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Carbon Market Program:
Future Carbon Fund—Change in Fund Regulations

ABBREVIATIONS

ADB	–	Asian Development Bank
CDM	–	Clean Development Mechanism
CER	–	certified emission reduction
ERPA	–	emission reduction purchase agreement
CO_2	–	carbon dioxide
DMC	–	developing member country
EU-ETS	–	European Emissions Trading Scheme
FCF	–	Future Carbon Fund
GHG	–	greenhouse gas
LDC	–	least-developed country
OGC	–	Office of the General Counsel
RSDD	–	Regional and Sustainable Development Department
RSDD-CC	–	Climate Change Program Coordination Unit, RSDD
TA	–	technical assistance
tCO_2e	–	ton of carbon dioxide equivalent
UNFCCC	–	United Nations Framework Convention on Climate Change
VER	–	verified emission reduction

NOTE

In this report, "$" refers to US dollars.

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I. INTRODUCTION

1. In November 2006, the Asian Development Bank (ADB) launched the Carbon Market Initiative, since succeeded by the Carbon Market Program. The program is part of ADB's broader climate change program, and its objective is to promote low-carbon projects in Asia and the Pacific such as those on renewable energy, energy efficiency, and reducing greenhouse gas (GHG) emissions.

2. The Carbon Market Program has four pillars by which ADB's developing member countries (DMCs) are provided with a comprehensive package of financial, technical, and marketing support for projects potentially eligible under the Clean Development Mechanism (CDM) of the Kyoto Protocol to the United Nations Framework Convention on Climate Change (UNFCCC). Technical support for identifying and developing CDM projects is extended by the Technical Support Facility and for marketing support by the Credit Marketing Facility. The Asia Pacific Carbon Fund and the Future Carbon Fund (FCF), both managed by ADB as trustee, provide additional financial resources for project development and implementation through the pre-purchase of emission reductions from CDM projects hosted by ADB DMCs.

3. Whereas the Asia Pacific Carbon Fund enters into emission reduction purchase agreements (ERPAs) for the purchase of certified emission reductions (CERs) expected to be generated until 31 December 2012 (the expiration date of the Kyoto Protocol's first commitment period), FCF purchases emission reductions from CDM projects from 2013 to 2020. While slow progress in international negotiations for a successor to or replacement of the Kyoto Protocol creates considerable uncertainty about the future of the CDM or another harmonized and globally recognized project-based mechanism for emission reductions, several regional initiatives in Europe and parts of Asia either have been implemented or are in advanced planning or testing stage and are expected to create some demand for emission reductions beyond 2012 for compliance purposes. The European Emission Trading Scheme (EU-ETS), for example, will continue with its Phase 3 during 2013–2020 and allows the limited use of CERs for compliance. At the same time, the Korean Emission Trading Scheme, planned for implementation nationally in the Republic of Korea from 2015, has recently started its trial phase.

4. While market activities continue with regard to the purchase of emission reductions beyond 2012 both for CERs and verified emission reductions (VERs), market participants are few and reported transactions are limited both in number and their volume of emission reductions. Regulatory uncertainty pertaining to the post-2012 international regulatory framework for trading emission reductions and the resulting lack of a long-term price signal for the value of emission reductions beyond 2012 constitute a significant barrier to attracting additional investment in CDM projects. FCF was launched in 2008 to weaken this barrier and enhance the competitiveness of low-carbon options against conventional choices of technology, as well as contribute to the transfer of low-carbon technologies to CDM project host countries among ADB DMCs. Meanwhile, the outcomes of the international negotiations for a Kyoto Protocol successor in Copenhagen at the end of 2009 and in Cancun at the end of 2010 provided little if any regulatory certainty for carbon market participants. The prolonged negotiations have stalled demand for forward purchases of emission reductions.

II. FUTURE CARBON FUND: CURRENT STATUS OF OPERATIONS

5. FCF is one of the few market participants purchasing post-2012 emission reductions from CDM projects in ADB DMCs. It has several unique features aiming to provide the regulatory and price certainty required to incentivize CDM project implementation both now and beyond 2012. In

particular, the regulations governing FCF permit it to make, on a case-by-case basis, advance payments for up to 75% of the purchased emission reduction volume as a cofinancing contribution to project costs and to pay on delivery for the remaining emission reductions. The regulations also permit the payment of a guaranteed and agreed fixed price for each emission reduction purchased, which adds price certainty and limits the downside for the project developer compared with the alternative of floating price mechanisms linked to the future spot price of emission reductions. Finally, by accepting the delivery of VERs instead of CERs at unchanged ERPA terms, FCF participants agree under the regulations to assume any risk of the discontinuance of the CDM beyond 2012.[1] These mechanisms provide significantly greater assurance of early project cofinancing support and performance incentives during project operations than is typically offered by other market participants.

6. In return, and to the extent that these projects fall within the window of FCF's period for committing funds to projects, FCF participants are provided with the opportunity to benefit from the pipeline of ADB-supported projects that FCF is tapping. FCF purchases emission reductions from projects financed by ADB loans, equity, guarantees, or grants, as well as projects receiving ADB technical assistance (TA) including through the Technical Support Facility. This allows FCF to benefit from the technical, financial, and legal due diligence carried out by ADB for ADB-financed projects, thereby streamlining due diligence and documentation for FCF participants and for project developers, with the objective of reducing transaction costs for both. At the same time, FCF participants have the opportunity to support projects with strong development characteristics and long-term benefits for mitigating climate change. All CDM projects FCF engages in, whether such projects receive ADB financing, TA or not, must comply with ADB's applicable policies including safeguards policies.

7. Having been established as a trust fund pursuant to the approval of the ADB Board of Directors in July 2008 ("Board approval"),[2] FCF commenced operations on 30 January 2009. The closing of syndication took place on 31 May 2010 with capitalization of $115 million. FCF has six participants: the Swedish Energy Agency, the Government of Finland, the Republic of Korea, Participatie Maatschappij Vlaanderen NV (an investment company fully owned by the Flemish Region of Belgium), POSCO (a Korean steel company), and ENECO Energy Trade (a Dutch utility). Each participant has committed to contributing up to $20 million, except for ENECO, which has committed to up to $15 million.

8. FCF day-to-day operations are carried out by ADB as trustee. ADB's costs in this regard are fully funded by FCF participants. As of 15 June 2011, FCF is pursuing transactions from a pipeline of 72 projects in 16 host countries at various stages of due diligence and transacting. The pipeline has 43 renewable energy projects (biogas and biomass, hydropower, wind power, solar power, and geothermal power), 18 energy efficiency projects, 9 projects in waste management to reduce or avoiding methane emissions, and 2 transport projects. To date, FCF has executed seven ERPAs in three host countries: India, Papua New Guinea, and the People's Republic of China. This portfolio of signed ERPAs represents more than 2.1 million tons of CO_2 equivalent (tCO_2e) expected to be generated from 1 January 2013 to 31 December 2020. All seven projects are financed by ADB, and six have availed of an advance component under the ERPA. A further eight transactions representing 3.3 million tCO_2e have been approved by FCF board for ERPA

[1] One CER is equal to the reduction of 1 ton of carbon dioxide equivalent calculated in accordance with international CDM rules pursuant to Article 12 of the Kyoto Protocol and verified and certified by UNFCCC-accredited third-party auditors (so-called designated operational entities). A VER is a verified GHG emission reduction unit calculated and verified based on guidelines, modalities, and procedures set by providers independently, outside the supervision of UNFCCC.

[2] ADB. 2008. *Carbon Market Initiative: The Future Carbon Fund*. Manila.

signing, of which five are financed by ADB and three are only supported by ADB TA.[3] FCF board of directors endorsed another 10 projects for which preliminary due diligence had been carried out by the fund management team and that are expected to materialize into firm transactions by January 2012. In total, these 25 projects represent an investment of $82.9 million for 8.2 million tCO_2e and provide carbon financing to projects in 13 countries.

9. FCF participants meet annually and in special meetings as required to review FCF operations, provide general strategic and policy guidance to ADB, and elect the members of the FCF board of directors, which consists of representatives from all six FCF participants. Voting rights are proportional to each participant's commitment to FCF. A quorum of participants holding a majority of all votes must be represented at meetings unless otherwise stated in FCF regulations. Each of the six participants has nominated one director for the FCF board of directors, which meets at least quarterly and provides general advice to ADB on issues regarding FCF operations. The FCF board of directors must approve the terms and conditions of all ERPAs proposed by ADB. Each director has one vote, and board decisions are made by simple majority vote.

III. PROPOSED CHANGE IN FUND REGULATIONS

10. The form of the regulations was approved in substance at Board approval (footnote 2). The regulations address the general governance and operations of FCF, including the duties of ADB as the trustee and the rights and obligations of FCF participants. Board approval preceded the syndication of FCF and so was sought and granted for draft regulations. Board approval made specific allowance for reasonable modifications to the regulations that were satisfactory to ADB. In the course of syndication, shortly before its closing, a modification to the draft regulations was in fact made to create a minority board seat on the FCF board of directors for the last participant entering FCF.[4] Additionally, an expense cap of 13.5%, which was not specifically quantified in the draft regulations, was established based on the final $115 million of commitments to FCF.[5] ADB considered this percentage to be reasonable and satisfactory.

11. Subsequently, discussions among ADB and FCF participants have taken place regarding participant-proposed revisions to the regulations. An overview of topics discussed in chronological order at each of the meetings of FCF participants and the FCF board of directors is in Appendix 1. The main objective of the proposed revisions is the regulations' adjustment to comply with evolving laws and regulations applicable to one or more FCF participants in their respective jurisdictions regarding the use of emission reductions beyond 2012. FCF participants expressed the need to adapt FCF regulations to their existing and future mandatory and voluntary regional and national emission reduction schemes, and to respond to continuing uncertainty as to the international climate change framework beyond 2012. Prolonged regulatory uncertainty on the global scale affected CDM market conditions and added to uncertainty about the scope and magnitude of the CDM beyond 2012. FCF participants' were particularly concerned about how the compliance value of emission reductions in the post-2012 environment would apply to each one of them. Whereas the deadline for project registration by the end of 2012 was of particular importance to European FCF participants, the mitigation of project risks by prioritizing ADB-financed projects over other projects was particularly important to Korean FCF participants.

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[3] Projects supported by the Technical Support Facility under ADB. 2007. *Technical Assistance for Implementation of the Technical Support Facility under the Carbon Market Initiative*. Manila (RETA-6438).

[4] Compare the section on Definitions and section 6.2. subsection (h).

[5] The expense cap of 13.5% is based on expense estimates for the lifetime of FCF (2009 to 2023) expressed in 2009 prices.

12. ADB has sought to address the concerns of each participant in a revised version of the regulations. The revised regulations are attached as Appendix 2. After considerable discussion among the parties, including ADB as facilitator, the revised regulations now reflect a consensus view of all FCF participants. ADB now seeks approval of the revised regulations. For the sake of completeness and ready reference, all changes made to the draft regulations as approved by the ADB Board of Directors in mid-2008 (footnote 2) are marked in track mode. In addition, the succeeding paragraphs provide a summary of the main revisions proposed. A discussion of risk implications resulting from the proposed revisions is contained in section IV below.[6]

(i) **Non-use opt out.**[7] The revised regulations give FCF participants a new right to abstain from participating in the purchase of CERs or VERs from individual projects contracted by FCF. This right may be exercised only under prescribed circumstances. Such rights are referred to as "non-use opt-out rights" and fall into two categories: the regulatory opt-out and the registration opt-out. The regulatory opt-out gives each FCF participant the right to opt out of participating in the purchase and distribution of emission reductions from particular projects if there is a law in place that prohibits the use of such credits for meeting mandatory GHG-reduction obligations in the jurisdiction of the participant. This opt-out right can be exercised only if the law was enacted on or before 15 July 2013 and the participant has notified ADB accordingly no later than 15 September 2013. The registration opt-out gives each FCF participant the right to opt out from participating in the purchase and distribution of emission reductions from projects if the credits cannot be used to meet mandatory GHG reduction obligations in the jurisdiction of the participant because the project received a UNFCCC registration date of 1 January 2013 or later.[9] This opt-out right can be exercised only if the participant has notified ADB no later than 31 March 2013. The registration opt-out is not applicable to projects in least-developed countries (LDCs). The revised regulations include detailed provisions governing the implementation of non-use opt-out rights. [This information was deemed confidential according to exception nos. 8 and 9 of ADB's Public Communications Policy (2005)]

(ii) **Allocation of expenses.**[11] A new section on cost allocation of FCF expenses allocates expenses among participants based on whether they opt out of a given project or not. The proposed cost allocation formula is based on a combination of a participants' commitment to FCF and participants' share in emission reductions contracted by FCF.

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6 Other changes not mentioned in para. 12 are of a technical nature only and do not affect the risks associated with ADB's management as trustee of the FCF. Such clarifications include the restructuring of definitions from the main body of the regulations to the Definitions section and other cleaning up, all of which has been introduced solely to improve legibility and clarify the interpretation of the regulations.

7 Compare the section Definitions and sections 4.1., 4.2., 10.3.,10.5., 12.2. subsection (b), and 12.4.

8 [This information was deemed confidential according to exception nos. 8 and 9 of ADB's Public Communications Policy (2005)]

9 Current requirements for EU-ETS participants and European Union governments prohibit the use of post-2012 CERs from projects not registered by 31 December 2012, except if located in least-developed countries.

10 This information was deemed confidential according to exception nos. 8 and 9 of ADB's Public Communications Policy (2005)]

11 Compare the section on Definitions and section 10.5.

(iii) **Portfolio restrictions.** [12] The portfolio restrictions contained in Schedule 1 obligate ADB to ensure that FCF shall enter into only those ERPAs that would, in aggregate, form a portfolio of ERPAs that complies with the prescribed requirements. These include a requirement that the maximum share of emission reductions that may be purchased on a payment-on-delivery basis does not exceed a certain percentage of total FCF participants' commitments to FCF. [This information was deemed confidential according to exception nos. 8 and 9 of ADB's Public Communications Policy (2005)]

(iv) **Portfolio guidance.** [14] It is proposed to introduce, in addition to existing project criteria and portfolio restrictions, a new Schedule 2 outlining additional portfolio guidance. The purpose of portfolio guidance is to give ADB additional input when identifying, assessing, and selecting projects for ERPA transactions, with the overriding objective of achieving a well-diversified portfolio of ERPAs across technologies and regions with contracted credits offering maximum compliance value to FCF participants and considering cost-efficiency criteria. [This information was deemed confidential according to exception nos. 8 and 9 of ADB's Public Communications Policy (2005)]

13. The changes set out in the revised regulations address the immediate concerns of FCF Participants and ADB, as trustee. However, it is clear that as FCF proceeds in the current challenging market conditions, certain further changes may need to be made to ensure that FCF achieves a successful and timely close. It is therefore proposed that the Board delegate to me the right to amend or grant waivers in respect of certain minor provisions of the regulations as needs arise.

14. **Future changes to fund regulations.** [16] The proposed delegation of approval authority is designed to create sufficient flexibility in fund operations and to ease administrative burden on ADB and its Board. Accordingly, it is proposed that all decisions as to minor waivers and amendments be delegated to me, with only key waiver and amendment decisions remaining subject to Board approval. Such key decisions would be confined to any changes that would:

(i) create financial risk for ADB by, for example, increasing the risk that FCF expenditures would exceed the expense cap;
(ii) result in a reputational risk to ADB;
(iii) cause ADB to deviate from ADB Board policies; or
(iv) revise or amend FCF's objectives and operational principles as specified in sections 3.1 and 3.2 of the revised regulations, including (but without limitation) by increasing the maximum share of credits that FCF may purchase on a payment-on-delivery basis. [This information was deemed confidential according to exception nos. 8 and 9 of ADB's Public Communications Policy (2005)]

All other decisions regarding waivers and amendments would be delegated to me.

[12] Compare Schedule 1 section 2 subsection (d).
[13] [This information was deemed confidential according to exception nos. 8 and 9 of ADB's Public Communications Policy (2005)]
[14] Compare the section on Definitions, section 3.4. subsection (a) and (c), section 6.1. subsection (vi), section 7.1. subsection (c), section 14.4. subsection (a), and Schedule 2.
[15] [This information was deemed confidential according to exception nos. 8 and 9 of ADB's Public Communications Policy (2005)]
[16] Compare the section on Definitions, section 3.4., and section 14.4.

15. It is expected that future changes to the regulations are not likely to be required, considering the advanced implementation stage of FCF and that the revisions proposed in this paper are based on the recently reached unanimous consent of FCF participants (to be formally approved by FCF participants and ADB subsequent to the approval by the ADB Board of Directors that this paper seeks). Any required changes would probably be limited to operational details of the regulations, such as project criteria and portfolio restrictions (Schedule 1 of the regulations) or portfolio guidance (Schedule 2 of the regulations) affecting the operations of ADB in its day-to-day management of FCF and can therefore be handled by me, should the proposed delegation be approved.

16. This is a pragmatic approach for the remaining life of FCF, as it is likely that additional flexibility may be required to permit further increases from the currently proposed [This information was deemed confidential according to exception nos. 8 and 9 of ADB's Public Communications Policy (2005)] maximum share of credits that FCF may purchase on a payment-on-delivery basis, as set out in Schedule 1 of the revised regulations and pursuant to subsection (iv) above. It is currently estimated that such flexibility may be needed to permit Management to allow as much as a further of 10% of the total commitments of all FCF participants to be allocated to payment-on-delivery purchase arrangements. It is therefore proposed not only to amend the current threshold [This information was deemed confidential according to exception nos. 8 and 9 of ADB's Public Communications Policy (2005)] (this change being set out in the attached revised regulations and referred to in paragraph 12 (iv) above), but also that the Board delegate authority to me to approve further increases. [This information was deemed confidential according to exception nos. 8 and 9 of ADB's Public Communications Policy (2005)] In seeking this delegation, it should be noted that ADB, in its role as trustee, wishes to maintain payment-in-advance purchases as high a percentage as possible and will agree to further increases [This information was deemed confidential according to exception nos. 8 and 9 of ADB's Public Communications Policy (2005)] only as and when sufficiently justified.

IV. RISKS

17. The main risks identified in relation to each of the proposed changes in regulations are described, along with mitigation measures, in the following two paragraphs, from the perspectives of both ADB and FCF participants.[17]

18. **Risks for ADB.** The following risks exist for ADB as the trustee:

(i) **Expense cap**. The non-use opt-out could mean more complications and costs for ADB in determining non-pro rata arrangements and dealing with the refund of undisbursed funds at FCF's end-of-lifetime. If FCF participants use a non-use opt-out, ADB would be obliged to seek to contract additional CERs from a greater number of projects to fully commit all FCF participants' commitments. This could possibly prolong FCF operations. At the same time, the proposed revision to portfolio restrictions may affect the project pipeline, and transactions costs are expected to be higher for projects not financed by ADB, in particular with regard to ensuring safeguard compliance, which is more complex without underlying

[17] Please note that only those risks that are affected by the proposed change in regulations are described in this section IV. A comprehensive overview of all risks related to participating in, implementing, and operating the FCF as an ADB trust fund is contained in the Board paper by which the FCF was established (ADB. 2008. *Carbon Market Initiative: The Future Carbon Fund*. Manila.).

ADB financing or advance payment incentives in place. This further increases the risk of the expense cap being exceeded. ADB's administration expenses are limited by the expense cap set out in the regulations. The expense cap is 13.5% of the total commitments of FCF participants to FCF and based on expense estimates for the expected lifetime of FCF (2009 to 2023) expressed in 2009 prices. Both of the complications relating to the non-use opt-out and potential prolongation of FCF, referred to above, may increase the risk of ADB exceeding the expense cap. ADB will bear all costs and expenses it incurs in excess of the expense cap. The risk of overrun is mitigated, however, by a new provision introduced in the revised regulations that allows FCF operations to cease once 95% of total commitments having been placed.[18] As of 31 March 2011, FCF's cumulative expenses amount to $ 2.75 million or 13% of the expense cap.

(ii) **Market perception.** The non-use opt-out and the increase in FCF's overall purchase of emission reductions on a payment-on-delivery basis could create the impression in the market that FCF is pursuing a more pragmatic approach to project support and the CDM and has modified its earlier strongly developmental, risk-taking approach. While it is true that market conditions require a more pragmatic approach, the risk of negative perception in the market is mitigated by the limitation of modifications under the revised regulations, which significantly impede the broad application of opt-out rights. [This information was deemed confidential according to exception nos. 8 and 9 of ADB's Public Communications Policy (2005)]

19. **Risks for fund participants.** Participants have been advised of certain risks associated with the proposed changes, which are identified in Appendix 3.

V. CONCLUSIONS

20. The main reason for the proposed revisions to the regulations, in particular the introduction of the non-use opt-out under certain prescribed circumstances, is that international negotiations for a successor to or replacement of the Kyoto Protocol after 2012 continue to be slow, while several regional initiatives for the continued use of the CDM mechanism applicable to FCF participants—such as the EU-ETS Phase 3 from 2013 to 2020 and the Korean Emission Trading Scheme planned for implementation in the Republic of Korea from 2015—have taken shape or, as in the case of the EU-ETS Phase 3, been enacted. These regional initiatives have introduced, or are likely to introduce, additional restrictions on the type of carbon credits that FCF participants may use for compliance in the post-2012 period (in the absence of an international agreement). At the same time, prolonged regulatory uncertainty on the global scale has affected CDM market conditions and added to uncertainty with regard to the scope and magnitude of the CDM beyond 2012. Limiting risks related to purchasing carbon credits is not uncommon among carbon market participants engaging in post-2012 transactions. At the same time, the revised regulations would allow FCF to continue providing an attractive and unique offer, including a significant carbon cofinancing contribution of up to 75% of contracted CERs and VERs to individual projects (subject to current and possible future portfolio restrictions).

[18] Compare section 12.4.

VI. RECOMMENDATIONS

21. I am satisfied that the proposed revisions to the Future Carbon Fund regulations as specified in paragraph 12 would comply with the Articles of Agreement of ADB and recommend that the Board approve such revisions to the Future Carbon Fund regulations.

22. I recommend that the Board delegate to me the authority to approve minor waivers and amendments to Future Carbon Fund regulations as described in paragraph 14 of this paper.

APPENDIXES

1. CHRONOLOGY OF EVENTS
   [This information was deemed confidential according to exception nos. 8 and 9 of ADB's Public Communications Policy (2005)]

2. REVISED FUTURE CARBON FUND REGULATIONS
   [This information was deemed confidential according to exception nos. 8 and 9 of ADB's Public Communications Policy (2005)]

3. RISKS FOR PARTICIPANTS
   [This information was deemed confidential according to exception nos. 8 and 9 of ADB's Public Communications Policy (2005)]