smoothly.

Board members are typically industry experts experienced in dispute avoidance techniques rather than solely lawyers. By including a board as part of the financial model from the commencement of the project, the cost impact is almost imperceptible.<sup>12</sup>

Typically, direct costs for a board consist of a monthly retainer for each member (perhaps two to three times their daily fee) and daily fees for site meetings and dispute determinations, as well as reasonable expenses.<sup>13</sup>

A University of Washington study estimated that the costs of a three-member panel over a 24-month project came to US\$47,520 plus travel.<sup>14</sup>

The Dispute Resolution Board Foundation (DRBF) undertook a large-scale study of all models of DBs globally.<sup>15</sup> Costs were expressed as a ratio to project costs, to take account of differing monetary values and the varying sizes of projects.

The DRBF's findings are as follows based on a percentage of total construction costs:

1. DBs with few disputes: 0.05 per cent.
2. DBs with many disputes: 0.25 per cent.
3. Lowest reported cost of a DB: 0.04 per cent.
4. Highest reported cost of a DB: 0.26 per cent.
5. Average cost of a DB: 0.15 per cent.

Various models of DBs were initially used in the 1970s on extremely high-value projects, but recent studies show that they have become increasingly popular on a range of smaller projects. Globally, they are now most frequently found on projects in the \$10–20m and \$20–40m ranges.<sup>16</sup>

A study by Dr Kathleen M Harmon of the use of DBs as part of the Boston Big Dig project found that disputes under contracts covered by DBs cost US\$31,034 per dispute, while those under contracts to be litigated cost an

11 Donald Charrett, 'Dispute Boards and Construction Contracts', *The Victorian Bar Continuing Professional Development Program* (20 October 2009), 16.

12 Dispute Resolution Board Foundation, *Guidance on the Use of Dispute Boards in Public Private Partnership (PPP) Projects* (April 2017), 11.

13 *Ibid* 15.

14 See n 2 above, 813.

15 *Ibid* 813.

16 Dispute Resolution Board Foundation, *Guidance on the Use of Dispute Boards in Public Private Partnership (PPP) Projects* (April 2017), 14.

average of US\$1.1m each.<sup>17</sup> However, proving the cost-effectiveness of CABs is inherently more difficult, as you must compare the actual costs of a board to the unverifiable estimates of likely disputes.

### **Case studies**

#### *2012 London Olympics*

1. In the delivery of infrastructure for the London Olympics, delays were simply not an option. The Olympic Delivery Authority took conflict avoidance seriously from the outset, recognising the potential of disputes to derail the entire project.
2. The Olympic Delivery Authority therefore decided to establish CABs in advance of appointing contractors. Independent bodies, including ICE, helped to appoint expert panellists. Work was procured with contracts requiring disputes to be referred to the panels. The standing boards were funded as a project cost, but with contractors splitting the extra cost of any formal referrals.<sup>18</sup>
3. Two separate boards were established. The first board provided dispute avoidance while the second delivered statutory adjudication, a swift and binding ADR process used in the UK construction industry. The system of two panels was found particularly appropriate as conflict avoidance could be conducted unencumbered by process.

#### *Network Rail*

1. Network Rail trialled a system of dispute avoidance panels (DAPs) as part of a £25bn programme of upgrades starting in 2014, following consultation with their Commercial Directors' Forum (CDF). Costs for their DAP are split equally between the parties to the contract.
2. The three/four panellists produce an observations report following each site visit, highlighting areas of concerns for leadership to deal with. Network Rail considered the project a success, with contractors requesting the continuation of the scheme after the trail. Network Rail are continuing to explore the potential of CABs for all their projects.

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17 See n 2 above, 814; Kathleen M Harmon, 'Case Study as to the Effectiveness of Dispute Review Boards on the Central Artery/Tunnel Project' (2009) 1(1) *Journal of Legal Affairs and Dispute Resolution in Engineering and Construction*.

18 See n 6 above, 228.

### Effectiveness of CABs

1. The DB model has been utilised globally on many major infrastructure projects, with a high rate of success. The buy-in enjoyed by the model consisting of an independent and expert board means recommendations – even when non-binding – are rarely challenged. Typically, where a board does have the authority to provide interim binding determinations and not simply make recommendations, there is a contractual mechanism allowing the dissatisfied party to refer the matter to arbitration. Evidence provided by projects where CABs or DBs have been used demonstrates that referrals to arbitration are rarely made.
2. In 72 to 85 per cent of cases, parties accept the decision of DBs.<sup>19</sup> The Cooperative Research Centre found that 97 per cent of DB decisions were either accepted or de-escalated down to settlement negotiations.<sup>20</sup> Some prominent examples include:
  - The Ertan China Hydroelectric Plant utilised a DB in a US\$5,000m construction project from 1991–2000, commissioned by the Chinese State Organisation as an international joint venture. This board engaged purely in dispute resolution, issuing non-binding recommendations. However, of the 40 disputes referred to the board, none was escalated to arbitration.<sup>21</sup>
  - The Hong Kong Airport (US\$15,000m construction project) used a bespoke DAB structure with 22 main contracts subject to a board, consisting of a convenor and six panellists of various backgrounds, selected with the Contractor's Association in advance of the awarding of contracts. Parties' positions were represented by engineers and decisions were binding in the interim, with one of the six that went to the board continuing to arbitration.<sup>22</sup>
  - The Rio Parana Dam Expansion (US\$5,500m project) in Argentina from 2003–2006 utilised a DAB. Eight formal disputes were referred to the board, with none going on to arbitration or litigation. Their board also resolved community disputes relating to the project and advised on several other disputes without formal hearings.<sup>23</sup>

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19 See n 6 above, 224.

20 Dante Figueroa, 'Dispute Boards for Infrastructure Projects in Latin America: A New Kid on the Block' (2017) 11(2) *Dispute Resolution International* 151.

21 See n 3 above, 71.

22 The Dispute Resolution Board Foundation, *The Use of Dispute Boards in Public-Private Partnership Transactions: The Dispute Board in Practice* (2013).

23 *Ibid.*

## **Conclusion**

What we can conclude from the foregoing is that DBs and their derivative, CABs, are an effective conflict avoidance mechanism for the traditional projects that they have been used in. They provide one of the few tools available to parties to actively engage in preventing conflicts and in managing them should they arise. Utilising the expertise and experience of the CAB members in assisting to spot issues, before they become conflicts and to help formulate realistic options should they become disputes, projects are largely delivered without the disruption and cost suffered through litigation.

Given that green projects and commitments made by states need to meet environmental targets within a limited period of time largely bounded by 2030–2050, it is imperative that lengthy disputes do not disrupt progress. Clearly, traditional methods such as litigation are not the answer to an effective prevention or management of these disputes. CABs can play an important part in fulfilling this role. To ensure that they are employed widely both governments and funders will play an important part in dictating their use. Institutions will play an important role in ensuring that board members are adequately trained in dispute avoidance and mediation techniques to ensure that the full benefit of CABs is realised.

It will also be essential that all stakeholders understand what CABs are, how they can be employed to ensure that global environmental sustainability is achieved and that they are encouraged to utilise them. Only then can we feel secure that achieving a green environment is not derailed by disputes and that state commitments and targets can be met in time to avoid an environmental catastrophe.