Felix Ekardt/ Anne-Katrin Exner* (CCLR 2012, 396 ff.)

The Clean Development Mechanism as a Governance Issue

Control deficits and developments of European and global climate law after Durban

This essay analyses law development, questions of law interpretation, as well as climate and development policy effects of the Clean Development Mechanism (CDM) as a mechanism which is linked to the state and enterprises corporate emissions trading (ETS) and combines transnational climate protection law with the promotion of renewable energies. The essential goal of the CDM is to provide opportunities for cost efficient compliance of the Kyoto Protocol targets of the annex I countries and to assist developing countries in achieving sustainable development. Therefore, annex I countries are allowed to achieve their emission reduction targets partially by conducting mitigation measures in developing countries. It turns out that the specific CDM projects are frequently questionable in terms of climate and development policy. This is also related to enforcement problems, which represent a variation of the common environmental law issue of the latent identity of interests of controllers and controlled ones. It is questionable, whether the discussed and partly decided reforms of the CDM and on this basis the regulations of the EU are sufficient to change the underlying issues. That implies at the same time a kind of exemplary governance analysis on the basis of important aspects of the ETS.

A. Basics: The CDM and its legal framework

The climate conference in Copenhagen in the year 2009 already aimed at a (new) climate protection regime for the time after the first commitment period of the Kyoto Protocol . Despite the fact that the economical, ecological and peace threateningconsequences of the climate change are being discussed, the goal has not been reached until the very day and there is only little improvement. By the end of 2011, the parties of the Kyoto Protocol set up a second commitment period at Durban, but the quantified emission targets have not been decided yet. Furthermore, the decision on the transferability of assigned amount units (AAUs) to the second commitment period is yet to make. The parties of the United Nations Framework Convention on Climate Change resolved abstractly to adopt a new international Climate Protection Agreement until 2015, which will come into force in the year 2020. It remains unclear, whether this goal will be achieved and if the new agreement is going to be sufficient to limit the global warming on two degrees Celsius. The insufficient character of these and other discussed goals, such as other problems of current and potential climate protection regimes are not investigated, but only shortly discussed in the conclusion. Instead

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¹ Draft Decision -/CMP.7, Outcome of the work of the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol at its sixteenth session, para. 1, 4 ff

² Draft Decision -/CMP.7, Outcome of the work of the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol at its sixteenth session, para. 7.

³ Draft Decision -/CP.17, Establishment of an Ad Hoc Working Group on the Durban Platform for Enhanced Action, para. 2 et seq.

⁴ In more detail to climate politics, its critics and possible alternatives Ekardt, Theorie der Nachhaltigkeit: Rechtliche, ethische und politische Zugänge – am Beispiel von Klimawandel, Ressourcenknappheit und

the focus lies on the Clean Development Mechanism (CDM), which facilitates the cost efficient performance of the emission targets of the industrial states. The Kyoto Protocol enables the industrial states to fulfill the reduction commitments not only through domestic emission reduction measures, but to benefit from reasonable emission reduction potential in developing- and emerging market countries with the help of the CDM. The following text should provide an overview of the legal framework of the CDM and wants to give a perspective on the resolved and discussed reforms in combination with the mechanism. Thereby, questions of legal interpretation and governance issues are being highlighted.

I. Framework on international law relation to the state emission trade

The general framework for the climate protection politics on the level of international law implements the United Nations Framework Convention on Climate Change of 1992 (UNFCCC). Art. 2 UNFCCC defines the ultimate goal to stabilize the greenhouse gas concentration at a level that ensures that dangerous anthropogenic interferences will not occur. In Art. 3 the UNFCCC determines essential principals of the climate protection.⁵ Furthermore it obliges the parties listed in Annex I to document and limit their emissions (Art. 4.2 UNFCCC) without giving already quantified goals⁶.

In contrast, the Kyoto Protocol (KP) includes quantified emission reduction targets for industrial countries, which substantiates the objectives of the UNFCCC. The Kyoto Protocol obligates the industrial countries under the contractual parties according to Art. 3.1 KP to emit altogether 5,2 % less greenhouse gas in the commitment period (2008-2012) than in the base year 1990. Annex B of the Kyoto Protocol lists the specific reduction commitments of the industrial states. A respective amount of emissions is accorded to the industrial states (Art. 3.7 KP). This assigned amount is given in carbon dioxide equivalents, which are listed as assigned amount units (AAUs). The KP determines the obligatory report responsibility, but does not prescribe the tools the parties have to use in order to fulfill their emission reduction targets stated in Annex B, such as through regulatory law, an enterprise-ETS, environmental charges or through additional instruments and combinations of instruments. Three mechanisms of the KP enable the industrial states to enlarge the amount of the permitted emissions by taking into account emission reduction measures in foreign countries: the international trade with AAUs between industrial states (states-ETS) according to Art. 17 KP, the common implementation of climate protection projects in Annex I countries (Joint Implementation/ JI) according to Art. 6 KP and the CDM according to Art. 12 KP. These flexible instruments base on the assumption that it is basically insignificant for the climate protection where on earth the emission of the greenhouse gas is being reduced. The CDM is based on the consideration that the costs of emission reductions is often more reasonable in developing and emerging countries than in technologically further developed industrial countries. The CDM is supposed to serve to a cost effective completion of the Kyoto targets of the industrial states and furthermore advancement of the economic development of the developing and emerging countries (Art. 12.2 KP). The emission reductions generated through a CDM project activity could be certified and an Annex I country may use the certified emission reductions (CERs) to contribute to achieve its emission reduction target

Welthandel, 2011.

⁵ Schwarze, Internationale Klimapolitik, 2000, p. 93; Frenz, Natur und Recht 2001, 301.

⁶ See Ott, in: Brauch (Ed.), Klimapolitik, 1996, p. 68.

(Art. 12.2, 12.3 lit a KP). The CERs are added to the amount of the investment state of the AAUs (Art. 3.12 KP). The CDM does not really generate net-reduced emissions, but leads only to a shift of the climate protection activities, respectively the emissions. One could abstractedly see it as a variation of the conclusion of units (=state respective enterprises) in the ETS, which do not underlie any reduction commitments – for the benefit of both sides.

II. European law frame and linking with the EU-enterprise-emission trade

The CDM is constructed for an implementation through private investors, who must be authorized by an Annex-B-state (Art. 12.9 KP). Within the EU an involvement of private investors on the CDM occurs throughout "bridges" of the EU-enterprise-emissions-ETS (this should be strictly separated from the states-ETS, although there is a link between both of them). Both the EU⁷ and their member states have ratified the Kyoto Protocol and have respectively committed to the reduction of in total 8 % (Annex B of the KP). An essential instrument of the legal climate protection is the EU ETS, standardized in the ETS Directive.⁸ Unlike the state-ETS, the EU ETS is directed to private enterprises. Within the framework of the EU ETS the emission of CO₂ underlies a reservation of ratification in the first instance (Art. 4 ETS Directive 2003). Furthermore, the operators of CO₂ emission facilities are obliged to hand in an European emission permission (European Allowance, EUA) for every ton of CO₂ emitted (Art. 12.3 ETS Directive, § 7 paragraph 1 TEHG). Until now followed (according to Art. 9 ETS Directive) on national basis a mostly free assignment of the EUAs to the obligatory operating companies. Since the allocation of the EUAs is lower than the expected necessary covering of the operators emissions, a principal pressure towards emission reductive measures can be created (in the absence of sophisticated goals, however, this is rarely the case). 10 Because of the EUAs being tradable, operators can renounce entirely or at least partly to reduce their own emissions and – next to this – to purchase the needed EUAs (Art. 12 para. 1, 2 ETS Directive 2003).

The so-called Linking Directive, the amending directive to the ETS Directive of the year 2004¹¹, combines the EU ETS with the flexible mechanism JI and CDM of the Kyoto Protocol and opens up the opportunity for the operators in terms of using these mechanisms of generated certificates of emissions (ERUs¹² and CERs) to fulfill their responsibility.¹³ However, the use of the CERs and ERUs from certain project categories is either completely excluded or depends on the fulfillment of additional conditions: In accordance with international law, Art. 11a paragraph 3 a) ETS Directive 2004 excludes the use of CERs

⁷ Art. 1 Council Decision of 25 April 2002 concerning the approval, on behalf of the European Community, of the Kyoto Protocol to the United Nations Framework Convention on Climate Change and the joint fulfilment of commitments thereunder, OJ L 130, 15.5.2002, p. 1–3.

⁸ Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC, OJ L 275, 25.10.2003, p. 32–46.

⁹ Geres/ Frenzel, in: Elspas/ Salje/ Stewing (ed.), Emissionshandel. Ein Praxishandbuch, 2006, chapter 38 note 6. ¹⁰ Such pressure only arises when there is a great cap between the allocated quantity of EUAs and the demand in the Business-As-Usual case and/ or the emission rights are not allocated free of charge. In the second trading period (2008-2012) a minimum of 90 % of all emission rights were allocated free of charge (Art. 10 ETS Directive).

¹¹ Directive 2004/101/EC of the European Parliament and of the Council of 27 October 2004 amending Directive 2003/87/EC establishing a scheme for greenhouse gas emission allowance trading within the Community, in respect of the Kyoto Protocol's project mechanisms, OJ L 338, 13.11.2004, p. 18–23.

¹² ERU means emission reduction unit. This unit type is generated by JI projects

¹³ Art. 11a para.. 1, para. 2 ETS Directive 2004.

coming from nuclear projects. According to paragraph 3 b) CERs coming from land use, land use change and forestry projects (LULUCF), which under the terms of COP/MOP¹⁴-decisions can be used¹⁵ by the states to a limited extent, cannot¹⁶ be used. According to Art. 11b paragraph 6 ETS Directive 2004 the member states have to ensure that hydroelectric power plants from 20 MW onwards correspond to the guidelines of the World Commission on Dams.

B. Control deficits – governance problems of the (consisting) CDM¹⁷

The main issue of the CDM lies within the question, whether it is really emission neutral or not. A control effect will be achieved when only emission reductions that would not have occurred without the CDMget certified, . Otherwise the use of CERs will lead to an increase of the global greenhouse emissions. The additionality criteria are intended to prevent this.¹⁸ The additional emission reductions are generally being determined by a comparison of the amount of emission of the implementation with the hypothetical level of emissions in the hosting country without CDM (baseline). The baseline is being calculated by use of certain methods, which have been regularly developed in a type of bottom-up-approach of the project developers and are being approved and revised from an executive board (EB19).20 The baseline is basically project-related and determined on a conservative as well as comprehensible type and relevant reforms in the hosting country must be considered.²¹ Both the investors and the hosting states are however expected to be interested in positioning the amount of certified emission reduction units as high as possible.²² While the investors are striving for maintaining as many CER to the lowest possible cost in order to consume them by themselves or trading with them, the hosting state is possibly interested in appearing as a worthwhile investment location²³ for profiting from the transfer of technologies and the know how in the long run.²⁴ Since there is furthermore a strong slope between the project participants (hosting state and investor) and the DOEs²⁵ as well as the executive board²⁶, irregularities threaten to endanger the ecological integrity of the CDM. Already without a conscious manipulation the calculation of the hypothetical emission scenario is difficult and marked with uncertainty.²⁷ Because of this different observations came to the conclusion, that

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¹⁴ Conference of Parties serving as the Meeting of Parties.

¹⁵ UN Doc. FCCC/KP/CMP/2005/8/Add.3, Decision 16/CMP.1, Annex, para. 13, 14.

¹⁶ For details regarding LULUCF and Emissions Trading see Ekardt/ Hennig/ von Bredow, CCLR 2011, 371 et seg.

¹⁷ Cf. an abbreviated version Ekardt/ Exner/ Albrecht, Carbon & Climate Law Review 2009, 263 et seq.

¹⁸ Art. 12.5 c) KP; UN Doc. FCCC/KP/CMP/2005/8/Add.1, Decision 3/CMP.1, Annex, para. 43.

¹⁹ The executive board is a group according to Art. 12.4 KP supervising the CDM. Cf. UN Doc. FCCC/KP/CMP/2005/8/Add.1, Decision 3/CMP.1, Annex, para. 5 et seq.

²⁰ That accounts for larger CDM projects, there are different rules for with small-scale projects. Compare further in the text reforms.

²¹ UN Doc. FCCC/KP/CMP/2005/8/Add.1, Decision 3/CMP.1, Annex, para. 45 (b), (c), (e).

²² Cames et.al., Analyse und Vergleich, Fn. 8; Sippel, CDM im Rahmen von Städtepartnerschaften, p. 37 (regarding the project developers); Kreuter-Kirchhof, Neue Kooperationsformen im Umweltvölkerrecht, 2005, p. 298.

²³ Cf. Schwarze, Klimapolitik, p. 169.

²⁴ Cf. Kreuter-Kirchhof, Kooperationsformen, p. 298.

²⁵ DOEs (Designated Operational Entities) are independent experts to validate projects. DOEs are accredited by the COP/MOP; cp. UN Doc. FCCC/KP/CMP/2005/8/Add.1, Decision 3/CMP.1, Annex, para. 20.

²⁶ Müller-Pelzer, The Clean Development Mechanism, 2004, p. 72.

²⁷ Müller-Pelzer, CDM, p. 73; International Rivers, Bad Deal for the Planet: Why Carbon Offsets Aren't Working and How to Create a Fair Global Climate Accord, 2008, p. 6, http://www.internationalrivers.org/files/DRP2English2008-521_0.pdf (latest download 03.06.2010).

for about half of the CDM-projects the additionally is questionable.²⁸ However the CDM is being reformed continuously, so that it is not possible to determine the degree to which the results of investigation meet on new project activities, although on the other hand the long running time of the questionable projects must be considered. Although the COP/MOP and EB are making an effort to an evenly geographical distribution of the project activities, a considerable share of the CDM-projects is still taking place in the big emerging countries, while so far the poorest states hardly profit from the CDM.²⁹

Another issue is that the Kyoto Protocol allows the partly fulfillment of the Annex I states emission reduction duties through the CERs (Art. 12.3 lit.b KP) and that the other flexible mechanism JI and the states-ETS can be used supplementally to emission reductions in the inland (Art. 6.1 lit.d, Art. 12 KP). So far no quantified utilizations do exist according to international law.³⁰ The COP/MOP only determine that national emission reduction have to considerably/significantly contribute to the achievement of the reduction goal.³¹ Through this limitation a pressure to innovate concerning low-emission technologies and a real climate saving change in structure should be made possible.³² According to Art. 11a.1, 30.3 ETS Directive 2004 the member states had to define maximum usage-limits for the CERs and ERUs for the inland located plant operators. The higher the margin, the more the change of structure in the industrial nations will be slowed down³³. Also, the problem of the "lowhanging fruits" will be established: Through the CDM low-cost emission reductions in the developing countries will potentially be accomplished – but for the benefit of the industrial countries! With this the measures of the developing countries do not provide own reduction targets on the level of international law in the medium-term. These significant problems of the CDM raise the question, if one can count on remedy in the future.

C. Decided and discussed reform options of the CDM

By the end of the year 2012 the first commitment period of the KP ends. As mentioned above the COP/MOP – the yearly conference of the parties of the KP – decided that the second commitment period of the KP should start in 2013³⁴. The COP/MOP is aiming in the Annex I states an emission reduction until 2020 of 25-40 % in comparison to the emission level of 1990.³⁵ Concrete emission goals have however not been set up yet. Until May 2012 the Annex I states are supposed to submit their aimed emission goals (quantified emission

²⁸ Schneider, Evaluation, p. 44 questions the additionality for 40 % of the CDM project activities (regarding project activities which were registered untill 18.07.2007, these projects generated about 20 % of the total CERs); International Rivers Bad Deal, p. 2, 6; without any quantification: Winter, Zeitschrift für Umweltrecht 2009, p. 289 (297); see also www.cdmwatch.org.

²⁹ See e.g.: http://cdm.unfccc.int/Statistics/Registration/NumOfRegisteredProjByHostPartiesPieChArt.html (version from 27.01.2012). Critical Sutter/ Parreño, Climate Change 2007, 75 (86 et seq.). To note is that the host countries are entitled to determine the sustainable development effects themselves; see UN Doc. FCCC/KP/CMP/2005/8/Add.1, Decision 3/CMP.1, Annex, para 40 a). This might be problematic.

³⁰ For details regarding supplementarity in the current and potential new climate protection regimes see: Platjouw, Review of European Community and International Environmental Law 2009, p. 244 et seq.

³¹ UN Doc. FCCC/KP/CMP/2005/8/Add.1, Decision 2/CMP.1, para. 1.

³² Cf. Brander, in: Faure/ Gupta/ Nentjes (Ed.), Climate Change and the Kyoto Protocol. The Role of Institutions and Instruments to Control Global Change, 2003, p. 31.

³³ Cf. Platjouw, Review of European Community and International Environmental Law 2009, p. 244 (254).

³⁴ Draft decision -/CMP.7, Outcome of the work of the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol at its sixteenth session (http://unfccc.int/files/meetings/durban_nov_2011/decisions/application/pdf/awgkp_outcome.pdf), para. 1.

³⁵ Draft decision -/CMP.7, Outcome of the work of the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol at its sixteenth session, preamble.

limitation or reduction objectives, QELROs) for consideration by the AWG-KP.³⁶ The emission goals shall be resolved on the 8th COP/MOP, which will take place by the end of 2012. With this a gap between the commitment periods of the Kyoto Protocol will be avoided, so that the future of CDM and JI is basically safe³⁷. In the following reforms and reform options in connection to the CDM on the basis of international law will be examined. A consideration of the European law for the time after 2012 is about to follow.

I. Reforms and reform options in reference to the CDM in international law³⁸

The negotiations on international law around the upcoming potential climate protection regime are taking place³⁹ in two independent working groups, the "Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol" (AWG-KP⁴⁰) and the "Ad Hoc Working Group on Long-term Cooperative Action under the Convention" (AWG-LCA⁴¹). The goal of the negotiation tracks is the development of a climate protection regime for the time after the first commitment period of the KP. In this regard the working groups negotiate CDM-related questions.

1. AWG-LCA and COP - Negotiations in terms of the UNFCCC

The AWG-LCA was supposed to work out a climate protection regime for the time after 2012 and thereby develop basic approaches for the usage of market based mechanisms, which shall increase the cost efficiency of the climate protection measures.⁴² The separation of the strands of negotiation causes that the flexible mechanisms of the KP and therefore the CDM are not topics⁴³ of these in terms of AWG-LCA. Still the negotiation papers partly refer to the flexible mechanisms of the KP.⁴⁴ So far negotiations in terms of the UNFCCC have not create detailed regulations for a new market-based instrument. Thus, a suggestion of the AWG-LCA, which included basic principles of the usage of market base instruments failed in Copenhagen.⁴⁵ The basic principles on market based approaches were not decided upon until the following conference in Cancun.⁴⁶ Differing from the CDM the future market mechanisms shall achieve net-emission reductions. Besides this, reduction measures in a wide range of the economy

³⁶ Draft decision -/CMP.7, Outcome of the work of the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol at its sixteenth session, para. 5.

³⁷ The legal consequences of a potential gap between the commitment periods of the KP were uncertain. For potential consequences regarding the CDM, see e.g. the legal consideration of the Climate Change Secretariat, UN Doc. FCCC/KP/AWG/2010/10, para. 45-49.

³⁸ See Duan, CCLR 2011, 169 (171ff.) for a summery of reforms of the CDM.

³⁹ For details of the negotiations see: Spence u.a., Review of European Community and International Environmental Law 2008, p. 142 et seq.

⁴⁰ UN Doc. FCCC/KP/CMP/2005/8/Add. 1, Decision 1/CMP.1. For this and regarding further decisions of the 1st COP/MOP: e.g. Ehrmann, Zeitschrift für europäisches Umwelt- und Planungsrecht 2006, 37 et seq., Bausch/ Mehling, Zeitschrift für Umweltrecht 2006, 291 et seq.

⁴¹ UN Doc. FCCC/CP/2007/6/Add.1, Decision 1/CP.13, para. 2.

⁴² UN Doc. FCCC/CP/2007/6/Add.1, Decision 1/CP.13, para 1 (b) (v).

⁴³ The separation of the negotiation tracks could affect the legal form of the potential post-2012 climate protection regime. Three different options were being discussed, for details see Morgenstern, CCLR 2009, 235 et seq.

⁴⁴ See e.g. UN Doc. FCCC/AWGLCA/2009/14, Annex III, E, para.9 et seq., 17 et seq. The non-papers compiled in UN Doc. FCCC/AWG/2009/14 formed the basis of the negotiations of the 8th meeting of the AWG-LCA in december 2009 in Copenhagen (see Akanle et. al., Earth Negotiations Bulletin, Vol. 12, Nr. 459, p. 15 et seq.; http://www.iisd.ca/download/pdf/enb12459e.pdf (02.03.2010)).

⁴⁵ UN Doc. FCCC/AWGLCA/2009/17, Annex I.

⁴⁶ UN Doc. FCCC/CP/2010/7/Add.1, Decision 1/CP.16, III, D., para. 80 et seq.

shall be encouraged, which would speak for a rather sectorial formation of the mechanism. Without concretizing the main principles decided in Cancun, the COP defined a new market mechanism in Durban⁴⁷. Rules of procedure for the mechanisms shall be developed by the AWG-LCA until the next COP. Next to this, additional cost efficient approaches shall be worked out. Regarding the new market mechanisms and the additional potential mechanism parties of the UNFCCC and registered NGOs can submit statements until March, 5th 2012. The creation of potential future market mechanisms in terms of a new climate protection arrangement is still unclear. The COP/MOP decided that certificates out of these market mechanisms can be used for the completion of the second obligation round of the KP.⁴⁸

2. AWG-KP and COP/MOP-negotiations in terms of the KP

Thereby the glance falls on the AWG-KP. Already the range of the work order was evaluated differently within the AWG-KP. ⁴⁹ The usage of the flexible mechanism and therefore also the CDM was and still is controversial in the negotiation. One of the most important questions of the CDM the AWG-KP has not agreed upon yet. Particularly regarding the permitted project activities in the CDM, as well as the handling of the above outlined problems the last two COP/MOPs however made essential decisions, which concern already the current commitment period.

Already since 2005 it has been considered whether CCS-activities should be allowed.⁵⁰ In spite of doubts in terms of the risks of the CCS-technology, the 6th COP/MOP decided to allow the CCS activities as CDM projects from the second commitment period on⁵¹. The admissibility of the technology was subject to the problems identified with the technology and the solubility thereof.⁵² The 7th CMP has, as strived for from the 6th COP/MOP, decided the rules of procedure for the CCS project activities⁵³.

There is a disagreement concerning the integration of nuclear activities in the CDM. Until now states cannot use CERs out of nuclear projects to fulfill their emission reduction obligations.⁵⁴ The inclusion of nuclear activities in the CDM is being discussed for the time after 2012.⁵⁵ The COP/MOP has not made a final decision yet.

⁴⁷ For this and for the following see: Outcome of the work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention, Draft decision -/CP.17, II. E. para. 83 et seq.

⁴⁸ Draft Decision -/CMP.7, Outcome of the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol at its sixteenth session, Annex 3, E.

⁴⁹ Especially the developing countries followed a strict interpretation of Art. 3.9 KP and were the opinion that the mandate oft he AWG-KP was only to ammend Appendix B of the KP and therefore the only topic of negotiations have to be new emission reduction goals for developed countries. Developed country parties demanded further amendments to the KP. See Morgenstern, CCLR 2009, 235 (237); furthermore Duan, CCLR 2011, 169 (174).

⁵⁰ The 1st proposal for a methodology in relation to CCS project activities were submitted to the EB in 2005, UN Doc. CDM-EB-22, para. 23; regarding CCS in general, see Ekardt/ van Riesten/ Hennig, Zeitschrift für Umweltpolitik und Umweltrecht 2011, 409 et seq.

⁵¹ UN Doc. FCCC/KP/CMP/2010/12/Add.2, Decision 7/CMP.6, para. 1.

⁵² UN Doc. FCCC/KP/CMP/2010/12/Add.2, Decision 7/CMP.6, para. 1

⁵³ Draft decision -/CMP.7, Outcome of the work of the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol at its sixteenth session (http://unfccc.int/files/meetings/durban nov 2011/decisions/application/pdf/cmp7 carbon storage .pdf).

⁵⁴ UN Doc. FCCC/CP/2001/13/Add.2, Decision 17/CP.7, p. 20 ("Recognizing that Parties included in Annex I are to refrain from using certified emission reductions generated from nuclear facilities to meet their commitments under Article 3 paragraph 1"). Confirmed by the 1st, see UN Doc. FCCC/KP/CMP/2005/8/Add.1, Decision 3/CMP.1, para. 1.

⁵⁵ See e.g. FCCC/KP/AWG/2011/CRP.2/Rev.1 (http://unfccc.int/resource/docs/2011/awg16/eng/crp02r01.pdf),

Already in the negotiations of the first obligation period of the Kyoto Protocol it was furthermore controversial if emission removals by sinks should be permitted as CDM project activities.⁵⁶ Eventually the COP/MOP decided to allow to a certain extent at least afforestation and reforestation project activities in the first period in terms of the CDM.⁵⁷ Within the AWG-KP it was further discussed, whether other LULUCF activities should be permitted under the CDM in the second commitment period. Because the regulations so far only refer to the ongoing commitment period, a decision of the COP/MOP was necessary so that CERs generated by afforestation and reforestation activities can be used also in the subsequent period. After the decision of the 7th COP/MOP the afforestation and reforestation activities are permitted in the second subsequent period. The extent of the certificate's usage possibilities out of this project type will not be increased in comparison to the first commitment period. The discussion about the inclusion of other LULUCF activities in the CDM is not finished yet. The general doubts towards the discussion on land use measures in climate protection so far have already been pronounced elsewhere.⁵⁸

It remains questionable, whether it is useful to include new activities into the CDM, as long as the general problems of the CDM are not solved. The CDM set of rules is very dynamic and constantly revised by the COP/MOP and the EB, also for the elimination of grievances. Some improvement suggestions will be and have been discussed for the first commitment period as well as for the time after 2012. These include standardized baselines and promotion of a equitable geographical distribution of the CDM projects:

Standardized baselines could replace the manipulation and defective investigations of the baseline for individual project activities by defining the standard works. This could simplify the authorization process and reduce the costs of transaction. From the viewpoint of governance, standardized baselines are fundamentally advantageous, but decisive is their concrete composition. Within the AWG-KP standardized baselines have been discussed controversially.⁵⁹ Already for the current commitment period the 6th COP/MOP defined standardized baselines as a resource for the calculation of the individual emission reduction and/or the proof of the additionality.⁶⁰ The EB was commissioned in developing standardized baselines, but has not yet finished this work.⁶¹ Standardizes baselines are with this already permitted in the current commitment period, but respective baselines have not been approved yet.

The decision processes in the CDM will get simplified also through the concept of materiality, which was already discussed by the Subsidiary Body for Scientific and

chapter III. B. para. 4 et seq., UN Doc. FCCC/KP/AWG/2010/CRP.4/Rev.4, chapter III, para. 8-11, UN Doc. FCCC/KP/AWG/2009/17, Annex I, p. 34.

⁵⁶ Cf. UN Doc. FCCC/CP/2001/13/Add.2, Decision 17/COP.7. para. 7; UN Doc. FCCC/KP/CMP/2005/8/Add.3, Decision 16/CMP.1, Annex, para. 13-15; siehe zur Diskussion um LULUCF im Kyoto-Protokoll und im Rahmen des CDM bis CP.7, Fry, Review of European Community and International Environmental Law 2002, p. 159 (166); Fry, Review of European Community and International Environmental Law 2007, p. 341 et seq.

⁵⁷ Vgl. UN Doc. FCCC/KP/CMP/2005/8/Add.1, Decision 5/CMP.1, para. 2.

⁵⁸ The SBSTA shall provide modalities and procedures for further LULUCF activities at(?) the 9th COP/MOP, Decision -/CMP.7, Land use, land-use change and forestry (http://unfccc.int/files/meetings/durban nov 2011/decisions/application/pdf/awgkp_lulucf.pdf), para. 6. Regarding LULUCF not only in relation to the CDM but in general, Ekardt/ Hennig/ von Bredow, CCLR 2011, 371 et seq.

⁵⁹ UN Doc. FCCC/KP/AWG/2009/17, Annex I, p. 35.

⁶⁰ UN Doc. FCCC/KP/CMP/2010/12/Add.2, Decision 3/CMP.6, para. 44 et seq. This decision follows a proposal of the SBSTA, UN Doc. FCCC/SBSTA/2010/L.23.

⁶¹ UN Doc. FCCC/KP/CMP/2010/12/Add.2, Decision 3/CMP.6, para. 46.

Technological Advice on behalf of the 6^{th} COP/MOP⁶² last year. In Durban the COP/MOP defined the term for the CDM.⁶³ Information, which as far as they were not given at all or incorrectly, could change an EB decision apply after this as a material information. Furthermore the COP/MOP decided on limit values which point out, on in which extent not or falsely transmitted information lead to an overestimation of the overall emission reductions of a CDM project activity. In dependence on the yearly emission reduction performance of the project activities essential limit values between 0.5 % ($\geq 500.000 \text{ t/CO}_{2eq}/a$) and 10 % (microprojects) were defined.⁶⁴ Which consequences the exceedance of the materiality thresholds brings along has not been decided yet. The EB shall implement the concept until the next climate conference.

Besides this the irregular geographical distribution has already been recognized as a problem by the CDM, as mentioned earlier. Some basic approaches, which have been discussed within the AWG-KP for the time after⁶⁵ 2012, have already been implemented for the ongoing obligation period.⁶⁶ Worth mentioning are especially the simplified additional assessments for micro-projects⁶⁷, as well as credit facilities for states with less than 10 CDM-projects⁶⁸. Until now it has not been decided, in how far the Annex I states have contributed to an equitable distribution of the CDM project activities, such as through take-up rates for CERs out of states worthy of promotion⁶⁹ or through other measures⁷⁰.

Whether the concept of discounting will get integrated into the CDM stays unclear.⁷¹ The investigation of hypothetical scenarios, which is necessary for additionality determination, is inevitably afflicted with uncertainty. On this problem, the emission reduction could react through general safety margin. Under certain circumstances the CDM could even render netemission reductions.⁷² Depending on the arrangements the discounting could launch emission reductions which are actually additional and make the CDM ultimately less attractive.

Also the Durban-Conference has barely achieved any results concerning market-based mechanism designs within the framework of a potential new climate protection agreement. At least the usability of the generated certificates out of these mechanisms in the framework of the KP has been clarified. Due to the decision for a second commitment period of the KP the future of the CDM is principally safe. Because of the risks which are related to the technology

⁶² UN Doc. FCCC/KP/CMP/2010/12/Add.2, Decision 3/CMP.6, para. 30 et seq., siehe bereits UN Doc. FCCC/KP/CMP/2009/21/Add.1, Decision 2/CMP.5, para. 22, For a compendium of relevant documents see: http://cdm.unfccc.int/about/materiality/index.html.

⁶³ Draft Decision -/CMP.7, Materiality standard under the clean development mechanism, para. 2.

⁶⁴ Draft Decision -/CMP.7, Materiality standard under the clean development mechanism, para. 4.

⁶⁵ UN Doc. FCCC/KP/AWG/2009/17, Annex I, p. 35.

⁶⁶UN Doc. FCCC/KP/CMP/2009/21/Add.1, Decision 2/CMP.5, para.23, para. 24 (c), para. 47 et seq.; UN Doc. FCCC/KP/CMP/2010/12/Add.2, Decision 3/CMP.6, para. 61 et seq., Annex III; Draft Decision -/CMP.7, Further guidance relating to the clean development mechanism, para. 22, 30 et seq.

⁶⁷ UN Doc. FCCC/KP/CMP/2009/21/Add.1, Decision 2/CMP.5, para. 24 (c); UN Doc. EB 65-Report, Annex 33.

⁶⁸ UN Doc. FCCC/KP/CMP/2010/12/Add.2, Decision 3/CMP.6, Annex III.

⁶⁹ See Akanle et. Al., Earth Negotiations Bulletin, Vol. 12, Nr. 459, p. 20 for a short outline of the discussion until the end of 2009. For the proposals of the AWG-KP, see UN Doc. FCCC/KP/AWG/2009/17, Annex I, p. 36, para. 19; UN Doc. FCCC/KP/AWG/2010/CRP.4/Rev.4, chapter III, para. 15-16. See also Duan, CCLR 2011, 169 (176)

⁷⁰ UN Doc. FCCC/KP/AWG/2011/CRP.2/Rev.1. para. 30.

⁷¹ UN Doc. FCCC/KP/AWG/2009/17, Annex I, p. 36; UN Doc. FCCC/KP/AWG/2010/CRP.4/Rev.4, chapter III, para. 18-20.

⁷² For details, see Schneider, A Clean Development Mechanism (CDM) with atmospheric benefits for a post-2012 climate regime, Discussion Paper, 2008, http://www.oeko.de/oekodoc/779/2008-227-en.pdf (02.03.2010), p. 6 et seq. Duan, CCLR 2011, 169 (176) states, that the implementation of discount factors might not be consistent with Art. 12 KP.

the inclusion of CCS related project activities in the CDM is not unproblematic. In terms of the evidence of additionality their simplified testing methods shows rather into the wrong direction. This question could be possibly defused through the introduction of quantified limits of utilization for project based certificates. Corresponding limits have been discussed in the AWG-KP⁷³ and also in the current decisions⁷⁴ it was pointed out, that the flexible mechanism only complement internal emission reduction measures. Limits of usage have not been decided upon yet. Overall the CDM remains in doubt, as far as it is linked to the uncertain treatment of the land-use-emission in the overall climate regime, these doubts keep on rising.

II. The CDM in the European law as from 2012

In April 2009 the EU passed the so called EU-climate protection package. In these premises the question is asked, how the EU-law reacts on the outlined problems of the CDM.

1. CDM in the EU-emission trading as from 2013

The EU has obligated itself through the climate package⁷⁵, to reduce its greenhouse gas emissions by around 20 % in comparison to 1990 until 2020. The ETS Directive 2013⁷⁶ prescribes that sectors in the third trading period (2013-2020) captured by the EU ETS shall reduce their emissions in comparison to the emission level of the year 2005 by around 21 % (recital 5).

In context that the first commitment period of the Kyoto Protocol ends by the end of the year 2012, the ETS Directive 2013 controls especially the measures of use of the CERs and ERUs from 2013 on. The ETS Directive 2009 provides basically an exchange of the respective certificates from 2013 onwards. Certificates can be exchanged – and therefore used – for

⁷³ E.g.: 30 % of the quantified emission limitation and reduction commitment of a party, UN Doc. FCCC/KP/AWG/2009/17, Annex I, p. 39; 30 % of the anthropogenic green house gas emissions volume as listed in Annex A in 1990 multiplied by the number of

years in the second commitment period, UN Doc. FCCC/KP/AWG/2010/CRP.4/Rev.4, chapter III, para. 43-44, ebenso: UN Doc. FCCC/KP/AWG/2011/CRP.2/Rev.1, chapter III, para. 28-29. For an outline about the positions oft he parties see Akanle et. al., Earth Negotiations Bulletin, Vol. 12, Nr. 459, p. 20; Akanle et. al., Earth Negotiations Bulletin, Vol. 12, Nr. 439, p. 15, http://www.iisd.ca/download/pdf/enb12439e.pdf (02.03.2010) - also regarding to the effects such usage restrictions might have to the determination of emission reductions or limitation goals.

⁷⁴ Draft Decision -/CMP.7, Emissions trading and the project mechanisms, para. 1.

⁷⁵ See ETS Directive 2009in the following fn and the following legal acts: Decision No 406/2009/EC of the European Parliament and of the Council of 23 April 2009 on the effort of Member States to reduce their greenhouse gas emissions to meet the Community's greenhouse gas emission reduction commitments up to 2020, OJ L 140, 5.6.2009, p. 136–148; Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC, OJ L 140, 5.6.2009, p. 16–62; Directive 2009/31/EC of the European Parliament and of the Council of 23 April 2009 on the geological storage of carbon dioxide and amending Council Directive 85/337/EEC, European Parliament and Council Directives 2000/60/EC, 2001/80/EC, 2004/35/EC, 2006/12/EC, 2008/1/EC and Regulation (EC) No 1013/2006, OJ L 140, 5.6.2009, p. 114–135; Directive 2009/30/EC of the European Parliament and of the Council of 23 April 2009 amending Directive 98/70/EC as regards the specification of petrol, diesel and gas-oil and introducing a mechanism to monitor and reduce greenhouse gas emissions and amending Council Directive 1999/32/EC as regards the specification of fuel used by inland waterway vessels and repealing Directive 93/12/EEC, OJ L 140, 5.6.2009, p. 88–113.

⁷⁶ Directive 2009/29/EC of the European Parliament and of the Council of 23 April 2009 amending Directive 2003/87/EC so as to improve and extend the greenhouse gas emission allowance trading scheme of the Community, OJ L 140, 5.6.2009, p. 63–87.

emission reductions taking place until 2013 (Art. 11a, paragraph 2 ETS Directive 2009) as well as for emission reductions generated from 2013 onwards by project activities which were registered before 2013 (Art. 11a, paragraph 3 ETS Directive 2009). Certificates of projects, which will be registered after 2013, can only by operators of the EU ETS, if the projects take place in the least developed countries (LCDs) (Art. 11a.4 ETS Directive 2013). Only CERs and ERUs out of project types, whose usage was permitted between 2008 and 2012 can be exchanged (Art. 11a paragraph 3 Subparagraph 2, paragraph 4 Subparagraph 2 ETS Directive 2009). With this the usage of the CERs and ERUs out of nuclear projects und LULUCF project activities stays excluded. The decisions made in Durban are not seen as an agreement according to Art. 11a, paragraph 5 and paragraph 7 ETS Directive 2009.⁷⁷ With this the possibility offered by Art. 11a paragraph 5 ETS Directive 2009 to use other credits, which will be generated in terms of potential agreements with third countries, remains in force. Further, Art. 11a paragraph 9 ETS Directive 2009 can limit the usage of project based credits in terms of the underlying project activity. On this basis certificates, which originate on HFC-23 projects or base on destroying N₂O during adipic acid production were principally excluded of the EU-emission exchange system⁷⁸. Certificates for the emission reductions taking place until 2013 can be used until 04/30/2013 however. Both HFC-23- and N₂O projects were strongly criticized and at times evaluated as artificially created.⁷⁹ Their exclusion seems therefore obvious.

Differing from the legal status in action so far, the scope of use is now allocated throughout the Community instead of by the Member States. According to Art. 11a paragraph 8 Subparagraph 1 ETS Directive 2009 the obliged of the ongoing trading period of the EU ETS can use the unused residue of their contingent of application for CERs and ERUs in the second trading period (2008-2012) until 2020. The operators can use credits at least up to a share of 11 % of the assigned emission reductions between 2008 and 2012. The usage limit after which the obliged can use more CERs and ERUs is to be applied. According to Art. 11a paragraph 8 Subparagraph 4 ETS Directive 2009 operators can furthermore get additional contingents assigned. For new obliged the new allowed amount of project based certificates is determined through Art. 11a paragraph 8 subparagraph 3 ETS Directive 2009. These operators can use the project based credits up to an amount meeting at least 4,5 % of their verified emissions within the time period of 2013-2020. For aircraft operators the amount was determined on at least 1,5 %.

2. CDM in the Effort-Sharing/ Burden-Sharing as from 2013

As part of the EU-climate package the effort-sharing-decisions⁸⁰ create a not yet given union

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 $^{^{77}\} http://ec.europa.eu/clima/news/docs/additional_qa_06_01_2011_en.pdf.$

⁷⁸ Commission Regulation (EU) No 550/2011 of 7 June 2011 on determining, pursuant to Directive 2003/87/EC of the European Parliament and of the Council, certain restrictions applicable to the use of international credits from projects involving industrial gases, OJ L 149, 8.6.2011, p. 1–3, Art. 1

⁷⁹ E.g.: Schneider/ Lazarus/ Kollmuss, Industrial N2O Projects Under the CDM:

Adipic Acid - A Case of Carbon Leakage? (http://www.cdm-watch.org/wordpress/wp-content/uploads/2010/10/CDM-Watch Adipic-Acid-Study1.pdf); CDM-Watch, HFC-23 Kompensationszertifikat im Kontext des Emissionshandelsystems der EU (ETS), (http://www.cdm-watch.org/wordpress/wp-content/uploads/2010/07/HFC-23 Policy-Briefing DE3.pdf); without a certain conclusion: Executive summary of Methodology Panel Report on HFC-23 Issues (AM0001), UN Doc. EB 58-Report, Annex 11 (the full report on HFC-23 issues is still unavaible). Inzwischen wurde die Methode für HFC 23-Projekte (AM0001) überarbeitet.

⁸⁰ DecisionNo. 406/2009/EG.

legislation over all provisions for emission reductions not falling under the EU ETS sector for the time period of 2013-2020. The reduction service of the individual member states depend on their economic power of performance, which is being determined through the relative percapita-GDP.⁸¹ The emission maximum limit lies within +20 % and -20 % referring to the emission level of 2005.⁸² In total the emission captured by the decision should be lowered by round about 10 % until 2020 in comparison to 2005.

The Effort-Sharing-Decision defines also how project based certificates could be used by the member states. According to Art. 5 of the decision, certificates generated by JI and CDM projects could be used to achieve the emission reduction targets. The regulations resemble those of Art. 11a ETS Directive 2009, however there is no return provided for valid certificate types from as 2013. Also the effort-sharing-decisions refer basically to the CERs and ERUs, which will be inserted in the EU ETS in 2008-2012. After this issued CERs and ERUs can be used in terms of the effort-sharing up until 2012. After this issued CERs and ERUs from registered projects before 2013 for achieved emission reductions after 2012. Furthermore CERs out of projects in LDCs could be used until 2020 or until the completion of a corresponding agreement between the EU and the hosting state. Deviating of the regulations to the EU ETS effort-sharing can also be used out of LULUCF activities (with all issues combined 1878). Furthermore certificates which are compatible to the agreements named in Art. The paragraph 5 ETS Directive 2013 could be used. In comparison to the EU ETS the effort-sharing decision does not provide the opportunity to exclude credits generated by problematic project types from usage.

All member states are allowed to use these certificates to a yearly extend, that corresponds to 3 % of the emission level of the year 2005 of the respective member state (Art. 5 paragraph 4 decision nr. 406/2009/EG). The contingent can be transferred to the upcoming years or be given to other member states, as far a member state does not exploit it. Ocertain member states, listed in appendix III of the decision are furthermore allowed to use an extent of 1 % of certificates out of projects in LCDs and SIDSs for the fulfillment of their reduction obligations, but have to fulfill additional conditions.

3. CDM in the directive of the quality of petrol

A special regulation is given in the petrol sector. Art. 7a paragraph 2 RL 98/70/EG in the version of the RL 2009/30/EG sets the goal to reduce the greenhouse emission per energy unit up to 10 % until 2020; 2 % of the reduction are supposed to be achieved through the use of CERs; another 2 % (approximate value) until 12/31/2020, subject to Art. 9 paragraph 1 lit. i)

⁸¹ Preamble 8 of decisionNo. 406/2009/EG.

⁸² Cf. preamble 9 of decisionNo. 406/2009/EG. The emission reduction goals of the meber states are quoted in appendix 2 of the decision.

⁸³ Art. 5 para. 1 a), b), c) of decision No. 406/29/EG.

⁸⁴ Art. 5 para. 1 a) of decision No. 406/29/EG.

⁸⁵ Art. 5 para. 1 b) of decision No. 406/29/EG.

⁸⁶ Art. 5 para. 1 c) of decision No. 406/29/EG.

⁸⁷ Vgl. zu den Problemen von Klimaschutz und Landnutzung Ekardt/ Hennig/ von Bredow, CCLR 2011, p. 371 et seg.

⁸⁸ Art. 5 para. 1 c) of decision No. 406/29/EG.

⁸⁹ Art. 5 para. 2 of decision No. 406/29/EG.

⁹⁰ Art. 5 para. 4, Abs. 6 of decision No. 406/29/EG.

⁹¹ Art. 5 para. 5 of decision No. 406/29/EG.

This reduction is going to be achieved through the usage of certificates, which will be achieved under the terms of the CDM, which are determined in the ETS Directive 2013.

4. Critical analysis of the European law approaches as from 2013

The CDM rules have especially been subject to criticism in relation to their quotas of usage for project based credits: For some, the CDM-quotas are still to gentle⁹², for others they are beyond the limit, rejecting the CDM in general.⁹³ Nevertheless, the limitation of CER and ERU usage under the ETS until 2020 and the opportunity of increasing the limits (in case an ambitious post-2012 treaty would have been passed) should in the end motivate developing and emerging countries to agree to an ambitious climate protection agreement.⁹⁴ Compared to the commission⁹⁵ proposal which does not allow any further contingents for usage besides the rest quotas for the second trading period (yet allowing automatic increase of allowances), the incentive of the ETS Directive 2013 seems significantly reduced.⁹⁶ Nonetheless, in their negotiations about a post 2012 treaty, even developing and emerging countries demand quantitative limits of usage.

Art. 11 Abs. 8 subparagraph 5 ETS Directive 2013 provides a limit of usage of 50 % of the emission reductions of the second and third trading period, compared to 2005. The effort-sharing-decision allows the member states to take advantage of 3-4 % the emissions of 2005 for project based credits. It is estimated that 60-80 % of all reduction responsibilities can be carried out through such credits.

As the superior reduction goal of the EU (20 % by 2020) is measured with the baseline of 1990 and as this goal is bound to be reached by different instruments and as the limits of usage for project based credits are calculated as a part of the reduction compared to 2005, the entire part of the flexible mechanism to all climate change efforts of the EU or of the member states is not obvious. As mentioned above, there are no quantitative limits of usage with regard to the flexible mechanisms in international law. Hence, a specific limit is yet to be identified. Interpreting the law by its wording, it appears reasonable to argue, that "in addition" and "a part" should at least mean that 50 % of the reductions have to be generated by domestic measures.

D. Outlook: CDM, emissions trading and quantity control

Directive of the European Parliament and of the Council amending Directive 2003/87/EC so as to improve and extend the greenhouse gas emission allowance trading system of the Community, COM (2008) 16 final.

⁹² E.g. Fübi (Mitarbeiter der RWE Power AG), Jiko-Info 1/2009, 8, http://www.jiko-bmu.de/files/basisinformationen/application/pdf/jiko_info_01-2009.pdf (03.03.2010).

Bals (Germanwatch), Jiko-Info 1/2009, 10, http://www.jiko-bmu.de/files/basisinformationen/application/pdf/jiko_info_01-2009.pdf (03.03.2010). In relation to the (insofar) stricter proposal of the European Commissuion, see further proof bySterk/ Wang-Helmreich/ Swiderski, EU ETS Post-2012, p. 15.

⁹⁴ Cf. to the proposal of the European Commission: Forth, Jiko-Info 2/2008, 1 (4 et seq.), http://www.jiko-bmu.de/files/inc/application/pdf/jiko_info_02_2008.pdf (02.03.2010); see furthermore Sterk/ Wang-Helmreich/ Swiderski, Use of External Units in the European Union Emissions Trading System Post-2012, Jiko Policy Paper 3/2008, http://www.jiko-bmu.de/files/basisinformationen/application/pdf/pp-ehs-cdm-ji-post-2012.pdf (03.03.2010) and Erling/ Waggershausen, UPR 2008, 175 (178).

⁹⁵ Proposal for a

⁹⁶ See also Wegener, Zeitschrift für Umweltrecht 2009, p. 283 (288).

⁹⁷ See Sterk, Jiko Info 1/2009, 7 regarding approximations of the European Commission.

This analysis allows a subsequent view on the governance aspect of the CDM. This again amounts in the effect that unsolved fictions of the CDM also rise. A solution to the problem is hence not coming from this new EU legislation. Contrary to this, rules, such as the potential integration of land use into international law are likely to further weaken the ecological sustainability of the CDM. But there are indeed opportunities to exclude problematic credit types from usage in the EU ETS which were already used.

The necessary quick shift of structure in the EU thus remains also unlikely. 98 It is however of importance to keep in mind that decisions for investments today will immobilize the old standards for years: when people believe that building coal-fired power plants in Europe is with no doubt a good thing to do because of the CDM, this will certainly not be of use for the still necessary harsh global reduction goals. As shown, none of this is changed in any effect by today's negotiated new international legislations.

Some⁹⁹ are already of the opinion, that the CDM and with it the emissions trading system is not more than granting indulgences with the climate. Indulgence because these instruments only allegedly work for saving the climate. However, all this is only true for the to-date emissions trading system in industrial countries. As a more useful approach than this fundamental criticism, a completely new way of looking at things might be of help: (a) if the CDM was to remain alive, solutions need to be found for the bespoken problems with baseline, additionality, one-sided regional distribution of project activities in developing countries (and so on). (b) A discussion would be necessary, to which extent the CDM must be overcome because it is based upon international agreements that do not account for any reductions in the developing countries.

Of course this must (as said in other papers¹⁰⁰) become different international law, hence a different EU ETS: With really powerful reduction goals (such as 80 % globally and up to 95 % in the EU until 2050, based on 1990) and a company based ETS following primary energy products (so no longer just single industries but combining all together to reach the majority of CO₂ emissions) with 100 % auctioning emission rights and careful including land use or maybe even categorically excluding it. Such a system could then even replace other instruments that are supposed to save the climate, such as the CDM. In any case: Not only the CDM but the ETS is not by means of its own useful to environmental protection. From an ecologic point of view, trading as such can only be of neutral consequence. The system depends on the named conditions, especially the quantity reduction goals.¹⁰¹

⁹⁸ Matthes, Nutzungsgrenzen für CDM- und JI-Gutschriften im Rahmen des EU-Emissionshandelssystems für Deutschland im Zeitraum 2008-2020. Kurzanalyse für die Umweltstiftung WWF Deutschland, 2008, http://www.wwf.de/fileadmin/fm-wwf/pdf neu/OEko-Institut 2008 - ETS III und CDM - 07-11-2008.pdf (03.03.2010), p. 8.

⁹⁹ See e.g. Wegener, Zeitschrift für Umweltrecht 2009, p. 283 et seq.; Winter, Zeitschrift für Umweltrecht 2009, 289 et seq.

¹⁰⁰ Cf. Ekardt/ Hennig/ von Bredow, CCLR 2011, p. 371 et seq.; Ekardt, Theorie, § 6.

¹⁰¹ On the characteristics of environmental problems as "quantity problems" and the resulting rebound effects, relocating effects and enforcement deficits (and on optimized certificate markets as the best solution) see Ekardt/ Hennig/ von Bredow, CCLR 2011, p. 371 et seq.; Ekardt/ von Bredow, in: Leal (ed.), The Economic, Social, and Political Aspects of Climate Change, 2011, p. 455 et seq.; Ekardt, Theorie, § 6.