

## 기후변화 관련 사건에 적용되는 국제투자중재의 투자자 보호 기준 \*

### Standards of Protection in Investment Arbitration for Upcoming Climate Change Cases

김 대 중  
Dae-Jung Kim\*\*

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**Key words** : Climate Change, Kyoto Protocol, Investor-State Arbitration, Indirect Expropriation,  
Regulatory Chill, Fair and Equitable Treatment

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\*\* Assistant Professor, Graduate School of International Studies at Dong-A University(daejungkim@dau.ac.kr)

## 초록

기후변화문제는 이미 글로벌 이슈로 부상한 지 오래이지만, 기후변화문제를 각국의 정책으로 이식시키는데 필요한 국제투자법상의 적합한 기준들은 아직 마련되어 있지 않은 실정이다. 최근 ICSID중재에 회부된 *Vattenfall v. Germany* 사례는 독일 정부의 원전폐쇄 조치에 대한 기후변화 관련 국제투자분쟁의 대표적 사례라고 할 수 있다. 2005년 발효된 교토의정서는 환경오염의 주범인 온실가스를 감소시키는 방안으로 공동이행체제와 청정개발시스템 등의 유연한 메카니즘들을 제안하였다. 교토의정서의 이러한 교토메카니즘들은 이행규칙상, 사적 영역의 투자자들이 각국이 이행하는 교토메카니즘의 규제아래 놓일 수도 있게 함으로써 잠재적으로 투자분쟁의 위험을 지니고 있다고 할 수 있다. 각 국가가 교토메카니즘을 잘 이행하기 위한 배출기준의 더욱 엄격한 규제 등을 한다면 온실가스 감축이라는 글로벌 명제와 상관없이, 정부의 기후변화 조치들조차 수용의 금지라고 하는 국제투자중재의 투자자 보호 원칙들의 잣대 하에 놓일 가능성을 배제할 수 없는 것이다. 수용의 문제에 있어 이제까지 대부분의 국제투자중재 판정에서 내려진 ‘침해의 결과(effect-based)’만을 기준으로 적용한다면, 각국 정부들의 배출기준 조정에 대해 투자자들이 자신들의 투자를 유치국 정부가 수용했다고 볼 수 있는 가능성이 생긴다. 투자중재 회부의 두려움으로 인한 각국 정부의 ‘규제적 위축(regulatory chill)’의 문제도 세계 각국이 기후 변화정책을 강화하는 것을 방해하는 역할을 할 수 있다. 투자 계약상 투자자를 보호하기 위한 정부조치의 ‘정지조항(stablization clause)’도 투자 유치국의 기후변화 이행과 새로운 입법에 뒤서리 효과를 가지고 올 것이다. 그리고 현재까지의 투자중재 판정부의 공정하고 공평한 대우 기준(FET)의 적용을 본다면, 교토메카니즘 이전에 탄소 집약적 산업들이 저탄소 운영체제로 가기 위해 투자유치국에 진입할 때, 투자유치국이 적절한 이행을 하는데 상당한 부담을 줄 수도 있다. 그러므로 *Methanex* 사건 판정부에서처럼, 수용에 있어서 침해결과만을 볼 것이 아니라, 정부의 규제결정이 의도적으로 외국인 투자자의 투자를 침해할 목적이 아니고 비차별적이며 공공적인 목적이라면 수용의 범주에 포함시키지 않도록 하는 것이 바람직할 것이다. 또한 환경법상의 지속가능한 발전의 원칙을 투자조약이나 투자계약에 포함하도록 하는 것을 고려해 볼 수 있다. 덧붙여 이후부터 정부가 투자자-국가 중재 회부 가능성이라는 부담을 벗어나서 환경규제를 이행하기 위해서는 투자자-국가 중재이외의 다른 적절한 분쟁해결 조항을 입안하여 합의하는 것도 고려해 볼만 하다.

**주제어** : 기후변화, 교토의정서, 투자자-국가 중재, 간접수용, 규제적 위축, 공정하고 공평한 대우

## I . Introduction

Climate change cases already start to appear in international courts including investment arbitration tribunals. As it is widely known that climate change is a global scale question, some concerns have been raised that investment laws may not adequately address the domestic implementation of mitigation in climate change-related cases. The main legal principles of investment arbitration potentially brought from investors of climate change related-industries are indirect expropriation, fair and equitable treatment and stabilization clauses in relation to a regulatory chill effect. A recent ICSID investment arbitration of *Vattenfall AB v. Federal Republic of Germany*<sup>1)</sup>, where the host state failed to issue emissions and water use permits for the operation of a coal-fired power plant, is a salient case in which climate change effects are expressly addressed. In 2012, Vattenfall again filed a request for arbitration against Germany at ICSID because of Germany's decision to phase out nuclear energy after the Fukushima nuclear power plant disaster.<sup>2)</sup>

The Kyoto Protocol mechanism plays an important role in the current climate change regime. An especially important innovation in the Kyoto Protocol is that the Protocol explicitly provides for the involvement of private actors and investors to achieve the Protocol's mission of reducing green house gas (GHG) emissions. It poses significant risks that a hosting state's climate change-related measures can be challenged by private investors in the near future. Investor-state arbitration is about whether and to what extent an investment hosting state may be liable when its regulations regarding environment such as climate change measures infringe an investor's legitimate expectations. Gradually more climate change cases are likely to draw attention, and the hosting state should be liable for a significant amount, as implicated in *Vattenfall* where Germany is to pay one billion euros to the foreign investor.

This paper will provide a background of the first 2009-2011 *Vattenfall v. Germany* arbitration as well as the new 2012 dispute of *Vattenfall v. Germany*. It will then take a brief overview of the Kyoto Protocol regime, especially through the so-called Kyoto Flexibility Mechanisms, and thereby shows various ways in which private investors can

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1) *Vattenfall AB, Vattenfall Europe AG, Vattenfall Europe Generation AG v. Federal Republic of Germany* (ICSID Case No. ARB/09/6 (11 March 2011).

2) *Vattenfall AB and others v. Federal Republic of Germany* (ICSID Case No. ARB/12/12).

participate in the execution of the Protocol. Now the Mechanism comes at a stage to pose potential threats against governments' regulatory measures to tackle climate change.<sup>3)</sup> Third, it analyzes the main investor protection standards that will likely be raised in cases of climate change. These include indirect expropriation and fair and equitable treatment which have been traditionally discussed the most in NAFTA chapter 11 cases, as well as stabilization clauses in relation to regulatory chill which are also likely to be raised in practice relating to climate change disputes. This paper will then present problems the implementation of the Kyoto Protocol could create for investment arbitration and also present how the climate change regime such as the Kyoto Protocol and the investment protection regime can reconcile to each other.

## II. *Vattenfall v. Germany* Salient Climate Change Dispute

In 2009, Vattenfall, a Swedish energy company filed its first arbitration against the German federal government in ICSID.<sup>4)</sup> The arbitration is with regard to environmental restrictions imposed on a 2.6 billion euro coal-fired power plant in Hamburg-Moorburg which was under construction along the Elbe River.<sup>5)</sup> This was the first known investor-state arbitration against Germany. The Hamburg Environmental Authority had issued a license imposing water quality restrictions, which according to Vattenfall, made the whole investment project unviable.<sup>6)</sup> Vattenfall argued that the environmental permit violated the provisions in Part 3 of the Energy Charter Treaty regarding the promotion and protection of investments and proceeded to file a compensation claim against Germany for 1.4 billion euros.<sup>7)</sup> The ICSID arbitration was settled in the spring of 2011 after Germany agreed to a watered-down environmental permit in favor of the corporation.<sup>8)</sup>

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3) Freya Baetens, "Foreign Investment Law and Climate Change: Legal Conflicts Arising from Implementing the Kyoto Protocol through Private Investment," International Development Law Organization and the Centre for International Sustainable Development Law (CISDL) 2010. p. 683-89.

4) *Vattenfall*, *supra* note 1.

5) Nathalie Bernasconi, "Background Paper on Vattenfall v. Germany Arbitration", International Institute for Sustainable Development, 2009, pp. 1-7.

6) Nathalie Bernasconi-Osterwalder & Rhea Tomara Hoffman, "The German Nuclear Phase-Out Put to the Test in International Investment Arbitration? Background to the new dispute *Vattenfall v. Germany* (II), Power Shift and the Forum Environment & Development (Germany)," 2012, pp.3-6.

7) *Id.*

In May 2012, Vattenfall again filed a request for arbitration against Germany in ICSID after German Chancellor Angela Merkel decided to close out nuclear energy after the Fukushima disaster broke out in Japan.<sup>9)</sup> Shortly after the new Atomic Energy Act passed into law in 2010, several nuclear power plant operators announced their intention to file a suit to contest the law. Vattenfall, after several months of threats to obtain compensation for the nuclear energy phase-out, brought investor-state arbitration under the Energy Charter Treaty, an international trade and investment agreement in the energy sector.<sup>10)</sup> The Energy Charter Treaty also grants foreign investors to bring arbitration to an international tribunal, bypassing domestic courts of the hosting state. Media reports in late 2011 estimated Vattenfall's lost investments in the nuclear power plants to be 700 million euros.<sup>11)</sup> It is not known Vattenfall would add any additional costs to its arbitration. In the financial report for 2011, Vattenfall estimated the damages of the nuclear phase-out was about 1.18 billion euros.<sup>12)</sup>

The new Atomic Act allows the operation of a nuclear power plant to expire at the latest legal date possible according to each respective plant.<sup>13)</sup> The Act plans to close the oldest 17 nuclear power plants immediately and further foresees the shutdown of remaining nuclear plants by 2022.<sup>14)</sup>

The exact amount and reasons for the investment arbitration is unknown because the proceeding is in confidentiality. The legal arguments that Vattenfall relied have not been disclosed as were the German government's on that matter despite the heightened public interest. Possible claims that Vattenfall would have brought on the arbitration, but not exclusively, involving the clauses in the Energy Charter Treaty are first, expropriation without compensation, second, fair and equitable treatment and the non-impairment through unreasonable or discriminatory measures. From Vattenfall's point of view, the German government's decision to abandon nuclear power has destroyed the value of its investment. Vattenfall might argue that revoking Vattenfall's license amounts to an indirect expropriation, as its ownership of the nuclear power plants has become worthless due to

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8) *Id.*

9) *Vattenfall*, *supra* note 2.

10) Energy Charter Secretariat.(2004). The Energy Charter Treaty and related documents: A legal framework for international energy cooperation.

Retrieved April 21, 2014, from [http://www.encharter.org/fileadmin/user\\_upload/document/EN.pdf](http://www.encharter.org/fileadmin/user_upload/document/EN.pdf).

11) Bernasconi, *supra* note 6.

12) *Id.*

13) *Id.*

14) *Id.*

the new Atomic Energy Act. Also, Vattenfall would likely to rely on the element of “legitimate expectation” in assessing the fair and equitable treatment standard. Further, when the foreign investor initiates an arbitration and the arbitral tribunal rules that an investment protection standards have been violated, the hosting state should concern high amounts in compensation. The mere threat of a claim can chill the hosting state’s future adoption of regulatory measures to protect the environment in so-called “regulatory chill” effect. Whether the ICSID arbitration tribunal would consider the rationale of the new Atomic Energy Act may be dependent on how much it considered the German government’s intention to achieve a public interest.

As we can see in *Vattenfall*, the approach to compensation in energy sector reforms can attract criticism for its potential to discriminate amongst operators.<sup>15)</sup> Investors of the energy sector in relation to climate change have been arguing that the payment of compensation and free permit measures are protectionist and potentially breach international trade and investment rules, thereby leading a hosting country into a significant amount of investment disputes.<sup>16)</sup> As in *Vattenfall*, investor-state arbitration over climate change measures can take issues of restrictions generated by the government’s climate-related measures, carbon emissions, water use restrictions, coastal development prohibitions and more.<sup>17)</sup>

### III. Climate Change Regime, Kyoto Protocol and Investor– State Arbitration

#### 1. The United Nations Framework Convention on Climate Change and the Kyoto Protocol

Under the United Nations Framework Convention on Climate Change (UNFCCC) entered into force in 1994, governments are encouraged to gather and share data on greenhouse gas emissions and national policies.<sup>18)</sup> However, the UNFCCC is only a framework

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15) Kate Miles, *The Origins of International Investment Law: Empire, Environment and the Safeguarding of Capital*, Cambridge University Press, 2013, pp. 187-211.

16) *Id.*

17) *Id.*

18) United Nations Framework Convention on Climate Change (UNFCCC), 20 Jun. 1992, 31 ILM 848 (entered

convention with few substantive obligations. Therefore it was necessary to conclude a protocol that specifies more detailed substantive obligations and imposes concrete greenhouse gas reduction targets.<sup>19)</sup> The UNFCCC has 194 parties to it, and the Kyoto Protocol currently enjoys 192 ratifications.<sup>20)</sup>

The Kyoto Protocol is an international agreement entered into force in 2005 to reduce greenhouse gas emissions.<sup>21)</sup> The Protocol binds 37 industrialized states and the European Community, the UNFCCC Annex I Parties to reduce greenhouse gas emissions.<sup>22)</sup> In addition to encouraging energy efficiency measures, the Kyoto Protocol also provides a number of flexible mechanisms, one of which is the so-called Kyoto Flexibility Mechanisms to assist with the carbon emission reductions.<sup>23)</sup> They include three major projects such as the use of carbon emission schemes, Joint Implementation (JI) projects, and the Clean Development Mechanism (CDM).<sup>24)</sup> The CDM allows Annex I states to finance emission reduction projects within non-Annex I parties and obtain credit for those reductions.<sup>25)</sup> It was intended to encourage investment flows from developed to developing countries in low-carbon projects and renewable energy technologies.<sup>26)</sup>

Interestingly, the mechanisms were also structured to include private sectors. In Joint Implementation, Annex I countries can also authorize legal entities such as private investors, to participate in actions leading to the generation, transfer or acquisition of Emission Reduction Units (ERUs).<sup>27)</sup> The main idea, again is that the mechanism offers developed states a flexible and cost efficient means of fulfilling a part of their Kyoto commitments, while hosting states benefit from foreign investment and technology transfer.<sup>28)</sup> Mindful that, in the Joint Implementation process, assessment of the additionality of

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into force 24 March 1994).

19) David Hunter et al, *International Environmental Law and Policy*, Third Edition, Foundation Press, 2007, pp. 667-705.

20) *Id.*

21) Kyoto Protocol to the United Nations Framework Convention on Climate Change, opened for signature 11 December 1997,(1998) 37 ILM 22 (entered into force 16 February 2005).

22) *Id.*

23) *Id.*

24) *Id.* at Art 6,12 and 17. Joint Implementation involves cooperation of two Annex I parties. Art 6 allows the parties to transfer to, or acquire from, each other emission reduction credits produced by projects that are aimed at emission reductions. This makes developed states to invest in renewable energy and low-carbon projects in other states and apply the credits generated to their own emission reduction targets.

25) *Id.* at Art 12.

26) Werksman, J, and Santoro, C., *Investing in Sustainable Development: The Potential Interaction between the Kyoto Protocol and the Multilateral Agreement on Investment*, New York: United Nations University Press, 2001, p147.

27) Kyoto Protocol, *supra* note 21, art 6 (3).

emission reductions or removals is done by the Joint Implementation Supervisory Committee's verification process.<sup>29)</sup> Under the process, an independent entity including a private investor accredited by the JI Supervisory Committee has to determine whether the relevant requirements have been fully fulfilled before the hosting state can issue and transfer ERUs.<sup>30)</sup>

Under the Clean Development Mechanism (CDM), it allows Annex I states or their investors who want to emit more than they have been allocated in Annex B to the Protocol, may still fulfil their commitments by buying extra emission rights from states or investors that have excess capacity because they have emitted less than their allowance.<sup>31)</sup> If CDM succeed in a detailed public registration and issuance process supervised by the Designated Operational Entity, they will be approved by the Designated National Authorities. Parties participating in the CDM shall designate a national authority for the CDM.<sup>32)</sup>

## 2. Kyoto Flexibility Mechanisms and Investor-State Arbitration

The key issue of relationship between the Kyoto Mechanisms and investment arbitration, especially investor-state arbitration is to what extent private investors should be offered a possibility to appeal against decisions of the authorities of the Kyoto Mechanisms. In the processes of Joint Implementation projects, investors may complaint against the authority such as the Joint Implementation Supervisory Committee regarding accreditation or verification decisions.<sup>33)</sup> Also in the CDM process, an investor may be dissatisfied with the verification, monitoring or registration that are executed by the Designated Operational Entity.<sup>34)</sup> The possibility of disputes implicates that implementation of the Kyoto Protocol can create dispute settlement through investor-state arbitration. For example, foreign investors from Kyoto as well as non-Kyoto states can consider a hosting state's Kyoto

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28) Baetens, *supra* note 3.

29) *Id.*

30) *Id.*

31) Bernd Hansjurgens, *Emissions Transfer for Climate Policy: US and European Perspectives*, Cambridge; New York; Cambridge University Press, 2005, p75.

32) A Designated Operational Entity has two key functions that, first it validates and requests registration of a proposed CDM project activity. Second, it certifies as appropriate and requests the Board to issue Certified Emission Reductions. See UNFCCC, <http://cdm.unfccc.int/DOE/index.html>.

33) Baetens, *supra* note 3.

34) *Id.*



Mechanism measures as an infringement of the investor's rights under international investment treaties.<sup>35)</sup> Also, types of the state's conduct against which investors can bring investor-state arbitration within the Kyoto regime include a state Supervisory Committee or Designated National Authority's assessment of the additionality of emission reductions or removals and many more monitoring functions.<sup>36)</sup> Foreign investors outside the Kyoto system also could bring arbitration against a hosting state's changes in national legislation and administration.

Although the Clean Development is still in its infancy, it has already over 2,000 projects approved and registered.<sup>37)</sup> International investment in wind, solar, and bio-fuel has rapidly grown and the international carbon market and global levels of investment in renewables are now about billions of dollars every year.<sup>38)</sup> Therefore, it is likely that there will be an increase in the use of mechanisms to protect and further to promote investment in renewable energy at domestic level.<sup>39)</sup> This can also create measures such as the regulation of access rights to major electricity grids, incentive tariffs, renewable energy tax exemptions, feed-in tariffs, carbon taxes and grants.<sup>40)</sup>

However, as presented above, climate change-investment disputes can arise not only about an investment scheme in renewables and low-carbon technology, but also can arise, for example, regarding low-carbon investment incentives' constituting discrimination against investors in high carbon-emitting operations.<sup>41)</sup> As such, investor protection standards under international investment agreements can be violated.

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35) *Id.*

36) *Id.*

37) Miles, *supra* note 15.

38) *Id.*

39) *Id.*

40) *Id.*

41) *Id.*

## IV. Re-evaluating Standards of Protection in International Investment Arbitration for Considering Climate Change Cases

### 1. Indirect Expropriation

Any initiation of stricter emission standards, as well as a ban on high-carbon producing products could have significant effects on economic value, and thereby foreign investors might argue that these measures violate the prohibition on expropriations in investment agreements, regardless the measures created to reduce greenhouse gas emissions.<sup>42)</sup> This is because most investment laws restrict not only direct takings, but also any other measures tantamount to expropriation.<sup>43)</sup> The indirect expropriation occurs if the hosting state interferes with the use of the investment or with the enjoyment of its benefits even though the investment has not been seized and the legal title to the investment is not affected.<sup>44)</sup>

Two approaches have been appreciated in determining as to whether a hosting state's measure is equivalent to expropriation.<sup>45)</sup> The effects doctrine and the purpose and context doctrine are the two.<sup>46)</sup> It is with regard to whether tribunals should focus solely on the effects of the challenged measure or they should consider the purpose and context of the measure. The dominant view is the measure's effects should be the sole criteria.<sup>47)</sup> In the NAFTA *Metalclad v. Mexico* case, the tribunal stated that:

...expropriation under NAFTA Article 1110 includes not only open, deliberate and acknowledged takings of property such as outright seizure or formal or obligatory transfer of title in favor of the host State, but also convert or incidental interference with the use

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42) Stephan W. Schill, "Do Investment Treaties Chill Unilateral State Regulation to Mitigate Climate Change?", *Journal of International Arbitration* 24(5). pp. 469-77.

43) *Id.*

44) Fiona Marshall, "Climate Change and International Investment Agreements: Obstacles or opportunities?", *International Institute for Sustainable development*, 2010, pp.32-60.

45) Jeswald W. Salacuse, *The Law of Investment Treaties*, The Oxford International Law Library, 2010, pp. 297-318.

46) *Id.*

47) *Id.*

of property which has the effect of depriving of the owner, in whole or in significant part, of the use of reasonably-to-be expected economic benefit of property even if not necessarily to the obvious benefit of the host state.<sup>48)</sup>

This effect-based doctrine can cover wide range of interference with the use of property that goes against the legitimate expectation of a foreign investor including changes to existing emission standards or a ban on high-carbon production.<sup>49)</sup> The purpose of the regulation, on the other hand, is a much less significant factor, even to the point of not impacting at all on the arbitral tribunal's decision.<sup>50)</sup> For example, legitimate purpose did not alter the expropriatory nature of the governmental action under the Iran-US Claims Tribunal in *Phelps Dodge Corp. et al v. Iran*. The tribunal stated that:

...[it] understands the financial, economic and social concerns that inspired the law pursuant to which it acted, but those reasons and concerns cannot relieve the Respondent of the obligation to compensate Phelps Dodge for its loss.<sup>51)</sup>

This approach has been appeared in more recent arbitral decisions of *Tecnicas Medioambientales Tecmed, SA v. United Mexican States (Tecmed)*<sup>52)</sup> and *Azurix Corp. v. Republic of Argentina (Azurix)*<sup>53)</sup>.

Contrary to the effect-based approach in *Metalclad, Iran-US* tribunal, *Tecmed* and *Azurix*, the awards in *Methanex* is encouraging.<sup>54)</sup> *Methanex* involved a challenge by a Canadian investor to a health and environmental regulation enacted in the US.<sup>55)</sup> Methyl Tertiary Butyl Ether (MTBE) is a fuel additive which increases oxygen levels in unleaded petrol and operates as an octane enhancer for the fuel. From 1996, however, the substance was found to be leaking from storage tanks and was detected in the drinking water systems in California.<sup>56)</sup> California considered MTBE-contaminated water posed a significant threat to human health and safety and to the quality of the environment.<sup>57)</sup> As

48) *Metalclad Corporation v. Mexico*, ICSOD Case No ARB(AF)/97/1 (Award) (30 August 2000).

49) Schill, *supra* note 42.

50) Miles, *supra* note 15.

51) *Phelps Dodge Corp. et al v. Iran*, 10 Iran-US CTR 121, 130 (1986-I).

52) *Tecnicas Medioambientales Tecmed, SA v. United Mexican States* (2004) 43 International Legal Materials 133.

53) *Azurix Corp. v. Republic of Argentina* (Award) (2006) ICSID Case No.ARB/01/12.

54) *Methanex Corporation v. United States of America*, (2005) 44 International Legal Materials 1345, 1456.

55) *Id.*

56) *Id.*

a result, the California governor issued an executive order in 1999 declaring that the use of the chemical would be phased out by 2022.<sup>58)</sup> Methanex was a Canadian manufacturer of methanol, one of the main ingredients in producing MTBE.<sup>59)</sup> Methanex argued that the Californian measures not only deprived it of a substantial portion of its customer base and market for methanol in California, but effectively transferred its market share to its competitors. The corporation filed a claim under NAFTA, seeking \$970 million in damages for regulatory expropriation, breach of the fair and equitable treatment standard, and a violation of national treatment obligations.<sup>60)</sup> The tribunal rejected Methanex's arguments, stating that:

as a matter of general international law, a non-discriminatory regulation for a public purpose, which is enacted in accordance with due process and which affects, inter alia, a foreign investor or investment is not deemed expropriatory and compensatory unless specific commitments had been given to the then putative foreign investor contemplating investment that the government would refrain from such regulation.<sup>61)</sup>

The ban in *Methanex*, was not considered as an indirect expropriation because it reflected a non-discriminatory and effect-based approach had not been realized. However, given the non-existence of a precedent case-binding in investment arbitration regime, it is premature that the tribunal started to consider government's non-discriminatory, public-purpose climate change measure will not considered as an indirect expropriation.

(1) Indirect Expropriation and Kyoto Mechanism

One of the main requirements for a Kyoto Flexible Mechanism is that investors have to prove that their project will create additional emission reductions. In order to calculate whether a certain reduction is additional, a baseline should be suggested and the original baseline is developed in conjunction with authority such as a Designated Operational Entity for CDM projects or an Accredited Independent Entity for JI projects. If the additional amount of emission reduction is lower than the baseline due to the hosting government's measure because, for example, the hosting government has taken domestic measures to

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57) *Id.*

58) *Id.*

59) *Id.*

60) *Id.*

61) *Id.* at 1456.

lower emissions, this will eventually lower the value of the investment and could raise an indirect expropriation allegation.<sup>62)</sup> Also regulatory action by the hosting state to promote Kyoto mechanism investment will affect foreign investors outside the Kyoto system.<sup>63)</sup> Mere existence of Kyoto regulation on a national level would lower the value of all non-Kyoto investments in the same sector.<sup>64)</sup>

## (2) Regulatory Chill and Stabilization Clause

Notable scholars say that mere fear of being forced to pay heavy compensation from regulatory takings could result in regulatory chill on enacting stricter environmental standards.<sup>65)</sup> The regulatory chill theory is based on a notion that fear of decreased investment flows, increased capital outflows and investor-state arbitration would lead a host state government to reduce or freeze environmental standards.<sup>66)</sup> In this scenario, the argument is that, threat of investor claims against the host state may preclude the strengthening of climate change measures. It has been suggested that the fear of facing investor claims not only encompasses the potential for large compensation from expropriation claims, but is also driven by the substantial costs involved in defending arbitral proceedings itself.<sup>67)</sup> The average costs in defending investor claims are US \$1.5 to 2.5 million.<sup>68)</sup> This also implies that hosting governments do not adopt any new environmental or climate change-related regulations just in case such measure would reduce the commercial value of investments and therefore be considered expropriatory.<sup>69)</sup>

These effects of regulatory chill can logically be applied to the implementation of Kyoto mechanisms. If regulatory chill can impact climate change measures, it would surely frustrate the purpose of the Kyoto Protocol.

A particular type of regulatory chill is due to the existence of a stabilization clause in contracts between investors and hosting states which aim to guarantee that domestic laws with regard to investment will remain unchanged.<sup>70)</sup> A stabilization clause is essentially a

62) Baetens, *supra* note 3.

63) *Id.*

64) *Id.*

65) Kevin R. Gray, "Foreign Direct Investment and Environmental Impacts-Is the Debate Over?", *RECIEL* 11, 2002, p.310. See also Kate Miles, "International Investment Law and Climate Change: Issues in the Transition to a Low Carbon World", *SIEL Working Paper No. 27/28*, 2008, p.22-26.

66) *Id.*

67) *Id.*

68) *Id.*

69) *Id.*

70) Baetens, *supra* note 3.

tool to preserve the legal and business environment in which the investment has been established.<sup>71)</sup> Originally, its purpose is uniform in seeking to protect foreign investment from political risks.<sup>72)</sup> Stabilization clauses have a freezing effect on hosting states' regulation and they freeze the law applicable to the investment when the investor entered into the contract.<sup>73)</sup> In this way, foreign investors are able to insulate their investments from the effect of more strict environmental regulation or law reform.<sup>74)</sup> The effect of stabilization could impede Kyoto-based regulations in the hosting state enacted after the establishment of the investment. Mindful that stabilization clause is contractual in nature between the investor and the state.

## 2. Fair and Equitable Treatment (FET)

The fair and equitable treatment standard requires the host state to observe the basic expectations that were taken into account by the foreign investors to make the investment.<sup>75)</sup> In comparison with FET standard, the Most Favored Nation and National Treatment standards are "empty" standards in a sense that they do not provide an absolute right to a certain treatment but merely an obligation for a state to treat a particular group of foreign investors as favorable as other foreign or domestic investors.<sup>76)</sup> However, the FET standard guarantees a certain level of protection regardless of treatment according to other foreigners or nationals.<sup>77)</sup> In this sense, FET is a core concept embedded in virtually all international investments agreements. The FET standard is intended to protect weaker foreigners from the government and the key element of FET is the legitimate expectations of the investor regarding the regulatory framework and whether due process has been followed. One of the most representative definition can be found in *Tecmed v. Mexico*.

The foreign investor expects that host state to act in a consistent manner, free from ambiguity and totally transparently in its relations with the foreign

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71) Miles, *supra* note 15.

72) *Id.*

73) *Id.*

74) *Id.*

75) Anatole Boute, "Combating Climate Change through Investment Arbitration", 35 *Fordham Int'l L.J.* 613, 2012, pp. 635-47.

76) Baetens, *supra* note 3.

77) Boute *supra* note 75.

investor, so that it may know beforehand and any all rules and regulations that will govern its investment, as well as the goals of the relevant policies and administrative practices or directives.<sup>78)</sup>

Arbitral tribunals pay particular attention to the conditions that the host state proposes and the promises it make to attract foreign investors. The tribunal of *Glaims Gold, Ltd v United States* noted “the creation by the state of objective expectations in order to induce investment and the subsequent repudiation of those expectations.”<sup>79)</sup> In *Sempra Energy International v. Argentine Republic*, the tribunal considered that the requirement not to affect the basic expectation by the investor “becomes particularly meaningful when the investment has been attracted and induced by means of assurances and representations.”<sup>80)</sup>

Also tribunals have taken as their starting point an examination of the law at the time when the investment was entered into and any specific representation made by the host state to the investor.<sup>81)</sup> This has made the FET standard connect to the idea of a stable legal and business environment.<sup>82)</sup> In *Occidental Exploration and Production Co v. Republic of Ecuador*, it was held that the “stability of the legal and business framework is an essential element of fair and equitable treatment.”<sup>83)</sup> This standard can place a heavy burden on host state. Although the obligation to maintain a stable legal and business environment do not mean that regulation can never change, it does have the potential to constrain the hosting state’s policy space.<sup>84)</sup> As in the definition of *Tecmed*, the requirement to “know beforehand any and all rules and regulations that will govern its investment” is at its worst and could preclude more stringent forms of regulation in climate change cases.<sup>85)</sup>

(1) FET, Kyoto Mechanisms and *Vattenfall*

The Kyoto Protocol sets the scheme that host states set the compliance by an investor’s home state as a requirement for the investor’s ability to participate in the project.<sup>86)</sup> What

78) *Tecmed supra* note 52 at 154.

79) *Glaims Gold, Ltd. v. United States*, Award, pp 620-21,627 (NAFTA/UNCITRAL Arb. 2009).

80) *Sempra Energy Int’l v. Arg, Republic*, ICSID Case No. ARB/02/16, Award, p298 (Sept. 28, 2007).

81) Miles, *supra* note 15.

82) *Id.*

83) *Occidental Exploration and Production Co v. Republic of Ecuador* (UNCITRAL, Case No. UN3467, Final Award of 1 July 2004).

84) Miles, *supra* note 15.

85) *Tecmed, supra* note 52.

86) Baetens, *supra* note 3.

if a home state does not comply and a host state suspends projects by investors from that country, then what can the investors do? They could argue that the host state's measure violates the legitimate expectations of investment and bring a claim based on the alleged breach of FET.<sup>87)</sup> Also, if the investors made investment before the enforcement of the Kyoto Protocol, they could argue that the changes in regulation by the Protocol was not expected and bring an FET claim.<sup>88)</sup>

However, whether a climate change measure is a breach of the fair and equitable standard remains questionable. A claim based on a breach of FET would also involve allegations that government measures which prohibits certain activities, phase-outs for the use of particular materials or severe restrictions on emission output amount to a substantial change in the legal and business environment for carbon-intensive operations.<sup>89)</sup> While it may be difficult to argue that climate change mitigation measures were not foreseeable for investments entered into more recently, the basic expectations of investors when entering into much earlier carbon-intensive operations would certainly be affected by regulations seeking to change into a low-carbon approach.<sup>90)</sup>

Additionally, in the ongoing dispute of *Vattenfall v. Germany*, Vattenfall is likely to refer to its "legitimate expectation" which is an element of the FET standard. Article 10(1) of the Energy Charter Treaty requires that "each contracting party shall encourage and create stable, equitable and transparent conditions for investors of other contracting parties."<sup>91)</sup> In practice, the standard of FET for investors has been used in a great extent to challenge various government measures. Therefore, it is not surprising that foreign investors in the climate change context frequently invoke a FET claim when they challenge a hosting state's climate change measures regardless the measures are necessary or not.

## V. Conclusion

Standards of protection in investment arbitration such as indirect expropriation and fair and equitable treatment are the major international investment principles. However, there are certain conflicts between these investment protection principles and environmental

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87) *Id.*

88) *Id.*

89) *Id.*

90) *Id.*

91) ECT, *supra* note 10.



protection measures such as the Kyoto Protocol mechanisms. We should be aware that climate change measure is already a part of global dispute resolution frameworks. As seen in the *Vattenfall* case, it is highly likely that in upcoming investment arbitration cases, the issue of climate change will be raised in various ways. The traditional standards of protection in investment arbitration tend to impede the object of the Kyoto Protocol mechanisms in multiple ways. The categorization of climate change measures as indirect expropriation thereby resulting in regulatory chill could neutralize a hosting state's attempt to create efficient climate change measures.

Some suggestions can be made to a investment treaty making process such as including social, environmental and human rights goals the states have committed. As seen in the *Methanex* tribunal, the non-discriminatory and public purpose of environmental protection measures should be considered in the arbitral tribunal unless its decision would not intentionally impede the foreign investment. Good faith regulation in line with the Kyoto mechanisms should not be seen as expropriatory. Also, incorporation of the principle of sustainable development in the making of an investment treaty or investment contract could also be considered. Investor-state contracts can also include sustainable development exceptions, thereby making the Kyoto Protocol implemented more efficiently. Similarly, in drafting investment treaties or invest-state contracts in the aftermath of the Kyoto Protocol, the drafters can consider providing a dispute settlement mechanism so that states enacting the Kyoto mechanisms can be free from fear of being brought in investor-state arbitration tribunals.

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## Abstract

### Standards of Protection in Investment Arbitration for Upcoming Climate Change Cases

Dae-Jung Kim

Although climate change is a global scale question, some concerns have been raised that principles of investment arbitration may not adequately address the domestic implementation of climate change measures. A recent ICSID investment arbitration of *Vattenfall v. Germany* with regard to the investor's alleged damages from the phase-out of nuclear plants is a salient climate change case. The 2005 Kyoto Protocol was made to reduce greenhouse gas emissions and it provides a number of flexible mechanisms such as Joint Implementation (JI) and Clean Development Mechanism (CDM). Implementation of the Kyoto Protocol allows dispute settlement through investor-state arbitration. Any initiation of stricter emission standards can violate the prohibition on expropriations in investment agreements, regardless of the measures created to reduce greenhouse gas emissions. The effect-based expropriation doctrine can charge changes to existing emission standards as interference with the use of property that goes against the legitimate expectation of a foreign investor. In regulatory chill, threat of investor claims against the host state may preclude the strengthening of climate change measures. Stabilization clauses also have a freezing effect on the hosting state's regulation and a new law applicable to the investment. In the fair and equitable standard, basic expectations of investors when entering into earlier carbon-intensive operations can be affected by a regulation seeking to change into a low-carbon approach. As seen in the *Methanex* tribunal, a non-discriminatory and public purpose of environmental protection measures should be considered as non-expropriation in the arbitral tribunal unless its decision would intentionally impede a foreign investor's investment.

**Key words** : Climate Change, Kyoto Protocol, Investor-State Arbitration, Indirect Expropriation, Regulatory Chill, Fair and Equitable Treatment