CDM

The CDM as Glue for the International Carbon Market?

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CONTENT

1 INTRODUCTION

During the first Kyoto commitment period, the Clean Development Mechanisms (CDM) emerged to be the global currency for emissions trading. According to the recent Report of the High-Level Panel on the CDM Policy Dialogue, the CDM has mobilised 215 billion USD in investments in developing countries and thereby helped to reduce about one billion tonnes of emissions. The report also suggests that the CDM should continue to provide the "glue" for the international carbon market by working with emerging systems and trying to harmonise approaches for market based climate finance (CDM Policy Dialogue 2012).

However, the CDM has not been without its critics, who have raised questions with regard to the additionality of projects, the mechanism's bureaucracy and transaction costs, and the majority of projects being concentrated in a few, primarily emerging economy countries. Efforts to reform the CDM are underway, but at the same, time the global carbon market faces a prospect of fragmentation as other domestic and international offset systems are developed by various jurisdictions. The design of new systems can, among other aspects, be considered as a reaction to the perceived failings of the CDM and an evaluation of their characteristics may therefore contribute to discussions on how to reform the CDM to help continue its "glue" role in international carbon markets. Prominent examples include Japan's development of a Joint Crediting Mechanism / Bilateral Offset Credit Mechanism (JCM/BOCM) and the development of offset protocols in the framework of the emission trading systems (ETS) that are being established by California and Québec. Australia is also developing its own domestic offset mechanism in addition to allowing the use of various Kyoto units from the CDM, Joint Implementation (JI), and Land Use, Land-Use Change and Forestry (LULUCF) in its domestic ETS starting in 2015.

In order to contribute to the reform discussion regarding the necessary steps to build a sus-tainable international carbon market, we explore perceived issues with the CDM as reflected in statements on CDM reform from these jurisdictions and the decisions they have made in establishing their own systems.

2 CURRENT OFFSET POLICIES IN AUSTRALIA, CALIFORNIA, AND JAPAN

In the following sections, we summarize the most recent offset policy developments in three jurisdictions outside Europe: Australia, California and Japan.

2.1 AUSTRALIA

2.1.1 Australian Views of the CDM

Australia's "Carbon Pricing Mechanism" went into effect on 1 July 2012. While the Federal Opposition is generally against emissions trading and has portrayed international offsets as having low quality, being "dodgy", and "sending taxpayers' money overseas" (Hunt 2012), the current Labor-led government has consistently supported the use of international offsets and the CDM in particular (Australia, DECC 2008b). International offsets including CERs, ERUs, and RMUs will therefore be eligible for use in the Carbon Pricing Mechanism starting in 2015 (Australian Government, Clean Energy Regulator 2013). In addition, Australia is also developing a domestic offset program, the Carbon Farming Initiative (CFI). The CFI pro-duces credits through storage or reduction of GHG in agriculture and land use and is volun-tary for farmers and landowners.

2.1.2 Australia's Domestic Offset Scheme

Despite its generally positive position towards the CDM, the Australian government explicitly distanced itself from the CDM's project-by-project additionality approach when designing the CFI. A public consultation paper elaborated that there were two approaches to assessing additionality, the project-by-project approach and the standardized or "positive list" approach. The paper argued that the former could be time-consuming and expensive to administer and that other schemes using this approach had had long delays in their approval processes. The paper also argued that the use of financial or investment additionality tests could exclude worthy projects with mitigation benefits.

The Australian government feels that even if a project is financially profitable without the CFI but is not common practice, it is justified to give an additional incentive to expand that type of activity by making it eligible for CFI support. Therefore,

> *"The CFI will be one of the first carbon offset schemes in the world to use a more efficient and transparent 'Positive List' approach to additionality. Under the Positive List approach, additionality is assessed for activities, rather than individual projects. This means fewer assessments and less subjectivity because all projects of the same type are treated equally."* (Australia, DECC 2011a, 2)

Consequently, financial or investment additionality is not considered in the development of the Australian positive list. Instead, the list is based on a "common practice test". Common practice is determined by analysing the "relevant comparison group" of similar farmers oper-ating in similar environments, with similar access to information, skills and technologies. Information to support the determination of what is common practice will come from the Agricultural Census, Agricultural Resources Management Surveys and other sources deemed credible. Starting in 2013, biennial surveys will be carried out on agricultural land management specifically in order to help with common practice determination in the CFI (Australia, DECC 2011b).

son group practices the activity. In the event that there is not enough survey data or other statistical evidence to determine if an activity is above or below the 5% threshold, an activity can be considered uncommon (additional) if it is "dependent on a new technology (not including minor adjustments to existing technologies)" or if there is "one or more significant impediments to adoption for all potential participants", such as high upfront or operating costs with little commercial benefit (Australia, DECC 2011b, 4).

As of February 2013, the positive list includes various types of vegetation and wetland restoration projects, legacy landfill gas projects, livestock management and other activities such as application of biochar to soil (Australian Government 2013). Corresponding draft regulations were released in October 2011. The government's commentary on the draft regulations noted that for all of the listed activities the estimated level of uptake was 5% or less and therefore no further assessment was required – "the activity is obviously uncommon." (Australia, DECC 2011b, 5) The document nevertheless gives specifications for the individual project types. According to these assessments, most types of activities, yield no commercial returns, costs are very high, or the abatement practice is still at the development stage (ibid.).

Methodologies for baseline setting and monitoring may in principle be developed by private proponents and by government agencies. In practice, methodology development has so far mostly been top-down through the Department of Climate Change and Energy Efficiency and the Department of Agriculture, Fisheries and Forestry, working with industry. In addition, the government has committed $19.6 million to the "Methodology Development Program" to support methodology development by private actors (Australian Government 2012).

2.2 CALIFORNIA

2.2.1 Californian Views of the CDM

The Californian ETS started in January 2013. Entities will be able to cover up to 8% of their compliance obligation through offsets. While it is constitutionally unclear if a sub-national jurisdiction of a country not Party to the Kyoto Protocol could participate in the CDM market, UN offsets were determined to be ineligible for other reasons (California Code of Regulations 2011).

After initially considering limited eligibility of the CDM, the state's regulatory agency in charge of the ETS, the California Air Resources Board (CARB), in the end decided not to allow its use for compliance. The "Final Statement of Reasons" from 2011, which lists all public comments that had been submitted on the draft regulation that had been published in 2010 as well as the CARB's responses, stated that, "ARB recognizes that some CDM credits created during this period may have been non-additional. ARB does not currently plan to accept CDM credits until these issues in that system are resolved" (CARB 2011a, pp. 221) In addition, they stated that, "Our offsets program is designed very differently than the CDM by relying on standardized assessments of additionality established by ARB through a public process and not relying on project-specific assessments done by the project developers themselves" (CARB 2011a, 824).

2.2.2 California's Offset Scheme

The final emission trading regulations mandate the CARB to establish requirements and procedures to issue offset credits according to "offset protocols" (comparable to CDM methodologies) adopted by CARB. The regulation explicitly stipulates that Offset Protocols must establish the eligibility and additionality of projects ex-ante on the basis of "standard criteria" and quantify emission reductions or removals on the basis of "standardized baseline assumptions, emission factor and monitoring methods" (CARB 2011a, § 95972 (a)(9))

At present, four Offset Protocols have been approved. These protocols currently only apply to projects in the United States, though the cap and trade regulation in principle allows for projects to be developed throughout North America including Canada and Mexico (Ibid, § 95972 (c). Presumably, CARB will accept offsets approved by the Quebec government after their systems link, perhaps as soon as 2013. The four offset protocols that have been ap-proved are: Livestock Projects, which relate to the use of biodigesters, Ozone Depleting Substances Projects, Urban Forest Projects, and US Forest Projects. CARB is currently considering further protocols including Coal Mine Methane Projects and Rice Cultivation Projects.

All four approved protocols use a "Performance Standard" to determine eligibility. The CARB staff reports that were the basis for the elaboration of the protocols explain that,

> *"The purpose of a performance standard is to establish a threshold that is significantly better than average GHG production for a specified activity, which, if met or exceeded by a project developer, satisfies the criterion of 'additionality.' If the project meets the threshold, then it exceeds what would happen under the business-as-usual scenario and generates surplus/ additional GHG reductions."* (CARB 2010a: 5)[1]

In contrast to Australia, California has so far not set a general threshold value such as 5% but considered each project type on its own merits while among other aspects using the argument of projects not being economically attractive on their own. The result has been that:

- Biodigesters are considered additional because so far less than 1% of dairies use them and cost is one of the main reasons (CARB 2010a),
- The destruction of ozone depleting substances (ODS) in foam blowing agent and re-frigerant applications is considered additional because currently less than 1.5% of recoverable US-sourced ODS are being destroyed at the end of the lifetime of the equipment or material, and there is an economic incentive for OSD recycling but not for ODS destruction (CARB 2010b),
- Urban forest projects are considered additional because most cities do not achieve significant net tree gain, there is no immediate economic benefit and most cities have severe budget constraints (CARB 2011b),
- Forestry projects are considered additional due to specific performance tests based on the specific project types (CARB 2011c).

2.3 JAPAN

2.3.1 Japanese Views of the CDM

Japan's position regarding the CDM and the potential role of alternative offset policies is determined by a profound criticism of a number of factors related to CDM performance (Kachi et al. 2012). In particular, it considers the rules on additionality and MRV as excessively strict and complex. Japanese submissions to the UNFCCC advocate a review of the "principle of additionality (...), reverting to its original concept provided in the Kyoto Protocol". Utilizing the experience and knowledge acquired so far, the mechanism should be redesigned with due consideration to the accessibility for project operators (Japan, Government of 2009).

While the government statements surveyed for this paper do not go into detail about the perceived over-complexity of the CDM process, the Institute for Global Environmental Strategies (IGES), which is close to the government, has produced various reports on the CDM's shortcomings and suggestions for reform. The points of criticism are as follows and may also be of major relevance for the government's perspective on the overall CDM process.

1 The staff reports on ozone depleting substances and urban forest projects have virtually identical language.

Koakutsu et al. claim that the CDM procedures lead to many projects being stopped before they get off the ground. Based on the IGES project database, they claim that nearly 2,000 projects have been halted during the validation process due to issues such as contract ter-minations and replacements, which has led to an estimated loss of 1.1 billion CERs by the end of 2012 and 2.6 billion by the end of 2020. They also criticize the high degree of uncer-tainty on how many CERs will eventually be issued (Koakutsu et al. 2011).

To resolve the identified problems, a fundamental reform of the CDM has been proposed, e.g. by Mizuno et al. and Koakutsu et al. - by "shifting from judging to checking" (Mizuno et al. 2010; Koakutsu et al. 2011). Both reports consider that the largest barrier in the CDM is the many uncertainties about whether a project will be registered and whether as many CERs as expected will be issued. The main reason for this uncertainty is in their view the judgement Designated Operational Entities and the CDM Executive Board need to exercise when assessing projects. Similar to the positions expressed in Australia and California, both reports suggest that to address this problem the counterfactual project-by-project approach to additionality should be replaced by a ex ante approach based on clear eligibility criteria and quantitative parameters, as is already employed for micro-scale projects.

In particular, the CDM Executive Board should, in their view, establish a positive list of spe-cific project types of a specific size, which would be deemed automatically additional. For project types where this is not feasible, the Board should set default parameters, in particular for the parameters that are needed for the investment analysis. In the same vein, standardised baselines should include criteria for automatic additionality.

Japanese representatives acknowledge that the ideas they propose are not radically new and that the Board has already taken some steps toward further standardisation. However, they feel that the Board is moving too slowly and that decentralized approaches would be better suited to taking local circumstances into account.

2.3.2 Japan's Joint Crediting Mechanism/Bilateral Offset Credit Mechanism

While Japan sees the JCM/BOCM as complementary to the CDM, not as a replacement per se, the development of the mechanism reflects many of the Japanese criticisms of the CDM. MRV standards have yet to be finalized, which will be done on the basis of on-going feasibility studies.

Regarding eligibility, Japan asserts that it should not be based on "the hypothetical assess-ments of what would have occurred in the absence of additional revenue from offsets/credits of emissions reduction" (Japan, Government of 2012). The draft eligibility criteria are:

- A positive list which *"identifies the low carbon technologies, products and services that should be deployed in host countries as its priority, and the projects meeting the positive list will be automatically deemed eligible."*
- Benchmarks, *"which are determined in advance by project types based on energy effi-ciency or diffusion rate of equipments and measures, and projects overachieving the benchmarks will be automatically deemed eligible."*
- NAMAs identified by host countries: *"The NAMAs which host countries develop by themselves and to which the host countries register that offsets/credits can be issued will be eligible as the BOCM."*
- Others: While in principle eligibility should be evaluated based on the above criteria, indicators such as market share, diffusion rate of technologies or barriers due to prevailing practice *"may be applied, if appropriate"*. (Japan, Government of 2012)

Baselines should also not be established on a project-specific basis, *"but be commonly applied to the projects/activities which meet a certain eligible criterion (...) based on the follow-ing indicators:*

- *Performances of equipments and appliances (including those under energy efficiency standards and labeling scheme)*
- *Existing actual emissions at a certain time point before project implementation*
- *Historical emissions trends in the past, etc."* (ibid, 22)

For the calculation of baselines and emission reductions, the aim is also to provide pre-prepared spread sheet templates where the project participants would only need to input the respective values of the required parameters. The scheme also aims to provide default val-ues to the largest extent possible.

Monitoring is also to be standardized by providing approved monitoring report spread sheets where again project participants would only need to input the monitored values of the required parameters. The spread sheet would need to be accompanied by supporting docu-ments with evidence for the stated values. The necessary effort is to be reduced by meas-ures such as establishing conservative default values, making use of manufacturers' specifi-cations or statistics and of estimations based on sampling and simulations or allowing the estimation of missing data under certain conditions (ibid).

3 POSSIBLE IMPLICATIONS FOR THE CDM REFORM DEBATE

Against the Background of the criticism on CDM the crucial question is under what conditions might these jurisdictions be willing to use or continue using the CDM as an offset mechanism and thus to maintain the global currency for carbon credits. The following conclusions could be drawn.

3.1 NEED FOR FURTHER STANDARDIZATION OF ADDITIONALITY TESTING AND BASELINES

Moving towards greater standardization of additionality testing and baselines may enhance the CDM's chances of being allowed to be used for compliance in new systems and continue being allowed to be used in existing systems.

In developing offset systems, all three jurisdictions analysed in this paper explicitly reject the project-by-project approach to additionality that the CDM has taken so far. Instead, they all promote an ex-ante additionality assessment approach for entire classes of projects and consider this to be not only more efficient and cost-effective but also to be more "objective", implying a higher degree of environmental integrity. California even decided not to allow any use of the CDM in its ETS citing concerns about its environmental integrity.

In addition to the countries analysed here, concern about the CDM's integrity has also fre-quently been voiced in the EU, so far by far the largest buyer. The EU has progressively tightened the types of CERs that it allows in the EU ETS and encouraged other countries such as Australia and New Zealand to at least consider similar restrictions. This has essen-tially eliminated demand for credits coming from projects which do not meet EU specifica-tions. Although the EU has not yet worked to create its own offsetting mechanism, it has left itself room to do so domestically under Article 24a of the Emissions Trading Directive and with third countries under Article 11a (5) of the same directive in the event that interna-tional progress does not suit its requirements. One can assume that if the EU were to decide to unilaterally create or sanction such schemes, their design would be a similar reflection of its critique of the CDM in its current form.

The ideas for reform such as a positive list of specific project types are not radically new and e.g. Japanese representatives acknowledge that the Board has already taken some steps toward further standardisation. However, there is a common perception that the Board is moving too slowly and that decentralized approaches would be better suited to taking local circumstances into account.

In this context, it bears noting that additionality demonstration is relatively straightforward for most of the project types that are eligible in the Australian and Californian systems. They either do not yield commercial returns (though that is not an exclusion criterion), are abate-ment practices that are still at early stages of development, have high upfront costs, or are commercially highly unattractive without government support. The Japanese system and the CDM process to establish standardized baselines with automatic additionality will hence be the first major undertakings to determine additionality top-down for more complex project types.

With the concept of standardized baselines it might be possible to raise the efficiency of the CDM while ensuring the environmental integrity. This is the common objective of four jurisdictions which are currently the potential main buyers of offsets credits. Bearing this in mind, it might be worth considering labelling CERs from projects using standardized base-lines for easy recognition in the registry. Even though there are on-going reform processes within the CDM the old and criticized projects will remain to generate CER for several years. For the different jurisdictions it might be politically easier to assert the inclusion of a specific project standard rather than to define detailed use-restrictions. Such a technical solution would also facilitate the transition of such projects into a new climate regime.

3.2 SUPPORT REQUIRED BY DEVELOPING COUNTRIES FOR DEVELOPING METHODOLOGIES WITH STANDARDIZED CRITERIA

Without substantial support, standardization may be beyond the capacity of most developing countries.

While standardization may lower overall transaction costs in the system, it also frontloads transaction costs and shifts them from project participants to those who develop the stan-dardized metrics. For their development, substantial data gathering is necessary to distin-guish activities that are additional to those that are common practice and to set robust baselines. Standardized approaches also require regular reviews and updating to account for technological developments. The CDM Policy Dialogue report has urged ensuring "that the focus of incentives constantly shifts to the next generation of technologies" (CDM Policy Dialogue 2012., 40).

These efforts will presumably have to rely on data collected by the public actors rather than the private sector, as the fundamental data gathering will likely offer little commercial incen-tive without the prospect of a concrete methodology and offsets sales in the short to medium term. The experience of Australia, California, and Japan illustrates the significant effort required from the public sector to establish a basis to standardize baselines and per-formance standards.

While the systems in Australia and California are explicitly designed as a domestic systems and not meant to be expanded to other countries, they may nevertheless serve to illustrate the substantial investment that would probably also be necessary in the CDM for standardi-zation.

In Australia, comprehensive biannual surveys are foreseen to serve as basis for the determi-nation of what is common practice. Methodologies have so far, all been developed top-down by the government and the government has deemed it necessary to commit $19.6 million to support methodology development by private actors.

In California, the four protocols that have so far been approved go back to the work of the California Climate Action Registry (CCAR), a public non-profit entity created in 2001 by the State of California to help develop voluntary greenhouse reductions and offset protocols. When the Global Warming Solutions Act was passed in 2006, the state "sunsetted" its sup-port for the institution, which led CCAR to create a private non-profit entity, the Climate Ac-tion Reserve (CAR). The current four CARB-approved offset protocols all started as CAR voluntary offset protocols, which were then subjected to increased scrutiny for approval in the compliance market. So while the CAR now operates as a private entity, here as well, the development of an offset system with standardized parameters was kick-started with finan-cial support from the government.

Japan has also invested very substantial amounts to develop feasibility studies and model projects in developing countries.

It is likely that the persistent problems encountered by CDM project developers in Least Developed Countries leading to a comparative lack of projects from places like Sub-Saharan Africa, parts of South East Asia, Latin America and the Caribbean will re-emerge due to a lack of capacity to develop standardized baselines. To realise the promise of standardization in the CDM and the equal distribution of projects, substantial support would therefore need to be provided by the CDM Executive Board and donor countries.

3.3 CDM STANDARDIZATION OF MONITORING AND ISSUANCE

Monitoring and issuance need also to be considered as factor of standardization.

The three jurisdictions' critique of the CDM is not limited to additionality and baselines set-ting, it also extends to monitoring and issuance. In particular Japanese experts criticise the high degree of uncertainty on how many CERs will eventually be issued.

The Japanese response, as illustrated in by the JCM/BOCM, therefore attempts to also standardize monitoring by providing approved monitoring report spread sheets where project participants would only need to input the monitored values. The scheme will also try to provide and use conservative default values as much as possible, including manufacturers' specifications or statistics. Monitoring training programs for Verifiers in California and Australia reflect similar trends.

3.4 RECONSIDER THE ROLE OF TRANSACTION COSTS OF CDM AND INDIVIDUAL SCHEMES

Though the transaction costs of an individual scheme may be lower than those of the CDM, a multitude of standards from different schemes may overburden host countries.

One of the arguments put forward in favour of new schemes is that the CDM in its current form has very high transaction costs while new schemes are supposedly going to have lower costs due to higher standardization. However, a proliferation of parallel schemes will raise issues of double counting, so coordination between parallel schemes will be necessary. In addition, having multiple schemes may lead to a proliferation of transaction costs, especially for the governments involved who would have to operate multiple schemes in parallel instead of one single international UNFCCC standard. This would place the greatest burden on least developed and other poor countries who are already struggling with the current CDM/UNFCCC system. Governments may of course opt to use only one out of various mechanisms that may be available, but then the question must be posed to what extent the development of new schemes would pay off for those who develop them.

3.5 FORESTS ARE A POINT OF CONTENTION

Reducing Emissions from Deforestation and Degradation (REDD+) might solve the reservation against forestry projects without being incorporated in the CDM

Forests, land use, and sinks have always been a controversial issue in the CDM. Current rules only allow afforestation and reforestation projects, but even those are not accepted in the EU ETS due to fundamental concerns about the integrity of forestry projects. They are also excluded in Australia, but mostly due to the higher complexity and associated liability issues of temporary and long-term CERs, rather than environmental integrity concerns.

By contrast, all three schemes discussed here include forestry in their coverage. California has not only approved two forest offset protocols, at one time it also seemed that sectoral forestry initiatives would become the first types of credits from outside North America to be eligible in the state. While Australia does not accept l-CERs and t-CERs, it has decided to accept Removal Units from land use, land-use change and forestry activities under Article 3.3 or 3.4 of the Kyoto Protocol. This underlines its focus on forestry and land use issues, which is also a point of departure from the European perspective.

Despite the current lack of demand for forestry CDM credits, REDD+ remains an issue of great interest to many stakeholders. As other sources of demand for carbon credits emerge, including in voluntary markets, the activities of project developers to promote methodology development in the forestry sector may become of greater importance. This supports arguments that a reform of the CDM could address critique and reflect developments of other offset systems which have already moved towards a standardized approach with regard to additionality, baseline methodology, and eligible sectors.

BIBLIOGRAPHY

Australia, DECC (Department of Climate Change and Energy Efficiency). 2008. Carbon Pol-lution Reduction Scheme, Australia's Low Pollution Future, White Paper. Volume 1. Decem-ber 2008. Available on the internet at http://www.climatechange.gov.au/publications/cprs/white-paper/cprs-whitepaper.aspx, last accessed 15 March 2013.

Australia, DECC (Department of Climate Change and Energy Efficiency). 2011a. Consulta-tion Paper: Positive and Negative Lists for the Carbon Farming Initiative. Available on the internet at http://www.climatechange.gov.au/government/submissions/closed-consultations/~/media/publications/carbon-farming-initative/cfi-pos-neg-consultation-paper.pdf, last accessed 15 March 2013.

Australia, DECC (Department of Climate Change and Energy Efficiency). 2011b. Carbon Farming Initiative, Positive List guidelines, Common Practice. Commonwealth of Australia (Department of Climate Change and Energy Efficiency). October 2011. Available on the internet at http://www.climatechange.gov.au/en/government/initiatives/carbon-farming-initiative/activities-eligible-excluded/additional-activities-positive-list/~/media/government/initiatives/cfi/activities-eligible-excluded/CFI-Positive-List-guide-20111024-PDF.pdf, last accessed 15 March 2013.

Australia, DECC (Department of Climate Change and Energy Efficiency). 2011c. Commen-tary on the exposure draft Regulations dealing with the positive and negative lists of activities under the Carbon Farming Initiative, August 2011. Commonwealth of Australia (Department of Climate Change and Energy Efficiency). Available on the internet at http://www.climatechange.gov.au/government/submissions/closed-consultations/draft-regulations-positive-negative-lists-for-cfi/~/media/submissions/cfi/cfi-pos-neg-list-explanatory-statement.pdf, last accessed 15 March 2013.

Australian Government. 2012. Methodology Development Program, Carbon Farming Initia-tive http://www.climatechange.gov.au/government/initiatives/carbon-farming-initiative/methodology-development/mdp-guidelines.aspx. Last accessed 15 March 2013.

Australian Government, Clean Energy Regulator. 2013. http://www.cleanenergyregulator.gov.au/Carbon-Pricing-Mechanism/About-the-Mechanism/Emissions-units/Pages/default.aspx#Eligible-international-emissions-units. Last accessed 15 March 2013.

Australian Government. 2013. The Carbon Farming Initiative positive list. http://www.climatechange.gov.au/en/government/initiatives/carbon-farming-initiative/activities-eligible-excluded/additional-activities-positive-list.aspx. Last accessed 15 March 2013.

CDM Policy Dialogue. 2012. Climate Change, Carbon Markets and the CDM: A Call to Ac-tion. Report of the High-Level Panel on the CDM Policy Dialogue. Available on the internet at http://www.cdmpolicydialogue.org/report/rpt110912.pdf, last accessed 15 March 2013.

Hunt, Greg 2012. Gillard's polluter handout. In: The Australian. April 09, 2012. Available on the internet at http://www.theaustralian.com.au/national-affairs/opinion/gillards-polluter-handout/story-e6frgd0x-1226321647433, last accessed 15 March 2013.

California Code of Regulations. 2011. California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms: Final Regulation Order, Subchapter 10 Climate Change, Article 5, Sections 95800 to 96023, Title 17, California Code of Regulations, to read as follows: Article 5: California Cap on Greenhouse Gas Emissions and Market-Based Com-pliance Mechanisms. Available on the internet at http://www.arb.ca.gov/regact/2010/capandtrade10/finalrevfro.pdf, last accessed 15 March 2013.

CARB (California Air Resource Board). 2010a. Proposed Regulation to Implement the Cali-fornia Cap-and-Trade Program, Part IV, Staff Report and Compliance Offset Protocol, Live-stock Manure (Digester) Projects, 28 October 2010. Available on the internet at http://www.arb.ca.gov/regact/2010/capandtrade10/cappt4.pdf, last accessed 15 March 2013.

CARB (California Air Resources Board). 2010b. Proposed Regulation to Implement the Cali-fornia Cap-and-Trade Program, Part III, Staff Report and Compliance Offset Protocol, U.S. Ozone Depleting Substances Projects, 28 October 2010. Available on the internet at http://www.arb.ca.gov/regact/2010/capandtrade10/cappt3.pdf, last accessed 15 March 2013.

CARB (California Air Resources Board). 2011a. California's Cap-and-Trade Program. Final Statement of Reasons. October 2011. Available on the internet at http://www.arb.ca.gov/regact/2010/capandtrade10/fsor.pdf, last accessed 15 March 2013.

CARB (California Air Resources Board). 2011b. Compliance Offset Protocol, Urban Forest Projects, Adopted: October 20, 2011. http://www.arb.ca.gov/regact/2010/capandtrade10/copurbanforestfin.pdf, last accessed 15 March 2013.

CARB (California Air Resources Board). 2011c. Compliance Offset Protocol, U.S. Forest Projects, Adopted: October 20, 2011. Available on the internet at http://www.arb.ca.gov/regact/2010/capandtrade10/copusforest.pdf, last accessed 15 March 2013.

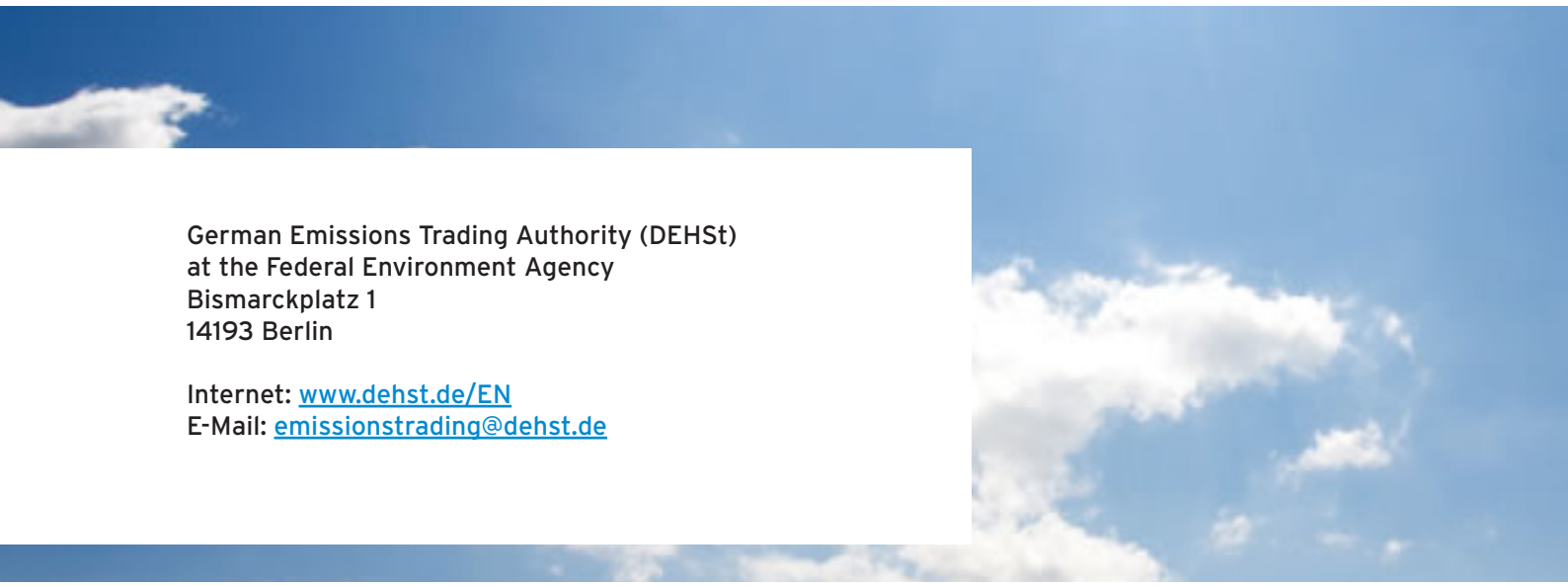
Japan, Government of. 2009. Japan's submission for the AWG-KP, Emissions trading and the project-based mechanism, FCC/KP/AWG/2009/MISC.3, 10 March 2009 (pp. 60–66). Available on the internet at http://unfccc.int/resource/docs/2009/awg7/eng/misc03.pdf, last accessed 15 March 2013.

Japan, Government of. 2012. Outline of The Bilateral Offset Credit Mechanism (tentative name), August 2012 (PowerPoint presentation). Available on the internet at http://www.mmechanisms.org/document/20120824_BOCM_seminar_goj.pdf, last accessed 15 March 2013.

Kachi, Aki, Dennis Taenzler and Wolfgang Sterk (2012): Prospects for CDM in Post 2012 Carbon Markets. Discussion Paper. Berlin: German Emissions Trading Authority (DEHSt) at the Federal Environment Agency. Available on the internet at http://www.dehst.de/SharedDocs/Kurzmeldungen/EN/CDM-discussion-paper.html, last ac-cessed 15 March 2013.

Koakutsu, Kazuhisa, Nozomi Okubo, Kentaro Takahashi, Naoki Torii, Akiko Fukui. 2011. CDM Reform 2011: Verification of the progress and the way forward (IGES Policy Report No. 2011-01). Institute for Global Environmental Strategies (IGES). Available on the internet at http://enviroscope.iges.or.jp/modules/envirolib/upload/3327/attach/cdmreform2011.pdf, last accessed 15 March 2013.

Mizuno, Yuji, Kazuhisa Koakutsu, Keisuke Iyadomi, Nozomi Okubo, Chisako Urayama, Ken-taro Takahashi. 2010. Towards CDM Reform: Report of the IGES CDM Capacity Building Kyoto General Meeting. Institute for Global Environmental Strategies (IGES). Available on the internet at http://enviroscope.iges.or.jp/modules/envirolib/upload/2798/attach/towards_cdm_reform.pdf, last accessed 15 March 2013.



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