

COPING WITH GLOBAL WARMING KYOTO MECHANISMS AND COMPLIANCE ISSUE*

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ABSTRACT

This article aims to discuss the potential roles of the Kyoto mechanisms to struggle against the challenges of global warming in the context of compliance issue. In this respect, it starts its analysis with making a brief survey on each Kyoto mechanism and types of emission units generated by them. Then, it explains the eligibility requirements which Annex I parties have to fulfil to participate to the Kyoto mechanisms. Thirdly, it studies on the suspension of eligibility within the compliance mechanism under the Kyoto Protocol. Fourthly, based on its examination, it questions what their advantages and potential challenges in ensuring compliance to cope with the problems of global warming. Finally, it provides a concluding assessment on its analysis.

Key Words: Global warming, compliance, Kyoto mechanisms, joint implementation, clean development mechanism and emission trading.

INTRODUCTION

Compliance has been one of the main priorities in both international environmental law(IEL) and international environmental politics(IEP) in current years, because the adoption of legally binding environmental agreements has failed to provide full compliance of the parties with these agreements. As there is a relationship mutually influencing each other between compliance and solving the environmental problems, failure in providing compliance has also resulted in failure to solve the environmental problems particularly the ones which have become globally effective, such as global warming.

Thus, the discussion between the scholars studying on IEP and IEL on eliciting compliance of the parties with the environmental agreements's obligations and improving it, has produced new mechanisms, such as compliance mechanisms supplementing the available means under the international law, and flexible mechanisms created under the Kyoto

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Protocol(KP). Therefore, the Kyoto Protocol's increasing role in ensuring compliance with its requirements aiming to stabilize "greenhouse gas concentrations in the atmosphere"(art.2, UNFCCC), and so coping with the problems of global warming, is very crucial to be discussed and underlined.

In fact, while the 1992 United Nations Framework Convention on Climate Change (UNFCCC) as a framework convention involves only general obligations in coping with the challenges of compliance, the Kyoto Protocol to the Convention has comprised specific obligations, by not only setting up new procedures and mechanisms to assess compliance and address non-compliance with the Protocol commitments, like creating a compliance committee with both a facilitative branch and an enforcement branch and specifying a list of consequences to be imposed by the enforcement branch on parties which fail to comply with their first period commitments in the second commitment period (2013-2017), but also by creating flexible procedures and mechanisms allowing parties to achieve emission reductions increasing their options for meeting these commitments.

This article aims to discuss the potential roles of these mechanisms created under Kyoto Protocol(KP) in providing compliance with its requirements, and thus, decreasing the problems of global warming. While doing that, it assumes that coping with the problems of global warming can be achieved to some extent through providing and increasing compliance of the parties with the legally binding emission reduction targets established for Annex I countries by the Protocol.

In this respect, it firstly makes a brief survey on each mechanism-joint implementation, clean development mechanism and emission trading-and types of emission units generated by them- emission reduction units, certified emission reductions, assigned amount units-. Secondly, it demonstrates the eligibility requirements(eligibility criteria- establishment and maintenance of eligibility) which the parties have to fulfil to participate to the Kyoto mechanisms. Thereafter, it analyzes the compliance mechanism under the Kyoto Protocol providing the institutional basis for assessing the eligibility of the parties to participate to Kyoto mechanisms, with its Enforcement Branch. Fourthly, based on its examination, it questions what their advantages and potential challenges in ensuring compliance to cope with the problems of global warming. Finally, based on its findings, it makes a concluding assessment on its study.

A BRIEF OVERVIEW ON THE KYOTO MECHANISMS

Article 4.2 (a,b) of the UNFCCC allows Annex I parties to implement related policies and measures for mitigation of climate change "jointly" with other parties. Article 4 of the Kyoto Protocol also sets out that

those parties, which have agreed to fulfil their commitments under art. 3, Protocol jointly, can adjust their commitments between themselves, prescribing that their total combined emissions can not exceed the sum of assigned amounts of emissions specified in Annex B. This joint fulfilment of commitments by a group of parties, called as “bubbling” (Oberthür and Ott, 1999:145), is specifically crucial in the context European Union with its integrated economy developed within its particular members. Indeed, within the EU, the individual member states have different emission targets based on their specific situations. But, the EU has a total reduction objective for the first commitment period (2008-2012), so, it has to enable the member states to behave in line with this objective (called as “European bubble”) (Eritja, Pons and Sancho, 2004:56-57).

The Kyoto Protocol makes further use of this approach based on the joint fulfilment of several parties by introducing three new instruments. These are: Joint Implementation (JI), (art.6, KP) Clean Development Mechanism (CDM) (art.12, KP) and Emission Trading (ET) (art.17, KP).

They are generally referred as ‘flexible/flexibility’ or ‘Kyoto’ or ‘carbon-market’ mechanisms’and, treating emissions as commodities that can be traded between the countries, provides opportunities for developed countries to invest emission-reduction activities in other developed/or developing countries, or to trade carbon emission credits(see Table 1).

Of these mechanisms, the Clean Development Mechanism (CDM) and Joint Implementation (JI) are “project-based” (Jacur, 2009:433) mechanisms by which the developed countries are encouraged to invest projects in developing countries or countries with economies in transition that reduce the greenhouse gases emissions in such a manner as to be capable of being proved. The other one, namely, International Emission Trading(IET) is a “market-based” mechanism (Jacur, 2009:433) by which developed countries may exchange and trade their emission credits.

Table 1: Kyoto mechanisms

The Joint Implementation (art.6,KP)	The Clean Development Mechanism (art.12,KP)	The Emissions Trading System (art.17,KP)
project-based mechanism	project-based mechanism	not project-based mechanism
encourages production of emission reduction units (ERUs)	encourages production of certified emission reductions(CERs)	allow transfers of assigned amount units (AAUs)
emission units can be moved from one party to another through JI projects	emission units can be added to the assigned amounts of the parties through CDM projects	emission units can be moved from one party to another through trading
they are for Annex I parties	they are for non-Annex I parties	they are for Annex I parties

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Different types of emission units are generated by these mechanisms: ERUs, CERs, AAUs.¹ While a joint implementation(JI) forms emission reduction units (ERUs) through projects in developed country parties. Certified emission reductions (CERs) (or “reduction credits”) (Brunnée, 2003:268) accrue from projects made in developing country parties through clean development mechanism(CDM). The last mechanism, emission trading, on the other hand, is based on assigned amount units (AAUs) defined in Annex B, Kyoto Protocol (see Table 2).

Table 2: Emission units

Emission Reduction Units (ERUs)	Certified Emission Reductions (CERs)	Assigned Amount Units (AAUs)
- project-level units -produce emission reductions wick can be counted towards meeting the Kyoto target	-project-level units - produce emission reductions wick can be counted towards meeting the Kyoto target	-not project-level units, quantified units (Annex B, KP) -not produce, but limit emissions
can be earned through JI projects	can be earned through CDM projects	can be transferred through emission trading and enlarged through credits for CDM
transferrable among Annex I parties	transferrable from Annex I parties to non-Annex I parties	transferrable among Annex I parties
can be traded only in the first commitment period (2008-2012)	can be used in the first commitment period(2008-2012)	can be used in the first commitment period(2008-2012)

The joint implementation/emission reduction units (ERUs) (art.6,KP)

The Protocol provides for joint implementation projects through which Annex I parties may transfer emission reduction units to any other party or gain them from it. Thus, in order to meet their commitments under art.3, KP, the parties may employ these joint projects that have the potential to enhance removals by sinks or reduce emissions by sources of GHGs.

There are four fundamental conditions which should be satisfied to apply to these projects. They are:

¹ The removal units(RMUs) which are constituted on the basis of land use, land-use change and forestry (LULUCF) activities such as reforestation (art.3.3, 3.4, 3.7, KP) will not be revealed here.

1. to ensure the approval of the parties involved,
2. to provide the reduction in emissions by sources, or an enhancement of removals by sinks additionally to any that would otherwise occur,
3. to comply with the obligations under articles 5 and 7, and,
4. to acquire emission reduction units as supplemental to domestic actions.

The party can only issue and transfer ERUs upon meeting the eligibility requirements.

Track 1: When all eligibility requirements are met by a party to transfer or attain ERUs(Decision 9/MOP 1 (2005b), that party can verify reductions in emissions by sources or enhancements of removals by sinks from an JI project as being additional to any that would otherwise occur, in accordance with art. 6, para. 1 (b) (Track 1). Through such verification, the host party can issue the appropriate quantity of ERUs in accordance with the relevant provisions of Decision 13/MOP 1(2005b) on modalities for the accounting of assigned amounts under art. 7.4.

Track 2: If the host party in question can not meet all requirements, the verification of reductions in emissions by sources or enhancements of removals by sinks from a JI project should occur through the verification procedure under the Joint Implementation Supervisory Committee(JISC) (Track 2). In that case, an independent entity accredited by the Committee has to determine whether the relevant requirements have been met before the party can issue and transfer ERUs.

A party which meets all eligibility requirements can use this verification procedure under the art.6 Supervisory Committee whenever it wants.

JI provides flexibility for Annex I parties to achieve their commitments “at lower costs” and “quicker than might otherwise be the case” (Yamin, 1996:231). However, when particularly compared with the modalities developed for the CDM, the provisions on JI adopted in the Marrakesh Accords are found as “vague and incomplete” (Freestone and Streck, 2005:541), so the consideration and possible adoption of criteria for JI can be required. Yet, the adoption of new rules for JI can result in the development of new rules for IL, so it is argued that this can increase “complexity” involved in the issue itself (Yamin, 1996:234).

The clean development mechanism/ certified emission reductions (CERs) (art.12,KP)

The Clean Development Mechanism aims, on the one hand, to assist non-Annex I parties in achieving sustainable development enabling them to benefit from CDM project activities, and on the other hand, to assist Annex I parties in achieving compliance with their quantified emission limitation and reduction commitments under art. 3, KP enabling them to use the certified emission reductions accruing from such project activities (art.12.2, 12.3, KP).

Emission reductions resulting from each project activity are certified by operational entities which are established by the meeting of the parties (MOP) on the basis of “voluntary participation approved by each party involved” (art.12.5.a), “real, measurable, and long-term benefits related to the mitigation of climate change”(art.12.5.b), and “reductions in emissions that are additional to any that would occur in the absence of the certified project activity”(art.12.5.c). Certified emission reductions provided during the period in between year 2000 to the beginning of the first commitment period can be used in the first commitment period (art.12.10).

This mechanism is supervised by an executive board (CDM Executive Board) under the authority and guidance of the MOP and also being as fully accountable to the MOP (art.12.4, KP).

The emissions trading system/assigned amount units (AAUs)(art.17,KP)

The Parties included in Annex B, Kyoto Protocol, which have quantified targets for limiting or reducing emissions, i.e. ‘assigned amounts,’ can trade emission reductions between each other. So, if a party included in Annex B reduces its emissions exceeding the target determined in the Annex, then, it can trade this exceeding amount to another Annex B party being over its target and facing high compliance cost to reduce its emissions. Thus, it can have the opportunity to find lower-cost solutions to its emission reduction problem.

The eligibility to participate in Kyoto mechanisms

Of those eligibility requirements(see Table 3) valid for each mechanism which Annex I parties have to fulfil to participate in the mechanisms, six specific eligibility criteria are applied to all three mechanisms:

a. ratification of the Protocol, the party should be a party to the Kyoto Protocol,

b. recording of the calculated assigned amount of green house gas (GHG) emissions in accordance with Decision 13/MOP 1(2005b),

c. development of a national system for estimating emissions and removals of GHG in line with the requirements established under art.5(1),

d. establishment of a national registry to record and monitor the movement of certain substances in line with the requirements established under art.7(4),

e. submission of the inventory for the most recent year which meets the requirements established under art.7(1) (see Decision 15/MOP 1(2005b), para. 3, for the inventory eligibility criterion failure conditions),

f. submission of the information on the assigned amount under art. 7(1) (Decision 3/MOP 1(2005c), Annex, para. 31, Decision 9/MOP 1(2005b), Annex, para. 21, Decision 11/MOP 1(2005b), Annex, para. 2).

All the eligibility criteria, with the exception of the criterion (f), apply immediately after submission of the initial report. This is because parties submit information on transactions of Kyoto units in the year after the transactions occurred, it can not be applied until the submission year after the party first transferred or acquired Kyoto units.

Failure to meet criteria (a), (b) or (d) prevents participation in any of the mechanisms. However, the result of failure to meet any criteria related to (c), (e) and (f) is different for each mechanism:

1. For Emission Trading(ET), it prevents party from transferring or acquiring units,
2. For Joint Implementation(JI), it prevents a host party from using Track 1, but the party may use JI Track 2 (verification of project-related emission reductions must occur through Joint Implementation Supervisory Committee (JISC) procedures). However, a party must have a national registry in place in order to issue and transfer emission reduction units (ERUs) under JI Track 2, (Decision 9/MOP 1(2005b), Annex, paras. 21, 23 and 24). There are two types of registry: national registries and CDM registry. Each registry operates through a link established with the International Transaction Log (ITL)² which verifies registry transactions and their consistency with rules under the KP) to record the movement of ERUs.

² There is also a supplemental transaction log, the Community Independent Transaction Log(CITL) which has been implemented by the European Commission since the start of the scheme in 2005. For the start of the Kyoto commitment period in 2008, transactions involving EU registries will be directed from the CITL to the ITL.

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3. For Clean Development Mechanism(CDM), it prevents a party from using certified emission reductions (CERs) for compliance with art.3(1) requirements. Yet, the party can still acquire CERs from the CDM registry.

Table 3: Eligibility requirements

Criteria applied to all three mechanisms	Application period	Failure to meet criteria
a. ratification of the KP b. recording of the assigned amount d. national registry to record certain substances	After submission of the initial report	prevents participation in any of the mechanisms
c. national system for estimating emissions e. submission of the inventory f. information submission on the assigned amount	after submission of the initial report after the party first transferred or acquired Kyoto units	For ET: prevents party from transferring or acquiring units, For JI: prevents a host party from using Track 1 For CDM: prevents party from using CERs

An Annex I party is considered eligible to use the flexible mechanisms automatically (“automatic eligibility,” (Lefeber, 2009:312, 313) after 16 months have elapsed since the submission of its initial report. Thus, when an Expert Review Team(ERT) reviews the information contained in the initial report, if identifies no problems with any of eligibility criteria, no question of implementation(QoI) is proceeded on the basis of that report. This enables the party to begin making transfers and acquisitions of units through the mechanisms after the expiration of the 16-month period. It can be described as eligible at an earlier date provided that the EB notifies the secretariat of the fact that it is not proceeding with any QoIs relating to eligibility criteria (Decision 3/MOP 1 (2005c), Annex, para. 32 (a), Decision 9/MOP 1(2005b), Annex, para. 22 (a), Decision 11/MOP 1(2005b), Annex, para. 3 (a)).

If a party can be able to establish its eligibility to participate in the mechanisms, it can remain eligible and maintain its eligibility until the EB decides that it does not meet one or more of the eligibility criateria and suspends its eligibility (NCP, Section V, para. 4 and Section XV).

The compliance mechanism under the Kyoto protocol: The Enforcement Branch(EB) and suspension of eligibility to participate in the Kyoto mechanisms

Like the UNFCCC, the Kyoto Protocol involves specific commitments only for Annex I parties to reduce their overall greenhouse gas emissions by an average of at least 5 % below their 1990 levels in the commitment period 2008-2012 (art.3.1, KP). For this purpose, each Annex I party is assigned an individual target amount -Assigned Amounts (AAs)- of greenhouse gas emissions listed in Annex B to the Protocol.³

These commitments by developed states in the Convention generally and in the Protocol more elaborately were supplemented by a compliance mechanism with a decision of the Conference of the Parties (COP) in Marrakesh, Morocco (so called as ‘Marrakesh Accords’) in 2001 (COP 7, Decision 24, 2001:64). through the confirmation of the Decision 24/COP 7 (2001) in Decision 27/MOP 1 (2005a:92) held in Montreal, Canada in 2005, many of the outstanding issues necessary to bring the Protocol into operation-except the legal status of enforcement consequences-has been resolved regarding the CM under the KP.

This mechanism involves a Compliance Committee and its two important branches, the Facilitative Branch (FB)and Enforcement Branch (EB).⁴ The FB aims to provide advice and facilitation of assistance to parties (particularly to developing countries and to Annex I economies in transition countries) to promote their compliance with their commitments under the Protocol (NCP, Section IV, 4). The EB, on the other hand, as a quasi-judicial body, has power to decide on questions of implementation(QoIs) and to impose consequences set out in Section XV (NCP, Section V(6)).

In fact, the EB is responsible for deciding on questions of implementation(QoI) to determine whether an Annex I party is in compliance with:

- a. its quantified emission limitation or reduction commitment under art. 3(1), KP,
- b. the methodological and reporting requirements under arts. 5, paras. 1 and 2, and art. 7, paras. 1 and 4, KP,

³ The Convention categorizes the parties into different groups: In its Annex I, it lists the developed country parties, so, developing countries are defined as ‘non-annex I’ countries. In its Annex II, it separates Annex I Parties, including OECD countries, which are obliged to provide financial and technological assistance to developing countries. Country-specific emission reduction commitments determined according to the developed country party’s own characteristics are also listed in Annex B.

⁴ For details on the CM under the KP, and its other bodies, see Savaşan(2013).

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c. the eligibility requirements under Kyoto Mechanisms(arts. 6, 12 and 17, KP (Decision 27/ MOP 1(2005a)- Decision 24/ COP 7(2001), Non-Compliance Procedure(NCP), Section V, para. 4)).

To date, there have been eight QoIs by ERTs sent to the Committee for consideration about the following parties: Greece, Canada Croatia, Bulgaria, Romania, Ukraine, Lithuania and Slovakia.⁵

In all these cases of non-compliance, the EB has applied the same three consequences(except Slovakia, only two of them were applied for it, suspension of participation to the flexibility mechanisms were not applied):

a. making a public declaration of non-compliance,

b. submission of a compliance action plan addressing their noncompliance within three months, which will be subject to review and assessment by the EB, and

c. suspension of trading in the Kyoto carbon market set up by the ET, CDM and JI mechanisms until the reinstatement by the EB.

Indeed, if the parties are found not to meet the criteria for participating in the mechanisms, in that case, the EB can withdraw the eligibility of the party concerned, i.e. can suspend its accession to the mechanisms, in line with relevant provisions under those articles (NCP, Section V, para. 4, Section XV).

When it is withdrawn, eligibility may only be restored in accordance with the procedure in Section X, para.2 (NCP, Section XV, 4) (see also Decision 22/MOP 1(2005a), Annex, Part VIII, pp.81-83, paras.147-160 for reinstatement of eligibility through an expedited review).

In that case, to reinstate the eligibility, the party requests to the EB either directly or through an expert review team (ERT). In response to the request submitted through an ERT, if the ERT confirms no longer existence of a QoI regarding the eligibility of the party concerned, the EB should restore the party's eligibility, unless it decides that such a QoI continues to exist. In response to the request submitted directly, if the EB decides on the non-existence of a QoI, it reinstates that party's eligibility. If it decides otherwise, then, it has to apply the procedure set out under Section X, 1 which is regulated specifically for QoIs relating to eligibility requirements under arts. 6, 12 and 17 of the Protocol. This is because, if a QoI is raised related to an eligibility criterion (by an ERT, by the party itself or by another party) before the EB, the EB should consider that question under expedited procedures (NCP, Section X, para. 1).

⁵ For details on the practical application of the CM under the KP, see Savaşan(2013).

The EB can also suspend its eligibility to make transfers on their surplus-not emission credits for its own compliance-, under emissions trading (art 17, KP), until it is restored by the EB in accordance with the procedure developed particularly on eligibility requirements for the emissions trading under Section X, 3-4 (NCP, Section XV, 5c).

In all cases of reinstatement of eligibility, the party gets eligible to use mechanisms again on the date of EB decision. Once the EB has taken a decision (either a decision not to proceed with a QoI, in which case the party meets the eligibility criterion, or a decision that the party does not meet the criterion), it notifies the secretariat of the decision (Decision 3/MOP 1(2005c), Annex, para. 32(b), Decision 9/MOP 1(2005b), Annex, para. 22(b), Decision 11/MOP 1(2005b), Annex, para. 3(b)).

Advantages and Potential Challenges

With respect to advantages of the Kyoto mechanisms in ensuring compliance, it should be firstly emphasized that these mechanisms “which have a definite market focus” (Stephens, 2008:5) are designed with three basic aims in themselves: flexibility, cost-effectiveness, sustainable development. In fact, they aim to enable the parties to meet their quantified targets, allowing them for flexibility while meeting their obligations through GHG mitigation projects or through the transfer of emission allowances between themselves. In addition, “minimiz[ing] the wasteful use of scarce resources,” (Hovi, Stokke and Ulfstein, 2005:7) they intend to reduce the costs of complying with the commitments to reduce the emissions. Finally, in particular through GHG mitigation projects which are implemented in developing country parties through CDM, they endeavour to encourage developing country parties to produce of emission reductions and to use clean technology, thus, to achieve sustainable development. JI is also indicated as serving for this aim by offering “emission abatement opportunities which are cheaper than domestic opportunities available to developed countries” (Yamin, 1996:231), and thus “increasing the flow of financial aid and resources to developing countries” (Yamin, 1996:231).

Given those aims of the mechanisms, it can be argued that they “have the potential to assist and create incentives for compliance” (Brunnée, 2003:269) In fact, particularly providing “flexibility” and “more cost-effective ways” (Brunnée, 2006:22) in meeting emissions targets, they can open the ways of enhancing compliance.

Making to be eligible to use these mechanisms contingent on compliance with the party’s commitments on reporting-eligibility-compliance requirements of the Kyoto Protocol also encourages the parties to develop strong inventory-monitoring and reporting systems. When it is

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taken into account that, the EB has applied suspension of participation to the flexibility mechanisms as a response for seven cases of eight brought before it by ERTs to date, their importance becomes more clear for ensuring compliance. As it is not possible to find out whether the parties are in compliance with their substantive obligations until the close of the first commitment period scheduled to run from 2008-2012 (with true-up period-submission of inventories for emissions in year 2012 and ERT's review (Decision 15-22/MOP1(2005a, 2005b)) at July 2015 or later (Oberthür and Lefeber, 2010)), they also render one of the last resorts of preventing the concerned party to be found as formally non-compliant with respect to its substantive obligations with the Kyoto Protocol. Thus, they allow the parties to have the opportunity to provide their compliance in a flexible and faster manner with lower costs of reducing emissions.

However, it should not be forgotten that they have also some potential challenges which can be explained in different categories looking from different perspectives, such as challenges in providing global cooperation against global warming (Pamukçu, 2006), in integrating trading regime into national law due to the different rules governing different trading regimes (domestic-regional-international) (Marr, 2005), or in linking the different regimes (Lefevere, 2005).etc. These challenges involved in these mechanisms also affect the promotion of compliance of the parties with their commitments under KP negatively.

Furthermore, suspension of eligibility used as a response measure under the CM of the KP can be criticised on the basis of the fact that, suspending a party's ability to use the Kyoto mechanisms can prevent it to bring itself into compliance through these mechanisms (Crossen, 2004).

In addition, if parties sell emission units that exceed their assigned amounts, or sell units that they need to remain in compliance,⁶ they can produce the grounds for non-compliance as well (Brunnée, 2003).

Moreover, the increased flexibility allowed within these mechanisms involve the verification and review challenges in itself and these challenges introduced by the mechanisms can cause the decrease in the regime's legitimacy.

As regards verification and review, firstly, it should be indicated that GHG emissions are "measured indirectly by means of conversion parameters that are vulnerable to challenge in the context of a non-compliance proceeding" (Hovi, Stokke and Ulfstein, 2005:7). In addition, the emissions reductions or removals associated with flexible mechanisms "face

⁶ To address the concerns on overselling, each party is required to maintain a reserve of ERUs, CERs, AAUs and/or RMUs in its national registry, known as the commitment period reserve.

considerable problems of causal substantiation, including resolving counterfactual questions of what level of emissions and removal would have occurred in the absence of those projects” (Hovi, Stokke and Ulfstein, 2005:7). These verification and review challenges can result in the view that determination of non-compliance is based on the emission inventory systems which lacks sufficient data, and non-compliance with the commitments does not cause significant costs for the relevant party, and thus, can undermine the regime’s legitimacy over time (Hovi, Stokke and Ulfstein, 2005).

Consequently, on these findings, it can be argued that the Kyoto mechanisms, while supporting to strengthening compliance on the one hand, can undermine it through the challenges they involved in themselves on the other hand. So, they have potential to decrease but also to pose new problems on compliance issue. However, despite their shortcomings regarding their operational characteristics generally, or their impact on compliance issue specifically, with their advantages-flexibility, cost-effectiveness- and sustainable development-, they still raise as promising for coping with the challenges of global warming in the short term. For the long term, on the other hand, their shortcomings should be eliminated(at least decreased as much as possible), for achieving a more successful struggle against the problems of global warming.

CONCLUSION

When it is considered that the increase of carbon dioxide in the atmosphere has been driven by the behaviours of the countries and their people, it is expected that eliciting compliance with emission reduction targets established for Annex I countries by the Kyoto Protocol should be directly and positively effective on struggling against the problems of global warming. Because the flexible mechanisms, as mentioned above, operate to reduce the overall costs of Annex I countries in meeting their commitments imposed them by the Protocol in a flexible manner, thus, operate for strengthening compliance, it can be concluded that these mechanisms can be directly influential on dealing with the problems of global warming.

However, while leading to this conclusion, it should not be forgotten that these mechanisms have some challenges which can undermine compliance as well. Even if they do not have them, given the complexity of the reasons and implications of global environmental problems, their undeniable effects on the environment and so arising need for much more effective efforts to hinder them, providing and improving compliance with the commitments of the Kyoto Protocol can only be one of the steps on the way of dealing with the challenges of global climate change and global warming. Compliance by itself can not achieve to be an overall solution to

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the global warming, and other global environmental problems, only be a further step towards it.

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