United Nations FCCC/SB/2016/1

Framework Convention on Climate Change

Distr.: General
23 September 2016

Original: English

Subsidiary Body for Scientific and Technological Advice
Forty-fifth session
Marrakech, 7–14 November 2016

Item 6(a) of the provisional agenda
Development and transfer of technologies
Joint annual report of the Technology Executive Committee and the Climate Technology Centre and Network

Subsidiary Body for Implementation
Forty-fifth session
Marrakech, 7–14 November 2016

Item 12(a) of the provisional agenda
Development and transfer of technologies
Joint annual report of the Technology Executive Committee and the Climate Technology Centre and Network

Joint annual report of the Technology Executive Committee and the Climate Technology Centre and Network for 2016

Summary

This report covers the respective activities and the performance of the respective functions of the Technology Executive Committee (TEC) and the Climate Technology Centre and Network (CTCN) in 2016. It includes a joint chapter of the TEC and the CTCN, as well as separate chapters for each of the two bodies. The chapter of the TEC outlines the work undertaken by the TEC in 2016 in accordance with its rolling workplan for 2016–2018. It also covers its 12th and 13th meetings and intersessional work and includes its key messages for the Conference of the Parties (COP) at its twenty-second session. The chapter of the CTCN describes its work in 2016, covers the 7th and 8th meetings and intersessional work of the Advisory Board of the CTCN, and contains key messages for COP 22. It also includes information provided by the United Nations Environment Programme on matters regarding its role as the host of the Climate Technology Centre.

The TEC has included in annex I the findings from the consultations undertaken in 2016 between the TEC, the CTCN and the operating entities of the Financial Mechanism on linkages between the Technology Mechanism and the Financial Mechanism. The key messages of the TEC and the CTCN for COP 22 are contained in annexes II and III, respectively.

GE.16-16465(E)
1616465

Contents

I. Introduction

A. Mandate

1. The Conference of the Parties (COP) established the Technology Mechanism, comprising the Technology Executive Committee (TEC) and the Climate Technology Centre and Network (CTCN), to facilitate the implementation of enhanced action on technology development and transfer to support action on mitigation and adaptation in order to achieve the full implementation of the Convention.[1]

2. COP 17 requested the TEC and the CTCN to establish procedures for preparing a joint annual report and also requested the secretariat to make that joint annual report available for consideration by the COP through its subsidiary bodies.[2] In response to that request, the TEC and the CTCN established procedures for preparing a joint annual report.[3]

3. COP 20 decided that the TEC and the CTCN shall continue to prepare a joint annual report to the COP, through the subsidiary bodies, on their respective activities and the performance of their respective functions.[4] COP 21 invited the TEC and the Advisory Board of the CTCN to update the procedures for preparing the joint chapter of the joint annual report of the TEC and the CTCN.[5]

B. Scope of the report

4. This joint annual report of the TEC and the CTCN to the COP for 2016 contains the following:

(a) A joint chapter of the TEC and the CTCN (chapter II);

(b) A chapter on the activities and performance of the TEC in 2016, including key messages for COP 22. It covers the outcomes of the 12th and 13th meetings and the intersessional work of the TEC with active engagement of nominated experts from relevant international and observer organizations (chapter III);

(c) A chapter on the activities and performance of the CTCN in 2016, including key messages for COP 22. It covers the outcomes of the 7th and 8th meetings and the intersessional work of the Advisory Board of the CTCN. It also includes information provided by the United Nations Environment Programme (UNEP) on matters regarding its role as the host of the Climate Technology Centre (chapter IV).[6]

C. Possible action by the subsidiary bodies

5. The Subsidiary Body for Scientific and Technological Advice (SBSTA) and the Subsidiary Body for Implementation (SBI) may wish to consider the joint annual report of the TEC and the CTCN for 2016 and recommend a draft decision on this matter for consideration and adoption at COP 22.

[1] Decision 1/CP.16, paragraph 117.
[2] Decision 2/CP.17, paragraphs 142 and 143.
[3] FCCC/SB/2013/1, paragraph 3.
[4] Decision 17/CP.20, paragraph 4.
[5] Decision 12/CP.21, paragraph 2.
[6] In accordance with decision 14/CP.18, paragraph 10.

II. Joint chapter of the Technology Executive Committee and the Climate Technology Centre and Network

6. The TEC and the CTCN welcome recognition by Parties of the important role to be played by technology development and transfer in meeting the objectives of the Paris Agreement. In the spirit of enhancing coherence and synergy, the TEC and the CTCN have closely worked together in 2016 to respond to tasks mandated to them by Parties.

7. The TEC and the CTCN have continued to consult with the operating entities of the Financial Mechanism and further elaborated on the linkages between the Technology Mechanism and the Financial Mechanism, including through an in-session workshop at SBSTA 44 and SBI 44. The workshop enhanced Parties' understanding of potential linkages between the Technology Mechanism and the Financial Mechanism, and identified ways to strengthen cooperation and collaboration between the TEC, the CTCN and the operating entities of the Financial Mechanism.

8. In the context of enhancing pre-2020 action, the TEC and the CTCN engaged in and provided inputs to the technical examination processes (TEP) on mitigation and adaptation to facilitate the implementation of policies, practices and actions. Furthermore, the two bodies initiated collaboration in the area of climate technology research, development and demonstration (RD&D), on the basis of their respective functions. They also worked to update the procedures for preparing the joint chapter of their joint annual report to the COP.

9. In addition to the above mandated tasks, the TEC and the CTCN explored opportunities to promote South–South cooperation and triangular cooperation on technologies for adaptation, in collaboration with the United Nations Office for South-South Cooperation (UNOSSC) and relevant stakeholders. They also collaborated to improve the technology needs assessment (TNA) process in order to facilitate the implementation of technology action plans (TAPs).

10. Looking forward, the TEC and the CTCN will continue with their collaboration in 2017 to respond to COP guidance and to enhance the coherence and synergy within the Technology Mechanism in order to take forward the outcomes of the Paris Agreement. The Technology Mechanism will continue to enhance its efforts in supporting Parties in scaling up their action on technology development and transfer, by continuing to engage with countries and promoting technology cooperation and partnerships.

III. Report on the activities and performance of the Technology Executive Committee in 2016

A. Organizational matters

1. Membership

Election of the Chair and Vice-Chair of the Technology Executive Committee

11. The TEC, at its 12th meeting, elected Ms. Duduzile Nhlengethwa-Masina (Swaziland) and Mr. Michael Rantil (Sweden) as the Chair and Vice-Chair of the TEC for 2016, respectively. The TEC expressed its appreciation to Mr. Kunihiko Shimada (Japan) and Mr. Gabriel Blanco (Argentina), as Chair and Vice-Chair for 2015, respectively, for their leadership in enabling the TEC to effectively carry out its work in 2015.

Members of the Technology Executive Committee

12. A list of the members of the TEC, including the length of their respective terms of office, is available on the UNFCCC website.[7]

2. Arrangements for the meetings of the Technology Executive Committee and related events

13. The TEC held two meetings in 2016: its 12th meeting from 5 to 8 April, and its 13th meeting from 6 to 9 September, both in Bonn, Germany. During its 12th meeting, the TEC held a thematic dialogue on enablers and barriers to South–South cooperation on technologies for adaptation.

14. The meetings of the TEC were webcast, enabling live and on-demand coverage of the plenary discussions. The meetings were attended by Party observers and observer organizations. The TEC invited observers to express their views on the issues under consideration. The Chairs of the SBSTA and the SBI were also invited to participate in the 12th meeting of the TEC to provide their insights regarding the role of the TEC in supporting technology transfer activities under the Convention and solicited input and support from the TEC in the organization of the technical expert meetings (TEMs) at SBSTA 44 and SBI 44. Representatives of the Adaptation Committee, the Standing Committee on Finance (SCF), the secretariat of the Green Climate Fund (GCF) and the Global Environment Facility (GEF) also participated in the TEC meetings. Meeting documents, presentations made during the meetings, webcasts of meetings and meeting reports are available on TT:CLEAR.[8]

B. Development and implementation of the rolling workplan of the Technology Executive Committee for 2016–2018

1. Development of the rolling workplan of the Technology Executive Committee for 2016–2018

15. At its 12th meeting, following discussions and taking into consideration input from the observers participating in the meeting, the TEC agreed on the "Rolling workplan of the Technology Executive Committee for 2016–2018".[9] The rolling workplan aims at ensuring the relevance and effectiveness of the work of the TEC, in accordance with its mandate and functions. The rolling workplan has a three-year period, providing the TEC with sufficient time to respond to all COP guidance and requests arising from the Paris outcomes and undertake its activities effectively and efficiently.

16. To assist the TEC in fulfilling its mandates in a strategic and coherent manner, the activities and work of the TEC under the rolling workplan are organized into the following three workstreams:

(a) Workstream 1: analyse technology issues and provide policy recommendations;

(b) Workstream 2: catalyse support and facilitate and promote technology cooperation and partnership to scale up implementation of actions;

(c) Workstream 3: work in collaboration with the CTCN to promote coherence and synergy within the Technology Mechanism.

[7] <http://unfccc.int/bodies/election_and_membership/items/6558.php>.
[8] <http://unfccc.int/ttclear/pages/tec_home.html>.
[9] <http://goo.gl/4axRiU>.

17. The TEC agreed to continue its established practice of undertaking its intersessional work through thematic task forces to effectively support the implementation of the new rolling workplan. The TEC task forces benefit from the participation of experts nominated by relevant international and observer organizations.[10]

18. The TEC recognized that the issue of the development and enhancement of endogenous capacities and technologies, which the COP mandated the TEC to undertake in accordance with decision 1/CP.21, paragraph 66(b), cuts across different areas. As such, the TEC agreed that all task forces would consider this issue as they undertake their work.

2. Implementation of the rolling workplan of the Technology Executive Committee in 2016

19. As per its rolling workplan, in 2016 the TEC undertook substantive work in six thematic areas: adaptation; climate technology financing; emerging and cross-cutting issues; innovation and RD&D; mitigation; and TNAs. In addition to these six thematic areas, the TEC also undertook a joint activity with the CTCN in initiating the updating of the procedures for preparing the joint chapter of the joint annual report to the COP.

20. The TEC wishes to express its appreciation of the financial contributions provided by Parties as well as of the active participation and support of relevant organizations and other stakeholders, which have helped the TEC to successfully implement its rolling workplan in 2016.

Adaptation

21. The TEC held, as part of its 12th meeting, a thematic dialogue on enablers and barriers to South–South cooperation on technologies for adaptation.[11] The dialogue provided an opportunity for participants to deepen their understanding of this topic and to share, among countries, the experiences and lessons learned.

22. Following the thematic dialogue, in 2016 the TEC continued to work further on South–South cooperation and triangular cooperation on technologies for adaptation. The TEC, together with the CTCN, also began to explore opportunities for collaboration with UNOSSC to further promote South–South cooperation and triangular cooperation. The TEC agreed to develop a TEC Brief on South–South cooperation and triangular cooperation on technologies for adaptation, incorporating the work undertaken by the TEC thus far on this issue and relevant information from its engagement with UNOSSC. The TEC will also develop a compilation of good practices on effective information sharing and practical learning from South–South cooperation and triangular cooperation on technologies for adaptation and highlight the potential enhancement of endogenous capacities.

23. The TEC also agreed to further study the potential application of South–South cooperation and triangular cooperation on adaptation and mitigation technologies to assist countries in implementing their nationally determined contributions (NDCs) and national adaptation plans (NAPs).

24. The TEC will also continue to engage with, and stands ready to contribute to, the work of the Adaptation Committee in the preparation of future TEMs on adaptation. The TEC welcomed the invitation by the Adaptation Committee to participate in the work of the Adaptation Committee in preparing TEMs on adaptation for the period 2017–2020 and agreed to engage actively in this process by providing relevant inputs.

[10] The updated composition and mandates of the TEC task forces are available on TT:CLEAR at <http://unfccc.int/ttclear/templates/render_cms_page?s=TEC_intersesswrk>.

[11] <http://unfccc.int/ttclear/templates/render_cms_page?s=TEC_TD6>.

Climate technology financing

Linkages between the Technology Mechanism and the Financial Mechanism

25. In response to decision 13/CP.21, paragraph 8, the TEC, the CTCN and the operating entities of the Financial Mechanism continued to consult and further elaborate, including through an in-session workshop at SBSTA 44 and SBI 44,[12] the linkages between the Technology Mechanism and the Financial Mechanism. The outcomes arising from these activities are included in annex I to this report for consideration by COP 22, as requested by COP 21.

Collaboration with the Standing Committee on Finance

26. In response to an invitation from the SCF, the TEC provided input to the SCF on draft guidance for the operating entities of the Financial Mechanism.

Contribution to the in-session workshop on long-term climate finance

27. The TEC provided inputs to an in-session workshop on long-term climate finance held at SBSTA 44 and SBI 44, in accordance with decision 5/CP.20.[13] The workshop focused on the issues of adaptation finance, needs for support to developing country Parties and cooperation on enhanced enabling environments and support for readiness activities. The inputs of the TEC[14] focused on assessing and communicating technology needs and how to move from a needs assessment to implementation, South–South cooperation for facilitating adaptation technology implementation, and lessons learned from the work undertaken by the TEC on facilitating access to climate technology finance. The TEC presented these inputs at the workshop.

Emerging and cross-cutting issues

28. The Chair and the Vice-Chair of the TEC had their first meeting with the Co-Chairs of the Executive Committee of the Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts in the margins of the May 2016 sessions of the subsidiary bodies. The TEC noted the importance of further engagement with the Executive Committee of the Warsaw International Mechanism to enhance understanding of technologies that reduce or avert loss and damage. The TEC agreed to further consider the potential for collaboration that is mutually beneficial to both bodies, taking into consideration relevant work undertaken by the TEC.

Innovation and research, development and demonstration

29. In response to decision 1/CP.21, paragraph 66(a), the TEC included activities on climate technology RD&D in its 2016–2018 rolling workplan. As part of these activities, the TEC prepared a concept note on assessing climate technology RD&D financing needs and considered an RD&D scoping note. The TEC worked closely with the Advisory Board of the CTCN on the implementation of its workplan activities on RD&D.

30. The TEC also continued its work on innovation, building on its work in previous years on national systems of innovation,[15] including by undertaking an initial consideration

[12] <http://unfccc.int/ttclear/templates/render_cms_page?s=events_ws_tmfm>.

[13] <http://unfccc.int/cooperation_support/financial_mechanism/long-term_finance/items/9518.php>.

[14] <http://goo.gl/mcoAdN>.

[15] In 2014, the TEC held a workshop on national systems of innovation, see <http://unfccc.int/ttclear/templates/render_cms_page?s=events_ws_nsi>. In 2015, it produced a TEC Brief on this issue, available at <http://goo.gl/vjRQML>.

of how innovation can support countries in implementing the technology elements of their NDCs.

31. In 2017, the TEC will continue its work on RD&D and innovation by:

(a) Preparing a technical paper on enhancing climate technology RD&D financing;

(b) Holding a special event during the forty-sixth sessions of the subsidiary bodies in May 2017 on how innovation can support implementation of the technology elements of NDCs and the Paris Agreement mid-century strategies;

(c) Preparing a TEC Brief for COP 23 based on the technical paper and the special event;

(d) Preparing key messages and/or recommendations for COP 23 based on the technical paper and the special event.

32. Furthermore, the TEC decided to continue considering issues related to enabling environments and barriers. As part of its rolling workplan, it agreed to identify policies and strategies to improve enabling environments and to address barriers. This will be based on a mapping of TNAs, NDCs and requests submitted to the CTCN.[16] The TEC will undertake this work in 2017 and 2018.

Mitigation

33. In response to decision 1/CP.21, paragraph 111(a), the TEC invited the Chairs of the SBSTA and the SBI and the secretariat to attend the 12th meeting of the TEC, to provide an update on the organization of TEMs in conjunction with SBSTA 44 and SBI 44, and to exchange views on possible further engagement of the TEC in this TEP.

34. In response to decision 1/CP.21, paragraph 109(c), in 2016 the TEC had the opportunity to present its work in two TEMs during the May sessions of the subsidiary bodies, namely the "Social and economic value of carbon" and "Shifting to more efficient public transport and increasing energy efficiency of vehicles" TEMs. The TEC will continue to engage in future TEMs on mitigation.

35. At its 13th meeting, the TEC considered the TAPs and intended nationally determined contribution analyses, together with CTCN inputs. Drawing on this, the TEC identified possible relevant technologies, topics and issues to be addressed in future TEMs on mitigation.

36. Taking into account its previous work and the topics of previous TEMs on policy options, practices and technologies with high mitigation potential, the TEC identified the following sectors as potential topics for future TEMs: waste to energy; waste treatment (including grey water and landfills); using biofuels in (public) transport; climate-smart agriculture; forestry management; cross-cutting issues in urban environments; and issues related to double counting of carbon credits. The TEC emphasizes that there could be a focus on the financing, training and co-benefits aspects of such mitigation sectors. It recommends these topics with a view to catalysing support for climate action.

37. In addition, the TEC will consider undertaking an additional analysis of the TEM process regarding the priorities of its stakeholders.

38. The TEC also analysed the TEP policy options and explored how to take these policy options forward to facilitate and support Parties in scaling up the implementation of

[16] See the rolling workplan of the Technology Executive Committee for 2016–2018, activity 2.1. Available at <http://goo.gl/4axRiU>.

these options. As part of this analysis, the TEC analysed the findings of TNAs and intended nationally determined contribution analyses, together with CTCN inputs. The TEC considered the findings of the analysis of TEP policy options and provided further input for its finalization. Based on the preliminary findings, the TEC agreed to prepare a technical paper and hold a thematic dialogue at its first meeting in 2017 on industrial energy efficiency[17] and material substitution in carbon-intensive sectors, including the financing, training and co-benefits aspects of this sector.

Technology needs assessments

Guidance on the preparation of technology action plans

39. In response to decision 17/CP.20, paragraph 13, and decision 1/CP.21, paragraph 65, the TEC carried out work to provide guidance on how the results of TNAs, in particular TAPs, can be developed into projects that can be ultimately implemented. In early 2016, the TEC finalized, in close collaboration with the UNEP DTU Partnership[18] and the CTCN, the guidance on TAPs and made it available to developing country Parties for informing the TNA process.[19] The TEC launched the guidance at a side event held during the forty-fourth sessions of the subsidiary bodies in May 2016.

Compilation and synthesis of transport-related information contained in technology needs assessments

40. The TEC compiled and synthesized transport-related information in the TNAs and TAPs of developing countries to inform the TEM on mitigation. The Chair of the TEC presented this information during the TEM on sustainable transport, and introduced the work of the TEC on this issue.

Linkages between the technology needs assessment process and the nationally determined contribution process

41. The TEC analysed the country-driven processes for developing both TNAs and NDCs and provided an overview of linkages between the two processes with a view to identifying opportunities for, inter alia, minimizing duplication and leveraging the TNA/TAP process to enhance NDC implementation. The TEC considered the draft paper on linkages between the TNA process and the NDC process, and agreed to continue its further deliberation on this issue in 2017.

Aligning technology needs assessments with the process to formulate and implement national adaptation plans

42. In response to decision 3/CP.21, paragraph 5, the TEC considered, in collaboration with the CTCN, the Adaptation Committee and the Least Developed Countries Expert Group (LEG), how Parties could be helped to align their TNAs with the process to formulate and implement NAPs. At its 13th meeting, the TEC considered a draft paper, prepared in collaboration with the CTCN, the Adaptation Committee and the LEG, on aligning TNAs with the process to formulate and implement NAPs. The TEC agreed to continue its further deliberation on this issue in 2017.

[17] In accordance with the TEC document TEC/2016/13/12, page 9, industrial energy efficiency includes, for example, programmes to implement improved electricity generation technologies, industrial boilers, and other industry-specific technologies such as those for brickmaking.

[18] The partnership, formerly known as the UNEP Risoe Centre, operates under a tripartite agreement between Denmark's Ministry of Foreign Affairs, the Technical University of Denmark (DTU) and UNEP.

[19] <http://goo.gl/upe0xu>.

Draft methodology on monitoring and evaluating the results of technology needs assessments

43. The TEC considered an outline on developing a draft methodology on how to monitor the TNA results, including what elements such monitoring should include, with a view to showcasing success stories and facilitating knowledge-sharing. The TEC agreed to change the outline draft methodology to a TEC working paper and proposed to prepare a draft methodology on monitoring and evaluation of the implementation of TNA results for further consideration in 2017.

Other

44. In response to decision 12/CP.21, paragraph 2, the Chairs and the Vice-Chairs of the TEC and the Advisory Board of the CTCN initiated their joint consideration on updating procedures for preparing the joint chapter of the joint annual report to the COP. The TEC considered a recommendation suggested jointly by the Chairs and the Vice-Chairs of the TEC and the Advisory Board of the CTCN and agreed to continue its further consultation with the Advisory Board of the CTCN on this matter.

45. To maintain effective communication and collaboration between the two bodies, the Chairs and the Vice-Chairs of the TEC and the Advisory Board of the CTCN continued to attend and actively participate in the meetings of the two bodies.

3. Collaboration with institutions and other stakeholders

46. The TEC continued interacting and collaborating with institutions and other stakeholders through various means, including by: inviting Party observers and observer organizations to participate in meetings of the TEC; inviting experts to participate in a thematic dialogue; inviting stakeholders to participate in various TEC task forces; and collaborating and regularly communicating with institutions and other bodies, such as the Adaptation Committee, the CTCN, the Executive Committee of the Warsaw International Mechanism, the GCF, the GEF, the LEG and the SCF.

47. The Chair and the Vice-Chair of the TEC also participated in meetings and events, such as: a side event of the Adaptation Committee, a stocktake meeting[20] organized jointly by the Presidency of COP 21 and the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol at its eleventh session (CMP 11) and the incoming Presidency of COP 22/CMP 12, a CTCN side event, the Durban Forum on capacity-building, two TEMs on mitigation, as well as two TEMs on adaptation.

48. In addition, the TEC welcomed the side event that took place in conjunction with its 12th meeting, organized by the Deutsche Gesellschaft für Internationale Zusammenarbeit and UNEP.

4. Communication and outreach

49. In 2016, the TEC agreed on a communications and outreach strategy,[21] which aims to support and enhance the visibility of the TEC output, in particular for the period of the 2016–2018 rolling workplan. In accordance with this strategy, the TEC communicated its work and outreached to its key stakeholders in 2016 through various written, oral and electronic means. The TEC also enhanced its use of social media, promoting its events and outputs on Facebook and Twitter using the hashtag '#climatetech'.

[20] <http://unfccc.int/bodies/apa/items/9632.php>.
[21] <http://goo.gl/sSUCou>.

50. Furthermore, the TEC and the CTCN conducted joint communication and outreach activities, including through TT:CLEAR and the knowledge management system of the CTCN.

51. In addition to the TEC enhancing its communication and outreach efforts, the secretariat initiated the process of redesigning and upgrading TT:CLEAR.

C. Key messages for the Conference of the Parties

52. Building on the work carried out in 2016, the TEC wishes to deliver the following key messages for COP 22, which are also contained in annex II.

Climate technology financing

53. The TEC welcomes the increased engagement between the GCF and the Climate Technology Centre (CTC), particularly with respect to exploring ways of utilizing the Readiness Programme and the Project Preparation Facility to respond to country-driven requests for technical assistance, and encourages the advancement of this linkage, including through the strengthening of collaboration between GCF national designated authorities (NDAs) and CTCN national designated entities (NDEs).

54. The TEC encourages the GEF and the CTC to enhance their collaboration with respect to exploring new ways of supporting climate technology related requests for technical assistance, including through the strengthening of collaboration between GEF focal points and CTCN NDEs.

South–South cooperation and triangular cooperation on technologies for adaptation

55. The TEC highlights to Parties that South–South cooperation and triangular cooperation is particularly important for adaptation given the prominence of the application of knowledge for adaptation. There are examples of successful South–South cooperation and triangular cooperation on technologies for adaptation in both the agriculture and water sectors. Such collaboration is within reach for all countries.

56. The TEC underlines that:

(a) Promoting and scaling up successful and sustainable South–South cooperation and triangular cooperation on technologies for adaptation requires concerted efforts in:

(i) Bringing multiple actors to work together in different capacities: policy, knowledge and practice;

(ii) Looking beyond climate issues to the interlinkages across sectors, such as the nexus of agriculture, water, energy and climate and other aspects of the United Nations sustainable development goals (SDGs);

(b) Institutional support is a crucial element of successful South–South cooperation and triangular cooperation and is required to enable effective knowledge management and information sharing;

(c) In the context of South–South cooperation and triangular cooperation on technologies for adaptation, learning and sharing experiences through personal interactions, such as exchange programmes, has proven to be an effective tool that can help to accelerate knowledge dissemination;

(d) Global mechanisms, international networks and international organizations working on this issue, such as UNOSSC, can play an important role in supporting the

promotion of South–South cooperation and triangular cooperation on technologies for adaptation.

57. The TEC therefore recommends that the COP:

(a) Invite Parties to explore potential opportunities offered by South–South cooperation and triangular cooperation to help countries implement their NAPs and NDCs;

(b) Encourage Parties to promote the use of South–South cooperation and triangular cooperation on technologies for adaptation through sharing of experiences of best practices and technologies at the national, subregional and regional levels, and through the use of international networks and global knowledge hubs already working on South–South cooperation and triangular cooperation;

(c) Invite Parties to work in partnership with international organizations and relevant UNFCCC institutions, including the TEC and the CTCN, to enhance the coordination and coherence of efforts in their action related to South–South cooperation and triangular cooperation.

Technology needs assessments

58. The TNA process should be integrated with other mitigation and adaptation processes. Strengthening linkages between the TNA process and the NDC and NAP processes would enhance their effectiveness and responsiveness towards implementation in developing countries. TAPs developed as part of the TNA process should be viewed as a platform for NDC and NAP implementation.

59. Enhanced financial, technical and capacity-building support are needed to facilitate the implementation of TAPs and updating of TNAs, which will bring economic, environmental and social benefits to countries. Further funding to conduct TNAs and implement TNA results, beyond the current scope of the global TNA project funding, is encouraged.

60. A monitoring and evaluation system of TNA results would deliver feedback, enhance learning and improve decision-making, and could be fed into national reporting systems.

61. Cooperation between countries could help them implement the results of TNAs, beyond the current technical support provided, and beyond the current scale of implementation. Such cooperation may include information sharing on regional implementation of environmentally sound adaptation and mitigation technologies, related success stories, lessons learned, opportunities and challenges.

IV. Report on the activities and performance of the Climate Technology Centre and Network in 2016

A. Work of the Advisory Board of the Climate Technology Centre and Network

62. At its 7th meeting, held from 11 to 13 April 2016 in Vienna, the Advisory Board of the CTCN: (1) welcomed new Advisory Board members Ms. Sara Aagesen Muñoz (Spain), Mr. Chen Ji (China), Ms. Mette Moglestue (Norway), Ms. Lyne Monastesse (Canada) and Ms. Duduzile Nhlengethwa-Masina (Swaziland), who were elected in accordance with the Advisory Board's rules of procedure; and (2) elected, at the end of the meeting, Mr. Spencer Linus Thomas (Grenada) as the new Chair and Mr. Matthew Kennedy (Ireland) as the new Vice-Chair, in line with the Advisory Board's rules of procedure.

63. At its 8th meeting, held from 23 to 25 August 2016 in Copenhagen, the Advisory Board welcomed new Advisory Board members Ms. Shikha Bhasin, Ms. Tanya Morrison and Mr. Roque Pedace, representing research and independent non-governmental organizations (RINGOs), business and industry non-governmental organizations (BINGOs) and environmental non-governmental organizations (ENGOs), respectively. At the end of the meeting, the Advisory Board thanked Mr. Matthew Kennedy for his service as both Chair and Vice-Chair and elected Ms. Mette Moglestue as the new Vice-Chair.

64. A list of the members of the Advisory Board is available on the CTCN website.[22]

65. Parties and observer States were invited to participate in the Advisory Board meetings, which were webcast live. The Advisory Board meeting documents and presentations are available on the CTCN website.

66. The Advisory Board provided guidance to the CTCN on specific operational initiatives, and endorsed the expansion of its Request Incubator Programme to small island developing States (SIDS) and outreach to the private sector through Stakeholder Engagement Forums. Furthermore, the Advisory Board: (1) provided guidance with a view to achieving intersessional endorsement of the CTCN 2015 financial statement; (2) considered updated procedures for preparing the joint chapter of the joint annual report; (3) approved the CTCN annual operating plan for 2017; and (4) provisionally endorsed the CTCN planned budget for 2017.

67. This past year, the Advisory Board formed a Funding Task Force and a Financial Visibility Task Force to help inform the discussions of the Advisory Board on funding for the CTCN and on increasing the visibility of CTCN finances and finance-related procedures with a view to promoting donor interest in the CTCN. The previously formed RD&D Task Force was given a mandate to continue its work to identify areas of RD&D that the CTCN should support and its modalities.

B. Organizational structure of the Climate Technology Centre and Network

1. The Climate Technology Centre

68. After having filled all staff positions for the Climate Technology Centre, consisting of one Director, five professional staff and two administrative staff, the CTCN has experienced staff turnover. The CTCN has already re-filled the position of one administrative staff and is in the process of re-filling the positions of Climate Technology Manager and Fund Management Officer. All candidates were and will be selected through a competitive process in line with the rules and regulations of the United Nations. During this period when the CTCN is short of staff, the co-hosts of the CTCN, UNEP and the United Nations Industrial Development Organization (UNIDO), have stepped in to provide continued and additional personnel support to the CTCN.

69. The CTCN continues to be supported by its consortium partners, to enable it to deliver all of its service offerings, in particular the provision of technical assistance to developing countries, including response plan development. The CTCN also continues to be supported by its strategic partner, DNV GL, in the areas of knowledge management, monitoring and evaluation, capacity-building and stakeholder engagement.

[22] <https://www.ctc-n.org/advisory-board>.

2. The Climate Technology Network

70. The COP requested the Climate Technology Centre to set up and facilitate a network of institutions capable of responding to requests from developing countries related to technology[23] development and transfer.[24] Procedures for accepting members of the Climate Technology Network were developed on the basis of outcomes of the 2nd and 3rd meetings of the Advisory Board.

71. A total of 234 applications for membership of the Network had been received by the CTCN as at September 2016. Out of those, 215 have been accepted as members, 17 applications are under assessment and 2 early applications were deemed not to fulfil all criteria. This represents an increase of 126 Network members from 2015. In terms of the composition of the Network by type of organization, the largest group is the private sector, at 34 per cent of the total membership, followed by academic and research organizations, which constitute 25 per cent.

72. The expansion of the Network is being guided by the needs of developing countries and the capacity of the Network, which are being monitored on a continual basis. In this regard, direct contact has been made with more than 250 relevant institutions, which have been invited to join the Network. Responses have been positive, interest to join the CTCN has been expressed by a number of stakeholders and the Network continues to grow at a steady pace.

3. National designated entities

73. NDEs serve as domestic focal points for the development and transfer of technologies and as points of contact with the CTC. Developing country NDEs coordinate and submit requests on their country technology needs to the CTCN, whereas developed country NDEs coordinate in-country support and technical knowledge to enhance the capabilities of the CTCN to respond to requests submitted to the CTCN. The COP invited Parties to nominate their NDEs for the development and transfer of technologies, pursuant to decisions 2/CP.17, annex VII, and 14/CP.18, paragraph 12. Parties that have not yet nominated their NDE are urged to do so.

74. As at September 2016, 152 countries had nominated their NDEs, 124 of which were from Parties not included in Annex I to the Convention (non-Annex I Parties).[25] NDEs are critical to the success of the CTCN because they are the gateway to engaging with and benefiting from CTCN services. As part of its regular regional forums and outreach activities, the CTCN has recently placed greater focus on the involvement of developed country NDEs and on how they can assist collaboratively in achieving common goals.

4. United Nations Environment Programme as host of the Climate Technology Centre

75. Pursuant to decision 14/CP.18, paragraph 10, UNEP is providing the following updates on matters regarding its role as the host of the CTC.

76. Since the time it was selected as host, UNEP has provided administrative and substantive support to the CTCN. Administrative support includes use of the UNEP: (1) financial management system and personnel assisting with financial management and reporting; (2) information technology services for office workstation support; (3) human

[23] In line with the definition of the Intergovernmental Panel on Climate Change, "climate technology" is defined as any equipment, technique, practical knowledge or skills needed to adapt to a changing climate or to mitigate greenhouse gas emissions and includes both adaptation and mitigation measures.

[24] Decision 1/CP.16, paragraph 123.

[25] <http://unfccc.int/ttclear/templates/render_cms_page?TEM_ndes>.

resources department for the hiring of CTCN staff and consultancies; and (4) communications staff to assist in outreach activities.

77. UNEP has also provided technical support to ensure the development and sustained operation of the services offered by the CTCN. For example, UNEP has: (1) provided access to its wealth of technology and country expertise to assist in responding to country requests for technical assistance; (2) assisted in the design of the Network management process and the review of Network applications; (3) supported various capacity-building activities including NDE Regional Forums and the Request Incubator Programme; (4) contributed to the design and development of the Knowledge Management System of the CTCN and assisted with CTCN linkages to the various project platforms of UNEP; and (5) established links between the CTCN and various UNEP projects and programmes that are relevant to the activities of the CTCN.

78. In the past, some Parties have raised concerns regarding the in-house capacity of the host organization on technologies for adaptation. UNEP is pleased to report that, in addition to the CTCN Climate Technology Manager and Climate Technology Specialist dedicated to adaptation, the CTCN frequently makes use of the in-house adaptation capacity of UNEP, which consists of a climate change adaptation unit, nine professional climate change adaptation staff located at UNEP headquarters, and an equivalent number of professional staff working in the regions. In addition, UNEP hosts the Global Adaptation Network and its regional nodes in Latin America and the Caribbean (REGATTA), Asia and the Pacific (APAN) and Africa (AAKNET), which collectively promote adaptation knowledge exchange in proven approaches and innovative technologies.

5. The Technology Mechanism: joint work with the Technology Executive Committee

79. The TEC and the CTCN have continued with their collaboration throughout 2016 to enhance the coherence and synergy in the work of the Technology Mechanism and to respond to tasks mandated to them by Parties. Jointly, they have initiated the updating of procedures for preparing the joint chapter of the joint TEC/CTCN annual report to the COP, elaborated on linkages between the Technology Mechanism and the Financial Mechanism through an in-session workshop at SBSTA 44 and SBI 44, provided input to the TEPs on mitigation and adaptation, and initiated collaboration on the topic of RD&D.

80. In addition, the CTCN has collaborated with the TEC at an operational level; for example, to improve the TNA process in order to facilitate the implementation of TAPs.

81. The TEC and the CTCN continued to participate in events, either jointly or in support of each other. For example, at the invitation of the CTCN, the UNFCCC secretariat participated in CTCN Regional NDE Forums to present the work of the TEC. The CTCN looks forward to continuing to collaborate with the TEC, including in the organization of joint CTCN Advisory Board/TEC meetings.

6. Funding

82. The COP decided that the costs associated with the CTC and the mobilization of the services of the Network should be funded from various sources, ranging from the Financial Mechanism of the Convention to philanthropic sources, as well as financial and in-kind contributions from the host organization and participants in the Network.[26] Parties in a position to do so were invited to support the CTCN through the provision of financial and other resources.[27]

[26] Decision 14/CP.18, annex I, section VII.
[27] Decision 2/CP.17, paragraph 141.

Funds secured for the Climate Technology Centre and Network as at September 2016
(United States dollars)

Donor[a]	*Total contribution*
Norway[b]	8 499 850
European Union	6 784 261
Denmark	5 361 461
Japan	2 856 708
Canada	2 451 461
United States of America[b]	2 095 000
Germany	586 207
Switzerland	400 000
Finland	216 640
Ireland	216 548
Subtotal	**29 468 136**
Global Environment Facility	1 800 000
Total	**31 268 136**

[a] Sweden has donated to the Climate Technology Centre and Network for its mobilization through the United Nations Environment Programme cash and in-kind contributions.

[b] Executed partially through partnerships (DNV GL for Norway and the National Renewable Energy Laboratory for the United States of America).

83. The funding target for the first five years of operation of the CTCN ending in 2018 amounts to USD 100 million, as approved by Parties. Shortly after the UNEP-led consortium was selected to be the host of the CTCN, a quick start to the operationalization of the CTCN was facilitated through cash and in-kind contributions from the consortium, particularly its co-hosts UNEP and UNIDO, to the amount of USD 5.85 million. As at July 2016, the CTCN had secured a total of USD 29.5 million from bilateral sources and a further USD 1.8 million from the GEF for the project "Promoting Accelerated Transfer and Scaled up Deployment of Mitigation Technologies through the Climate Technology Centre & Network (CTCN)".

84. The total of the above contributions to the CTCN as listed in the table above amounts to USD 31.3 million, and represents an incremental increase of USD 2.8 million over the last year, leaving the CTCN short of its five-year funding target by more than USD 60 million. The rate of contributions to the CTCN is a concern as it is inconsistent with the planned year over year budget increase, which is necessary to accommodate the increasing level of technical assistance activities.

85. UNEP and UNIDO, as the co-leads of the CTCN consortium, continued to engage with current and other potential donors to secure additional funds. As part of these efforts, the UNEP Executive Director and the UNFCCC Executive Secretary jointly sent formal letters to ministers of developed countries, seeking financial support in order to allow the CTCN to fully deliver on its mandate.

86. The CTCN is also engaging Network members, including NDEs, as a means to provide and/or fund CTCN services. The precise mechanism will need to be elaborated by the CTCN, but it could be an in-kind contribution, either partially or wholly contributing technical expertise to respond to CTCN requests from developing countries.

87. The CTCN continues to explore linkages between the Technology Mechanism and the Financial Mechanism, including through an in-session workshop at SBSTA 44 and SBI

44, as one of the means for ensuring sustainable, adequate and predictable funds in support of the activities of the CTCN. Though discussions are ongoing with both the GCF and the GEF, the operating entities of the Financial Mechanism, any additional project funding is not expected to address the near-term funding requirements of the CTCN.

88. The GCF and the CTCN are exploring a partnership wherein CTCN services and expertise strengthen proposals seeking GCF readiness and Project Preparation Facility support. This would allow for the establishment of the enabling conditions for and the development of robust GCF proposals to accelerate the scaled deployment of climate adaptation and mitigation technologies in developing countries. This cooperative approach can take many forms on the basis of the specific mandate of the COP to the Technology Mechanism and the Financial Mechanism, and the guidelines that the operating entities of the two mechanisms would receive from their respective boards. These actions are not meant to pre-judge the outcomes of any formal processes such as those on linkages between the Technology Mechanism and the Financial Mechanism that are ongoing under the auspices of the UNFCCC.

89. The CTCN is actively engaging with multilateral development banks (MDBs) and their GEF-funded regional climate technology transfer and finance centres. Collaborative activities with MDBs include the implementation of technical assistance requests with scalable investment potential, participation in relevant Regional NDE Forums, and the organization of joint meetings to promote knowledge-sharing and the strengthening of networks.

90. Securing sustained funding to enable the CTCN to continue to deliver on its mandate is an issue of concern. The provision of technical assistance for technology development and transfer and the building of endogenous capacities to developing countries is a core element of the Convention, the decisions agreed at COP 21 and the Paris Agreement. While the Advisory Board greatly appreciates the contributions made by Parties to the operating budget of the CTCN, it is clear that the absence of sufficient, predictable and sustained financing places the future viability of the CTCN and the technology development and transfer services it provides to developing country Parties at risk.

91. Therefore, at its 8th meeting, the Advisory Board endorsed the following:

(a) A call to the COP to ensure sustainable funding for the CTC that supports its operational costs. Specifically, this funding could be sourced from resources under the Convention;

(b) A communication from the Chair of the CTCN to be sent to the COP 21 and COP 22 Presidencies to alert them that the operative body of the Technology Mechanism may be at risk of being unable to fulfil its mandate due to a lack of sustainable, adequate and predictable funding;

(c) An urgent and continuous collaboration between the Financial Mechanism and the Technology Mechanism in order to enhance the fulfilment and implementation of their respective mandates, as called for in decision 13/CP.21.

C. Activities of the Climate Technology Centre and Network

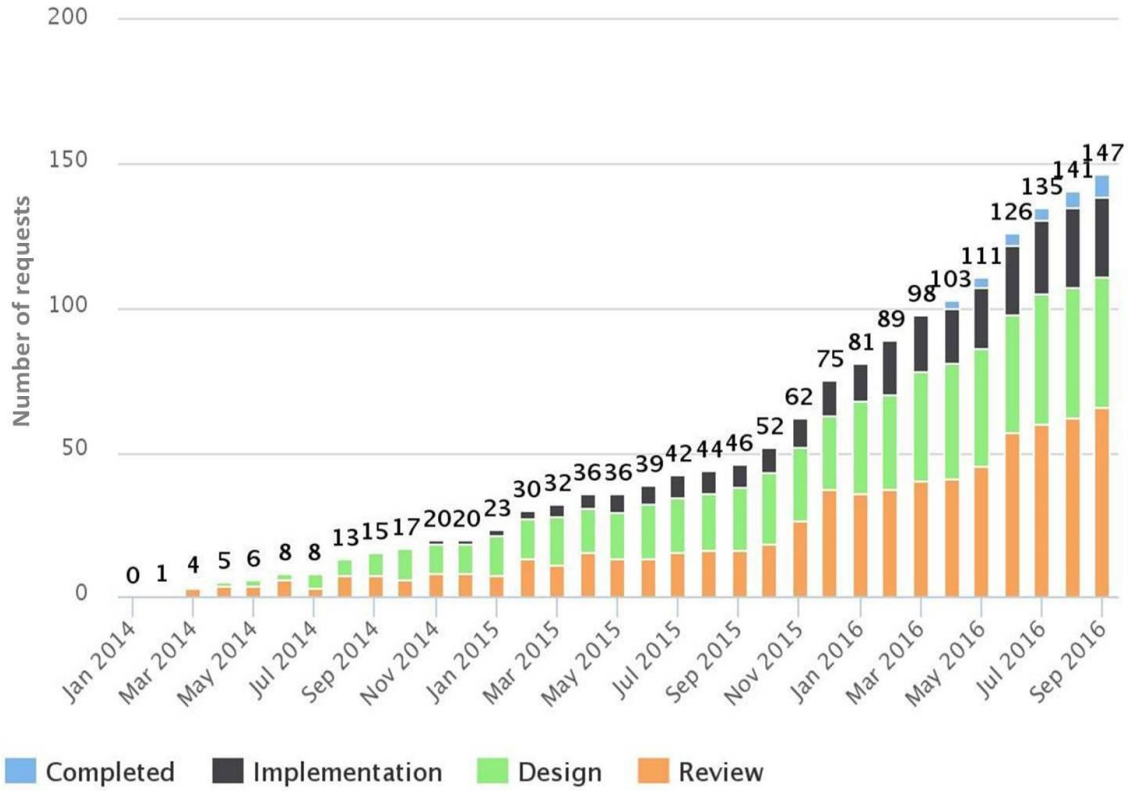
1. Function 1: responding to requests from developing countries

92. As at September 2016, the CTCN had engaged with 67 non-Annex I Parties regarding 147 requests and response plans. Both the number of requests and their progression by stage of development has increased each month, and responses to the first requests for technical assistance have been successfully implemented (see the figure below). More requests are poised to be completed before the end of 2016.

93. The CTCN has increasingly drawn on the expertise of its Network members to respond to the requests for technical assistance received from developing countries, and anticipates that this trend will continue. Although based on a very small sample size, the number of requests being responded to by Network members has increased fourfold from 3 in 2015 to 12 in 2016.

94. On the basis of the current prioritization criteria approved by the Advisory Board, most of the requests submitted to the CTCN have been deemed eligible, with only two not deemed eligible. In March 2015, the CTCN incurred its first cases of requests that were deemed eligible but not prioritized due to balancing criteria and limited funds. Since then, the CTCN has been increasingly facing the challenge of insufficient financial resources being available to respond to eligible requests, resulting in a commensurate increase in the number of requests that have not been prioritized.

Status of requests for technical assistance from the Climate Technology Centre and Network and its responses



95. The requests cover both climate change adaptation and mitigation, with 29 per cent focused on adaptation, 41 per cent on mitigation and 30 per cent relating to both mitigation

and adaptation. The requests are well distributed geographically, with 64 requests received from Africa, 50 from Asia and the Pacific, 30 from Latin America and the Caribbean, and 3 from Eastern Europe.

96. The majority of requests have been submitted by countries that conducted a TNA between 2009 and 2013. Considering all countries that have conducted a 'second-generation' TNA that includes a TAP, 53 per cent of requests were submitted from countries that conducted a TNA. There is a positive correlation between the requests received and the countries that have conducted a TNA. However, not all requests submitted by countries that have conducted a TNA are directly related to TNA recommendations and priorities arising from them.

97. The CTCN reviewed technical assistance timeliness and appropriateness with its Advisory Board, concluding that: (1) factors influencing the request processing timeline are numerous and the CTCN has a limited ability to control some of these factors; and (2) CTCN responses to requests have been appropriate when considered in the context of the eligibility criteria set by the Advisory Board and with respect to relevance to addressing the expressed needs and requirements of the requests.

98. On the basis of guidance from its Advisory Board, the CTCN is also placing greater emphasis on highlighting the impacts of its technical assistance services in relation to, for example, climate change adaptation and mitigation, relevance to country NDCs and the SDGs. A revised format for response plans is one of the means being implemented to better capture the impacts as a result of CTCN technical assistance. An initial analysis of 16 CTCN technical assistance projects that represent those that are in the advanced stages of design and implementation confirms that they all contribute to SDG 13 on climate action, while, cumulatively, they contribute to most other SDGs.

2. Function 2: fostering collaboration and access to information

99. The knowledge management system (KMS) of the CTCN continues to support the delivery of its core functions to developing country NDEs, broader government decision makers and other climate technology practitioners. The online presence of the CTCN is creating greater visibility to the wealth of existing information provided by its consortium partners and Network members, with the CTCN website averaging over 19,000 visits per month and users staying longer per visit than in the previous year.

100. The CTCN intranet (or internal portion of the KMS) has been developed to support the management and tracking of the technical assistance process, enabling CTCN staff to process requests, monitor progress and initiate/receive relevant action alerts. An online monitoring system captures information related to technical assistance (including country, thematic area, response expert team, etc.), enabling an enhanced monitoring and evaluation functionality, including the generation of automatic and up-to-date visualizations (i.e. graphs and charts), which are also available for public viewing. The intranet provides further support for the management of technical assistance through the development of an online matchmaking system. This matchmaking tool analyses NDE requests and then ranks organizations, both consortium partners and Network members, according to their relevant experience and expertise. The information generated assists the climate technology managers in identifying the best candidates for the response expert teams.

101. The CTCN intranet now includes a Network member dashboard with an integrated Network application evaluation system that streamlines the work of the Network team of the CTCN.

102. The CTCN is changing its approach to the further development of the KMS and, in particular, its 'technology library'. The proposed approach will integrate technology information into the KMS by linking technology information to CTCN work areas such as

technical assistance, network, capacity-building, and regional and sector web pages. The enhancement of KMS technology information will be prioritized on the basis of the identified needs, such as through an analysis of technical assistance requests, NDCs, TNAs and TAPs. Network members, including those from BINGOs, ENGOs and RINGOs, will be engaged to provide this focused technical content.

3. Function 3: strengthening of networks, partnerships and capacity-building

103. Similar to 2015, during 2016 the CTCN has designed a series of Regional Forums for NDEs, with a continued focus on supporting NDEs to identify and access funding for follow-up actions to CTCN requests or other climate technology activities through an enhanced relationship with representatives of subregional, regional and multilateral development banks, the GCF and other financial mechanisms relevant for climate technologies. The Regional Forums also provide the opportunity to reflect on and discuss the outcomes of COP 21 and specifically on how the CTCN can support the identification and implementation of technologies that may lead to achieving the targets defined in the NDCs of developing countries.

104. In the first half of 2016, Regional Forums were held in West Asia, Central Asia and Eastern Europe, and Asia. The CTCN also adopted a thematic approach whereby priority adaptation and mitigation sectors were identified through an analysis of the NDCs of the countries from the region, and sector experts from the CTCN and its Network presented climate technology options with high potential for replication and scale-up. The remaining Regional Forums in this series are being planned for francophone Africa, anglophone Africa, Latin America and the Caribbean, and SIDS.

105. In 2016, the CTCN began holding stakeholder forums that bring together a wide range of leading voices on climate technology, including representatives of governments, the private sector, United Nations agencies and non-governmental organizations (NGOs), in order to help find solutions to some of the most critical challenges facing the transfer of climate-friendly technologies. The involvement of the private sector is critical, and is viewed as being key to matching government aspirations, as identified in their NDCs, with the technology markets and the availability of technologies. As part of the design of the stakeholder forum, chapters are created that aim to seed bankable and fundable projects by creating a portfolio of activities that investigate the barriers to technology transfer and engage the CTCN for assistance. The first stakeholder forum was held in Nairobi in April 2016. The initial chapters spawned from this forum have started to work with the CTCN. Additional regional stakeholder forums are being planned for Central America and the Mekong subregion.

106. Since the launch of the Request Incubator Programme for the least developed countries (LDCs) at COP 20, 17 LDCs have participated in the programme. The programme aims at enhancing the capacity of the participating LDCs to develop high-quality requests for technical assistance that have strong potential for technology deployment and transfer on the ground and to attract investments, strengthen institutional capacities related to climate technologies and reinforce national efforts on technology transfer in line with their national development objectives, including their NDCs. Since its launch, 17 requests generated by the programme have been submitted to the CTCN, and more are expected to be submitted in the coming months.

107. Since the introduction of the CTCN secondment programme, participants of the programme representing Network members (including NDEs) and CTCN consortium partners supported the CTCN at its headquarters in Copenhagen for a period of four to six months. The seconders contribute to the strategic and operational work of the CTCN, while enhancing their understanding of climate technology implementation and knowledge transfer. The third group of secondees is scheduled to start in autumn 2016.

108. The CTCN has continued with its series of webinars, which is another means for the CTCN to build the capacity of NDEs and other stakeholders in relation to climate technologies. Network members of the CTCN are now the primary group delivering CTCN webinars. The webinars introduce the main climate technologies and sectors and their contribution to increased resilience and reduced greenhouse gas emissions. Participants in the webinars have had the chance to discuss the main sectoral gaps and barriers and to learn about concrete examples of successful policies and tools that can be replicated in other regions. To date, over 3,000 participants have benefited from the 31 webinars delivered and 24 partner webinars promoted by the CTCN.

4. Other activities

109. The secretariat informed the Advisory Board at its 7th meeting that it is on schedule regarding decision 2/CP.17, paragraph 20, whereby "The secretariat, subject to the availability of resources, shall commission an independent review of the effective implementation of the Climate Technology Centre and Network four years after its inception". The CTCN stands ready to fully support the secretariat in this review.

5. Key messages

110. Building on the work carried out in 2016, the CTCN wishes to deliver the following key messages for COP 22, which are also contained in annex III.

111. With the CTCN fully operational, both the number of requests and their progression by stage of development has increased each month, and responses to the first seven requests for technical assistance have been successfully implemented. Another seven requests are poised to be completed before the end of 2016.

112. The CTCN has increasingly drawn on the expertise of its Network members to respond to requests for technical assistance received from developing countries, and anticipates that this trend will continue. Although based on a very small sample size, the number of requests being responded to by Network members has increased fourfold from 2015 to 2016.

113. The CTCN has now received nearly 150 requests for technical assistance from developing countries. The CTCN incurred, in March 2015, its first cases of requests that were deemed eligible but not prioritized due to balancing criteria and limited funds. Since then, the CTCN is increasingly facing the challenge of insufficient financial resources available to respond to eligible requests, resulting in a commensurate increase in the number of requests that are not being prioritized.

114. The requests submitted to the CTCN by developing countries are in line with their national development objectives including their NDCs. The majority of requests have been submitted by countries that conducted a TNA between 2009 and 2013.

115. The CTCN is highlighting the impacts of its technical assistance services in relation to, for example, climate change adaptation and mitigation, relevance to country NDCs and the SDGs. An initial analysis of 16 CTCN technical assistance projects that represent those that are in advanced stages of design and implementation confirms that they all contribute to SDG 13 on climate action, while, cumulatively, they contribute to most other SDGs.

116. Total bilateral and multilateral contributions to the CTCN as at July 2016 amounted to USD 31.3 million, and represent an incremental increase of USD 2.8 million over the last year. The rate of contributions to the CTCN is a concern, as it is inconsistent with the planned year over year budget increase which is necessary to accommodate the increasing level of technical assistance activities. UNEP and UNIDO, as the co-leads of the CTCN

consortium, continue to engage with current and other potential donors to secure additional funds.

117. The CTCN is also engaging Network members, including NDEs, as a means to provide and/or fund CTCN services. The precise mechanism will need to be elaborated by the CTCN, but it could be an in-kind contribution, either partially or wholly contributing technical expertise to respond to CTCN requests from developing countries.

118. The CTCN continues to explore linkages between the Technology Mechanism and the Financial Mechanism, including through an in-session workshop at SBSTA 44 and SBI 44, as one of the means to ensure sustainable, adequate and predictable funds in support of the activities of the CTCN. Though discussions are ongoing with both the GCF and the GEF, the operating entities of the Financial Mechanism, any additional project funding is not expected to address the near-term funding requirements of the CTCN.

119. The CTCN will continue to prioritize the provision of technical assistance to developing countries with a balance in terms of the criteria set by its Advisory Board, and in accordance with its budget circumstances.

120. GCF support is being explored by using CTCN services to complement GCF readiness and Project Preparation Facility offerings. This would have the added benefit of allowing for the establishment of the enabling conditions for and the development of robust GCF proposals to accelerate the scaled deployment of climate adaptation and mitigation technologies in developing countries.

121. The CTCN is actively engaging with MDBs and their GEF-funded regional climate technology transfer and finance centres. Collaborative activities with MDBs include the implementation of technical assistance requests with scalable investment potential, participation in relevant Regional NDE Forums, and the organization of joint meetings to promote knowledge-sharing and strengthening of networks.

122. In accordance with its stakeholder engagement plan, the CTCN began holding stakeholder forums that bring together a wide range of leading voices on climate technology, including representatives of governments, the private sector, United Nations agencies and NGOs, to help find solutions to some of the most critical challenges facing the transfer of climate-friendly technologies. The involvement of the private sector and its expertise is viewed as being critical to matching government aspirations as identified in their NDCs with available technologies in the technology markets.

123. To support these outreach and partnership efforts, at its 8th meeting the Advisory Board clearly articulated a call for financial support, strengthened collaboration with the Financial Mechanism and guaranteed operational funding for the CTCN to ensure its continued operation.

124. The CTCN acknowledges the importance of technology RD&D, including the development and enhancement of endogenous capacities and technologies, to the Technology Mechanism and the work of the CTCN. In this regard, the Advisory Board has formed a task force to help guide the CTCN on how RD&D should best be incorporated into its technical assistance services. The CTCN is working collaboratively with the TEC on RD&D, and participates in meetings of the TEC task force on RD&D with the intention to share information and ensure a coordinated approach.

125. The CTCN has worked closely with the TEC during 2016 to respond to tasks mandated by Parties. In addition to the in-session workshop at SBSTA 44 and SBI 44, and on the topic of RD&D, the CTCN has collaborated with the TEC at an operational level. For example, the UNFCCC secretariat participated in CTCN Regional NDE Forums to present the work of the TEC. The CTCN looks forward to continuing to collaborate with the TEC, including the organization of joint CTCN Advisory Board/TEC meetings.

126. The Advisory Board, at its 8th meeting, was supportive of the request on behalf of the ENGO, BINGO and RINGO Advisory Board members that their maximum term be extended from one year to two years to allow these constituencies to better contribute to the Advisory Board discussions and to bring their terms of office in line with other members. However, it was noted that this is a decision that must be made by the COP.

Annex I

Outcomes of the consultations among the Technology Executive Committee, the Climate Technology Centre and Network, the Green Climate Fund and the Global Environment Facility on linkages between the Technology Mechanism and the Financial Mechanism

[English only]

I. Background

1. The Conference of the Parties (COP), at its eighteenth session, agreed to further elaborate, at COP 20, the linkages between the Technology Mechanism and the Financial Mechanism of the Convention, taking into consideration the recommendations of the Board of the Green Climate Fund (GCF), developed in accordance with decision 3/CP.17, paragraph 17, and of the Technology Executive Committee (TEC), developed in accordance with decision 4/CP.17, paragraph 6.[1] In response to this request, the TEC prepared its recommendations on linkages between the Technology Mechanism and the Financial Mechanism for consideration by COP 20. [2]

2. COP 21 welcomed the recommendations of the TEC on linkages between the Technology Mechanism and the Financial Mechanism. [3] COP 21 requested the TEC, the Climate Technology Centre and Network (CTCN) and the operating entities of the Financial Mechanism to continue to consult on and further elaborate, including through an in-session workshop at the forty-fourth sessions of the subsidiary bodies, the linkages between the Technology Mechanism and the Financial Mechanism. [4]COP 21 also requested the TEC to include, in its annual report, the findings arising from these activities for consideration by COP 22, taking into consideration the recommendations of the GCF Board on this matter.

II. Outcomes of the consultations between the Technology Executive Committee, the Climate Technology Centre and Network, the Green Climate Fund and the Global Environment Facility on linkages between the Technology Mechanism and the Financial Mechanism

3. The TEC, the CTCN, the GCF and the Global Environment Facility (GEF) continued their consultations on linkages between the Technology Mechanism and the Financial Mechanism with a view to further elaborating these linkages. These consultations took place through various means, including meetings and conference calls among the Chairs and Co-Chairs of these bodies and through the participation of representatives of the GCF and the GEF in the meetings of the TEC and the Advisory Board of the CTCN. In addition, an in-session workshop on linkages between the Technology Mechanism and the Financial Mechanism of the Convention was held.

[1] Decision 1/CP.18, paragraph 62.
[2] FCCC/CP/2014/6.
[3] The recommendations of the TEC on linkages between the Technology Mechanism and the Financial Mechanism are contained in document FCCC/CP/2014/6.
[4] Decision 13/CP.21.

A. Outcomes of the workshop on linkages between the Technology Mechanism and the Financial Mechanism

4. The TEC, in cooperation with the CTCN, the GCF and the GEF, organized an in-session workshop on linkages between the Technology Mechanism and the Financial Mechanism of the Convention at the forty-fourth sessions of the subsidiary bodies. [5]

5. The workshop was structured around two sessions. The first session aimed to set the scene for the workshop by introducing the functions and activities of the TEC, the CTCN and the operating entities of the Financial Mechanism. The second session was a panel discussion among representatives of the CTCN, the GCF, the GEF, the TEC, national designated entities, national designated authorities, the United Nations Environment Programme and the United Nations Industrial Development Organization, focusing on enhancing cooperation and collaboration between the TEC, the CTCN and the operating entities of the Financial Mechanism. Both sessions were followed by a question and answer session with the active engagement of the audience. [6]

6. Panellists highlighted the importance of linkages between the Technology Mechanism and the Financial Mechanism, and of joint work between these mechanisms to accelerate action on the ground. Some panellists identified linkages between the Technology Mechanism and the Financial Mechanism at different levels, including at the activity, institutional and systemic levels. Panellists further noted the complementary services and support provided by the TEC, the CTCN, the GCF and the GEF in terms of strategic policy advice, technical assistance and support for investment projects and programmes. Some panellists also highlighted the catalytic role of technology needs assessments in enhancing coherence and synergy between the Technology Mechanism and the Financial Mechanism at the national level. In identifying potential areas for cooperation and collaboration, panellists highlighted that these may build on the strategic plans and respective mandates of the respective body/entity.

7. In his conclusion, the moderator of the workshop highlighted that the workshop had contributed to:

(a) Enhancing understanding on the functions and activities of the Technology Mechanism and the Financial Mechanism;

(b) Enhancing understanding on the benefits and value of linkages between the Technology Mechanism and the Financial Mechanism in supporting developing countries to access financial resources for, and scale up action on, technology development and transfer;

(c) Identifying ways to enhance coherence and synergies between the Technology Mechanism and the Financial Mechanism and ways to enhance cooperation and collaboration between the TEC, the CTCN and the operating entities of the Financial Mechanism.

[5] See <http://unfccc.int/ttclear/templates/render_cms_page?s=events_ws_tmfm>. The workshop report is available at <http://goo.gl/zkLHeI>.

[6] Participants at the workshop included representatives from Parties, relevant international organizations, intergovernmental organizations and non-governmental organizations, the Chair of the TEC, the Chair of the CTCN Advisory Board, the Director of the CTCN, a Co-Chair of the GCF Board and representatives of the GCF and GEF secretariats.

B. Outcomes of the consultations between the Technology Executive Committee, the Climate Technology Centre and Network, the Green Climate Fund and the Global Environment Facility on linkages between the Technology Mechanism and the Financial Mechanism

8. The workshop was an important step in the ongoing consultation process among the TEC, the CTCN, the GCF and the GEF on further elaborating the linkages between the Technology Mechanism and the Financial Mechanism.

9. As part of its recommendations, referred to in paragraph 2 above, the TEC identified possible areas for collaboration between the TEC, the GEF and the Standing Committee on Finance (SCF). [7]

1. Consideration of linkages between the Technology Mechanism and the Financial Mechanism by the Board of the Green Climate Fund

10. The GCF Board, at its 13th meeting, considered the relationship with UNFCCC climate change thematic bodies.

11. It was noted that the GCF Board, at its 13th meeting, decided to hold an annual meeting, in accordance with paragraph 70 of the Governing Instrument for the GCF, in order to enhance cooperation and coherence of engagement between the GCF and UNFCCC thematic bodies. It was further noted that the meeting will be chaired by the Co-Chairs of the GCF Board and organized by the GCF secretariat on an annual basis to be held in conjunction with the COP. [8]

12. In addition, the GCF Board requested the GCF secretariat to strengthen its current approach to engaging thematic bodies, including through:

(a) Exchanging relevant information;

(b) Participating in flagship activities of the thematic bodies, including in relevant technical workshops and events;

(c) Identifying components of the programmes and workplans of the thematic bodies that are related to the GCF, and, where appropriate, updating the work programme of the GCF secretariat to improve coordination;

(d) Reporting the outcome of engagement with thematic bodies to the GCF Board in the report on the activities of the GCF secretariat. [9]

13. The GCF Board is scheduled to consider, at its 14th meeting (October 2016), ways to provide support pursuant to the existing GCF modalities, for facilitating access to environmentally sound technologies in developing countries, and for undertaking collaborative research and development for enabling developing countries to enhance their mitigation and adaptation action. [10]

14. It was further noted that the GCF Board decided to invite the Chair of the TEC and the Chair of the Advisory Board of the CTCN to present to the Board during its consideration of technology matters at the 14th meeting of the Board.

[7] The TEC recommendations on linkages with the GEF and the SCF are contained in document FCCC/CP/2014/6.

[8] GCF decision B.13/11.

[9] GCF decision B.13/11.

[10] The GCF will issue an addendum to the fifth report of the GCF to the COP after the 14th meeting of the GCF Board.

2. Consideration of linkages between the Technology Mechanism and the Financial Mechanism by the Technology Executive Committee

15. Pursuant to decision 1/CP.18, the TEC provided its recommendations on linkages between the Technology Mechanism and the Financial Mechanism for consideration by COP 20. COP 21 welcomed the recommendations of the TEC on linkages between the Technology Mechanism and the Financial Mechanism.

16. As part of its recommendations, the TEC highlighted the need to establish linkages with the Board of the GCF on issues of common interest. The TEC has identified initial areas within the Board's workplan which may benefit from inputs by the TEC. In order to jointly determine which future work would provide greater value, consultations with the Board of the GCF are required.

17. In this context, the TEC welcomes the decision of the Board of the GCF to organize an annual Board-level Engagement Forum between the GCF and the UNFCCC thematic bodies to be held in conjunction with the COP, as referred to in paragraph 11 above.

18. The TEC also welcomes the request of the GCF Board to the GCF secretariat to strengthen its current approach to engaging thematic bodies, as referred to in paragraph 12 above.

19. The TEC further welcomes the decision by the Board of the GCF to invite the Chair of the TEC and the Chair of the Advisory Board of the CTCN to present to the Board during its consideration of technology matters at the 14th meeting of the Board.

3. Consideration of linkages between the Technology Mechanism and the Financial Mechanism by the Climate Technology Centre and Network

20. The outcomes of the consultations between the CTCN, the GCF and the GEF on linkages between the Technology Mechanism and the Financial Mechanism are contained in the report of the CTCN contained in chapter IV of this report (see paras. 87–89 of this document).

Annex II

Key messages of the Technology Executive Committee for the Conference of the Parties at its twenty-second session

[English only]

1. Building on the work carried out in 2016, the Technology Executive Committee (TEC) wishes to deliver the following key messages for the Conference of the Parties (COP) at its twenty-second session.

Climate technology financing

2. The TEC welcomes the increased engagement between the Green Climate Fund (GCF) and the Climate Technology Centre (CTC), particularly with respect to exploring ways of utilizing the Readiness Programme and the Project Preparation Facility to respond to country-driven requests for technical assistance, and encourages the advancement of this linkage, including through the strengthening of collaboration between GCF national designated authorities and Climate Technology Centre and Network (CTCN) national designated entities (NDEs).

3. The TEC encourages the Global Environment Facility (GEF) and the CTC to enhance their collaboration with respect to exploring new ways of supporting climate technology related requests for technical assistance, including through the strengthening of collaboration between GEF focal points and CTCN NDEs.

South–South cooperation and triangular cooperation on technologies for adaptation

4. The TEC highlights to Parties that South–South cooperation and triangular cooperation is particularly important for adaptation given the prominence of the application of knowledge for adaptation. There are examples of successful South–South cooperation and triangular cooperation on technologies for adaptation in both the agriculture and water sectors. Such collaboration is within reach for all countries.

5. The TEC underlines that:

(a) Promoting and scaling up successful and sustainable South–South cooperation and triangular cooperation on technologies for adaptation requires concerted efforts in:

(i) Bringing multiple actors to work together in different capacities: policy, knowledge and practice;

(ii) Looking beyond climate issues to the interlinkages across sectors, such as the nexus of agriculture, water, energy and climate and other aspects of the United Nations sustainable development goals;

(b) Institutional support is a crucial element of successful South–South cooperation and triangular cooperation and is required to enable effective knowledge management and information sharing;

(c) In the context of South–South cooperation and triangular cooperation on technologies for adaptation, learning and sharing experiences through personal interactions, such as exchange programmes, has proven to be an effective tool that can help to accelerate knowledge dissemination;

(d) Global mechanisms, international networks and international organizations working on this issue, such as the United Nations Office for South-South Cooperation, can

play an important role in supporting the promotion of South–South cooperation and triangular cooperation on technologies for adaptation.

6. The TEC therefore recommends that the COP:

(a) Invite Parties to explore potential opportunities offered by South–South cooperation and triangular cooperation to help countries implement their national adaptation plans (NAPs) and nationally determined contributions (NDCs);

(b) Encourage Parties to promote the use of South–South cooperation and triangular cooperation on technologies for adaptation through sharing of experiences of best practices and technologies at the national, subregional and regional levels, and through the use of international networks and global knowledge hubs already working on South–South cooperation and triangular cooperation;

(c) Invite Parties to work in partnership with international organizations and relevant UNFCCC institutions, including the TEC and the CTCN, to enhance the coordination and coherence of efforts in their action related to South–South cooperation and triangular cooperation.

Technology needs assessments

7. The technology needs assessment (TNA) process should be integrated with other mitigation and adaptation processes. Strengthening linkages between the TNA process and the NDC and NAP processes would enhance their effectiveness and responsiveness towards implementation in developing countries. Technology action plans (TAPs) developed as part of the TNA process should be viewed as a platform for NDC and NAP implementation.

8. Enhanced financial, technical and capacity-building support are needed to facilitate the implementation of TAPs and updating of TNAs, which will bring economic, environmental and social benefits to countries. Further funding to conduct TNAs and implement TNA results, beyond the current scope of the global TNA project funding, is encouraged.

9. A monitoring and evaluation system of TNA results would deliver feedback, enhance learning and improve decision-making, and could be fed into national reporting systems.

10. Cooperation between countries could help them implement the results of TNAs, beyond the current technical support provided, and beyond the current scale of implementation. Such cooperation may include information sharing on regional implementation of environmentally sound adaptation and mitigation technologies, related success stories, lessons learned, opportunities and challenges.

Annex III

Key messages of the Climate Technology Centre and Network for the Conference of the Parties at its twenty-second session

[English only]

1. Building on the work carried out in 2016, the Climate Technology Centre and Network (CTCN) wishes to deliver the following key messages for the Conference of the Parties (COP) at its twenty-second session.

2. With the CTCN fully operational, both the number of requests and their progression by stage of development has increased each month, and responses to the first seven requests for technical assistance have been successfully implemented. Another seven requests are poised to be completed before the end of 2016.

3. The CTCN has increasingly drawn on the expertise of its Network members to respond to requests for technical assistance received from developing countries, and anticipates that this trend will continue. Although based on a very small sample size, the number of requests being responded to by Network members has increased fourfold from 2015 to 2016.

4. The CTCN has now received nearly 150 requests for technical assistance from developing countries. The CTCN incurred, in March 2015, its first cases of requests that were deemed eligible but not prioritized due to balancing criteria and limited funds. Since then, the CTCN is increasingly facing the challenge of insufficient financial resources available to respond to eligible requests, resulting in a commensurate increase in the number of requests that are not being prioritized.

5. The requests submitted to the CTCN by developing countries are in line with their national development objectives including their nationally determined contributions (NDCs). The majority of requests have been submitted by countries that conducted a technology needs assessment (TNA) between 2009 and 2013.

6. The CTCN is highlighting the impacts of its technical assistance services in relation to, for example, climate change adaptation and mitigation, relevance to country NDCs and the United Nations sustainable development goals (SDGs). An initial analysis of 16 CTCN technical assistance projects that represent those that are in advanced stages of design and implementation confirms that they all contribute to SDG 13 on climate action, while, cumulatively, they contribute to most other SDGs.

7. Total bilateral and multilateral contributions to the CTCN as at July 2016 amounted to USD 31.3 million, and represent an incremental increase of USD 2.8 million over the last year. The rate of contributions to the CTCN is a concern, as it is inconsistent with the planned year over year budget increase which is necessary to accommodate the increasing level of technical assistance activities. The United Nations Environment Programme and the United Nations Industrial Development Organization, as the co-leads of the CTCN consortium, continue to engage with current and other potential donors to secure additional funds.

8. The CTCN is also engaging Network members, including national designated entities, as a means to provide and/or fund CTCN services. The precise mechanism will need to be elaborated by the CTCN, but it could be an in-kind contribution, either partially or wholly contributing technical expertise to respond to CTCN requests from developing countries.

9. The CTCN continues to explore linkages between the Technology Mechanism and the Financial Mechanism, including through an in-session workshop at the forty-fourth sessions of the subsidiary bodies, as one of the means to ensure sustainable, adequate and predictable funds in support of the activities of the CTCN. Though discussions are ongoing with both the Green Climate Fund (GCF) and the Global Environment Facility (GEF), the operative bodies of the Financial Mechanism, any additional project funding is not expected to address the near-term funding requirements of the CTCN.

10. The CTCN will continue to prioritize the provision of technical assistance to developing countries with a balance in terms of the criteria set by its Advisory Board, and in accordance with its budget circumstances.

11. GCF support is being explored by using CTCN services to complement GCF readiness and Project Preparation Facility offerings. This would have the added benefit of allowing for the establishment of the enabling conditions for and the development of robust GCF proposals to accelerate the scaled deployment of climate adaptation and mitigation technologies in developing countries.

12. The CTCN is actively engaging with multilateral development banks (MDBs) and their GEF-funded regional climate technology transfer and finance centres. Collaborative activities with MDBs include the implementation of technical assistance requests with scalable investment potential, participation in relevant Regional NDE Forums, and the organization of joint meetings to promote knowledge-sharing and strengthening of networks.

13. In accordance with its stakeholder engagement plan, the CTCN began holding stakeholder forums that bring together a wide range of leading voices on climate technology, including representatives of governments, the private sector, United Nations agencies and non-governmental organizations, to help find solutions to some of the most critical challenges facing the transfer of climate-friendly technologies. The involvement of the private sector and its expertise is viewed as being critical to matching government aspirations as identified in their NDCs with available technologies in the technology markets.

14. To support these outreach and partnership efforts, at its 8th meeting the Advisory Board clearly articulated a call for financial support, strengthened collaboration with the Financial Mechanism and guaranteed operational funding for the CTCN to ensure its continued operation.

15. The CTCN acknowledges the importance of technology research, development and demonstration (RD&D), including the development and enhancement of endogenous capacities and technologies, to the Technology Mechanism and the work of the CTCN. In this regard, the Advisory Board has formed a task force to help guide the CTCN on how RD&D should best be incorporated into its technical assistance services. The CTCN is working collaboratively with the Technology Executive Committee (TEC) on RD&D, and participates in meetings of the TEC task force on RD&D with the intention to share information and ensure a coordinated approach.

16. The CTCN has worked closely with the TEC during 2016 to respond to tasks mandated by Parties. In addition to the in-session workshop at the forty-fourth sessions of the subsidiary bodies, and on the topic of RD&D, the CTCN has collaborated with the TEC at an operational level. For example, the UNFCCC secretariat participated in CTCN Regional NDE Forums to present the work of the TEC. The CTCN looks forward to continuing to collaborate with the TEC, including the organization of joint CTCN Advisory Board/TEC meetings.

17. The Advisory Board, at its 8th meeting, was supportive of the request on behalf of the environmental non-governmental organization, business and industry non-governmental organization, and research and independent non-governmental organization Advisory Board members that their maximum term be extended from one year to two years to allow these constituencies to better contribute to the Advisory Board discussions and to bring their terms of office in line with other members. However, it was noted that this is a decision that must be made by the COP.