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Centre for International  
Governance Innovation

Fixing Climate Governance Series | Paper No. 4 – May 2017

# Governance of Article 6 of the Paris Agreement and Lessons Learned from the Kyoto Protocol

Andrei Marcu





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## About the Author

**Andrei Marcu** is currently a senior fellow at the International Centre for Trade and Sustainable Development and director of the European Roundtable on Climate Change and Sustainable Transition. Andrei has been one of the corporate sector pioneers in the area of climate change, greenhouse gas (GHG) markets and related areas on sustainable development.

Since 1993, Andrei has been actively involved in many areas of climate change-related initiatives, including as chief executive officer of BlueNext, the environmental exchange, based in Paris. He joined Mercuria Energy Group in September 2009 in the role of head of Regulatory Affairs, Environment and Climate Change.

Andrei was the founder and president and CEO of the International Emissions Trading Association (IETA), a world-class business association with offices in Geneva, Brussels, Washington, DC, and Ottawa. IETA is dedicated to the creation of an efficient and environmentally robust market for GHGs to address the issues of global warming and climate change. He is currently a board member of IETA.

Andrei also served as senior managing director of the World Business Council for Sustainable Development in charge of its climate and energy cluster and as vice chair of the Commission on Environment and Energy of the International Chamber of Commerce in Paris. Andrei was a senior adviser on climate change and emissions trading at Bennett Jones LLP in Canada.

Andrei has substantial experience in the electric power industry from his work with Ontario Hydro in Toronto, where he worked for 18 years. While at Ontario Hydro, he worked in various areas of the corporation, including system operations, climate change, regulatory affairs and international cooperation, and was chief of staff to the chairman Maurice Strong.

Andrei has also worked in the United Nations Development Program in New York on issues of development, private sector development and climate change, as manager of Corporate Cooperation.

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## About the Fixing Climate Governance Project

Project Leaders: **John Odell**, CIGI Senior Fellow and **David Runnalls**, CIGI Distinguished Fellow

Climate scientists agree that human activity has been changing our planet's climate over the long term. Without serious policy changes, scientists expect devastating consequences in many regions: inundation of coastal cities; greater risks to food production and, hence, malnutrition; unprecedented heat waves; greater risk of high-intensity cyclones; many climate refugees; and irreversible loss of biodiversity. Some international relations scholars expect increased risk of violent conflicts over scarce resources due to state breakdown.

Environmentalists have been campaigning for effective policy changes for more than two decades. The world's governments have been negotiating since 1995 as parties to the United Nations Framework Convention on Climate Change (UNFCCC). Their 2015 Paris Agreement represents a historic new platform for international cooperation. It is the first UN climate agreement obliging all member states to make concrete contributions to address the problem. Yet important details of this new regime remain to be negotiated. The members' pledges still must be implemented. And it is widely agreed that, if implemented, their 2015 pledges alone will not be sufficient to meet the need identified by science or to achieve their own agreed goal of stopping global warming well below 2°C.

The Fixing Climate Governance project is designed to contribute fresh ideas to the global debate. High-level workshops have developed a set of policy briefs and short papers written by experts from multiple countries and disciplines. Publications began in 2015 and are listed at the back of this publication. Some offer original concrete recommendations for making the UNFCCC more effective. Some propose diverse other ways to improve climate governance. The ideas in two 2015 publications were implemented in Paris. New publications, taking stock of recent conditions and research and looking forward on multiple levels, appear as they are completed.

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## Acronyms and Abbreviations

<b>AAUs</b>	assigned amount units
<b>CDM</b>	Clean Development Mechanism
<b>CDM EB</b>	CDM Executive Board
<b>CMA</b>	Conference of the Parties serving as the meeting of the Parties to the Paris Agreement
<b>CMP</b>	Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol
<b>CO<sub>2</sub>e</b>	carbon dioxide equivalent
<b>EI</b>	environmental integrity
<b>EUAs</b>	European Union allowances
<b>EU ETS</b>	EU emissions trading system
<b>GHG</b>	greenhouse gas
<b>IETA</b>	International Emissions Trading Association
<b>ITL</b>	International Transaction Log
<b>JCM</b>	Joint Crediting Mechanism
<b>JI</b>	Joint Implementation
<b>JISC</b>	Joint Implementation Steering Committee
<b>NDCs</b>	nationally determined contributions
<b>SBSTA</b>	Subsidiary Body for Scientific and Technological Advice
<b>SD</b>	sustainable development
<b>UNFCCC</b>	United Nations Framework Convention on Climate Change



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## Executive Summary

Carbon markets are seen as necessary tools to meet the goals set in the nationally determined contributions (NDCs) under the Paris Agreement.

The international carbon market serving the Kyoto Protocol is coming to an end. It has had an enormous positive impact, shown that there is value in reducing GHG emissions and put a price on carbon emissions. This market has produced some “hard” lessons learned from this experience. One lesson is the importance of governance.

Article 6 under the Paris Agreement provides a framework that allows for the creation of an international carbon market. The Paris Agreement has broadly sketched the outlines of such a market but given few details on how it might be made operational. Many issues have been left reasonably ambiguous, and this is especially true with respect to the governance of article 6.

This paper identifies the governance challenges, and choices available, in operationalizing article 6 of the Paris Agreement, based on the lessons learned from the international carbon market serving the Kyoto Protocol. It focuses the discussion on a number of areas:

- the level of centralization;
- independence of the regulator;
- how to determine the compliance value of units transferred internationally;
- conditions for robust accounting; and
- experience from other markets.

Furthermore, the paper makes the case that, in creating a framework for an international carbon market, it is necessary to define a governance system that ensures the *predictability* and *stability* of the policy and regulatory framework. These principles, fundamental but insufficient on their own, join those of *sustainability*, *equity* and *transparency* as guiding in the design of the governance of a future international carbon market.

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## Objectives

Article 6 of the Paris Agreement<sup>1</sup> provides for the transfer of mitigation outcomes between parties to the Paris Agreement (countries), which could then be used to meet their NDCs — the pledges that parties have made under the agreement.

This provision could enable the creation of an international carbon market, through which these countries’ governments, and private entities, could trade emissions permits across national boundaries. This paper examines the lessons learned from the Kyoto Protocol with respect to the governance of international carbon markets, and how these lessons relate to the provisions under the Paris Agreement’s article 6.

The Paris Agreement has outlined the broad political lines of how such a market would function but provided limited specificity as to how to operationalize it. To reach an agreement in Paris, many issues were left reasonably ambiguous, and this is especially true with respect to the issue of governance of article 6. Consequently, there remain significant amounts of work to do, and many issues to negotiate.

This paper intends to identify issues to be decided with respect to article 6, options for dealing with them and outcomes to strive for.

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## Market Background

### Carbon Markets 1.0: Kyoto Protocol

Carbon markets 1.0, the first generation of carbon markets — which could be thought of as having started, more or less, after the entry into force of the Kyoto Protocol to the United Nations Framework Convention on Climate Change (UNFCCC), and is now slowly coming to an end — were, and still are, closely aligned to the Kyoto Protocol, both in terms of governance and in the way they function. The market components are run by the Conference of the Parties serving as the

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<sup>1</sup> The text of the agreement can be found at [http://unfccc.int/files/home/application/pdf/paris\\_agreement.pdf](http://unfccc.int/files/home/application/pdf/paris_agreement.pdf).

meeting of the Parties to the Kyoto Protocol (CMP). These components include the Clean Development Mechanism (CDM), Joint Implementation (JI) and international emissions trading (defined in articles 12, 6 and 17, respectively, of the Kyoto Protocol).

At a level below, operating in parallel and designed to assist the parties to comply with their obligations under the Kyoto Protocol, are domestic markets, such as the EU emissions trading system (EU ETS). Markets at the domestic level intersect and interact with markets at the UNFCCC level.

These two levels of markets have different and separate governance. The governance of the carbon market serving the Kyoto Protocol is centralized, with the regulatory bodies — the CDM Executive Board (CDM EB) and the Joint Implementation Steering Committee (JISC) — operating under the authority of the CMP. The CMP decides on the compliance value, for Kyoto Protocol purposes, of units issued under the three Kyoto Protocol mechanisms, and sets the face value of the units at 1 ton of carbon dioxide equivalent (CO<sub>2</sub>e).

There are many carbon markets currently in operation, including those in California-Quebec (linked), New Zealand and the Republic of Korea. They all provide good lessons learned. However, the market that is by far the largest and the oldest, and that has experienced the most trials, is the EU ETS. The EU ETS had started closely linked to the UNFCCC-level market but then slowly distanced itself, weary of the potential politicization of the UNFCCC infrastructure. It also started as decentralized, at the level of the EU member state in many aspects (for example, in the allocation of allowances and in registries), but after acquiring experience, and often through learning the “hard way,” it moved toward more centralized governance in some aspects (Gronewold and Fialka 2011).

Domestic units, such as European Union allowances (EUAs) issued under the EU ETS, have no value for UN compliance. In the case of linked domestic trading schemes for countries that have Kyoto Protocol obligations, any domestically issued units transferred internationally would have to be shadowed (that is, a parallel transfer would have to take place) by CMP-issued units under one of its three mechanisms. The shadowing is necessary to ensure the integrity of accounting for obligations under the Kyoto Protocol, which does not recognize, and has no mechanism to recognize, domestically issued units.

However, at the EU level, the European Union retained the power to decide on the domestic and international compliance value of CMP-issued units (certified emission reductions, emission reduction units and assigned amount units [AAUs]), while being obliged, unless they were willing to make up the difference, to observe the “ceiling” set by the CMP through the 1 ton face value that Kyoto Protocol units have.

There was little direct governance interaction between the two levels of governance, which in some cases led to serious problems, as discussed below.

All in all, carbon markets 1.0 is a Cartesian world, where there is orderly accounting and governance, with each national jurisdiction having the ability to set the domestic compliance value of any international units it allows inside its system. This is also true for their international compliance value. However, there is a strong centralizing element, with the CMP setting a face value (ceiling) for any units used for Kyoto Protocol (the international agreement) compliance.

## Carbon Markets 2.0 and the Paris Agreement

Carbon markets are now moving into a 2.0 phase. The fact that serious issues exist is evident in current symptoms: a freeze in international activity and virtual disappearance of the international component of the carbon market. In a “normal and clear world,” both sovereign states (Parties to the Paris Agreement) and private companies would have already started to work on hedging their carbon risk, using contributions that could be counted toward the NDCs.

The lack of interest in international transactions is partly due to the lack of demand to meet obligations under the second commitment period of the Kyoto Protocol and the Cancun commitments. However, another and more important cause is the lack of clarity on the governance of markets for the Paris Agreement, including how it will interact with domestic markets.

Article 6 of the Paris Agreement provides what seems like “governance options” for carbon markets (that is, parties will have the option of a more centralized or decentralized approach). It has four components, two of which can be said to provide a framework for the creation of international carbon markets:

- Article 6.1 provides broad endorsement of international cooperation toward meeting NDCs.
- Articles 6.2 and 6.3 provide a framework for international cooperation when transfers of “international mitigation outcomes” take place. There do not seem to be any provisions that would imply that the governance of this framework has to be multilateral (that is, no requirement that decisions need to be made by the Conference of the Parties serving as meeting of the Parties to the Paris Agreement (CMA). There are, however, provisions that impose some obligations on parties with respect to accounting, sustainable development, environmental integrity and governance transparency, although these are not well defined from a governance point of view.
- Articles 6.4 to 6.7 create a new mechanism, under the authority and guidance of the CMA, to “contribute to the reduction of emission levels in the host Party,” which can be used by another party. There is little doubt that this is a multilateral, centralized governance.
- Articles 6.8 and 6.9 refer to cooperation through non-market approaches, which are increasingly becoming a better-understood component. This paper will not cover these articles.

In the context of the architecture of the Paris Agreement, and its article 6, it is important to note that while the Paris Agreement has introduced positive elements, in particular its coverage of and flexibility in defining NDCs, it has, at the same time, introduced elements of complexity.

These intricacies will be reflected in the way article 6 will be operationalized. Providing for every possible combination of NDC for elements such as accounting, and the avoidance of double counting in transfers between parties, may render the exercise for writing the rulebook for article 6 a matter of enormous complexity, if not an impossible task.

That is why some (parties and carbon market experts) are considering simplifying assumptions, such as applying article 6.2 only to parties to the Paris Agreement that have NDCs that are in the form of absolute economy-wide caps and budgets. The discussion below takes these discussions into account.

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## Views on “Good” Governance

Governance is a concept that can be understood in many different ways. Addressing climate change requires a stable and predictable investment signal for low-carbon investment. Therefore, in creating a framework for an international carbon market, it is necessary to have a defined governance system that ensures the predictability and stability of the policy and regulatory framework. Although predictability and stability are not alone sufficient, they join other fundamental principles — sustainability, equity and transparency — in guiding the design of the governance of an international carbon market.

It is inevitable that a framework for international carbon markets will be affected by external events and will interact with other policies. Stability and resilience are not to be interpreted as “no changes.” Rather, they mean that changes do not emerge in a mostly ad hoc and capricious manner, but instead come about as the result of forces and interactions that, to the extent possible, were already taken into account *ex ante* in the governance framework. At the same time, stability should not be equated with rigidity, but with resilience: plans are always subject to “unknown unknowns” and then require adaptive responses.

In a broad sense, governance consists of the traditions and institutions by which authority is exercised. It includes the process by which the members of governing bodies are selected, monitored and replaced; the capacity of governing bodies to effectively formulate and implement sound policies; and the respect for the institutions that regulate interactions among them. The collective goal in the case of a carbon market is to contribute to the mitigation of climate change, as defined by the objectives of the UNFCCC and its Paris Agreement (Centre on Regulation in Europe 2016).

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## Governance of Article 6: Key Issues

The Paris Agreement's ethos is one of allowing as much freedom as possible to parties, with strong transparency provisions. This ethos is embedded in those elements of the article 6 governance already defined, and will need to be considered in those elements that are yet to be defined.

The experience acquired by parties using the Kyoto Protocol mechanisms needs to be considered as it constitutes a significant body of policy and operational knowledge. In addition, it is simply stipulated in the UNFCCC's Decision 1/CP.21 adopting the Paris Agreement that the new mechanism's modalities and procedures (under article 6.4) shall be developed on the basis of "experience learned from mechanisms and approaches adopted under the Convention."<sup>2</sup>

This paper's discussion focuses on addressing several questions, based on observations of experiences surrounding the Kyoto Protocol mechanisms and their functioning, as well as other carbon markets, and considers potential solutions. After discussing each question, conclusions are drawn as to how to achieve optimal outcomes.

### Centralized or Decentralized Governance?

It is clearly the intention of the Paris Agreement to provide parties with options in terms of the type of governance they wish to use, if they voluntarily choose to use international carbon markets. Parties will prefer a more, or a less, centralized governance, depending on a number of factors, including national preferences.

The experiences that parties had with UNFCCC centralized governance, especially under the CDM, which was the main international mechanism used before the Paris Agreement, has weight in these decisions. The perception was that a UN-centralized governance resulted in a process that was too bureaucratic and not flexible enough to recognize the needs of individual parties. Every decision, on every project, had to be made,

according to the same procedures, by the CDM EB. While some level of quality control is needed, some level of subsidiarity also needs to be recognized.

At the same time, some parties considered that the benefits of centralized governance, and the UN stamp of approval, outweighed the drawbacks associated with this approach. While it is possible that in the long term these two approaches may converge, at this stage the need for a choice should be respected.

The new mechanism under article 6.4 is more restrictive, with the governance clearly needing to be agreed multilaterally, by the CMA. The carbon market framework under article 6.2 is designed to have more decentralized governance, with parties engaged in collaboration being able to establish their own governance. The temptation to create centralized governance for article 6.2, through backdoor provisions, should be resisted, at least at this stage.

Such attempts can be seen from some of the interventions in UNFCCC negotiations by parties who either distrust markets in general, or fear that they can become a loophole — and believe that strong central governance is needed. Examples will include attempts to restrict the types of cooperation possible (such as no REDD+) or the characteristics of NDCs (such as limiting them to economy-wide absolute caps) that parties must have in order to use article 6.2. Alternatively, there are attempts to introduce into text resulting from UNFCCC negotiations an indirect connection between provisions in article 6.2 and article 6.4, which is accepted as having centralized governance.

As additional illustration, the temptation to centralize is also currently playing out in the provisions in article 6.2 on environmental integrity (EI) and sustainable development (SD). The Paris Agreement states that EI and SD "shall" — language that in the UNFCCC context implies obligation — be promoted and ensured, but does not refer to any work program that would operationalize these "shall"s. Most parties see implementation of the EI and SD provisions as being left to cooperating parties, through transparency provisions. "Centralizers" are seeking "hooks" that would allow for a centralized, CMA-managed supervision of how these "shall"s are operationalized.

Importantly, in neither case (article 6.2 or article 6.4) can completely centralized or decentralized

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<sup>2</sup> See <https://unfccc.int/resource/docs/2015/cop21/eng/10a01.pdf>, paragraph 37(f).

governance be expected. It is a matter of balance, with article 6.2 tilting toward party responsibilities, and article 6.4 tilting more toward CMA supervision. The CMA will have a role to play under article 6.2, especially as it relates to transparency provisions. Under article 6.4, parties will play a more important role than they did with the CDM and JI mechanisms of the Kyoto Protocol, given the general decentralized ethos of the Paris Agreement.

The independence (and the perception of independence) of the regulator would ensure that the markets and regulatory decisions are not (and not seen as) overly politicized. Freedom from politicization is particularly important for the carbon market, where scarcity is created through regulation. This is a reaction to experiences in the current carbon markets where regulators (for example, members of the CDM EB), are indistinguishable from negotiators in the UNFCCC process. In this example, there appears to be little effective independent control by the CMP over the CDM EB and JISC.

Ensuring that markets are not perceived as being overly politicized is important if parties desire to attract the private sector's participation, which is the objective enunciated in article 6.4(b) of the Paris Agreement. Good governance is characterized by stability and predictability. An increased level of independence would reassure market participants that good market functioning is the primary driver for the regulator.

A totally independent regulator at the UN level may be unrealistic, given the nature of the UNFCCC process. This can be seen in the statements and submissions from parties<sup>3</sup> before the 2015 Paris Climate Conference, which address aspects of the governing body under article 6.4.

Providing an increased level of separation between negotiators and regulators would go a long way in that direction. For article 6.4, more independence can be justified by the centralized nature of its governance. In the case of article 6.2, the decentralized nature of the

governance will have to be balanced, to a certain extent, with reassurance to the international community that the parties involved in that cooperation will be responsible and accountable.

For the mechanism created by article 6.4, provisions, departing from the current practices for nominating members of the CDM EB, will need to be put in place. These provisions may need, for example, to include the stipulation that members of the CDM EB cannot serve on negotiating teams for a certain amount of time, and that their nominations will be for an extended period, rendering them somewhat distanced from the dynamics of developments in UNFCCC negotiations. Having these positions as full-time, paid positions, through the UNFCCC, may further help in ensuring their independence.

For cooperation under article 6.2, increased transparency provisions on governance are one way to ensure the neutrality of the regulators. Peer review processes, as well as the presence of independent regulators, not representatives from the cooperating parties, may also need to be considered as potential solutions.

## Who Will Determine the Compliance Value of Units Used for NDC Compliance?

In a regulatory compliance market, the governance of how to set the compliance value of any unit used in that jurisdiction is critical. In the Kyoto Protocol, the CMP issued, and also set the compliance value (or a ceiling), for all units used for compliance within the Kyoto Protocol. This led to problems, as in some cases the compliance value was not “recognized” by stakeholders as being valid.

One example is that of the AAUs, which were issued to each party with a compliance obligation under the Kyoto Protocol. As mentioned, the face value of an AAU is 1 ton CO<sub>2</sub>e. Under the Kyoto Protocol, there was an enormous surplus of AAUs in the former Soviet bloc, resulting not from mitigation actions, but from the economic restructuring that took place in the transition to a market economy. As a result, many stakeholders felt that the surplus, also available for international trading, could not justify a face value of 1 ton. This problem has become known as the “hot air” issue.

The only way to address this was to change international agreements, that is, amend the Kyoto

<sup>3</sup> See “Submissions from Parties to the UNFCCC Subsidiary Body for Scientific and Technological Advice (SBSTA)” – 28 submissions on article 6.2 and 6.4 by various parties, including the Asociación Independiente de Latinoamérica y el Caribe, Brazil, Canada Environmental Integrity Group, European Union, Japan, the Like Minded Developing Countries group, New Zealand, Norway and the United States of America (accessible through the UNFCCC submissions portal: [http://unfccc.int/documentation/submissions\\_from\\_parties/items/5900.php](http://unfccc.int/documentation/submissions_from_parties/items/5900.php)).

Protocol for its second commitment period (2013–2020). Doing so was complicated and politically explosive, given the opposition, overruled, by the Russian Federation. The result, known as the Doha Amendment, essentially eliminated a significant part of AAUs from international trading.

In the Kyoto Protocol, international units could be either issued from the Kyoto Protocol mechanisms or be units issued domestically in a jurisdiction, and then exported to a linked system, to be used for domestic compliance by the receiving jurisdiction. The importing domestic regulator could set the domestic compliance value of both categories. Units issued domestically had no compliance value for Kyoto Protocol compliance.

That is why any domestically issued exported units had to be accompanied/shadowed by Kyoto Protocol units, if the transfer was to have any value for Kyoto Protocol compliance, for the importing jurisdiction. The ceiling for the international compliance value of the only units recognized for international compliance was set by the CMP, and it was constant: 1 ton of CO<sub>2</sub>e.

The situation will be significantly different for article 6.2, but not very dissimilar for article 6.4. Under article 6.4, the units issued will have a face value for international compliance value, which will be set by the CMA at issuance and will, de facto, act as a ceiling. Parties are of course free to move below the CMA ceiling, if they so choose. This is similar to what took place under the CDM and JI mechanisms.

Units issued under article 6.2 will have an international compliance value set by the parties that cooperate, be it bilaterally or plurilaterally. This is the case currently for the Japanese Joint Crediting Mechanism (JCM), which will likely function under article 6.2.

The advantage is that parties, or sets of parties, will have more flexibility to recognize changing circumstances, and adjust the international compliance value of units issued domestically by trading partners. There are no floors or ceilings in this case. However, parties will be influenced by the views of stakeholders and other CMA parties, which will result in some balance being present in assigning an international compliance value to a domestically issued unit. If stakeholders, or even emerging rating agencies, consider that the face value of domestic units is not justified by the level of ambition of a cap (for cap-and-

trade), or baseline (for baseline-and-credit), then that compliance value can be adjusted without the need for international intervention.

It is important to recognize the changing (relative) conditions of economies that have linked systems, which may influence their compliance value. That can be recognized in article 6.4 through shorter crediting periods, which will allow for adjustments in the baseline, as conditions change. For article 6.2, parties involved in cooperation should also recognize the changing nature of compliance value. While this need is not something that the UNFCCC can address directly, it can indirectly facilitate it by allowing for parties to have access to decentralized governance, and to set their own domestic and international compliance values for units issued domestically.

## Will Experience from Other Markets Be Used in Developing the Regulations?

The components and governance of the international carbon market under the Kyoto Protocol have emerged gradually, often in response to new issues that were discovered through its operation. Two main issues need to be pointed out with respect to the evolution and development of the governance elements.

First, it was developed more or less in an original way, without relying on the experience of other regulatory regimes. The original approach can be justified to some extent by the unique aspects of this market, which is totally regulatory (the underlying commodity is created by the regulator) and global, and deals with an environmental commodity. However, while its development may not have depended on direct experience in many respects, commodity markets are not unique and the principles of regulation are to some degree universal.

A second aspect is that some components were never developed, especially due to the politicization of process. In the development of the most-used market mechanism under the Kyoto Protocol, the CDM, some issues were gridlocked and never resolved. Among the issues that could not be addressed as part of the CDM review process is the creation of an appeals process in the CDM, which would ensure that reasons for the decision are always present when the regulatory body makes a decision. No regulatory regime is complete without

an appeals process, but the CDM does not have one, and its development has been languishing for years.

In the case of the governance of article 6 of the Paris Agreement, the new framework may lead to a market, which may have aspects that are even closer to existing markets, including financial markets. The regulatory experience gained from other markets must be used in constructing the new framework, which should include all elements that have proven important in other markets. Although markets are always imperfect, if the option to develop a new international carbon market is provided, it is important that it make use of the good, and bad, lessons learned.

Accordingly, it is important that those responsible for the development and regulation of this market have experience and expertise in markets, which has not been so to date. In the case of article 6.4 and its new mechanism, the temptation to nominate UNFCCC negotiators, many of whom have had a long association with either CDM or JI, will remain. However, unlike the Kyoto Protocol situation, the article 6.4 mechanism is no longer in the position of a monopoly; rather, it will have to compete with mechanisms emerging from article 6.2. As such, there is an increasing need to understand how commodity and financial markets work, given the interaction between the bottom-up part, article 6.2, and the top-down component, article 6.4. In the case of article 6.2, the responsibility of ensuring that regulators have market experience will rest with those parties that engage in international cooperation.

## How Will Robust Accounting Be Assured?

Accounting is one of the important elements in the carbon market, and was dealt with in articles 4.2–4.13 of the Kyoto Protocol, as well as extensively in the 2001 Marrakesh Accords.

Good accounting provisions and governance are critical to ensuring environmental integrity, which is one of the cornerstones of this market framework. In this context, avoiding double counting and ensuring that the tracking of transfers is done properly, which reassure all market participants of the safety of their investments, are just two examples.

In the case of the Kyoto Protocol, the accounting of both issuance and usage was centralized

and done at the international level. The CMP and its designated regulatory bodies issued units, and provided serial numbers.

Tracking was also done centrally through the International Transaction Log (ITL). National registries had to observe standards. Under the Paris Agreement, the same situation can be expected to continue under article 6.4. It is possible, given the bottom-up ethos of the Paris Agreement, that the national level may play a more important role.

However, lessons learned from the EU ETS, a market that started as more decentralized and has evolved toward increasing centralization, would caution against excessive decentralization, unless high standards, especially with respect to system security, can be ensured, including provisions connected to accounting.

Article 6.2 moves in a somewhat different direction, as the governance of cooperation, including accounting, appears to be more the prerogative of the parties. It is true that article 6.2 of the Paris Agreement refers to applying accounting that is consistent with guidance adopted by the CMA, while article 36 of 1/CP.21 requests that the SBSTA develop such guidance. However, the main responsibility for the accounting processes that are applied remains with the parties. This responsibility will include the development of the infrastructure for accounting.

Serial numbers and the ITL were critical in ensuring the integrity of the Kyoto Protocol carbon market. The lack of universal serial numbers and a universal tracking instrument under the Paris Agreement may mean that it cannot provide the level of assurance that private sector participants may seek regarding international transfer of unit ownership. That is why it is important to recognize that decentralization should not be applied to all aspects of the international market framework. In cases where the market functioning will benefit from a more centralized approach, the current provisions, such as the introduction of international serial numbers and the availability of an ITL may be beneficial. Such provisions will ensure that the market can provide good liquidity and price discovery.

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## Conclusions

The governance that will emerge under article 6 of the Paris Agreement will be critical if parties are to use this opportunity. A certain level of suspicion already exists due to the experiences under the carbon market that emerged under the Kyoto Protocol. It produced some very hard lessons (for example, complexity of the CDM project cycle, lack of transparency in decision making, difficulties in establishing on-the-record formal communication processes between the regulators and market participants) and some frustration among market participants, but everyone, in the end, learned how to adapt. They had to, as there were no options.

The world has changed, as the CMP/UNFCCC monopoly on regulation does not exist any more. The Paris Agreement now allows for competition, and it does not need to be a race to the bottom. Article 6.4 is being seen as a successor to the CDM and JI. But there will likely be competition in this new market, not only for investment opportunities, but also for the regulatory approach that different types of cooperation use, especially those developed under article 6.2. Any project may now choose between being a project under article 6.4, or some approach, such as a JCM-like approach, which will emerge under article 6.2. The pluses and minuses will be weighted, and choices made.

There have to be fundamental principles guiding the governance of these new markets, and they must include stability, predictability, transparency, environmental integrity and sustainability. The rest must flow from these principles. Important lessons were learned from the Kyoto Protocol markets, and they must not be forgotten, but the world of Kyoto Protocol markets, including CDM, cannot be imported wholesale and unchanged in article 6 of the Paris Agreement.

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# Fixing Climate Governance Series



The Fixing Climate Governance project is designed to contribute fresh ideas to the global debate. High-level workshops have developed a set of policy briefs and short papers written by experts from multiple countries and disciplines. Publications began in 2015 and are listed below. Some offer original concrete recommendations for making the UNFCCC more effective. Some propose diverse other ways to improve climate governance. The ideas in two 2015 publications were implemented in Paris. New publications, taking stock of recent conditions and research and looking forward on multiple levels, appear as they are completed.

## **Policy Options Could Increase Ambition in the 2015 Climate Agreement**

*Fixing Climate Governance Policy Brief No. 1*  
Henrik Jepsen

## **Conducting Global Climate Change Negotiations: Harnessing the Power of Process**

*Fixing Climate Governance Policy Brief No. 2*  
Kai Monheim

## **Six Ways to Make Climate Negotiations More Effective**

*Fixing Climate Governance Policy Brief No. 3*  
Pamela Chasek, Lynn Wagner and I. William Zartman

## **Focus Less on Collective Action, More on Delayed Benefits and Concentrated Opponents**

*Fixing Climate Governance Policy Brief No. 4*  
Edward A. (Ted) Parson

## **Mainstreaming Climate Change into Financial Governance: Rationale and Entry Points**

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## **How the United States Can Do Much More on Climate and Jobs**

*Fixing Climate Governance Policy Brief No. 7*  
John Odell

## **Central Banks Can and Should Do Their Part in Funding Sustainability**

*Fixing Climate Governance Paper No. 1*  
Andrew Sheng

## **Climate Technology Partnerships: Form, Function and Impact**

*Fixing Climate Governance Paper No. 2*  
Arunabha Ghosh, Anupama Vijayakumar and Sudatta Ray

## **Fixing Climate Governance through Effective Technology Partnerships**

*Fixing Climate Governance Paper No. 3*  
Arunabha Ghosh and Sudatta Ray

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## About CIGI

We are the Centre for International Governance Innovation: an independent, non-partisan think tank with an objective and uniquely global perspective. Our research, opinions and public voice make a difference in today's world by bringing clarity and innovative thinking to global policy making. By working across disciplines and in partnership with the best peers and experts, we are the benchmark for influential research and trusted analysis.

Our research programs focus on governance of the global economy, global security and politics, and international law in collaboration with a range of strategic partners and support from the Government of Canada, the Government of Ontario, as well as founder Jim Balsillie.

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## À propos du CIGI

Au Centre pour l'innovation dans la gouvernance internationale (CIGI), nous formons un groupe de réflexion indépendant et non partisan qui formule des points de vue objectifs dont la portée est notamment mondiale. Nos recherches, nos avis et l'opinion publique ont des effets réels sur le monde d'aujourd'hui en apportant autant de la clarté qu'une réflexion novatrice dans l'élaboration des politiques à l'échelle internationale. En raison des travaux accomplis en collaboration et en partenariat avec des pairs et des spécialistes interdisciplinaires des plus compétents, nous sommes devenus une référence grâce à l'influence de nos recherches et à la fiabilité de nos analyses.

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