Exhibit 1

United Nations FCCC/CP/2015/L.9

Framework Convention on Climate Change

Distr.: Limited
12 December 2015

Original: English

Conference of the Parties
Twenty-first session
Paris, 30 November to 11 December 2015

Agenda item 4(b)
Durban Platform for Enhanced Action (decision 1/CP.17)
Adoption of a protocol, another legal instrument, or an agreed outcome with legal force under the Convention applicable to all Parties

ADOPTION OF THE PARIS AGREEMENT

Proposal by the President

Draft decision -/CP.21

The *Conference of the Parties*,

Recalling decision 1/CP.17 on the establishment of the Ad Hoc Working Group on the Durban Platform for Enhanced Action,

Also recalling Articles 2, 3 and 4 of the Convention,

Further recalling relevant decisions of the Conference of the Parties, including decisions 1/CP.16, 2/CP.18, 1/CP.19 and 1/CP.20,

Welcoming the adoption of United Nations General Assembly resolution A/RES/70/1, "Transforming our world: the 2030 Agenda for Sustainable Development", in particular its goal 13, and the adoption of the Addis Ababa Action Agenda of the third International Conference on Financing for Development and the adoption of the Sendai Framework for Disaster Risk Reduction,

Recognizing that climate change represents an urgent and potentially irreversible threat to human societies and the planet and thus requires the widest possible cooperation by all countries, and their participation in an effective and appropriate international response, with a view to accelerating the reduction of global greenhouse gas emissions,

Also recognizing that deep reductions in global emissions will be required in order to achieve the ultimate objective of the Convention and emphasizing the need for urgency in addressing climate change,

Acknowledging that climate change is a common concern of humankind, Parties should, when taking action to address climate change, respect, promote and consider their respective obligations on human rights, the right to health, the rights of indigenous peoples,

local communities, migrants, children, persons with disabilities and people in vulnerable situations and the right to development, as well as gender equality, empowerment of women and intergenerational equity,

Also acknowledging the specific needs and concerns of developing country Parties arising from the impact of the implementation of response measures and, in this regard, decisions 5/CP.7, 1/CP.10, 1/CP.16 and 8/CP.17,

Emphasizing with serious concern the urgent need to address the significant gap between the aggregate effect of Parties' mitigation pledges in terms of global annual emissions of greenhouse gases by 2020 and aggregate emission pathways consistent with holding the increase in the global average temperature to well below 2 °C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5 °C,

Also emphasizing that enhanced pre-2020 ambition can lay a solid foundation for enhanced post-2020 ambition,

Stressing the urgency of accelerating the implementation of the Convention and its Kyoto Protocol in order to enhance pre-2020 ambition,

Recognizing the urgent need to enhance the provision of finance, technology and capacity-building support by developed country Parties, in a predictable manner, to enable enhanced pre-2020 action by developing country Parties,

Emphasizing the enduring benefits of ambitious and early action, including major reductions in the cost of future mitigation and adaptation efforts,

Acknowledging the need to promote universal access to sustainable energy in developing countries, in particular in Africa, through the enhanced deployment of renewable energy,

Agreeing to uphold and promote regional and international cooperation in order to mobilize stronger and more ambitious climate action by all Parties and non-Party stakeholders, including civil society, the private sector, financial institutions, cities and other subnational authorities, local communities and indigenous peoples,

I. ADOPTION

1. *Decides* to adopt the Paris Agreement under the United Nations Framework Convention on Climate Change (hereinafter referred to as "the Agreement") as contained in the annex;

2. *Requests* the Secretary-General of the United Nations to be the Depositary of the Agreement and to have it open for signature in New York, United States of America, from 22 April 2016 to 21 April 2017;

3. *Invites* the Secretary-General to convene a high-level signature ceremony for the Agreement on 22 April 2016;

4. *Also invites* all Parties to the Convention to sign the Agreement at the ceremony to be convened by the Secretary-General, or at their earliest opportunity, and to deposit their respective instruments of ratification, acceptance, approval or accession, where appropriate, as soon as possible;

5. *Recognizes* that Parties to the Convention may provisionally apply all of the provisions of the Agreement pending its entry into force, and *requests* Parties to provide notification of any such provisional application to the Depositary;

6. *Notes* that the work of the Ad Hoc Working Group on the Durban Platform for Enhanced Action, in accordance with decision 1/CP.17, paragraph 4, has been completed;

7. *Decides* to establish the Ad Hoc Working Group on the Paris Agreement under the same arrangement, mutatis mutandis, as those concerning the election of officers to the Bureau of the Ad Hoc Working Group on the Durban Platform for Enhanced Action;[1]

8. *Also decides* that the Ad Hoc Working Group on the Paris Agreement shall prepare for the entry into force of the Agreement and for the convening of the first session of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement;

9. *Further decides* to oversee the implementation of the work programme resulting from the relevant requests contained in this decision;

10. *Requests* the Ad Hoc Working Group on the Paris Agreement to report regularly to the Conference of the Parties on the progress of its work and to complete its work by the first session of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement;

11. *Decides* that the Ad Hoc Working Group on the Paris Agreement shall hold its sessions starting in 2016 in conjunction with the sessions of the Convention subsidiary bodies and shall prepare draft decisions to be recommended through the Conference of the Parties to the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement for consideration and adoption at its first session;

II. INTENDED NATIONALLY DETERMINED CONTRIBUTIONS

12. *Welcomes* the intended nationally determined contributions that have been communicated by Parties in accordance with decision 1/CP.19, paragraph 2(b);

13. *Reiterates* its invitation to all Parties that have not yet done so to communicate to the secretariat their intended nationally determined contributions towards achieving the objective of the Convention as set out in its Article 2 as soon as possible and well in advance of the twenty-second session of the Conference of the Parties (November 2016) and in a manner that facilitates the clarity, transparency and understanding of the intended nationally determined contributions;

14. *Requests* the secretariat to continue to publish the intended nationally determined contributions communicated by Parties on the UNFCCC website;

15. *Reiterates* its call to developed country Parties, the operating entities of the Financial Mechanism and any other organizations in a position to do so to provide support for the preparation and communication of the intended nationally determined contributions of Parties that may need such support;

16. *Takes note* of the synthesis report on the aggregate effect of intended nationally determined contributions communicated by Parties by 1 October 2015, contained in document FCCC/CP/2015/7;

17. *Notes* with concern that the estimated aggregate greenhouse gas emission levels in 2025 and 2030 resulting from the intended nationally determined contributions do not fall within least-cost 2 ˚C scenarios but rather lead to a projected level of 55 gigatonnes in 2030, and *also notes* that much greater emission reduction efforts will be required than those associated with the intended nationally determined contributions in order to hold the increase in the global average temperature to below 2 ˚C above pre-industrial levels by reducing emissions to 40 gigatonnes or to 1.5 ˚C above pre-industrial levels by reducing to a level to be identified in the special report referred to in paragraph 21 below;

[1] Endorsed by decision 2/CP.18, paragraph 2.

18. *Also notes, in this context,* the adaptation needs expressed by many developing country Parties in their intended nationally determined contributions;

19. *Requests* the secretariat to update the synthesis report referred to in paragraph 16 above so as to cover all the information in the intended nationally determined contributions communicated by Parties pursuant to decision 1/CP.20 by 4 April 2016 and to make it available by 2 May 2016;

20. *Decides* to convene a facilitative dialogue among Parties in 2018 to take stock of the collective efforts of Parties in relation to progress towards the long-term goal referred to in Article 4, paragraph 1, of the Agreement and to inform the preparation of nationally determined contributions pursuant to Article 4, paragraph 8, of the Agreement;

21. *Invites* the Intergovernmental Panel on Climate Change to provide a special report in 2018 on the impacts of global warming of 1.5 °C above pre-industrial levels and related global greenhouse gas emission pathways;

III. DECISIONS TO GIVE EFFECT TO THE AGREEMENT

MITIGATION

22. *Invites* Parties to communicate their first nationally determined contribution no later than when the Party submits its respective instrument of ratification, accession, or approval of the Paris Agreement. If a Party has communicated an intended nationally determined contribution prior to joining the Agreement, that Party shall be considered to have satisfied this provision unless that Party decides otherwise;

23. *Urges* those Parties whose intended nationally determined contribution pursuant to decision 1/CP.20 contains a time frame up to 2025 to communicate by 2020 a new nationally determined contribution and to do so every five years thereafter pursuant to Article 4, paragraph 9, of the Agreement;

24. *Requests* those Parties whose intended nationally determined contribution pursuant to decision 1/CP.20 contains a time frame up to 2030 to communicate or update by 2020 these contributions and to do so every five years thereafter pursuant to Article 4, paragraph 9, of the Agreement;

25. *Decides* that Parties shall submit to the secretariat their nationally determined contributions referred to in Article 4 of the Agreement at least 9 to 12 months in advance of the relevant meeting of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement with a view to facilitating the clarity, transparency and understanding of these contributions, including through a synthesis report prepared by the secretariat;

26. *Requests* the Ad Hoc Working Group on the Paris Agreement to develop further guidance on features of the nationally determined contributions for consideration and adoption by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement at its first session;

27. *Agrees* that the information to be provided by Parties communicating their nationally determined contributions, in order to facilitate clarity, transparency and understanding, may include, as appropriate, inter alia, quantifiable information on the reference point (including, as appropriate, a base year), time frames and/or periods for implementation, scope and coverage, planning processes, assumptions and methodological approaches including those for estimating and accounting for anthropogenic greenhouse gas emissions and, as appropriate, removals, and how the Party considers that its nationally determined contribution is fair and ambitious, in the light of its national circumstances, and

how it contributes towards achieving the objective of the Convention as set out in its Article 2;

28. *Requests* the Ad Hoc Working Group on the Paris Agreement to develop further guidance for the information to be provided by Parties in order to facilitate clarity, transparency and understanding of nationally determined contributions for consideration and adoption by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement at its first session;

29. *Also requests* the Subsidiary Body for Implementation to develop modalities and procedures for the operation and use of the public registry referred to in Article 4, paragraph 12, of the Agreement, for consideration and adoption by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement at its first session;

30. *Further requests* the secretariat to make available an interim public registry in the first half of 2016 for the recording of nationally determined contributions submitted in accordance with Article 4 of the Agreement, pending the adoption by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement of the modalities and procedures referred to in paragraph 29 above;

31. *Requests* the Ad Hoc Working Group on the Paris Agreement to elaborate, drawing from approaches established under the Convention and its related legal instruments as appropriate, guidance for accounting for Parties' nationally determined contributions, as referred to in Article 4, paragraph 13, of the Agreement, for consideration and adoption by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement at its first session, which ensures that:

(a) Parties account for anthropogenic emissions and removals in accordance with common methodologies and metrics assessed by the Intergovernmental Panel on Climate Change and adopted by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement;

(b) Parties ensure methodological consistency, including on baselines, between the communication and implementation of nationally determined contributions;

(c) Parties strive to include all categories of anthropogenic emissions or removals in their nationally determined contributions and, once a source, sink or activity is included, continue to include it;

(d) Parties shall provide an explanation of why any categories of anthropogenic emissions or removals are excluded;

32. *Decides* that Parties shall apply the guidance mentioned in paragraph 31 above to the second and subsequent nationally determined contributions and that Parties may elect to apply such guidance to their first nationally determined contribution;

33. *Also decides* that the Forum on the Impact of the Implementation of response measures, under the subsidiary bodies, shall continue, and shall serve the Agreement;

34. *Further decides* that the Subsidiary Body for Scientific and Technological Advice and the Subsidiary Body for Implementation shall recommend, for consideration and adoption by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement at its first session, the modalities, work programme and functions of the Forum on the Impact of the Implementation of response measures to address the effects of the implementation of response measures under the Agreement by enhancing cooperation amongst Parties on understanding the impacts of mitigation actions under the Agreement and the exchange of information, experiences, and best practices amongst Parties to raise their resilience to these impacts;

35. *Decides* that the guidance under paragraph 31 above shall ensure that double counting is avoided on the basis of a corresponding adjustment by both Parties for anthropogenic emissions by sources and/or removals by sinks covered by their nationally determined contributions under the Agreement;

36. *Invites* Parties to communicate, by 2020, to the secretariat mid-century, long-term low greenhouse gas emission development strategies in accordance with Article 4, paragraph 19, of the Agreement, and *requests* the secretariat to publish on the UNFCCC website Parties' low greenhouse gas emission development strategies as communicated;

37. *Requests* the Subsidiary Body for Scientific and Technological Advice to develop and recommend the guidance referred to under Article 6, paragraph 2, of the Agreement for adoption by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement at its first session, including guidance to ensure that double counting is avoided on the basis of a corresponding adjustment by Parties for both anthropogenic emissions by sources and removals by sinks covered by their nationally determined contributions under the Agreement;

38. *Recommends* that the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement adopt rules, modalities and procedures for the mechanism established by Article 6, paragraph 4, of the Agreement on the basis of:

(a) Voluntary participation authorized by each Party involved;

(b) Real, measurable, and long-term benefits related to the mitigation of climate change;

(c) Specific scopes of activities;

(d) Reductions in emissions that are additional to any that would otherwise occur;

(e) Verification and certification of emission reductions resulting from mitigation activities by designated operational entities;

(f) Experience gained with and lessons learned from existing mechanisms and approaches adopted under the Convention and its related legal instruments;

39. *Requests* the Subsidiary Body for Scientific and Technological Advice to develop and recommend rules, modalities and procedures for the mechanism referred to in paragraph 38 above for consideration and adoption by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement at its first session;

40. *Also requests* the Subsidiary Body for Scientific and Technological Advice to undertake a work programme under the framework for non-market approaches to sustainable development referred to in Article 6, paragraph 8, of the Agreement, with the objective of considering how to enhance linkages and create synergy between, inter alia, mitigation, adaptation, finance, technology transfer and capacity-building, and how to facilitate the implementation and coordination of non-market approaches;

41. *Further requests* the Subsidiary Body for Scientific and Technological Advice to recommend a draft decision on the work programme referred to in paragraph 40 above, taking into account the views of Parties, for consideration and adoption by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement at its first session;

ADAPTATION

42. *Requests* the Adaptation Committee and the Least Developed Countries Expert Group to jointly develop modalities to recognize the adaptation efforts of developing

country Parties, as referred to in Article 7, paragraph 3, of the Agreement, and make recommendations for consideration and adoption by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement at its first session;

43. *Also requests* the Adaptation Committee, taking into account its mandate and its second three-year workplan, and with a view to preparing recommendations for consideration and adoption by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement at its first session:

(a) To review, in 2017, the work of adaptation-related institutional arrangements under the Convention, with a view to identifying ways to enhance the coherence of their work, as appropriate, in order to respond adequately to the needs of Parties;

(b) To consider methodologies for assessing adaptation needs with a view to assisting developing countries, without placing an undue burden on them;

44. *Invites* all relevant United Nations agencies and international, regional and national financial institutions to provide information to Parties through the secretariat on how their development assistance and climate finance programmes incorporate climate-proofing and climate resilience measures;

45. *Requests* Parties to strengthen regional cooperation on adaptation where appropriate and, where necessary, establish regional centres and networks, in particular in developing countries, taking into account decision 1/CP.16, paragraph 13;

46. *Also requests* the Adaptation Committee and the Least Developed Countries Expert Group, in collaboration with the Standing Committee on Finance and other relevant institutions, to develop methodologies, and make recommendations for consideration and adoption by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement at its first session on:

(a) Taking the necessary steps to facilitate the mobilization of support for adaptation in developing countries in the context of the limit to global average temperature increase referred to in Article 2 of the Agreement;

(b) Reviewing the adequacy and effectiveness of adaptation and support referred to in Article 7, paragraph 14(c), of the Agreement;

47. *Further requests* the Green Climate Fund to expedite support for the least developed countries and other developing country Parties for the formulation of national adaptation plans, consistent with decisions 1/CP.16 and 5/CP.17, and for the subsequent implementation of policies, projects and programmes identified by them;

LOSS AND DAMAGE

48. *Decides* on the continuation of the Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts, following the review in 2016;

49. *Requests* the Executive Committee of the Warsaw International Mechanism to establish a clearinghouse for risk transfer that serves as a repository for information on insurance and risk transfer, in order to facilitate the efforts of Parties to develop and implement comprehensive risk management strategies;

50. *Also requests* the Executive Committee of the Warsaw International Mechanism to establish, according to its procedures and mandate, a task force to complement, draw upon the work of and involve, as appropriate, existing bodies and expert groups under the Convention including the Adaptation Committee and the Least Developed Countries Expert Group, as well as relevant organizations and expert bodies outside the Convention, to develop recommendations for integrated approaches to avert, minimize and address displacement related to the adverse impacts of climate change;

51. *Further requests* the Executive Committee of the Warsaw International Mechanism to initiate its work, at its next meeting, to operationalize the provisions referred to in paragraphs 49 and 50 above, and to report on progress thereon in its annual report;

52. *Agrees* that Article 8 of the Agreement does not involve or provide a basis for any liability or compensation;

FINANCE

53. *Decides* that, in the implementation of the Agreement, financial resources provided to developing countries should enhance the implementation of their policies, strategies, regulations and action plans and their climate change actions with respect to both mitigation and adaptation to contribute to the achievement of the purpose of the Agreement as defined in Article 2;

54. *Further decides* that, in accordance with Article 9, paragraph 3, of the Agreement, developed countries intend to continue their existing collective mobilization goal through 2025 in the context of meaningful mitigation actions and transparency on implementation; prior to 2025 the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement shall set a new collective quantified goal from a floor of USD 100 billion per year, taking into account the needs and priorities of developing countries;

55. *Recognizes* the importance of adequate and predictable financial resources, including for results-based payments, as appropriate, for the implementation of policy approaches and positive incentives for reducing emissions from deforestation and forest degradation, and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks; as well as alternative policy approaches, such as joint mitigation and adaptation approaches for the integral and sustainable management of forests; while reaffirming the importance of non-carbon benefits associated with such approaches; encouraging the coordination of support from, inter alia, public and private, bilateral and multilateral sources, such as the Green Climate Fund, and alternative sources in accordance with relevant decisions by the Conference of the Parties;

56. *Decides* to initiate, at its twenty-second session, a process to identify the information to be provided by Parties, in accordance with Article 9, paragraph 5, of the Agreement with the view to providing a recommendation for consideration and adoption by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement at its first session;

57. *Also decides* to ensure that the provision of information in accordance with Article 9, paragraph 7 of the Agreement shall be undertaken in accordance with modalities, procedures and guidelines referred to in paragraph 96 below;

58. *Requests* Subsidiary Body for Scientific and Technological Advice to develop modalities for the accounting of financial resources provided and mobilized through public interventions in accordance with Article 9, paragraph 7, of the Agreement for consideration by the Conference of the Parties at its twenty-fourth session (November 2018), with the view to making a recommendation for consideration and adoption by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement at its first session;

59. *Decides* that the Green Climate Fund and the Global Environment Facility, the entities entrusted with the operation of the Financial Mechanism of the Convention, as well as the Least Developed Countries Fund and the Special Climate Change Fund, administered by the Global Environment Facility, shall serve the Agreement;

60. *Recognizes* that the Adaptation Fund may serve the Agreement, subject to relevant decisions by the Conference of the Parties serving as the meeting of the Parties to the Kyoto

Protocol and the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement;

61. *Invites* the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol to consider the issue referred to in paragraph 60 above and make a recommendation to the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement at its first session;

62. *Recommends* that the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement shall provide guidance to the entities entrusted with the operation of the Financial Mechanism of the Convention on the policies, programme priorities and eligibility criteria related to the Agreement for transmission by the Conference of the Parties;

63. *Decides* that the guidance to the entities entrusted with the operations of the Financial Mechanism of the Convention in relevant decisions of the Conference of the Parties, including those agreed before adoption of the Agreement, shall apply mutatis mutandis;

64. *Also decides* that the Standing Committee on Finance shall serve the Agreement in line with its functions and responsibilities established under the Conference of the Parties;

65. *Urges* the institutions serving the Agreement to enhance the coordination and delivery of resources to support country-driven strategies through simplified and efficient application and approval procedures, and through continued readiness support to developing country Parties, including the least developed countries and small island developing States, as appropriate;

TECHNOLOGY DEVELOPMENT AND TRANSFER

66. *Takes note of* the interim report of the Technology Executive Committee on guidance on enhanced implementation of the results of technology needs assessments as referred to in document FCCC/SB/2015/INF.3;

67. *Decides* to strengthen the Technology Mechanism and requests the Technology Executive Committee and the Climate Technology Centre and Network, in supporting the implementation of the Agreement, to undertake further work relating to, inter alia:

(a) Technology research, development and demonstration;

(b) The development and enhancement of endogenous capacities and technologies;

68. *Requests* the Subsidiary Body for Scientific and Technological Advice to initiate, at its forty-fourth session (May 2016), the elaboration of the technology framework established under Article 10, paragraph 4, of the Agreement and to report on its findings to the Conference of the Parties, with a view to the Conference of the Parties making a recommendation on the framework to the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement for consideration and adoption at its first session, taking into consideration that the framework should facilitate, inter alia:

(a) The undertaking and updating of technology needs assessments, as well as the *enhanced* implementation of their results, particularly technology action plans and project ideas, through the preparation of bankable projects;

(b) The provision of enhanced financial and technical support for the implementation of the results of the technology needs assessments;

(c) The assessment of technologies that are ready for transfer;

(d) The enhancement of enabling environments for and the addressing of barriers to the development and transfer of socially and environmentally sound technologies*;*

69. *Decides* that the Technology Executive Committee and the Climate Technology Centre and Network shall report to the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement, through the subsidiary bodies, on their activities to support the implementation of the Agreement;

70. *Also decides* to undertake a periodic assessment of the effectiveness of and the adequacy of the support provided to the Technology Mechanism in supporting the implementation of the Agreement on matters relating to technology development and transfer;

71. *Requests* the Subsidiary Body for Implementation to initiate, at its forty-fourth session , the elaboration of the scope of and modalities for the periodic assessment referred to in paragraph 70 above, taking into account the review of the Climate Technology Centre and Network as referred to in decision 2/CP.17, annex VII, paragraph 20 and the modalities for the global stocktake referred to in Article 14 of the Agreement, for consideration and adoption by the Conference of the Parties at its twenty-fifth session (November 2019);

CAPACITY-BUILDING

72. *Decides* to establish the Paris Committee on Capacity-building whose aim will be to address gaps and needs, both current and emerging, in implementing capacity-building in developing country Parties and further enhancing capacity-building efforts, including with regard to coherence and coordination in capacity-building activities under the Convention;

73. *Also decides* that the Paris Committee on Capacity-building will manage and oversee the work plan mentioned in paragraph 74 below;

74. *Further decides* to launch a work plan for the period 2016–2020 with the following activities:

(a) Assessing how to increase synergies through cooperation and avoid duplication among existing bodies established under the Convention that implement capacity-building activities, including through collaborating with institutions under and outside the Convention;

(b) Identifying capacity gaps and needs and recommending ways to address them;

(c) Promoting the development and dissemination of tools and methodologies for the implementation of capacity-building;

(d) Fostering global, regional, national and subnational cooperation;

(e) Identifying and collecting good practices, challenges, experiences, and lessons learned from work on capacity-building by bodies established under the Convention;

(f) Exploring how developing country Parties can take ownership of building and maintaining capacity over time and spac*e;*

(g) Identifying opportunities to strengthen capacity at the national, regional, and subnational level;

(h) Fostering dialogue, coordination, collaboration and coherence among relevant processes and initiatives under the Convention, including through exchanging information on capacity-building activities and strategies of bodies established under the Convention;

(i) Providing guidance to the secretariat on the maintenance and further development of the web-based capacity-building portal;

75. *Decides* that the Paris Committee on Capacity-building will annually focus on an area or theme related to enhanced technical exchange on capacity-building, with the purpose of maintaining up-to-date knowledge on the successes and challenges in building capacity effectively in a particular area;

76. *Requests* the Subsidiary Body for Implementation to organize annual in-session meetings of the Paris Committee on Capacity-building;

77. *Also requests* the Subsidiary Body for Implementation to develop the terms of reference for the Paris Committee on Capacity-building, in the context of the third comprehensive review of the implementation of the capacity-building framework, also taking into account paragraphs 75, 76, 77 and 78 above and paragraphs 82 and 83 below, with a view to recommending a draft decision on this matter for consideration and adoption by the Conference of the Parties at its twenty-second session;

78. *Invites* Parties to submit their views on the membership of the Paris Committee on Capacity-building by 9 March 2016;[2]

79. *Requests* the secretariat to compile the submissions referred to in paragraph 78 above into a miscellaneous document for consideration by the Subsidiary Body for Implementation at its forty-fourth session;

80. *Decides* that the inputs to the Paris Committee on Capacity-building will include, inter alia, submissions, the outcome of the third comprehensive review of the implementation of the capacity-building framework, the secretariat's annual synthesis report on the implementation of the framework for capacity-building in developing countries, the secretariat's compilation and synthesis report on capacity-building work of bodies established under the Convention and its Kyoto Protocol, and reports on the Durban Forum and the capacity-building portal;

81. *Requests* the Paris Committee on Capacity-building to prepare annual technical progress reports on its work, and to make these reports available at the sessions of the Subsidiary Body for Implementation coinciding with the sessions of the Conference of the Parties;

82. *Also requests* the Conference of the Parties at its twenty-fifth session (November 2019), to review the progress, need for extension, the effectiveness and enhancement of the Paris Committee on Capacity-building and to take any action it considers appropriate, with a view to making recommendations to the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement at its first session on enhancing institutional arrangements for capacity-building consistent with Article 11, paragraph 5, of the Agreement;

83. *Calls upon* all Parties to ensure that education, training and public awareness, as reflected in Article 6 of the Convention and in Article 12 of the Agreement are adequately considered in their contribution to capacity-building;

84. *Invites* the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement at its first session to explore ways of enhancing the implementation of training, public awareness, public participation and public access to information so as to enhance actions under the Agreement;

[2] Parties should submit their views via the submissions portal at <http://www.unfccc.int/5900>.

TRANSPARENCY OF ACTION AND SUPPORT

85. *Decides* to establish a Capacity-building Initiative for Transparency in order to build institutional and technical capacity, both pre- and post-2020. This initiative will support developing country Parties, upon request, in meeting enhanced transparency requirements as defined in Article 13 of the Agreement in a timely manner;

86. *Also decides* that the Capacity-building Initiative for Transparency will aim:

(a) To strengthen national institutions for transparency-related activities in line with national priorities;

(b) To provide relevant tools, training and assistance for meeting the provisions stipulated in Article 13 of the Agreement;

(c) To assist in the improvement of transparency over time;

87. *Urges and requests* the Global Environment Facility to make arrangements to support the establishment and operation of the Capacity-building Initiative for Transparency as a priority reporting-related need, including through voluntary contributions to support developing countries in the sixth replenishment of the Global Environment Facility and future replenishment cycles, to complement existing support under the Global Environment Facility;

88. *Decides* to assess the implementation of the Capacity-building Initiative for Transparency in the context of the seventh review of the financial mechanism;

89. *Requests* that the Global Environment Facility, as an operating entity of the financial mechanism include in its annual report to the Conference of the Parties the progress of work in the design, development and implementation of the Capacity-building Initiative for Transparency referred to in paragraph 85 above starting in 2016;

90. *Decides* that, in accordance with Article 13, paragraph 2, of the Agreement, developing countries shall be provided flexibility in the implementation of the provisions of that Article, including in the scope, frequency and level of detail of reporting, and in the scope of review, and that the scope of review could provide for in-country reviews to be optional, while such flexibilities shall be reflected in the development of modalities, procedures and guidelines referred to in paragraph 92 below;

91. *Also decides* that all Parties, except for the least developed country Parties and small island developing States, shall submit the information referred to in Article 13, paragraphs 7, 8, 9 and 10, as appropriate, no less frequently than on a biennial basis, and that the least developed country Parties and small island developing States may submit this information at their discretion;

92. *Requests* the Ad Hoc Working Group on the Paris Agreement to develop recommendations for modalities, procedures and guidelines in accordance with Article 13, paragraph 13, of the Agreement, and to define the year of their first and subsequent review and update, as appropriate, at regular intervals, for consideration by the Conference of the Parties, at its twenty-fourth session, with a view to forwarding them to the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement for adoption at its first session;

93. *Also requests* the Ad Hoc Working Group on the Paris Agreement in developing the recommendations for the modalities, procedures and guidelines referred to in paragraph 92 above to take into account, inter alia:

(a) The importance of facilitating improved reporting and transparency over time;

(b) The need to provide flexibility to those developing country Parties that need it in the light of their capacities;

(c) The need to promote transparency, accuracy, completeness, consistency, and comparability;

(d) The need to avoid duplication as well as undue burden on Parties and the secretariat;

(e) The need to ensure that Parties maintain at least the frequency and quality of reporting in accordance with their respective obligations under the Convention;

(f) The need to ensure that double counting is avoided;

(g) The need to ensure environmental integrity;

94. *Further requests* the Ad Hoc Working Group on the Paris Agreement, when developing the modalities, procedures and guidelines referred to in paragraph 92 above, to draw on the experiences from and take into account other on-going relevant processes under the Convention;

95. *Requests* the Ad Hoc Working Group on the Paris Agreement, when developing modalities, procedures and guidelines referred to in paragraph 92 above, to consider, inter alia:

(a) The types of flexibility available to those developing countries that need it on the basis of their capacities;

(b) The consistency between the methodology communicated in the nationally determined contribution and the methodology for reporting on progress made towards achieving individual Parties' respective nationally determined contribution;

(c) That Parties report information on adaptation action and planning including, if appropriate**,** their national adaptation plans, with a view to collectively exchanging information and sharing lessons learned;

(d) Support provided, enhancing delivery of support for both adaptation and mitigation through, inter alia, the common tabular formats for reporting support, and taking into account issues considered by the Subsidiary Body for Scientific and Technological Advice on methodologies for reporting on financial information, and enhancing the reporting by developing countries on support received, including the use, impact and estimated results thereof;

(e) Information in the biennial assessments and other reports of the Standing Committee on Finance and other relevant bodies under the Convention;

(f) Information on the social and economic impact of response measures;

96. *Also requests* the Ad Hoc Working Group on the Paris Agreement, when developing recommendations for modalities, procedures and guidelines referred to in paragraph 92 above, to enhance the transparency of support provided in accordance with Article 9 of the Agreement;

97. *Further requests* the Ad Hoc Working Group on the Paris Agreement to report on the progress of work on the modalities, procedures and guidelines referred to in paragraph 92 above to future sessions of the Conference of the Parties, and that this work be concluded no later than 2018;

98. *Decides* that the modalities, procedures and guidelines developed under paragraph 92 above, shall be applied upon the entry into force of the Paris Agreement;

99. *Also decides* that the modalities, procedures and guidelines of this transparency framework shall build upon and eventually supercede the measurement, reporting and verification system established by paragraphs 40 to 47 and 60 to 64 of decision 1/CP.16 and paragraph 12 to 62 of decision 2/CP.17 immediately following the submission of the final biennial reports and biennial update reports;

GLOBAL STOCKTAKE

100. *Requests* the Ad Hoc Working Group on the Paris Agreement to identify the sources of input for the global stocktake referred to in Article 14 of the Agreement and to report to the Conference of the Parties, with a view to the Conference of the Parties making a recommendation to the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement for consideration and adoption at its first session, including, but not limited to:

(a) Information on:

(i) The overall effect of the nationally determined contributions communicated by Parties;

(ii) The state of adaptation efforts, support, experiences and priorities from the communications referred to in Article 7, paragraphs 10 and 11, of the Agreement, and reports referred to in Article 13, paragraph 7, of the Agreement;

(iii) The mobilization and provision of support;

(b) The latest reports of the Intergovernmental Panel on Climate Change;

(c) Reports of the subsidiary bodies;

101. *Also requests* the Subsidiary Body for Scientific and Technological Advice to provide advice on how the assessments of the Intergovernmental Panel on Climate Change can inform the global stocktake of the implementation of the Agreement pursuant to its Article 14 of the Agreement and to report on this matter to the Ad Hoc Working Group on the Paris Agreement at its second session;

102. *Further requests* the Ad Hoc Working Group on the Paris Agreement to develop modalities for the global stocktake referred to in Article 14 of the Agreement and to report to the Conference of the Parties, with a view to making a recommendation to the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement for consideration and adoption at its first session;

FACILITATING IMPLEMENTATION AND COMPLIANCE

103. *Decides* that the committee referred to in Article 15, paragraph 2, of the Agreement shall consist of 12 members with recognized competence in relevant scientific, technical, socio-economic or legal fields, to be elected by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement on the basis of equitable geographical representation, with two members each from the five regional groups of the United Nations and one member each from the small island developing States and the least developed countries, while taking into account the goal of gender balance;

104. *Requests* the Ad Hoc Working Group on the Paris Agreement to develop the modalities and procedures for the effective operation of the committee referred to in Article 15, paragraph 2, of the Agreement, with a view to the Ad Hoc Working Group on the Paris Agreement completing its work on such modalities and procedures for consideration and adoption by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement at its first session;

FINAL CLAUSES

105. *Also requests* the secretariat, solely for the purposes of Article 21 of the Agreement, to make available on its website on the date of adoption of the Agreement as well as in the report of the Conference of the Parties at its twenty-first session, information on the most up-to-date total and per cent of greenhouse gas emissions communicated by Parties to the Convention in their national communications, greenhouse gas inventory reports, biennial reports or biennial update reports;

IV. ENHANCED ACTION PRIOR TO 2020

106. *Resolves* to ensure the highest possible mitigation efforts in the pre-2020 period, including by:

(a) Urging all Parties to the Kyoto Protocol that have not already done so to ratify and implement the Doha Amendment to the Kyoto Protocol;

(b) Urging all Parties that have not already done so to make and implement a mitigation pledge under the Cancun Agreements;

(c) Reiterating its resolve, as set out in decision 1/CP.19, paragraphs 3 and 4, to accelerate the full implementation of the decisions constituting the agreed outcome pursuant to decision 1/CP.13 and enhance ambition in the pre-2020 period in order to ensure the highest possible mitigation efforts under the Convention by all Parties;

(d) Inviting developing country Parties that have not submitted their first biennial update reports to do so as soon as possible;

(e) Urging all Parties to participate in the existing measurement, reporting and verification processes under the Cancun Agreements, in a timely manner, with a view to demonstrating progress made in the implementation of their mitigation pledges;

107. *Encourages* Parties to promote the voluntary cancellation by Party and non-Party stakeholders, without double counting of units issued under the Kyoto Protocol, including certified emission reductions that are valid for the second commitment period;

108. *Urges* host and purchasing Parties to report transparently on internationally transferred mitigation outcomes, including outcomes used to meet international pledges, and emission units issued under the Kyoto Protocol with a view to promoting environmental integrity and avoiding double counting;

109. *Recognizes* the social, economic and environmental value of voluntary mitigation actions and their co-benefits for adaptation, health and sustainable development;

110. *Resolves* to strengthen, in the period 2016–2020, the existing technical examination process on mitigation as defined in decision 1/CP.19, paragraph 5(a), and decision 1/CP.20, paragraph 19, taking into account the latest scientific knowledge, including by:

(a) Encouraging Parties, Convention bodies and international organizations to engage in this process, including, as appropriate, in cooperation with relevant non-Party stakeholders, to share their experiences and suggestions, including from regional events, and to cooperate in facilitating the implementation of policies, practices and actions identified during this process in accordance with national sustainable development priorities;

(b) Striving to improve, in consultation with Parties, access to and participation in this process by developing country Party and non-Party experts;

(c) Requesting the Technology Executive Committee and the Climate Technology Centre and Network in accordance with their respective mandates:

(i) To engage in the technical expert meetings and enhance their efforts to facilitate and support Parties in scaling up the implementation of policies, practices and actions identified during this process;

(ii) To provide regular updates during the technical expert meetings on the progress made in facilitating the implementation of policies, practices and actions previously identified during this process;

(iii) To include information on their activities under this process in their joint annual report to the Conference of the Parties;

(d) Encouraging Parties to make effective use of the Climate Technology Centre and Network to obtain assistance to develop economically, environmentally and socially viable project proposals in the high mitigation potential areas identified in this process;

111. *Encourages* the operating entities of the Financial Mechanism of the Convention to engage in the technical expert meetings and to inform participants of their contribution to facilitating progress in the implementation of policies, practices and actions identified during the technical examination process;

112. *Requests* the secretariat to organize the process referred to in paragraph 110 above and disseminate its results, including by:

(a) Organizing, in consultation with the Technology Executive Committee and relevant expert organizations, regular technical expert meetings focusing on specific policies, practices and actions representing best practices and with the potential to be scalable and replicable;

(b) Updating, on an annual basis, following the meetings referred to in paragraph 112(a) above and in time to serve as input to the summary for policymakers referred to in paragraph 112(c) below, a technical paper on the mitigation benefits and co-benefits of policies, practices and actions for enhancing mitigation ambition, as well as on options for supporting their implementation, information on which should be made available in a user-friendly online format;

(c) Preparing, in consultation with the champions referred to in paragraph 122 below, a summary for policymakers, with information on specific policies, practices and actions representing best practices and with the potential to be scalable and replicable, and on options to support their implementation, as well as on relevant collaborative initiatives, and publishing the summary at least two months in advance of each session of the Conference of the Parties as input for the high-level event referred to in paragraph 121 below;

113. *Decides* that the process referred to in paragraph 110 above should be organized jointly by the Subsidiary Body for Implementation and the Subsidiary Body for Scientific and Technological Advice and should take place on an ongoing basis until 2020;

114. *Also decides* to conduct in 2017 an assessment of the process referred to in paragraph 110 above so as to improve its effectiveness;

115. *Resolves* to enhance the provision of urgent and adequate finance, technology and capacity-building support by developed country Parties in order to enhance the level of ambition of pre-2020 action by Parties, and in this regard *strongly urges* developed country Parties to scale up their level of financial support, with a concrete roadmap to achieve the goal of jointly providing USD 100 billion annually by 2020 for mitigation and adaptation while significantly increasing adaptation finance from current levels and to further provide appropriate technology and capacity-building support;

116. *Decides* to conduct a facilitative dialogue in conjunction with the twenty-second session of the Conference of the Parties to assess the progress in implementing decision 1/CP.19, paragraphs 3 and 4, and identify relevant opportunities to enhance the provision of financial resources, including for technology development and transfer and capacity-building support, with a view to identifying ways to enhance the ambition of mitigation efforts by all Parties, including identifying relevant opportunities to enhance the provision and mobilization of support and enabling environments;

117. *Acknowledges* with appreciation the results of the Lima-Paris Action Agenda, which build on the climate summit convened on 23 September 2014 by the Secretary-General of the United Nations;

118. *Welcomes* the efforts of non-Party stakeholders to scale up their climate actions, and *encourages* the registration of those actions in the Non-State Actor Zone for Climate Action platform;[3]

119. *Encourages* Parties to work closely with non-Party stakeholders to catalyse efforts to strengthen mitigation and adaptation action;

120. *Also encourages* non-Party stakeholders to increase their engagement in the processes referred to in paragraph 110 above and paragraph 125 below;

121. *Agrees* to convene, pursuant to decision 1/CP.20, paragraph 21, building on the Lima-Paris Action Agenda and in conjunction with each session of the Conference of the Parties during the period 2016–2020, a high-level event that:

(a) Further strengthens high-level engagement on the implementation of policy options and actions arising from the processes referred to in paragraph 110 above and paragraph below, drawing on the summary for policymakers referred to in paragraph 112(c) above;

(b) Provides an opportunity for announcing new or strengthened voluntary efforts, initiatives and coalitions, including the implementation of policies, practices and actions arising from the processes referred to in paragraph 110 above and paragraph 125 below and presented in the summary for policymakers referred to in paragraph 112(c) above;

(c) Takes stock of related progress and recognizes new or strengthened voluntary efforts, initiatives and coalitions;

(d) Provides meaningful and regular opportunities for the effective high-level engagement of dignitaries of Parties, international organizations, international cooperative initiatives and non-Party stakeholders;

122. *Decides* that two high-level champions shall be appointed to act on behalf of the President of the Conference of the Parties to facilitate through strengthened high-level engagement in the period 2016–2020 the successful execution of existing efforts and the scaling-up and introduction of new or strengthened voluntary efforts, initiatives and coalitions, including by:

(a) Working with the Executive Secretary and the current and incoming Presidents of the Conference of the Parties to coordinate the annual high-level event referred to in paragraph 121 above;

(b) Engaging with interested Parties and non-Party stakeholders, including to further the voluntary initiatives of the Lima-Paris Action Agenda;

[3] <http://climateaction.unfccc.int/>.

(c) Providing guidance to the secretariat on the organization of technical expert meetings referred to in paragraph 112(a) above and paragraph 130(a) below;

123. *Also decides* that the high-level champions referred to in paragraph 122 above should normally serve for a term of two years, with their terms overlapping for a full year to ensure continuity, such that:

(a) The President of the Conference of the Parties of the twenty-first session should appoint one champion, who should serve for one year from the date of the appointment until the last day of the Conference of the Parties at its twenty-second session;

(b) The President of the Conference of the Parties of the twenty-second session should appoint one champion who should serve for two years from the date of the appointment until the last day of the Conference of the Parties at its twenty-third session (November 2017);

(c) Thereafter, each subsequent President of the Conference of the Parties should appoint one champion who should serve for two years and succeed the previously appointed champion whose term has ended;

124. *Invites* all interested Parties and relevant organizations to provide support for the work of the champions referred to in paragraph 122 above;

125. *Decides* to launch, in the period 2016–2020, a technical examination process on adaptation;

126. *Also decides* that the technical examination process on adaptation referred to in paragraph 125 above will endeavour to identify concrete opportunities for strengthening resilience, reducing vulnerabilities and increasing the understanding and implementation of adaptation actions;

127. *Further decides* that the technical examination process referred to in paragraph 125 above should be organized jointly by the Subsidiary Body for Implementation and the Subsidiary Body for Scientific and Technological Advice, and conducted by the Adaptation Committee;

128. *Decides* that the process referred to in paragraph 125 above will be pursued by:

(a) Facilitating the sharing of good practices, experiences and lessons learned;

(b) Identifying actions that could significantly enhance the implementation of adaptation actions, including actions that could enhance economic diversification and have mitigation co-benefits;

(c) Promoting cooperative action on adaptation;

(d) Identifying opportunities to strengthen enabling environments and enhance the provision of support for adaptation in the context of specific policies, practices and actions;

129. *Also decides* that the technical examination process on adaptation referred to in paragraph 125 above will take into account the process, modalities, outputs, outcomes and lessons learned from the technical examination process on mitigation referred to in paragraph 110 above;

130. *Requests* the secretariat to support the technical examination process referred to in paragraph 125 above by:

(a) Organizing regular technical expert meetings focusing on specific policies, strategies and actions;

(b) Preparing annually, on the basis of the meetings referred to in paragraph 130(a) above and in time to serve as an input to the summary for policymakers referred to in paragraph 112(c) above, a technical paper on opportunities to enhance adaptation action, as well as options to support their implementation, information on which should be made available in a user-friendly online format;

131. *Decides* that in conducting the process referred to in paragraph 125 above, the Adaptation Committee will engage with and explore ways to take into account, synergize with and build on the existing arrangements for adaptation-related work programmes, bodies and institutions under the Convention so as to ensure coherence and maximum value;

132. *Also decides* to conduct, in conjunction with the assessment referred to in paragraph 120 above, an assessment of the process referred to in paragraph 125 above, so as to improve its effectiveness;

133. *Invites* Parties and observer organizations to submit information on the opportunities referred to in paragraph 126 above by 3 February 2016;

V. NON-PARTY STAKEHOLDERS

134. *Welcomes* the efforts of all non-Party stakeholders to address and respond to climate change, including those of civil society, the private sector, financial institutions, cities and other subnational authorities;

135. *Invites* the non-Party stakeholders referred to in paragraph 134 above to scale up their efforts and support actions to reduce emissions and/or to build resilience and decrease vulnerability to the adverse effects of climate change and demonstrate these efforts via the Non-State Actor Zone for Climate Action platform[4] referred to in paragraph 118 above;

136. *Recognizes* the need to strengthen knowledge, technologies, practices and efforts of local communities and indigenous peoples related to addressing and responding to climate change, and *establishes* a platform for the exchange of experiences and sharing of best practices on mitigation and adaptation in a holistic and integrated manner;

137. *Also recognizes* the important role of providing incentives for emission reduction activities, including tools such as domestic policies and carbon pricing;

VI. ADMINISTRATIVE AND BUDGETARY MATTERS

138. *Takes note* of the estimated budgetary implications of the activities to be undertaken by the secretariat referred to in this decision and requests that the actions of the secretariat called for in this decision be undertaken subject to the availability of financial resources;

139. *Emphasizes* the urgency of making additional resources available for the implementation of the relevant actions, including actions referred to in this decision, and the implementation of the work programme referred to in paragraph 9 above;

140. *Urges* Parties to make voluntary contributions for the timely implementation of this decision.

[4] <http://climateaction.unfccc.int/>.

Annex

PARIS AGREEMENT

The Parties to this Agreement,

Being Parties to the United Nations Framework Convention on Climate Change, hereinafter referred to as "the Convention",

Pursuant to the Durban Platform for Enhanced Action established by decision 1/CP.17 of the Conference of the Parties to the Convention at its seventeenth session,

In pursuit of the objective of the Convention, and being guided by its principles, including the principle of equity and common but differentiated responsibilities and respective capabilities, in the light of different national circumstances,

Recognizing the need for an effective and progressive response to the urgent threat of climate change on the basis of the best available scientific knowledge,

Also recognizing the specific needs and special circumstances of developing country Parties, especially those that are particularly vulnerable to the adverse effects of climate change, as provided for in the Convention,

Taking full account of the specific needs and special situations of the least developed countries with regard to funding and transfer of technology,

Recognizing that Parties may be affected not only by climate change, but also by the impacts of the measures taken in response to it,

Emphasizing the intrinsic relationship that climate change actions, responses and impacts have with equitable access to sustainable development and eradication of poverty,

Recognizing the fundamental priority of safeguarding food security and ending hunger, and the particular vulnerabilities of food production systems to the adverse impacts of climate change,

Taking into account the imperatives of a just transition of the workforce and the creation of decent work and quality jobs in accordance with nationally defined development priorities,

Acknowledging that climate change is a common concern of humankind, Parties should, when taking action to address climate change, respect, promote and consider their respective obligations on human rights, the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations and the right to development, as well as gender equality, empowerment of women and intergenerational equity,

Recognizing the importance of the conservation and enhancement, as appropriate, of sinks and reservoirs of the greenhouse gases referred to in the Convention,

Noting the importance of ensuring the integrity of all ecosystems, including oceans, and the protection of biodiversity, recognized by some cultures as Mother Earth, and noting the importance for some of the concept of "climate justice", when taking action to address climate change,

Affirming the importance of education, training, public awareness, public participation, public access to information and cooperation at all levels on the matters addressed in this Agreement,

Recognizing the importance of the engagements of all levels of government and various actors, in accordance with respective national legislations of Parties, in addressing climate change,

Also recognizing that sustainable lifestyles and sustainable patterns of consumption and production, with developed country Parties taking the lead, play an important role in addressing climate change,

Have agreed as follows:

Article 1

For the purpose of this Agreement, the definitions contained in Article 1 of the Convention shall apply. In addition:

1. "Convention" means the United Nations Framework Convention on Climate Change, adopted in New York on 9 May 1992.
2. "Conference of the Parties" means the Conference of the Parties to the Convention.
3. "Party" means a Party to this Agreement.

Article 2

1. This Agreement, in enhancing the implementation of the Convention, including its objective, aims to strengthen the global response to the threat of climate change, in the context of sustainable development and efforts to eradicate poverty, including by:
   (a) Holding the increase in the global average temperature to well below 2 °C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5 °C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change;
   (b) Increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development, in a manner that does not threaten food production;
   (c) Making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development.
2. This Agreement will be implemented to reflect equity and the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances.

Article 3

As nationally determined contributions to the global response to climate change, all Parties are to undertake and communicate ambitious efforts as defined in Articles 4, 7, 9, 10, 11 and 13 with the view to achieving the purpose of this Agreement as set out in Article 2. The efforts of all Parties will represent a progression over time, while recognizing the need to support developing country Parties for the effective implementation of this Agreement.

Article 4

1. In order to achieve the long-term temperature goal set out in Article 2, Parties aim to reach global peaking of greenhouse gas emissions as soon as possible, recognizing that peaking will take longer for developing country Parties, and to undertake rapid reductions thereafter in accordance with best available science, so as to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century, on the basis of equity, and in the context of sustainable development and efforts to eradicate poverty.
2. Each Party shall prepare, communicate and maintain successive nationally determined contributions that it intends to achieve. Parties shall pursue domestic mitigation measures with the aim of achieving the objectives of such contributions.
3. Each Party's successive nationally determined contribution will represent a progression beyond the Party's then current nationally determined contribution and reflect its highest possible ambition, reflecting its common but differentiated responsibilities and respective capabilities, in the light of different national circumstances.
4. Developed country Parties shall continue taking the lead by undertaking economy-wide absolute emission reduction targets. Developing country Parties should continue enhancing their mitigation efforts, and are encouraged to move over time towards economy-wide emission reduction or limitation targets in the light of different national circumstances.
5. Support shall be provided to developing country Parties for the implementation of this Article, in accordance with Articles 9, 10 and 11, recognizing that enhanced support for developing country Parties will allow for higher ambition in their actions.

6. The least developed countries and small island developing States may prepare and communicate strategies, plans and actions for low greenhouse gas emissions development reflecting their special circumstances.

7. Mitigation co-benefits resulting from Parties' adaptation actions and/or economic diversification plans can contribute to mitigation outcomes under this Article.

8. In communicating their nationally determined contributions, all Parties shall provide the information necessary for clarity, transparency and understanding in accordance with decision 1/CP.21 and any relevant decisions of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement.

9. Each Party shall communicate a nationally determined contribution every five years in accordance with decision 1/CP.21 and any relevant decisions of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement and be informed by the outcomes of the global stocktake referred to in Article 14.

10. The Conference of the Parties serving as the meeting of the Parties to the Paris Agreement shall consider common time frames for nationally determined contributions at its first session.

11. A Party may at any time adjust its existing nationally determined contribution with a view to enhancing its level of ambition, in accordance with guidance adopted by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement.

12. Nationally determined contributions communicated by Parties shall be recorded in a public registry maintained by the secretariat.

13. Parties shall account for their nationally determined contributions. In accounting for anthropogenic emissions and removals corresponding to their nationally determined contributions, Parties shall promote environmental integrity, transparency, accuracy, completeness, comparability and consistency, and ensure the avoidance of double counting, in accordance with guidance adopted by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement.

14. In the context of their nationally determined contributions, when recognizing and implementing mitigation actions with respect to anthropogenic emissions and removals, Parties should take into account, as appropriate, existing methods and guidance under the Convention, in the light of the provisions of paragraph 13 of this Article.

15. Parties shall take into consideration in the implementation of this Agreement the concerns of Parties with economies most affected by the impacts of response measures, particularly developing country Parties.

16. Parties, including regional economic integration organizations and their member States, that have reached an agreement to act jointly under paragraph 2 of this Article shall notify the secretariat of the terms of that agreement, including the emission level allocated to each Party within the relevant time period, when they communicate their nationally determined contributions. The secretariat shall in turn inform the Parties and signatories to the Convention of the terms of that agreement.

17. Each party to such an agreement shall be responsible for its emission level as set out in the agreement referred to in paragraph 16 above in accordance with paragraphs 13 and 14 of this Article and Articles 13 and 15.

18. If Parties acting jointly do so in the framework of, and together with, a regional economic integration organization which is itself a Party to this Agreement, each member State of that regional economic integration organization individually, and together with the regional economic integration organization, shall be responsible for its emission level as set out in the agreement communicated under paragraph 16 of this Article in accordance with paragraphs 13 and 14 of this Article and Articles 13 and 15.

19. All Parties should strive to formulate and communicate long-term low greenhouse gas emission development strategies, mindful of Article 2 taking into account their common but differentiated responsibilities and respective capabilities, in the light of different national circumstances.

Article 5

1. Parties should take action to conserve and enhance, as appropriate, sinks and reservoirs of greenhouse gases as referred to in Article 4, paragraph 1(d), of the Convention, including forests.

2. Parties are encouraged to take action to implement and support, including through results-based payments, the existing framework as set out in related guidance and decisions already agreed under the Convention for: policy approaches and positive incentives for activities relating to reducing emissions from deforestation and forest degradation, and the role of conservation, sustainable management of forests and enhancement of forest carbon

stocks in developing countries; and alternative policy approaches, such as joint mitigation and adaptation approaches for the integral and sustainable management of forests, while reaffirming the importance of incentivizing, as appropriate, non-carbon benefits associated with such approaches.

Article 6

1. Parties recognize that some Parties choose to pursue voluntary cooperation in the implementation of their nationally determined contributions to allow for higher ambition in their mitigation and adaptation actions and to promote sustainable development and environmental integrity.
2. Parties shall, where engaging on a voluntary basis in cooperative approaches that involve the use of internationally transferred mitigation outcomes towards nationally determined contributions, promote sustainable development and ensure environmental integrity and transparency, including in governance, and shall apply robust accounting to ensure, inter alia, the avoidance of double counting, consistent with guidance adopted by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement.
3. The use of internationally transferred mitigation outcomes to achieve nationally determined contributions under this Agreement shall be voluntary and authorized by participating Parties.
4. A mechanism to contribute to the mitigation of greenhouse gas emissions and support sustainable development is hereby established under the authority and guidance of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement for use by Parties on a voluntary basis. It shall be supervised by a body designated by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement, and shall aim:
   (a) To promote the mitigation of greenhouse gas emissions while fostering sustainable development;
   (b) To incentivize and facilitate participation in the mitigation of greenhouse gas emissions by public and private entities authorized by a Party;
   (c) To contribute to the reduction of emission levels in the host Party, which will benefit from mitigation activities resulting in emission reductions that can also be used by another Party to fulfil its nationally determined contribution; and
   (d) To deliver an overall mitigation in global emissions.
5. Emission reductions resulting from the mechanism referred to in paragraph 4 of this Article shall not be used to demonstrate achievement of the host Party's nationally determined contribution if used by another Party to demonstrate achievement of its nationally determined contribution.
6. The Conference of the Parties serving as the meeting of the Parties to the Paris Agreement shall ensure that a share of the proceeds from activities under the mechanism referred to in paragraph 4 of this Article is used to cover administrative expenses as well as to assist developing country Parties that are particularly vulnerable to the adverse effects of climate change to meet the costs of adaptation.
7. The Conference of the Parties serving as the meeting of the Parties to the Paris Agreement shall adopt rules, modalities and procedures for the mechanism referred to in paragraph 4 of this Article at its first session.
8. Parties recognize the importance of integrated, holistic and balanced non-market approaches being available to Parties to assist in the implementation of their nationally determined contributions, in the context of sustainable development and poverty eradication, in a coordinated and effective manner, including through, inter alia, mitigation, adaptation, finance, technology transfer and capacity-building, as appropriate. These approaches shall aim to:
   (a) Promote mitigation and adaptation ambition;
   (b) Enhance public and private participation in the implementation of nationally determined contributions; and
   (c) Enable opportunities for coordination across instruments and relevant institutional arrangements.
9. A framework for non-market approaches to sustainable development is hereby defined to promote the non-market approaches referred to in paragraph 8 of this Article.

Article 7

1. Parties hereby establish the global goal on adaptation of enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change, with a view to contributing to sustainable development and ensuring an adequate adaptation response in the context of the temperature goal referred to in Article 2.
2. Parties recognize that adaptation is a global challenge faced by all with local, subnational, national, regional and international dimensions, and that it is a key component of and makes a contribution to the long-term global response to climate change to protect people, livelihoods and ecosystems, taking into account the urgent and immediate needs of those developing country Parties that are particularly vulnerable to the adverse effects of climate change.
3. The adaptation efforts of developing country Parties shall be recognized, in accordance with the modalities to be adopted by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement at its first session.
4. Parties recognize that the current need for adaptation is significant and that greater levels of mitigation can reduce the need for additional adaptation efforts, and that greater adaptation needs can involve greater adaptation costs.
5. Parties acknowledge that adaptation action should follow a country-driven, gender-responsive, participatory and fully transparent approach, taking into consideration vulnerable groups, communities and ecosystems, and should be based on and guided by the best available science and, as appropriate, traditional knowledge, knowledge of indigenous peoples and local knowledge systems, with a view to integrating adaptation into relevant socioeconomic and environmental policies and actions, where appropriate.
6. Parties recognize the importance of support for and international cooperation on adaptation efforts and the importance of taking into account the needs of developing country Parties, especially those that are particularly vulnerable to the adverse effects of climate change.
7. Parties should strengthen their cooperation on enhancing action on adaptation, taking into account the Cancun Adaptation Framework, including with regard to:
   (a) Sharing information, good practices, experiences and lessons learned, including, as appropriate, as these relate to science, planning, policies and implementation in relation to adaptation actions;
   (b) Strengthening institutional arrangements, including those under the Convention that serve this Agreement, to support the synthesis of relevant information and knowledge, and the provision of technical support and guidance to Parties;
   (c) Strengthening scientific knowledge on climate, including research, systematic observation of the climate system and early warning systems, in a manner that informs climate services and supports decision-making;
   (d) Assisting developing country Parties in identifying effective adaptation practices, adaptation needs, priorities, support provided and received for adaptation actions and efforts, and challenges and gaps, in a manner consistent with encouraging good practices;
   (e) Improving the effectiveness and durability of adaptation actions.
8. United Nations specialized organizations and agencies are encouraged to support the efforts of Parties to implement the actions referred to in paragraph 7 of this Article, taking into account the provisions of paragraph 5 of this Article.
9. Each Party shall, as appropriate, engage in adaptation planning processes and the implementation of actions, including the development or enhancement of relevant plans, policies and/or contributions, which may include:
   (a) The implementation of adaptation actions, undertakings and/or efforts;
   (b) The process to formulate and implement national adaptation plans;
   (c) The assessment of climate change impacts and vulnerability, with a view to formulating nationally determined prioritized actions, taking into account vulnerable people, places and ecosystems;
   (d) Monitoring and evaluating and learning from adaptation plans, policies, programmes and actions; and
   (e) Building the resilience of socioeconomic and ecological systems, including through economic diversification and sustainable management of natural resources.

10. Each Party should, as appropriate, submit and update periodically an adaptation communication, which may include its priorities, implementation and support needs, plans and actions, without creating any additional burden for developing country Parties.

11. The adaptation communication referred to in paragraph 10 of this Article shall be, as appropriate, submitted and updated periodically, as a component of or in conjunction with other communications or documents, including a national adaptation plan, a nationally determined contribution as referred to in Article 4, paragraph 2, and/or a national communication.

12. The adaptation communications referred to in paragraph 10 of this Article shall be recorded in a public registry maintained by the secretariat.

13. Continuous and enhanced international support shall be provided to developing country Parties for the implementation of paragraphs 7, 9, 10 and 11 of this Article, in accordance with the provisions of Articles 9, 10 and 11.

14. The global stocktake referred to in Article 14 shall, inter alia:

    (a) Recognize adaptation efforts of developing country Parties;

    (b) Enhance the implementation of adaptation action taking into account the adaptation communication referred to in paragraph 10 of this Article;

    (c) Review the adequacy and effectiveness of adaptation and support provided for adaptation; and

    (d) Review the overall progress made in achieving the global goal on adaptation referred to in paragraph 1 of this Article.

Article 8

1. Parties recognize the importance of averting, minimizing and addressing loss and damage associated with the adverse effects of climate change, including extreme weather events and slow onset events, and the role of sustainable development in reducing the risk of loss and damage.

2. The Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts shall be subject to the authority and guidance of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement and may be enhanced and strengthened, as determined by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement.

3. Parties should enhance understanding, action and support, including through the Warsaw International Mechanism, as appropriate, on a cooperative and facilitative basis with respect to loss and damage associated with the adverse effects of climate change.

4. Accordingly, areas of cooperation and facilitation to enhance understanding, action and support may include:

    (a) Early warning systems;

    (b) Emergency preparedness;

    (c) Slow onset events;

    (d) Events that may involve irreversible and permanent loss and damage;

    (e) Comprehensive risk assessment and management;

    (f) Risk insurance facilities, climate risk pooling and other insurance solutions;

    (g) Non-economic losses;

    (h) Resilience of communities, livelihoods and ecosystems.

5. The Warsaw International Mechanism shall collaborate with existing bodies and expert groups under the Agreement, as well as relevant organizations and expert bodies outside the Agreement.

Article 9

1. Developed country Parties shall provide financial resources to assist developing country Parties with respect to both mitigation and adaptation in continuation of their existing obligations under the Convention.

2. Other Parties are encouraged to provide or continue to provide such support voluntarily.

3. As part of a global effort, developed country Parties should continue to take the lead in mobilizing climate finance from a wide variety of sources, instruments and channels, noting the significant role of public funds,

through a variety of actions, including supporting country-driven strategies, and taking into account the needs and priorities of developing country Parties. Such mobilization of climate finance should represent a progression beyond previous efforts.

4. The provision of scaled-up financial resources should aim to achieve a balance between adaptation and mitigation, taking into account country-driven strategies, and the priorities and needs of developing country Parties, especially those that are particularly vulnerable to the adverse effects of climate change and have significant capacity constraints, such as the least developed countries and small island developing States, considering the need for public and grant-based resources for adaptation.

5. Developed country Parties shall biennially communicate indicative quantitative and qualitative information related to paragraphs 1 and 3 of this Article, as applicable, including, as available, projected levels of public financial resources to be provided to developing country Parties. Other Parties providing resources are encouraged to communicate biennially such information on a voluntary basis.

6. The global stocktake referred to in Article 14 shall take into account the relevant information provided by developed country Parties and/or Agreement bodies on efforts related to climate finance.

7. Developed country Parties shall provide transparent and consistent information on support for developing country Parties provided and mobilized through public interventions biennially in accordance with the modalities, procedures and guidelines to be adopted by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement, at its first session, as stipulated in Article 13, paragraph 13. Other Parties are encouraged to do so.

8. The Financial Mechanism of the Convention, including its operating entities, shall serve as the financial mechanism of this Agreement.

9. The institutions serving this Agreement, including the operating entities of the Financial Mechanism of the Convention, shall aim to ensure efficient access to financial resources through simplified approval procedures and enhanced readiness support for developing country Parties, in particular for the least developed countries and small island developing States, in the context of their national climate strategies and plans.

Article 10

1. Parties share a long-term vision on the importance of fully realizing technology development and transfer in order to improve resilience to climate change and to reduce greenhouse gas emissions.

2. Parties, noting the importance of technology for the implementation of mitigation and adaptation actions under this Agreement and recognizing existing technology deployment and dissemination efforts, shall strengthen cooperative action on technology development and transfer.

3. The Technology Mechanism established under the Convention shall serve this Agreement.

4. A technology framework is hereby established to provide overarching guidance for the work of the Technology Mechanism in promoting and facilitating enhanced action on technology development and transfer in order to support the implementation of this Agreement, in pursuit of the long-term vision referred to in paragraph 1 of this Article.

5. Accelerating, encouraging and enabling innovation is critical for an effective, long-term global response to climate change and promoting economic growth and sustainable development. Such effort shall be, as appropriate, supported, including by the Technology Mechanism and, through financial means, by the Financial Mechanism of the Convention, for collaborative approaches to research and development, and facilitating access to technology, in particular for early stages of the technology cycle, to developing country Parties.

6. Support, including financial support, shall be provided to developing country Parties for the implementation of this Article, including for strengthening cooperative action on technology development and transfer at different stages of the technology cycle, with a view to achieving a balance between support for mitigation and adaptation. The global stocktake referred to in Article 14 shall take into account available information on efforts related to support on technology development and transfer for developing country Parties.

Article 11

1. Capacity-building under this Agreement should enhance the capacity and ability of developing country Parties, in particular countries with the least capacity, such as the least developed countries, and those that are particularly vulnerable to the adverse effects of climate change, such as small island developing States, to take

effective climate change action, including, inter alia, to implement adaptation and mitigation actions, and should facilitate technology development, dissemination and deployment, access to climate finance, relevant aspects of education, training and public awareness, and the transparent, timely and accurate communication of information.

2. Capacity-building should be country-driven, based on and responsive to national needs, and foster country ownership of Parties, in particular, for developing country Parties, including at the national, subnational and local levels. Capacity-building should be guided by lessons learned, including those from capacity-building activities under the Convention, and should be an effective, iterative process that is participatory, cross-cutting and gender-responsive.

3. All Parties should cooperate to enhance the capacity of developing country Parties to implement this Agreement. Developed country Parties should enhance support for capacity-building actions in developing country Parties.

4. All Parties enhancing the capacity of developing country Parties to implement this Agreement, including through regional, bilateral and multilateral approaches, shall regularly communicate on these actions or measures on capacity-building. Developing country Parties should regularly communicate progress made on implementing capacity-building plans, policies, actions or measures to implement this Agreement.

5. Capacity-building activities shall be enhanced through appropriate institutional arrangements to support the implementation of this Agreement, including the appropriate institutional arrangements established under the Convention that serve this Agreement. The Conference of the Parties serving as the meeting of the Parties to the Paris Agreement shall, at its first session, consider and adopt a decision on the initial institutional arrangements for capacity-building.

Article 12

Parties shall cooperate in taking measures, as appropriate, to enhance climate change education, training, public awareness, public participation and public access to information, recognizing the importance of these steps with respect to enhancing actions under this Agreement.

Article 13

1. In order to build mutual trust and confidence and to promote effective implementation, an enhanced transparency framework for action and support, with built-in flexibility which takes into account Parties' different capacities and builds upon collective experience is hereby established.

2. The transparency framework shall provide flexibility in the implementation of the provisions of this Article to those developing country Parties that need it in the light of their capacities. The modalities, procedures and guidelines referred to in paragraph 13 of this Article shall reflect such flexibility.

3. The transparency framework shall build on and enhance the transparency arrangements under the Convention, recognizing the special circumstances of the least developed countries and small island developing States, and be implemented in a facilitative, non-intrusive, non-punitive manner, respectful of national sovereignty, and avoid placing undue burden on Parties.

4. The transparency arrangements under the Convention, including national communications, biennial reports and biennial update reports, international assessment and review and international consultation and analysis, shall form part of the experience drawn upon for the development of the modalities, procedures and guidelines under paragraph 13 of this Article.

5. The purpose of the framework for transparency of action is to provide a clear understanding of climate change action in the light of the objective of the Convention as set out in its Article 2, including clarity and tracking of progress towards achieving Parties' individual nationally determined contributions under Article 4, and Parties' adaptation actions under Article 7, including good practices, priorities, needs and gaps, to inform the global stocktake under Article 14.

6. The purpose of the framework for transparency of support is to provide clarity on support provided and received by relevant individual Parties in the context of climate change actions under Articles 4, 7, 9, 10 and 11, and, to the extent possible, to provide a full overview of aggregate financial support provided, to inform the global stocktake under Article 14.

7. Each Party shall regularly provide the following information:

(a) A national inventory report of anthropogenic emissions by sources and removals by sinks of greenhouse gases, prepared using good practice methodologies accepted by the Intergovernmental Panel on Climate Change and agreed upon by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement;

(b) Information necessary to track progress made in implementing and achieving its nationally determined contribution under Article 4.

8. Each Party should also provide information related to climate change impacts and adaptation under Article 7, as appropriate.

9. Developed country Parties shall, and other Parties that provide support should, provide information on financial, technology transfer and capacity-building support provided to developing country Parties under Article 9, 10 and 11.

10. Developing country Parties should provide information on financial, technology transfer and capacity-building support needed and received under Articles 9, 10 and 11.

11. Information submitted by each Party under paragraphs 7 and 9 of this Article shall undergo a technical expert review, in accordance with decision 1/CP.21. For those developing country Parties that need it in the light of their capacities, the review process shall include assistance in identifying capacity-building needs. In addition, each Party shall participate in a facilitative, multilateral consideration of progress with respect to efforts under Article 9, and its respective implementation and achievement of its nationally determined contribution.

12. The technical expert review under this paragraph shall consist of a consideration of the Party's support provided, as relevant, and its implementation and achievement of its nationally determined contribution. The review shall also identify areas of improvement for the Party, and include a review of the consistency of the information with the modalities, procedures and guidelines referred to in paragraph 13 of this Article, taking into account the flexibility accorded to the Party under paragraph 2 of this Article. The review shall pay particular attention to the respective national capabilities and circumstances of developing country Parties.

13. The Conference of the Parties serving as the meeting of the Parties to the Paris Agreement shall, at its first session, building on experience from the arrangements related to transparency under the Convention, and elaborating on the provisions in this Article, adopt common modalities, procedures and guidelines, as appropriate, for the transparency of action and support.

14. Support shall be provided to developing countries for the implementation of this Article.

15. Support shall also be provided for the building of transparency-related capacity of developing country Parties on a continuous basis.

Article 14

1. The Conference of the Parties serving as the meeting of the Parties to the Paris Agreement shall periodically take stock of the implementation of this Agreement to assess the collective progress towards achieving the purpose of this Agreement and its long-term goals (referred to as the "global stocktake"). It shall do so in a comprehensive and facilitative manner, considering mitigation, adaptation and the means of implementation and support, and in the light of equity and the best available science.

2. The Conference of the Parties serving as the meeting of the Parties to the Paris Agreement shall undertake its first global stocktake in 2023 and every five years thereafter unless otherwise decided by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement.

3. The outcome of the global stocktake shall inform Parties in updating and enhancing, in a nationally determined manner, their actions and support in accordance with the relevant provisions of this Agreement, as well as in enhancing international cooperation for climate action.

Article 15

1. A mechanism to facilitate implementation of and promote compliance with the provisions of this Agreement is hereby established.

2. The mechanism referred to in paragraph 1 of this Article shall consist of a committee that shall be expert-based and facilitative in nature and function in a manner that is transparent, non-adversarial and non-punitive. The committee shall pay particular attention to the respective national capabilities and circumstances of Parties.

3. The committee shall operate under the modalities and procedures adopted by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement at its first session and report annually to the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement.

Article 16

1. The Conference of the Parties, the supreme body of the Convention, shall serve as the meeting of the Parties to this Agreement.
2. Parties to the Convention that are not Parties to this Agreement may participate as observers in the proceedings of any session of the Conference of the Parties serving as the meeting of the Parties to this Agreement. When the Conference of the Parties serves as the meeting of the Parties to this Agreement, decisions under this Agreement shall be taken only by those that are Parties to this Agreement.
3. When the Conference of the Parties serves as the meeting of the Parties to this Agreement, any member of the Bureau of the Conference of the Parties representing a Party to the Convention but, at that time, not a Party to this Agreement, shall be replaced by an additional member to be elected by and from amongst the Parties to this Agreement.
4. The Conference of the Parties serving as the meeting of the Parties to the Paris Agreement shall keep under regular review the implementation of this Agreement and shall make, within its mandate, the decisions necessary to promote its effective implementation. It shall perform the functions assigned to it by this Agreement and shall:
   (a) Establish such subsidiary bodies as deemed necessary for the implementation of this Agreement; and
   (b) Exercise such other functions as may be required for the implementation of this Agreement.
5. The rules of procedure of the Conference of the Parties and the financial procedures applied under the Convention shall be applied mutatis mutandis under this Agreement, except as may be otherwise decided by consensus by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement.
6. The first session of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement shall be convened by the secretariat in conjunction with the first session of the Conference of the Parties that is scheduled after the date of entry into force of this Agreement. Subsequent ordinary sessions of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement shall be held in conjunction with ordinary sessions of the Conference of the Parties, unless otherwise decided by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement.
7. Extraordinary sessions of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement shall be held at such other times as may be deemed necessary by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement or at the written request of any Party, provided that, within six months of the request being communicated to the Parties by the secretariat, it is supported by at least one third of the Parties.
8. The United Nations and its specialized agencies and the International Atomic Energy Agency, as well as any State member thereof or observers thereto not party to the Convention, may be represented at sessions of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement as observers. Any body or agency, whether national or international, governmental or non-governmental, which is qualified in matters covered by this Agreement and which has informed the secretariat of its wish to be represented at a session of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement as an observer, may be so admitted unless at least one third of the Parties present object. The admission and participation of observers shall be subject to the rules of procedure referred to in paragraph 5 of this Article.

Article 17

1. The secretariat established by Article 8 of the Convention shall serve as the secretariat of this Agreement.
2. Article 8, paragraph 2, of the Convention on the functions of the secretariat, and Article 8, paragraph 3, of the Convention, on the arrangements made for the functioning of the secretariat, shall apply mutatis mutandis to this Agreement. The secretariat shall, in addition, exercise the functions assigned to it under this Agreement and by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement.

Article 18

1. The Subsidiary Body for Scientific and Technological Advice and the Subsidiary Body for Implementation established by Articles 9 and 10 of the Convention shall serve, respectively, as the Subsidiary Body for Scientific and Technological Advice and the Subsidiary Body for Implementation of this Agreement. The provisions of the Convention relating to the functioning of these two bodies shall apply mutatis mutandis to this Agreement. Sessions of the meetings of the Subsidiary Body for Scientific and Technological Advice and the Subsidiary Body for Implementation of this Agreement shall be held in conjunction with the meetings of, respectively, the Subsidiary Body for Scientific and Technological Advice and the Subsidiary Body for Implementation of the Convention.
2. Parties to the Convention that are not Parties to this Agreement may participate as observers in the proceedings of any session of the subsidiary bodies. When the subsidiary bodies serve as the subsidiary bodies of this Agreement, decisions under this Agreement shall be taken only by those that are Parties to this Agreement.
3. When the subsidiary bodies established by Articles 9 and 10 of the Convention exercise their functions with regard to matters concerning this Agreement, any member of the bureaux of those subsidiary bodies representing a Party to the Convention but, at that time, not a Party to this Agreement, shall be replaced by an additional member to be elected by and from amongst the Parties to this Agreement.

Article 19

1. Subsidiary bodies or other institutional arrangements established by or under the Convention, other than those referred to in this Agreement, shall serve this Agreement upon a decision of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement. The Conference of the Parties serving as the meeting of the Parties to the Paris Agreement shall specify the functions to be exercised by such subsidiary bodies or arrangements.
2. The Conference of the Parties serving as the meeting of the Parties to the Paris Agreement may provide further guidance to such subsidiary bodies and institutional arrangements.

Article 20

1. This Agreement shall be open for signature and subject to ratification, acceptance or approval by States and regional economic integration organizations that are Parties to the Convention. It shall be open for signature at the United Nations Headquarters in New York from 22 April 2016 to 21 April 2017. Thereafter, this Agreement shall be open for accession from the day following the date on which it is closed for signature. Instruments of ratification, acceptance, approval or accession shall be deposited with the Depositary.
2. Any regional economic integration organization that becomes a Party to this Agreement without any of its member States being a Party shall be bound by all the obligations under this Agreement. In the case of regional economic integration organizations with one or more member States that are Parties to this Agreement, the organization and its member States shall decide on their respective responsibilities for the performance of their obligations under this Agreement. In such cases, the organization and the member States shall not be entitled to exercise rights under this Agreement concurrently.
3. In their instruments of ratification, acceptance, approval or accession, regional economic integration organizations shall declare the extent of their competence with respect to the matters governed by this Agreement. These organizations shall also inform the Depositary, who shall in turn inform the Parties, of any substantial modification in the extent of their competence.

Article 21

1. This Agreement shall enter into force on the thirtieth day after the date on which at least 55 Parties to the Convention accounting in total for at least an estimated 55 percent of the total global greenhouse gas emissions have deposited their instruments of ratification, acceptance, approval or accession.
2. Solely for the limited purpose of paragraph 1 of this Article, "total global greenhouse gas emissions" means the most up-to-date amount communicated on or before the date of adoption of this Agreement by the Parties to the Convention.
3. For each State or regional economic integration organization that ratifies, accepts or approves this Agreement or accedes thereto after the conditions set out in paragraph 1 of this Article for entry into force have been fulfilled,

this Agreement shall enter into force on the thirtieth day after the date of deposit by such State or regional economic integration organization of its instrument of ratification, acceptance, approval or accession.

4. For the purposes of paragraph 1 of this Article, any instrument deposited by a regional economic integration organization shall not be counted as additional to those deposited by its member States.

Article 22

The provisions of Article 15 of the Convention on the adoption of amendments to the Convention shall apply mutatis mutandis to this Agreement.

Article 23

1. The provisions of Article 16 of the Convention on the adoption and amendment of annexes to the Convention shall apply mutatis mutandis to this Agreement.
2. Annexes to this Agreement shall form an integral part thereof and, unless otherwise expressly provided for, a reference to this Agreement constitutes at the same time a reference to any annexes thereto. Such annexes shall be restricted to lists, forms and any other material of a descriptive nature that is of a scientific, technical, procedural or administrative character.

Article 24

The provisions of Article 14 of the Convention on settlement of disputes shall apply mutatis mutandis to this Agreement.

Article 25

1. Each Party shall have one vote, except as provided for paragraph 2 of this Article.
2. Regional economic integration organizations, in matters within their competence, shall exercise their right to vote with a number of votes equal to the number of their member States that are Parties to this Agreement. Such an organization shall not exercise its right to vote if any of its member States exercises its right, and vice versa.

Article 26

The Secretary-General of the United Nations shall be the Depositary of this Agreement.

Article 27

No reservations may be made to this Agreement.

Article 28

1. At any time after three years from the date on which this Agreement has entered into force for a Party, that Party may withdraw from this Agreement by giving written notification to the Depositary.
2. Any such withdrawal shall take effect upon expiry of one year from the date of receipt by the Depositary of the notification of withdrawal, or on such later date as may be specified in the notification of withdrawal.
3. Any Party that withdraws from the Convention shall be considered as also having withdrawn from this Agreement.

Article 29

The original of this Agreement, of which the Arabic, Chinese, English, French, Russian and Spanish texts are equally authentic, shall be deposited with the Secretary-General of the United Nations.

DONE at Paris this twelfth day of December two thousand and fifteen.

IN WITNESS WHEREOF, the undersigned, being duly authorized to that effect, have signed this Agreement.

Exhibit 2

EXECUTIVE ORDER NO. 17-20

ACCELERATING EFFICIENCY IN OREGON'S BUILT ENVIRONMENT TO REDUCE GREENHOUSE GAS EMISSIONS AND ADDRESS CLIMATE CHANGE

WHEREAS, climate change presents a significant threat to our livelihoods, economic security, environment, health, and well-being.

WHEREAS, there has been an increase in extreme weather events, including more frequent and intense heat waves and wildfires. According to the Oregon Climate Change Research Institute and other regional studies, the best available science indicates Oregon is at risk of serious impacts to its natural resources due to climate change.

- Water resources are being affected by decreased winter snowpack, changes to seasonal runoff patterns, decreased precipitation in Eastern Oregon, and increased intensity and occurrence of flooding.
- Agricultural resources are being affected by increases in temperatures.
- Ocean acidification is increasing and there are changes in ocean currents.
- Significant parts of the Oregon coastal region, stretching 363 miles, will be impacted by an expected rise in sea level up to 1 to 4 feet by 2100, incurring billions of dollars of damages and losses to roadways and structures.
- Climate change impacts threaten the State's agricultural, fishing, timber, recreation, and tourism industries, thereby threatening the livelihood of the State's residents and an important source of Gross State Product for the state.

WHEREAS, energy efficiency leads to significant greenhouse gas reductions that are essential to meeting our state greenhouse gas reduction goals and addressing climate change.

WHEREAS, Oregon is committed to meeting the international Paris Agreement targets to reduce greenhouse gas emissions by 26 to 28 percent below 2005 levels by 2025.

WHEREAS, Oregon has adopted goals to reduce greenhouse gas emissions to 10 percent below 1990 levels by 2020 and at least 75 percent below 1990 levels by 2050 as described in ORS 468A.20.

WHEREAS, saving energy by using less energy in buildings is one of the least cost ways to achieve emissions reductions in the energy system – often with a net financial savings over the life of these energy efficiency measures, in particular as energy efficiency technology continues to improve.

WHEREAS, studies have found that building codes in Oregon have had a 97 percent compliance rate; and as building codes become more energy efficient, we will continue to strive toward excellence in construction and building codes, which are applicable statewide and provide uniformity and predictability for building owners and contractors and equity for residents and businesses.

WHEREAS, Oregon is an international leader in energy efficiency, has in-state energy efficiency expertise, and a skilled workforce to continue to be a leader; and Oregon can build on its reputation through emphasis on state leadership, building codes for newly constructed buildings, and retrofits for existing buildings.

WHEREAS, energy efficiency is a critical and growing portion of the State's clean energy economy. Investments in energy efficiency sustain a workforce of over 40,000 jobs statewide; 70 percent of these are small businesses with 11 employees or fewer. Investments in energy efficiency result in an average annual increase of gross state product of over $132 million, and the resulting reduction in energy costs generates an additional $32 million per year.

WHEREAS, low income and other underserved communities often struggle to access energy efficiency programs that will save them money and improve housing quality over the long-term and the State can take steps to implement policies that increase the availability of energy efficiency to these residents.

WHEREAS, state government has a responsibility to lead by example in its adoption of energy efficiency to achieve a more cost-effective and clean energy future.

WHEREAS, energy efficiency actions increase the health, safety, and resiliency of Oregon's buildings and homes, resulting in lower health care costs borne by the State and its residents.

WHEREAS, an energy system with distributed generation, energy efficiency, and storage capacity can build resiliency in the face of climate change related disruptions and other disasters.

NOW, THEREFORE, IT IS HEREBY DIRECTED AND ORDERED:

1. **Definition.** For purposes of this Executive Order, "state agency" shall be defined as any agency within the Executive Department as defined in ORS 174.112, other than the Oregon Secretary of State, Oregon State Treasury, Oregon Department of Justice, and Oregon Bureau of Labor and Industries.

2. **Statement of Policy.** It is the policy of the State of Oregon to establish an aggressive timeline to achieve net zero energy ready buildings as a standard practice in buildings across the state. Review and regular improvements to the energy provisions of the state building code will occur on at least a three-year cycle for residential and commercial buildings. Directives in this Executive Order related to energy efficiency, electric vehicle readiness, and solar installation readiness are essential to meeting this policy, as is a focus on retrofitting older, less-efficient buildings and demonstrating energy efficiency leadership in state-owned and state-leased buildings.

3. **Energy Efficiency Leadership in State Buildings**

   A. <u>High Performance Energy Targets for Existing State Buildings</u>. State agencies will use high performance energy use targets for remodels in all existing state-owned buildings. Department of Administrative Services (DAS) and Oregon Department of Energy (ODOE) are directed to consider ASHRAE 100 Standard pathways and work with all state agencies to adopt targets for any remodels that begin after the date of this executive order. State agencies that are not meeting energy use targets will work with ODOE and DAS to undertake energy retrofits to increase the efficiency of their buildings. ODOE is directed to report on and track all state-owned building energy use to guide agencies to implement tactical and achievable energy use reductions. ODOE will work with all agencies to benchmark and identify buildings for retrofits. A database of all eligible state-owned buildings will be created by June 1, 2018.

B. Carbon-Neutral Operations for New State Buildings. DAS and ODOE are directed to work with state agencies to ensure that new state owned buildings permitted after January 1, 2022 and used primarily for office and other commercial work space are designed to be able to operate as carbon-neutral buildings defined with full fuel-cycle considerations that are inclusive of, but not limited to, off-site renewable energy and other provisions of ASHRAE standard 189.1. In addition, DAS and ODOE are directed to analyze feasible options with the Department of Environmental Quality that would lower the embodied carbon of building materials in new construction of state buildings.

C. Statewide Plug-Load Strategy. DAS and ODOE are directed to develop a statewide plug-load management strategy and strategies for other occupant behavior changes to reduce energy uses not regulated by codes and standards. DAS and ODOE will develop a plug load strategy by January 1, 2019, and DAS will update policies for behavior-based efficiency by January 1, 2020.

D. Energy Efficient Equipment. DAS, with support from ODOE, is directed to ensure that all equipment purchased by the state meets high-efficiency energy and water use specifications by incorporating efficiency standards into procurement requirements. DAS and ODOE will develop procurement requirements in the 2018-19 fiscal year.

E. Lifecycle Cost Analysis. ODOE is directed to analyze state building costs, including lifecycle energy and water use costs or savings, when considering energy and water upgrades for state buildings. By January 1, 2019, ODOE, working with DAS, will develop analysis tools that can inform the high performance energy use targets and carbon neutral requirements for state buildings referenced above.

4. Increasing Energy and Water Efficiency in New Construction Across the State

A. Solar Ready Building Construction. The appropriate advisory board(s) and the Department of Business and Consumer Services Building Codes Division (BCD) are directed to conduct code amendment of the state

building code to require all newly constructed buildings will be ready for the installation of solar panels and related technologies by October 1, 2020 for residential structures and October 1, 2022 for commercial structures. BCD may establish limited specific exemptions to this solar-ready policy for buildings where solar applications are infeasible.

B. Electric Vehicle Ready Building Construction. The appropriate advisory board(s) and BCD are directed to conduct code amendment of the state building code to require that parking structures for all newly constructed residential and commercial buildings are ready to support the installation of at least a level 2 EV charger by October 1, 2022. BCD may establish limited specific exemptions related to types of parking lots, such as temporary parking lots.

C. Zero-Energy Ready Homes. The appropriate advisory board(s) and BCD are directed to conduct code amendment of the state building code to require newly constructed residential buildings to achieve at least equivalent performance levels with the 2017 U.S. Department of Energy Zero Energy Ready Standard by October 1, 2023.

D. Increasing Energy Efficiency in Commercial Construction. The appropriate advisory board(s) and BCD are directed to conduct code amendment of the state building code to require, by October 1, 2022, that newly constructed commercial buildings, averaged across building types, will exceed International Energy Conservation Code and ASHRAE 90.1 by achieving at least equivalent performance levels with the measurable prescriptive energy efficiency portions of the most current version of ASHRAE 189.1 that are construction-related.

E. Helping Key, Expanding Industries to Save Costs by Reducing their Energy Footprint. ODOE, in consultation with BCD, is directed to work with industry stakeholders to identify key high-energy use industries that have the potential to realize significant cost savings and energy savings through building code amendments as it relates to their industrial building types. ODOE and BCD are directed to provide the Governor with a report of its analysis and findings by January 1, 2019.

F. Improved State Standards for Appliances. ODOE is directed to work with appliance industry stakeholders to identify categories of appliances for improved efficiency standards, while considering appliance standards of other states, potential efficiency gains, potential costs, and supply chains for the regional market for appliances. ODOE is directed to provide the Governor with a report of its analysis and identify categories of appliances for improved efficiency by November 1, 2018.

G. High Efficiency Water Fixtures. The appropriate advisory board(s) and BCD are directed to conduct code amendment of the state building code to require high-efficiency water fixtures in all new buildings by January 1, 2020.

H. Increased Water Efficiency in On-Site Reuse. The appropriate advisory board(s) and BCD are directed to conduct code amendment of the state building code to require water efficiency improvements in all newly constructed commercial buildings through standards for capture and safe reuse of water for irrigation purposes by October 1, 2025.

5. Increasing Energy Efficiency through Retrofits of Existing Buildings Across the State

A. Energy Trust of Oregon Pilot Programs. Oregon Public Utility Commission (PUC) is directed to work with the Energy Trust of Oregon and interested stakeholders to expand meter-based savings pilot programs, including pay-for-performance pilot programs, by January 1, 2019. PUC shall consider inclusion of pilot programs, which do not significantly raise energy efficiency delivery costs, and that focus on existing single family homes, multi-family residential buildings, commercial buildings, and methods to incentivize energy efficiency in building stock that is significantly below current building code requirements.

B. Prioritizing Energy Efficiency in Affordable Housing to Reduce Utility Bills. ODOE, PUC, and Oregon Housing and Community Services (OHCS) are directed to work together to assess energy use in all affordable housing stock and develop a ten-year plan for achieving

maximum efficiency, as well as a continuum of efficiency levels up to maximum efficiency in affordable housing across the state by January 1, 2019. As part of the assessment, the agencies shall consider new resources and best practices and shall seek assistance from Energy Trust of Oregon and Bonneville Power Administration. OHCS is directed to expand its existing multi-family energy program and green energy path requirements, including a manufactured home replacement program through pilot programs and initiatives, while considering multiple values from energy efficiency improvements, such as health and habitability.

C. Coordination of Data. ODOE and PUC are directed to support and assist private sector partners in efforts to coordinate sharing of data that shows projected energy use reductions in the region. This data will be made available to the public to inform energy efficiency policies, as appropriate, by January 1, 2020.

D. Evaluation of Energy and Resiliency Efforts. ODOE and PUC are directed to evaluate the state's distributed energy resources and the efficiency of energy systems needed to improve Oregon's recovery from a disaster situation. ODOE and PUC are directed to provide the Governor with a report of their analysis and findings by January 1, 2019.

6. **Analysis of Cost**. State agencies are expected to implement this Executive Order using the least cost methods available. ODOE and BCD, in consultation with DAS, PUC, and OHCS, are directed to adopt a cost-analysis tool through a process that involves meaningful public input by December 1, 2019. State agencies shall use this cost analysis tool to determine whether any directive in this Executive Order should be deferred for one year or, if specific to a building code related directive, to the next building code cycle, due to significant cost at the time of implementation of that directive. All state agency processes for determining deferment of a directive in this Executive Order must include at least one public meeting that allows interested stakeholders to provide input.

7. **Implementation.** The implementation of this Executive Order shall be coordinated through a Built Environment Efficiency Working Group, which will also identify any structural barriers or barriers to information sharing that may slow the progress of any directive in this Executive Order. The Built Environment Efficiency Working Group will review directives in this Executive Order, seek input from interested stakeholders, and recommend opportunities to provide equitable access to clean energy by removing barriers to achieving energy efficiency in the built environment to the Governor and state agencies. The Built Environment Efficiency Working Group shall include the following agencies: DAS, ODOE, BCD, PUC, and OHCS. Agencies shall implement each directive in this Executive Order using their existing internal processes and established rulemaking procedures, including recommendations from any boards. This Executive Order is intended to be consistent with obligations under federal and state law and shall be interpreted as to not violate any requirement of federal or state law.

8. The Governor encourages the Secretary of State, the State Treasurer, the Attorney General, and the Commissioner of the Bureau of Labor and Industries to adopt policies and practices to accelerate efficiency in the built environment consistent with measures in this Executive Order. DAS and ODOE are directed to assist the above-mentioned officials and entities of state government in accomplishing these objectives as they may request.

Done at Portland, Oregon, this 10th day of November, 2017.

Kate Brown
Kate Brown
GOVERNOR

ATTEST:

Dennis Richardson
Dennis Richardson
SECRETARY OF STATE

Exhibit 3

GLOBAL CLIMATE LEADERSHIP

MEMORANDUM OF UNDERSTANDING (MOU)

I. Statement of Purpose

A. Climate change presents worldwide challenges and risks to environment and economies, impacting human health, increasing extreme weather events, threatening natural resources and triggering forced migration of populations. Impacts from climate change are already inevitable due to the greenhouse gas emissions (GHG) already resident in the atmosphere. At the same time, climate change responses and solutions create economic opportunities and benefits through sustainable energy and development. International efforts are necessary to ensure protection of humankind and our planet, and to limit the increase in global average temperature to below 2°C. To achieve this will require substantial emissions reductions over the next few decades and near zero emissions of CO2 and other long-lived GHGs by the end of the century.

[*(Intergovernmental Panel on Climate Change – Fifth assessment report (AR5))*]

B. Governments at all levels need act **now** to reduce GHG emissions in order to achieve long-term climate balance. Entities need to harness new technologies, policies, financing mechanisms, and economic incentives to reduce emissions while developing common metrics to measure their progress. Governments must also increase the resilience of infrastructure and natural systems to growing climate impacts.

C. While the signatories to this MOU (hereinafter referred to as "the Parties") acknowledge and affirm support of international activities and declarations to respond to climate change (including the Rio Declaration on Environment and Development (1992), the Montreal Declaration (2009), the Cancun Statement (2011), and the Lyon Declaration (2011)), international efforts on climate change to date have been inadequate to address the scale of the challenge we face. Despite limited progress in cooperation among nations, sub-national jurisdictions—including provinces, states, and cities—have led the world in setting ambitious climate targets and taking actions to reduce GHG emissions and protect against climate impacts.

D. By working together and building on agreements such as the Declaration of Rio de Janeiro 2012 (Federated States and Regional Governments Committed to a New Paradigm for Sustainable Development and Poverty Eradication), subnational governments, together with interested nations, can help to accelerate the world's response to climate change and provide a model for broader international cooperation among nations.

II. Reducing greenhouse gas emissions

A. The guiding principle for reduction of GHG emissions by 2050 must be to limit global warming to less than 2.C. For Parties to this MOU this means pursuing emission reductions consistent with a trajectory of 80 to 95 percent below 1990 levels

by 2050 and/or achieving a per capita annual emission goal of less than 2 metric tons by 2050.

B. In order to achieve this ambitious 2050 target, measurable progress must be made in the near-term to establish the trajectory of reductions needed. Midterm targets, including commitments for 2030 or earlier are critical. Recognizing that each party has unique challenges and opportunities, this agreement does not prescribe a specific path for 2030. Rather, Parties agree to undertake their own unique set of actions and plans in Appendix A to reach 2030 reduction goals and related targets.

C. Parties aim at broadly increasing energy efficiency and a comprehensive development of renewable energy to achieve the GHG emission goals. Parties set forth their 2030 goals and targets for these and other critical areas in Appendix A.

D. Specific areas of action, coordination, and cooperation:

The Parties agree that for actions related to this MOU, coordination and cooperation will be beneficial and will strengthen the efforts of participating states. The Parties agree to work together on solutions that provide near- and long-term environmental and economic co-benefits, including joint efforts where possible. The Parties may expand the list of specific areas of action set forth in this sub-section from time to time. The following is a non-exhaustive list of issues of interest for cooperation and coordination among the Parties:

1. Energy:

   The Parties agree to share information and experience on redesign of the power supply and grid, technical solutions and advances in promoting large-scale switch to renewable energy and the integration of renewable energy sources, actions needed to ensure security of supply, and strategies to promote energy efficiency.

2. Traffic and Transport:

   The Parties agree to take steps to reduce greenhouse gas emissions from passenger and freight vehicles, with the goal of broad adoption of "zero emission vehicles" and development of related zero emission infrastructure. The Parties agree to encourage land use planning and development that supports alternate modes of transit, especially public transit, biking, and walking.

3. Natural Resource Protection and Waste Reduction:

   The Parties agree to collaborate on methods to reduce emissions from the natural resources and waste sectors, which exist at the nexus of climate mitigation and adaptation activity. Parties will share information about management techniques to sequester carbon and protect natural infrastructure. Parties will share technologies to reduce waste or convert waste to secondary raw materials or to energy.

4. Science and Technology:

   The Parties agree to collaborate and coordinate on scientific assessment efforts, and share information and experience in technology development and deployment. Parties seek to help others learn from experience to maximize success of technological transitions and avoid potential obstacles.

5. Communication and Public Participation:

   The Parties agree to collaborate and coordinate on messaging, transparency, public outreach around climate change, mitigation of GHG emissions, adaptation, and the subject matter of this MOU.

6. Short-lived Climate Pollutants:

   The Parties agree to collaborate on the reduction of short-lived climate pollutants such as black carbon and methane, which will provide near-term air quality benefits, while also reducing potent climate forcing pollutants.

7. Inventory, Monitoring, Accounting, Transparency:

   The Parties agree to work towards consistent monitoring, reporting, and verification across jurisdictions, and will work through mechanisms such as the Compact of States and Regions and the Compact of Mayors to that end.

III. Adaptation and Resilience

A. The Parties agree to collaborate on actions to promote adaptation and resilience, with an eye toward maximizing benefits for both GHG emission reduction and climate adaptation.

B. Parties will share best practices in modeling and assessment to understand projected climate impacts, especially at the regional and local scale. Entities will share best practices in integrating these findings into planning and investment.

C. Parties will work together to build metrics and indicators that can help to track progress in reducing the risk of climate change to people, natural systems, and infrastructure.

D. In working to reduce climate risk, Parties will look to natural or "green" infrastructure solutions that maximize ecological benefits while providing protection. Parties will share best practices in designing and deploying these solutions.

E. Parties to this MOU will work to share innovative models for financing and supporting climate adaptation, including public-private partnerships, resilience funds, and competitive approaches.

IV. Means of Implementation

The Parties each have their own strategies to implement and achieve their goals and targets. While some strategies will be unique to particular Parties, others can be shared and/or modified by other Parties.

- Parties agree to collaborate and coordinate to advance respective interim targets consistent with 2050 goals and climate actions at the annual Conference of Parties and other international climate events.
- Parties agree to share and promote effective financing mechanisms domestically and internationally to the extent feasible.

- Parties agree to share technology to the extent feasible, such as through open source information.
- Parties agree to help build capacity for action and technology adaptation through technology transfer and expertise to the extent feasible.

This MOU is neither a contract nor a treaty.

[Signatures on following pages]

This Memorandum of Understanding on Subnational Global Climate Leadership signed as of the 19th day of May 2015.

THE STATE OF CALIFORNIA

By: _____

Edmund G. Brown Jr.

Governor

This Memorandum of Understanding on Subnational Global Climate Leadership signed as of the 19th day of May 2015.

THE STATE OF BADEN-WÜRTTEMBERG

By: _____

Winfried Kretschmann

Minister-President

This Memorandum of Understanding on Subnational Global Climate Leadership signed as of the 19th day of May 2015.

THE STATE OF ACRE

By: _____

Magaly Medeiros

Director-President, The Institute on Climate Change

This Memorandum of Understanding on Subnational Global Climate Leadership signed as of the 19th day of May 2015.

THE STATE OF BAJA CALIFORNIA

By: _____

Francisco Vega de Lamadrid

Governor

This Memorandum of Understanding on Subnational Global Climate Leadership signed as of the 19th day of May 2015.

THE PROVINCE OF BRITISH COLUMBIA

By: _____

Christina Joan Clark

Premier

This Memorandum of Understanding on Subnational Global Climate Leadership signed as of the 19th day of May 2015.

THE STATE OF CATALONIA

By: _____

Santi Vila Vicente

Minister of Territory and Sustainability

This Memorandum of Understanding on Subnational Global Climate Leadership signed as of the 19th day of May 2015.

THE STATE OF JALISCO

By: _____

Jorge Aristóteles Sandoval Díaz

Governor

This Memorandum of Understanding on Subnational Global Climate Leadership signed as of the 19th day of May 2015.

THE PROVINCE OF ONTARIO

By: _____

Glen Murray

Minister of the Environment and Climate Change

This Memorandum of Understanding on Subnational Global Climate Leadership signed as of the 19th day of May 2015.

THE STATE OF OREGON

By: _____

Kate Brown

Governor

This Memorandum of Understanding on Subnational Global Climate Leadership signed as of the 19th day of May 2015.

THE STATE OF VERMONT

By: _____

Peter Shumlin

Governor

This Memorandum of Understanding on Subnational Global Climate Leadership signed as of the 19th day of May 2015.

THE GOVERNMENT OF WALES

By: _____

Carl Sargeant

Minister for Natural Resources

This Memorandum of Understanding on Subnational Global Climate Leadership signed as of the 19th day of May 2015.

THE STATE OF WASHINGTON

By: _____

Jay Inslee

Governor

APPENDIX A.1
CALIFORNIA

Overview

California is a leader in climate change action. The California Global Warming Solutions Act of 2006 (AB 32) established California as a global leader in reducing GHG emissions. To meet the goals of AB 32, the state adopted a three-pronged approach to reducing emissions, including adopting standards and regulations, providing emission reduction incentives via grant programs, and establishing a market-based compliance mechanism known as cap and trade. As of May 2014, 23 percent of California's electricity produced derives from renewable sources. California's economy-wide, legally binding emissions trading system, the cap and trade program, is the only such program in the United States. By 2020, California will reduce greenhouse gas (GHG) emissions by 17 percent to 1990 levels to 431 million metric tons of CO2e, and will generate at least 33 percent of its electricity from renewable sources. California is the world's leading market for electric vehicles and for stationary storage, including a requirement of 1300 MW of storage by 2020. These programs have become part of the dynamic economic engine that is California. Over the past five years, the State's gross domestic product has grown by five percent while the amount of carbon pollution has fallen. California solar companies employ more than 44,000 people. Over four decades, the state's appliance and building efficiency policies have saved consumers over $65 billion and created 1.5 million jobs. California's 2030 GHG emission reduction target is 40 percent below 1990 emission levels, which is consistent with its 80 percent reduction target for 2050.

Specific Actions and Commitments

Understanding California's role in reducing GHG emissions to mitigate climate change and protect the state's residents and economy from a changing climate, Governor Jerry Brown issued Executive Order B-30-15 to establish a GHG emission reduction target of 40 percent below 1990 levels by 2030. Along with this target, the most ambitious in North America, the Governor also required state agencies to incorporate climate resiliency into planning and funding decisions to ensure that the State's resources withstand California's changing climate. To meet the GHG emission reduction target specified in the Executive Order, the Administration will pursue the following policies:

By 2030,

- Increase electricity derived from renewable resources to 50 percent.
- Reduce petroleum use in cars and trucks by up to 50 percent.
- Double energy efficiency achieved in existing buildings and make heating fuels cleaner.
- Reduce the release of short-lived climate pollutants, such as methane and black carbon.
- Increase carbon sequestration on farms and rangelands and in forests and wetlands.

Low Carbon Electricity

California will build on its 2020 target of a 33%-plus renewable portfolio with a goal of 50 percent by 2030. California will focus more specifically on GHG emission reductions from the power sector, through an increased renewable portfolio, demand reduction and response, increased storage paired with renewables, increased penetration of distributed renewables and storage, and actions at the grid level.

Decarbonization of Transportation

The transportation sector in California accounts for nearly 40 percent of its greenhouse gas emissions. Strategies for reducing carbon pollution must include transformation of the transportation fleet from older higher pollution vehicles and fuels to newer, near zero and zero emission vehicles and cleaner, less carbon intense fuels. California has set a goal of 1.5 million zero emission vehicles by 2025, adopted a Zero Emission Vehicle mandate, provided incentives for purchasers of ZEVs, established grants to accelerate charging infrastructure for battery electric vehicles and hydrogen fueling infrastructure for fuel cell electric vehicles, and developed programs to support near zero and zero emission vehicles and fuels in a wide variety of fleets from transit buses to port equipment. California's low carbon fuel standard requires a 10 percent reduction in the carbon intensity of transportation fuels in California by 2020. California is providing more zero emission transit options, changing land use and zoning to reduce vehicle miles traveled, and building a high speed rail network that will be the backbone of an integrated transit system. California has also adopted aggressive carbon pollution reduction requirements for all vehicles through 2026 and beyond. By 2030, California's transportation emissions will be significantly reduced, in line with the 2050 reduction goals. The State has set a goal of reducing the use of oil by up to 50% by 2030.

Energy Efficiency

California requires that all new residential construction be Zero Net Energy by 2020, and all non-residential be so by 2030. California's goal is to double energy efficiency in buildings by 2030. The State is developing additional cost-effective minimum efficiency standards for a variety of lighting, electronics and other common products. California is also instituting requirements for energy benchmarking of all non-residential buildings above 30,000 square feet. The State is also using standardized reporting and analysis tools for statewide assessment and trending of existing building energy performance patterns, which will call for evaluation of current and future actions. California's annual energy ratepayer investment of $1.2 billion in end-use energy efficiency is likely to increase. California is promoting a number of financing tools for home energy retrofits and will increase efforts to ensure a higher percentage of energy retrofits for existing homes and buildings.

Climate Policies and Emissions Trading

California's cap and trade program sets statewide limits on sources of 85 percent of greenhouse gas emissions, and helps establish a price for emissions and drive investments

towards cleaner energy, infrastructure, and fuels. The emission cap declines 2 to 3 percent through 2020. Sending the market a signal that the cap-and-trade program will continue in the long-term is critical to fully realizing the benefits of the program. Extending the cap-and-trade program beyond 2020 will also reduce the costs of the program as California industry and households make long-term capital and investment decisions. The level of the cap decline beyond 2020 will be commensurate with the emission reductions needed to meet the 2030 goal.

Natural Resources, Waste and Green Infrastructure

California's 100 million acres are critical to meeting all of the State's climate goals. The land base includes one of the world's biodiversity hotspots, provides more than 65 percent of the potable water used in state, produces food for millions of people, and sequesters carbon in trees, wetlands, grasslands, rangelands and soils, among other land types. California's 2014-15 investment in urban greening nearly exceeds the budget set by the US Forest Service for the entire country. The State's Desert Renewable Energy Conservation Plan couples renewable energy development with conservation in a 23 million acre area. California will target landscape health through broader investments in natural lands to ensure their ability to withstand climate change while increasing sequestration and provisioning of ecosystem services such as clean water, air and erosion control. These efforts will be complemented by organic waste diversion to produce rich compost for California's healthy soils and support reduced fertilizer use in California's agricultural fields. Further, by increasing forest health management efforts, California's residents will experience cleaner air through reduced severity of wildfires and increased access to electricity and heat derived from biomass.

Funding

California has multiple funding mechanisms to drive emissions reductions and is evaluating others. Cap and trade auction revenue, bonds, ratepayer funds, Property Assessed Clean Energy funding, and on-bill financing are among the mechanisms currently being used.

APPENDIX A.2

BADEN-WÜRTTEMBERG

The State of Baden-Württemberg, located in South West Germany, is one of the most prosperous regions in Europe. Baden-Württemberg is a pioneer in Germany and the EU. Though the state is embedded in the national German and the European climate policy, Baden-Württemberg undertakes its own contributions to achieve the political goal of acting as a pacemaker, particularly in Germany and the EU. For example, Baden-Württemberg, along with North Rhine-Westphalia, passed its own 'Climate Protection Act' as the first state in Germany. On this basis and with a broad public participation process an 'Integrated Energy and Climate Protection Action Plan (IEKK)' was developed. The IEKK includes over 100 measures to reduce greenhouse gas emissions in line with the German energy transition "Energiewende" and the decision to phase out nuclear energy production.

In the IEKK reduction targets are also defined for key sectors such as power generation, industry and the transport sector. The necessary basis was derived from an energy scenario for Baden-Württemberg; it shows possible paths to reach the GHG emission targets. The future energy needs were identified in different sectors and the level of potential coverage by renewable energy sources was identified. The greenhouse gas (GHG) emissions are split between three main sectors: electricity and heat production with around 23%, transport with slightly above 28% and energy consumers in household and small business with about 23%. About a third of the greenhouse gas emissions of Baden-Württemberg are covered by the EU emission trading system (ETS). The first ETS worldwide was installed in a pilot phase 2005–2007. In 2021 the fourth phase will start with an annual reduction of the emission-allowances in the EU climbing from 1,74% to 2,2%.

Baden-Württemberg aims to reduce greenhouse gas emissions by 2020 compared to 1990 by at least 25% and by 2050 by 90%. European heads of state have decided a greenhouse emissions reduction target for the year 2030 of 40% compared to 1990 to which a reasonable contribution of Baden-Württemberg is intended. Furthermore, the EU has decided to increase the share of renewable energy to 27% of primary energy in 2030 and to reduce energy consumption by 27%.

<u>The starting position:</u>

Population: 10.8 million (2013)

GDP: 37,472 EUR per capita (2013)

Country: Germany

GHG emissions (year): 76 million tons (2012)

<u>Specific Actions and Commitments:</u>

I. Greenhouse Gas Emissions

By 2020 Baden-Württemberg will reduce GHG emissions by 25% and by 2050 by 90% compared to 1990. The targets are laid down in the "Climate Protection Act Baden-Württemberg" which was enacted by the state parliament on 17th of July 2013. Against

this background an 'Integrated Energy and Climate Protection Action Plan (IEKK)' was developed. A periodical monitoring program will be established for the further development of the IEKK.

With regards to the EU 2030-targets of 40% THG reduction a reasonable contribution of Baden-Württemberg is intended.

II. Renewable Energy:

The amount of renewable energies in final energy consumption by 2020 will be increased up to 25%. The Baden-Württemberg objective for 2030 will be updated depending on the implementation of the EU 2030 target of 27%. Since 2011 Baden-Württemberg has improved the legal planning conditions for wind farms. In 2013 renewable energy covered about 23% of electric power production. In Germany the national Renewable Energy Law (EEG) promotes the generation of renewable energy.

At the national level there is a Statute on the Use of Renewable Heat Energy for new buildings. Additionally there are further funds in Baden-Württemberg for existing buildings. For example, in the case of a change of the radiator the owner must use regenerative heating energies or alternatively the energy efficiency of the house can be improved by better insulation of the roof or the front of the house.

III. Energy Efficiency:

By 2020 the final energy demand compared to 2010 will decrease by 16%. The EU 2030 target aims to increase the energy efficiency by 27%. Baden-Württemberg promotes energy efficiency through a wide range of measures, including a widespread network of regional energy agencies, which provide advice for households and businesses, campaigns for energetically retrofitting residential buildings, grant schemes on the latter for households, and grant schemes for energy efficiency in small and medium sized businesses. Baden-Württemberg emphasizes the combined generation of power and heat, ideally by use of renewable energies. Municipalities and electricity producers are encouraged to develop further local heat networks.

IV. Sustainable Mobility:

Baden-Württemberg has become a pioneering region for sustainable mobility. In the 'transport and mobility' sector Baden-Württemberg aims to reducing GHG emissions by 20 percent by 2020, compared to 1990. By 2050 the GHG emissions in this sector should be reduced by 70%. Therefore several actions are to be taken, like strengthening bicycle traffic, public transport and electro-mobility. To ensure constant progress towards these objectives numerous sub-goals have been agreed upon. For example, Baden-Württemberg intends to increase the share of bicycle traffic from 8% in 2008 to 16% by 2020 and increase the number of electric vehicles to 200.000 until 2020.

V. Role model of the state:

The state administration of Baden-Württemberg is pursuing the objective of near climate neutrally by 2040. Therefore Baden-Württemberg is pursuing a comprehensive retrofitting of its state-owned buildings in order to reduce its own energy consumption and is increasing the number of e-mobile vehicles in its car pools. Part of the scheme is to raise the share of renewable energies for state purposes.

VI. Emission Trading:

Baden-Württemberg industries are taking part in the EU emission trading system (ETS). Baden-Württemberg advocates for ensuring the ETS is an efficient instrument for reducing greenhouse gas emissions and climate protection.

APPENDIX A.3
ACRE

Appendix forthcoming.

APPENDIX A.4

BAJA CALIFORNIA

Baja California is a leading federal entity in the field of climate change and has an institutional framework for the prevention, mitigation and adaptation to the phenomenon, allowing it to make timely decisions, based on:

(a) Preventative State law, mitigation and adaptation of climate change for the State of Baja California (the first law in the country).

(b) State program on climate change for the State of Baja California

(c) Council on climate change for Baja California (where the government levels and the powers of the State are represented, as well as higher education institutions and civil society organizations).

Similarly, we have the results of a study called "Second phase of the State Program on climate change for Baja California", which identifies twenty-five (25) mitigation policies that have the best cost-benefit ratio to be implemented and which will allow us to reduce greenhouse gas emissions between 20% and 25% by the year 2030.

In this sense, the State Development Plan defines as a general objective of sustainable economic development section: managing regional development with representative population participation, with high levels of competitiveness, with the efficient allocation of functions and financial resources in departments of public administration, as well as urban, economic, and environmental institutional coordination for the promotion of investment , research and development of local productive options, the linking of regional vocations and border economy, the use of clean energy and environmental protection and the following commitments for the period 2014-2019 are established:

3.8.2. Environmental policies and climate change

3.8.2.1 Implement sustainable environmental public policies that mitigate the effects of climate change and that can adapt to rationally take advantage of natural resources.

3.8.2.2 Integrate the conservation of natural capital of the entity with the social and economic development. Develop and implement the environmental fund in such a way to ensure resources for the implementation of environmental policies.

3.8.2.3 Develop the environmental geographic information system and integrate it into the general system, to develop, implement and manage the territorial and ecological system of the State.

3.8.2.4. Developing and implementing protected areas, strategies and management plans for the conservation of biodiversity and the sustainable use of natural resources emblematic of Baja California.

Specific Actions and Commitments

CROSS-BORDER LINKAGE

I. 3.8.3. Intergovernmental and international coordination

3.8.3.1 Improve channels for intergovernmental and international coordination to address environmental problems with a regional, cross-border and long term vision.

CLEAN ENERGY

II. 3.9.3 Promote energy efficiency of industrial and commercial usage

3.9.3.2 Adapting current regulations applicable in the construction of state and municipal housing.

3.9.3.3 Promote and disseminate a saving and efficiency culture through institutional strengthening programs and awareness events.

III. 3.9.4. New sources of supplying energy

3.9.4.1. Encourage public and private investment in projects that generate, manage and commercialize alternative clean energy

3.9.4.2. Encourage public and private investment in programs that promote the creation of companies, training courses and professional development in the field of clean energy.

WATER MANAGEMENT

IV. 5.5.3 Use of treated wastewater

5.5.3.1 Promote and implement local and intercity projects of treated wastewater for irrigation of green urban areas, as well as agricultural, industrial, and ecological and recharge of aquifers.

V. 5.5.1. Drinking water

5.5.1.1 Ensure water supply sources and define alternatives for new sources, such as desalination of seawater.

URBAN MOBILITY AND VEHICLE EMISSIONS

VI. Systems of rapid transport (BRT) for the cities of Mexicali and Tijuana.

VII. Planning of bike paths, pedestrian walkways and green corridors – Diversify transportation in cities through the promotion of the use of bicycles, significantly improve the quality of urban routes, improvements in commute times, equity, health, road and personal safety, the environment and the tourist attractions of cities.

VIII. Environmental vehicle verification program. This is intended to verify that the motor vehicles in the State, comply with the emission limits allowed by the Mexican official standards.

IX. Paving programs for the cities of the State.

APPENDIX A.5

BRITISH COLUMBIA

British Columbia was the first jurisdiction in North America to introduce a carbon tax and require greenhouse gas emissions reduction targets by legislation – 33% below 2007 levels for 2020 and 80% below 2007 levels for 2050. The carbon tax was launched together with a suite of ambitious measures outlined in B.C.'s 2008 Climate Action Plan. The carbon tax and complementary policies allowed British Columbians to reach their 2012 interim emissions reduction target of 6% below 2007 levels. In the same period, the province's population and GDP increased, keeping pace with the Canadian average. This was a major milestone for the province and represented the first step in a longer journey toward achieving 2020 and 2050 targets. British Columbia will continue the internationally recognized leadership it began with the Climate Action Plan in 2008 and is currently developing a Climate Leadership Plan to keep British Columbia on track to achieve the 2020 and 2050 legislated greenhouse gas reduction targets, and support a growing economy.

The starting position:

Population: 4, 582, 600 (2013)
GDP: $50, 121.00 CAD per capita (2013)
Country: Canada
GHG emissions: 61.5 million tonnes CO_2e (2012)

Specific Actions and Commitments

Carbon Tax
British Columbia's revenue-neutral carbon tax remains the most comprehensive and ambitious of its kind in North America, establishing a model for other jurisdictions around the world. British Columbia's carbon tax applies to virtually all fossil fuels, including: gasoline, diesel, natural gas, coal, propane and home heating fuel. The carbon tax started at a rate based on $10 per tonne of carbon-dioxide equivalent emissions, and rose $5 each year over four years, reaching $30 per tonne in 2012. The revenue generated by this tax is returned to individuals and businesses through reductions in other taxes. Since the introduction of the tax, independent research has shown that fuel use per capita has fallen 17.4% between 2008 and 2012. British Columbia remains committed to a strong price on carbon, and works to encourage other jurisdictions to adopt similar measures.

Clean Power
The Province has legislation requiring 93% or more clean and renewable electricity generation. In November 2013, the Province approved BC Hydro's Integrated Resource Plan that shows that BC Hydro, the largest electricity utility in the province, is at 96% renewable electricity generation. There is currently no coal power generation in British Columbia. British Columbia's *Energy Plan: A Vision for Clean Energy Leadership*, set out a policy objective to require zero greenhouse gas emissions from any coal thermal electricity facilities in British Columbia. In December 2014, the Province made a final investment decision to develop Site C, a 1,100 MW hydro-electric facility on the Peace River—the third facility on the Peace River, demonstrating British Columbia's commitment to clean power. Energy utilities are required to pursue demand-

side measures (DSM) up to the cost of new clean generation resources before purchasing new generation. BC Hydro is required to meet 66% of new demand through DSM by 2020, and BC Hydro's Integrated Resource Plan shows BC Hydro plans to meet 78% of new demand through DSM.

Energy Efficiency

British Columbia sets energy performance standards to meet targets for market transformation of 66% displacement of electricity demand growth and 20% reduction in energy in houses by 2020. British Columbia recently adopted energy efficiency standards aligned with national and regional leaders for small battery charging systems (e.g., cordless phones, cell phones, power tools, laptops and golf carts), clothes washers, dishwashers and residential gas-fired furnaces. Net present-value energy savings at the provincial level are estimated to be $157 million CAD. Twenty-nine per cent of LEED Gold building projects registered in Canada since 2007 are located in British Columbia, and all new public sector buildings must be built to LEED-gold standard or better. British Columbia was the first jurisdiction in Canada to adopt both the new National Building Code energy-efficiency requirements for housing and small buildings and the National Energy Code for Buildings, which applies to large buildings (2013).

Transportation

By building the key infrastructure, increasing the adoption of cleaner fuels and encouraging the transition to clean energy vehicles, British Columbia is moving toward building a transportation system that reduces distances driven and is powered by clean energy.

Clean Energy Vehicles

Actions in every sector have helped people, communities and businesses reduce their emissions and their costs. For example, in 2011, the British Columbia government launched its $14.3 million CAD Clean Energy Vehicle (CEV) Program to provide incentives for eligible clean energy vehicles and deployment of charging-point infrastructure for these vehicles. The CEV Program has provided British Columbians with more affordable clean energy transportation solutions, and British Columbia leads Canada in clean energy vehicle sales per capita and has the largest electric vehicle charging and hydrogen fueling networks in Canada. In 2015, British Columbia renewed the CEV Program to continue to encourage adoption of clean energy vehicles.

Low-Carbon Fuel Standards

Adopted in 2008, British Columbia's Renewable and Low Carbon Fuel Requirements Regulation has helped reduce the province's reliance on non-renewable fuels and the environmental impact of transportation fuels. This regulation enables the Province to set benchmarks for the amount of renewable fuel in British Columbia's transportation fuel blends, reduce the carbon intensity of transportation fuels and meet its commitment to adopt a low-carbon fuel standard. Currently, the regulation targets a 10% decrease in carbon intensity of transport fuels sold in British Columbia by 2020, and 5% renewable content in gasoline (4% in diesel).

Alternative Fuels

The Province implemented the Greenhouse Gas Reduction (Clean Energy) Regulation in 2012 which permits utilities to offer incentives for the purchase of natural gas vehicles and to make investments in liquefied natural gas and compressed natural gas fuelling

infrastructure in sectors such as medium and heavy duty on-road transportation, marine, mining and locomotive support.

Cleanest LNG Facilities in the World

The British Columbia government had committed to having the cleanest LNG facilities in the world, while maintaining its leadership in clean energy and climate action. The Province has implemented a benchmark approach with the use of offsets and technology fund contributions as flexible means to achieve compliance. Facilities must reduce the intensity of their emissions against a standard that outperforms the cleanest LNG facilities in the world today.

Commitment to Leadership in Government Operations

Each year since 2010, British Columbia's public sector has achieved carbon neutrality, a first for any province or state in North America. Through the Carbon Neutral Government program, the development of British Columbia-based offsets has meant this achievement places British Columbia on the leading edge of growth in the clean-energy and clean-technology sectors. Provincially owned or leased buildings must be LEED gold or equivalent. The Carbon Neutral Capital Program helps public schools, universities, colleges and hospitals reduce energy costs and use innovative clean technologies. Government buildings are able to showcase examples of clean-energy solutions for hundreds of thousands of British Columbians when they access government services, go to work or attend school.

Local Communities

British Columbia can only meet its greenhouse gas reduction commitments with the help of its cities and communities. 95% of local governments have signed a voluntary agreement with the provincial government through the Climate Action Charter. By signing the Climate Action Charter, local governments commit to: working toward carbon neutrality in their corporate operations; measure their community energy and emissions; and create complete, compact, more energy efficient rural and urban communities. To support their commitments, local government signatories that report on their progress each year are granted the same amount paid in carbon taxes on their corporate operations.

APPENDIX A.6

CATALONIA

Catalonia is a historical nationality within the Spanish state, as well as one of its 17 Autonomous Communities. It is the second most populous one, has the highest GDP and its main economic sectors include chemicals, food, energy, metal, transportation and the rapidly increasing tourism sector. It has a strong tradition of research and innovation and seeks to foster a transition to a more sustainable and low carbon economy. This is demonstrated, among other initiatives, by its leadership in smart cities development and implementation, its long tradition of climate and environmental research and its commitment to preserve the unique environment of the region.

Catalonia is fully committed to taking action against climate change, proved by its engagement in international networks and the UNFCCC process, as well as its leadership at a regional level, with the Energy and Climate Change Plan 2012-2020 or the Catalan Strategy for Adapting to Climate Change 2013-2020.

Catalonia accomplished its objectives under the Kyoto Protocol during the 2008-2012 period. Currently, it has a target of increasing energy efficiency by 20%, generate 20% of the gross final energy consumption from renewable sources and reduce energy-related greenhouse gas emissions 25% below 2005 levels by 2020.

Catalonia also acknowledges the importance of adaptation when tackling climate change. The Catalan Strategy for Adapting to Climate Change 2013-2020 identifies the main impacts for this century and aims to incorporate adaptation into public policies, identify arising opportunities and promote research, innovation and knowledge transfer.

Finally, the Catalan Government is currently working on a Climate Change Bill, giving a solid response to the threat of climate change, and thus showing unequivocal commitment and collective responsibility in the fight against climate change.

Starting position:

Population: **7,518,903 (2014)**

GDP: **226,328.65 (US$, 2014)**

Country: Spain

GHG emissions: 43.14 million tons CO2eq (2012)

Emissions per capita: 5.8 t CO2eq (2012)

Specific Actions and Commitments

I. Energy Efficiency and Low Carbon Electricity

Catalonia has an Energy and Climate Change Plan 2012-2020, which demonstrates its focus on clean energy. Its objectives complement the 2020 EU Strategy: the Plan will achieve a 25.3% GHG emissions reduction from 2005 levels; it is also committed to generate 20.1% of the gross final energy consumption through renewable energy sources, and to achieve a 20.2% increase in energy efficiency by 2020. Actions are focused predominantly on energy demand, energy

efficiency and renewable energy. Energy efficiency is based on industrial, building and transportation sectors. The new Plan also promotes renewable energy, in particular wind, including marine wind, biomass and solar (thermal, photoelectric and thermoelectric).

Apart from that, Catalonia has specific legislation for issues related to mitigation actions. That is the case of the Catalan Strategy for Energy Renovation of Buildings 2014-2020, which aims to cut by 22% the CO2 emissions of already-built residential buildings by reducing their energy use by 14,4%, while mobilising public investment, saving money and creating new job opportunities.

At present, Catalonia is drawing the Climate Change Mitigation Plan 2020, which focuses on non-energetic sectors not covered by the Energy and Climate Change Plan 2012-2020, such as waste, agriculture, fluorinated GHG emissions, carbon sinks, and non-energetic emissions from buildings, transport and industry.

Furthermore, a Catalan Climate Change Bill is being drafted and will be passed this year, which will set the path to further emission reduction targets and increased ambition in regional climate action. Targets are designed as a continuous progression from previous ones, in line with the EU objective to reduce its emissions by 80-95% by 2050 compared to 1990, within the context of necessary reductions by developed countries as a group according to the IPCC.

II. Sustainable Mobility

The Government of Catalonia is already heavily involved in initiatives to make EVs ready for the market. In 2010 Catalonia adopted the Strategy to Foster the Electric Vehicle in Catalonia (IVECAT) 2010-2015, for the introduction of electric vehicles (EVs) and, since 2010, a growing number of municipalities have introduced EV fleets thanks to regional subsidies. The strategy has a target of 76,000 electrical vehicle sales and 91,200 charging station installations (83,600 private and 7,600 public access) by 2015.

Furthermore, Catalonia's Transport Infrastructure Plan 2006-2026 (PITC) aims to increase rail freight 8.5% per year and limit private car mobility increase by up to 60% by 2026, resulting in a 10% CO2 emissions reduction compared to business as usual scenario.

III. Natural Resource Protection and Waste Reduction

The General Program of Waste and Resources Prevention and Management 2013-2020 (PRECAT20) aims to achieve a 30% reduction in the carbon footprint of waste management and resources used in Catalonia (based on 2012 levels) and a 15% reduction in primary total waste primary generation reduction (including municipalities, industry and building sector) in 2020 and based on 2010 levels.

Furthermore, Catalonia recently approved the Strategy to Promote the Energy Use of Forest and Agriculture Biomass 2020. Due to its highly forested territory and the deficit in forest management, the strategy is considered a key to protect the environment and promote zero emissions energy.

IV. Adaptation

Catalonia is already suffering the consequences of climate change, and therefore understands the necessity to act rapidly. That is why the Government approved a Catalan Climate Change

Adaptation Strategy 2013-2020. The Strategy identifies the geographic areas and activities at greater risk due to climate change, and considers adaptation options that reduce the vulnerability of socioeconomic sectors and natural systems. It also incorporates and implements measures in sectorial planning, risk management and best practice to improve climate change adaptation and resilience.

The Strategy has been complimented by the Global Indicator of Climate Change Adaptation in Catalonia, designed to measure how the region is adapting to climate change. The study has 29 key indicators that produce a global adaptation indicator quantifying Catalonia's capacity to adapt to climate change, which will be key to evaluate the extent to which policies are being effective.

APPENDIX A.7

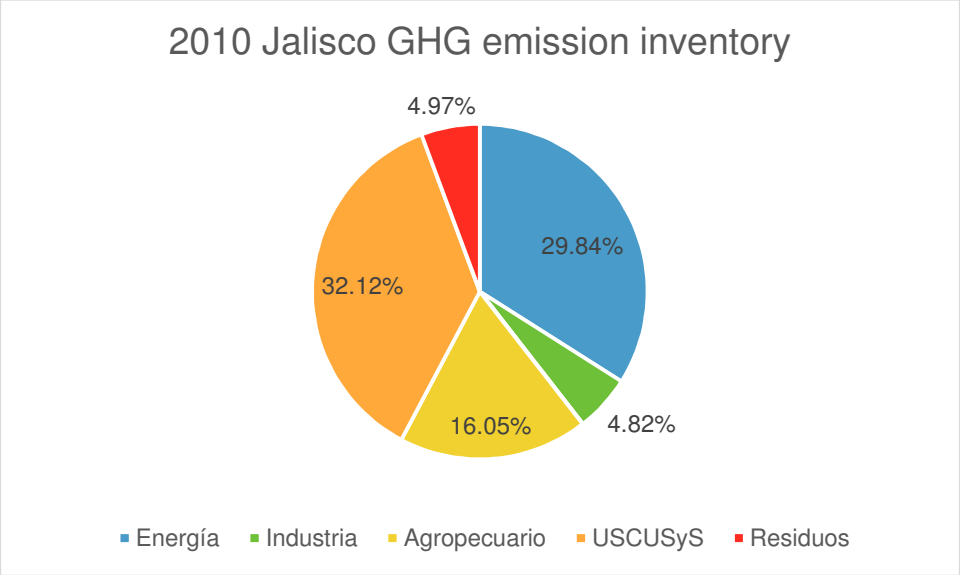
JALISCO

Jalisco, one of the most important economic actors in Mexico, is located in the western part of the country and possess a territory of 78,588 km^2 – a size similar to that of the Czech Republic. With over 7 million inhabitants, Jalisco is the fourth most populous state in Mexico; which about 60% of the population lives within the Greater Guadalajara Area, making it the country's second largest city right after Mexico City.

Jalisco contributes with 6.4% (57,888 million USD) of Mexico's GDP. Even though over 65% of Jalisco's economic activity comes from the tertiary sector (trade, transport, real estate and other services), Jalisco's agricultural sector leads Mexico's national production in several produces such as corn, milk, eggs and pork meat.

When it comes to environmental actions, Jalisco has positioned itself as a local leader thanks to initiatives such as the "Voluntary Environmental Achievement Program", the improvement of public building's energy efficiency, and the inauguration of the Los Altos wind farm, among others projects, all which enable Jalisco to play a significant role in the Mexican environmental policy and politics development.

Based on the inventory of greenhouse gas emissions, in the year 2010 Jalisco generated 42,001.22 Gg of $C0_2$, which results in a per capita emission of 5.16 tons. The sectors that emit the most are land use, changing land use, and energy consumption, followed by the agriculture sector, industrial and waste management.



The state of Jalisco aligned to the National Climate Change Strategy, has set the following goals for reducing emissions based on 2010 emissions:

- 30% by 2030.
- 50% by 2050.

The inventory results allows the state to guide mitigation strategies prioritizing those that have a direct influence on the emitting sectors including:

- **Energy:** transition to energy independence by using renewable energy; which implies the exploitation of the potential of the territory in generating solar power and wind power. Boosting the implementation of energy efficiency programs in both, the public and private sectors through the investment in the construction of infrastructure and new operations.
- **Urban Planning:** increase territory efficiency by reducing urban sprawl, as well as promoting a transition towards public transportation systems that are safe, clean, low-emission alternatives, accessible, comfortable, and that strengthen interconnectivity.
- **Transportation:** Promotion the use of non-motorized mobility by improving bicycle and pedestrian infrastructure, road safety education, and legal reforms to protect the cyclists and pedestrians. Modernization of the vehicle fleet with an eventual transition to electric cars. Increased public transport lines. Modernization of public transport units that can be more accessible, comfortable and with better fuel efficiency. Boosting foreign and inter rail passenger transport.
- **Biodiversity and Forests**: Develop a strategy for reducing emissions from deforestation and land degradation, as well as consider sustainable forest management, increasing carbon stocks and forest conservation schemes by increasing payments for environmental services.
- **Agricultural Sector**: Promoting schemes of agricultural and forest production with potential mitigation through carbon sequestration practices, livestock waste management activities, and reducing emissions from the inappropriate use of fire.
- **Waste:** To promote integrated waste management through enhancement projects, use of organic waste, methane capture at landfills and wastewater treatment.
- **Financial instruments**: Install regional carbon trading schemes, green taxes and environmental funds to finance projects to move towards a low carbon development.

The fourth part of the state territory is very sensitive to global warming; 47% of this area is dedicated to predominantly agricultural activities, 4% to livestock activities and only 3% are human settlements. Climate disruption has various effects such as reduced rainfall and soil moisture or extreme temperatures increase and intensity of rainfall, crop failures, increased pollution, increased presence of natural disasters (such as hurricanes), among others.

Based on opinion surveys for adaptation to climate change made to the population of Jalisco, it is shown that there is a partial ignorance in terms of the causes, consequences, and effects of climate change, as well as a remarkable misinformation about how to tackle climate change, and how to reduce vulnerability and adaptation measures.

To reduce vulnerability and increase resilience of its systems, the state of Jalisco should promote the following initiatives:

- Educate, inform, and raise awareness about climate change, its consequences, and responsibility of the whole society.
- Promote the analysis of vulnerability to climate change areas, economic activities and population groups.

APPENDIX A.8
ONTARIO

Appendix forthcoming.

APPENDIX A.9

OREGON

Oregon has long been a leader in establishing strong policies that help build a more resilient economy while reducing greenhouse gas emissions. Oregon's private sector has been able to leverage this policy environment to make significant investments in maximizing energy efficiency and conservation, building out a renewable energy portfolio and growing the alternative fuel industry. This is good for consumers, good for the environment and good for the state's economy.

Oregon has been recognized nationally and internationally as an innovative leader in working with the clean technology industry to strengthen our economy and environment. The state focuses on how we can continue to transition to new energy systems that save consumers money, create consumer choice, provide for system reliability, remove market barriers for development, and attract significant private capital investment. For example, the Energy Trust of Oregon was created to maximize energy efficiency and conservation. Since the organization's inception, ETO has helped save rate-payers $1.7 billion on their energy bills. Their work keeps energy costs as low as possible, builds a sustainable energy future, creates jobs that cannot be outsourced and protects the environment. The state also has implemented strong building codes, energy efficient appliance standards, residential energy disclosure mechanisms, renewable energy and conservation incentives, alternative transportation options, mass transit alternatives, and the renewable portfolio and carbon dioxide standards, to name a few.

Specific actions and commitments:

I. Greenhouse Gas Emissions Goals

In 2007, the Oregon State Legislature established greenhouse gas emissions reduction goals. The goals call for Oregon to arrest the growth of greenhouse gas emissions and begin to reduce emissions by 2010, achieve greenhouse gas levels that are 10% below 1990 levels by 2020, and to achieve greenhouse gas levels that are 75% below 1990 levels by 2050. Oregon has put in place a number of policies and programs that are moving the state forward to meet these greenhouse gas emissions reduction goals.

II. Clean Electricity

Oregon is one of the largest producers of renewable electricity in the country. The Bonneville Power Administration's hydro system is the backbone of Oregon's renewable energy portfolio. Approximately 44% of the state's energy is hydroelectric. In addition, 2.8% is derived from nuclear, 5.2% from wind and 10% from other renewable resources, such as solar, landfill gas, geothermal, waste and biomass.

In 2007, the legislature passed the renewable portfolio standard which requires large utilities to serve 25% of their retail load from new renewable resources by 2025. To date, this has attracted over $10 billion investment in the state, most of which is in rural Oregon. This investment not only reduces greenhouse gas emissions, it provides much needed property tax and other revenue to hard hit counties. Through maximizing royalties from wind, counties have been able to retain public safety officers, build schools and provide rebates for their citizens. The state is on track to meet the renewable portfolio standard by 2025.

In 2009, the state established a five year solar feed-in tariff pilot program to expand distributed generation solar. In addition, the state requires all new and retrofitted state buildings use 1.5% of their construction budget to install solar on-site and is working to develop a community solar program. The state also provides incentives for renewable energy generation projects.

Oregon's only coal-fired power plant will be decommissioned in 2020.

III. Energy-neutral buildings

Oregon has long been a national leader on energy efficiency. It is the state's policy to maximize energy efficiency and conservation first, as efficiency is the least-cost resource. The region has set a target of meeting 85% of new load growth through energy efficiency and conservation, and due to the investments made by our local utilities Oregon is on track to meet the state's share of this target.

Oregon adopted a reach code to lay the groundwork for significantly reducing energy consumption in the build environment. The state coupled this with providing an incentive for building operators who meet the reach code, helping to buy down the cost of the delta between standard code and the reach code. In addition, the state is pursuing commercial building disclosure mechanisms to capture behavioral energy efficiency, adoption of efficient appliances, on-site generation, smart controls and other features. Oregon consistently ranks in the top three on the State Energy Efficiency Scorecard, published by the American Council for an Energy Efficient Economy.

IV. Clean Transportation

The largest contributing sector to Oregon's greenhouse gas emissions is the transportation sector at 33%. Oregon is taking a comprehensive approach to reducing emissions in this sector. The state prioritizes maximizing mass transit opportunities, investing a significant amount of money is providing strong mass transit opportunities for people in all corners of the state. In addition, the state has established incentive and loan programs to help private and public sector fleets convert to alternative fuels; this not only reduces greenhouse gas emissions, it saves fleet operators significant money that can be reinvested into growing their business or public sector organization. Coupled with work to convert fleets, the state has worked diligently to create Oregon's part of the West Coast Electric Vehicle Highway and to provide alternative fueling stations so consumers and fleet operators have access to alternative fuels. Lastly, Oregon requires its metropolitan planning organizations to develop transportation and land use plans that meet carbon reduction targets. Lastly, Oregon joined with California and other states to significantly increase the adoption of zero emission vehicles.

APPENDIX A.10
VERMONT

Appendix forthcoming.

APPENDIX A.11

WALES

Wales is one of the nations that make up the United Kingdom, located in the west of Europe and covering an area of just over 8,000 square miles (20,722 km²). Climate change action in Wales sits within the wider European and UK framework and the overarching target of at least an 80% reduction in greenhouse gases by 2050 (based on a 1990 baseline). Wales has had a dedicated climate change strategy in place since 2010, encompassing ambitious climate change targets of a 40% reduction in emissions by 2020 and a 3% per annum reduction in those areas devolved to the Welsh Government.

As one of the first nations in the world to have a duty on sustainable development at the heart of its constitution, this commitment has underpinned the approach to climate change in Wales. This has meant that action on key priorities has been taken forward in a way that delivers economically, socially and environmentally. Examples include action on energy efficiency - where the retrofitting of houses has addressed fuel poverty and supported growth in the green economy - and action to reduce waste, which has delivered a significant increase in recycling along with a significant decrease in emissions and increased economic investment. This approach has been further strengthened by the recent passing of the Well-being of Future Generations (Wales) Act 2015, containing a set of statutory sustainable development goals for Wales. The goals encompass the need to act on the causes and adapt to the consequences of climate change, as well as ensuring that Wales is globally responsible in its actions. This is being followed by the Environment (Wales) Bill, which focuses on the sustainable management of Wales' resources and includes a statutory commitment to carbon budgeting to set a clear pathway for decarbonisation. This legislation will sit within the wider EU and UK framework, which includes the EU Emissions Trading Scheme (ETS).

<u>The current position in Wales:</u>

Population: 3,082,412 (2013)

GDP: £53.1 billion (GVA 2013 /

GHC emissions (year): 45.83 MtCO2e (2012)

Specific actions and commitments

Greenhouse Gas Emissions

Wales is committed to reducing its total greenhouse gas emissions by 40% from 1990 levels by 2020 within the overall goal of reducing emissions by at least 80% by 2050 as laid down in the UK Climate Change Act 2008. In addition, the Welsh Government has committed to reducing emissions within areas of devolved competence by 3% from 2010. Reporting against both the targets and delivery of key policies is undertaken annually. As of the latest annual report (December 2014), territorial emissions in Wales had reduced by 17.9% on 1990 levels and to date the 3% per annum target has been successfully delivered. On an end-user consumption basis, this equates to a 32% reduction on 1990 levels.

The legislation currently being brought forward through the Environment (Wales) Bill aims to further accelerate action, by putting in place strengthened requirements for statutory climate change targets and committing to a carbon budgeting approach in Wales.

Renewable energy

In Wales, the percentage of electricity generated from renewable sources has increased nearly three fold from 2005 to 2013 and it is estimated that in 2016 it will account for over 15% of total electricity generation which is approximately the equivalent of 30% of Wales' electricity consumption. Alongside more established technologies, innovative proposals are being developed to harness Wales' natural resources. For example, a proposal to construct a 320 MW tidal lagoon is currently under consideration in the planning system which, if consented, will be capable of powering over 155,000 homes for 120 years. In addition, in delivering on renewable energy, Wales' commitment to sustainable development has also seen and emphasis on community energy with the Welsh Government providing support to 57 community-led renewable energy schemes since 2012. The Welsh Government is also currently developing a Green Growth fund for Wales to accelerate the roll-out and encourage investment in resource efficiency, renewable energy generation and waste efficiency projects.

Energy and Resource efficiency

In taking action on energy efficiency, a key priority has been to address fuel poverty in deprived areas. Schemes in Wales have improved 7900 homes in Wales in some of the most deprived areas. The energy and environmental sector has also grown in sales turnover from £1.24 billion to £2.36 billion - an increase of 90% from 2006 - with employment increasing from 22,160 to 30,100 over the same period.

This action has also been complemented by work to improve the standards of energy efficiency through investment in social housing and the increasing of standards in the Building Regulations in Wales. The funding and regulatory framework in Wales is also supported by Welsh Government funded independent advice and support for people and organisations to invest in improvements that save on energy, water and waste. This Resource Efficient Wales (REW) service provides a range of advice and fully funded energy efficiency improvements targeted in particular at individual low income households and deprived communities across Wales. Going forward, a new Energy Efficiency Strategy for Wales will be published in 2015.

Action to improve resource efficiency through the implementation of the '*Towards Zero Waste'* strategy has seen Wales achieve the highest recycling rates in the UK at 58% and the 4th highest in Europe. This been complemented by initiatives such as the charge for single use carrier bags. The overarching aim is to recycle at least 70 per cent of waste by 2025 and to be a zero waste (100 per cent recycling) nation by 2050. Importantly, the increase in recycling in the waste sector has also significantly reduced emissions – by 20.4% in the sector – whilst also delivering investment and economic growth.

Clean transportation

Action on transport in Wales includes the Active Travel (Wales) Act 2013, which requires new road schemes (including road improvement schemes) to consider the needs of pedestrians and cyclists

at design stage, to enable more people to walk and cycle. The act also requires local authorities to continuously improve facilities and routes for pedestrians and cyclists and to prepare maps identifying the routes for their use. Sustainable Travel Centres have also been put in place to encourage public transport use and effective journey planning. Going forward, the delivery of the Cardiff Capital Region Metro is a key priority. This comprises multiple modes of transport brought together within an integrated network for the region. The objective is to create a region wide alternative to the car and improve accessibility to public transport within city and town centres.

Emissions trading

Wales is a part of the EU Emission Trading Scheme (ETS), which covers 54% of its emissions reflecting both the heavy industry located in Wales and the fact that Wales is a net exporter of electricity. In addition, businesses and public sector bodies in Wales that are high energy users but not covered under the requirements of the EU ETS are part of the Carbon Reduction Commitment (CRC). This is a UK-wide scheme to improve energy efficiency and cut carbon dioxide (CO2) emissions where those organisations covered pay for the carbon they emit. The Welsh Government itself is a participant of the CRC and has decreased emissions on its administrative estate by 27% since 2010-11.

Adaptation

As well as reducing emissions, Wales has a framework in place for building resilience to the impacts of climate change. The adaptation work has focussed on developing Sectoral Adaptation Plans, which take sectors through a risk assessment process to develop a planned response. In addition, the goals contained in the Well-being of Future Generations (Wales) Act include a goal in relation to a '*Resilient Wales'* which specifically makes reference to adapting to the impacts of climate change. The Environment (Wales) Bill also includes legal requirements relating to action on adaptation at both the national and local levels, together with a framework for the sustainable management of natural resources based on the principles from the Convention for Biological Diversity.

Global responsibility

A key part of Wales' commitment to sustainable development has been its work in partnership internationally from being a founding signatory of the Gauteng Declaration in 2002 to most recently signing the global *Compact of States and Regions* in 2014. Wales' work internationally includes the Wales for Africa programme in Mbale, which won the UNFCC Momentum for Change Lighthouse award in 2011 and which has seen the planting of more than one million trees and the launch of an ambitious next phase – 10 million trees. Through the Size of Wales project, an area of forest the Size of Wales has been safeguarded in Africa and in Wales, a tree is planted in both Wales and Africa for every child born. As an active member of The Climate Group and Network of Regional Governments for Sustainable Development (nrg4SD), Wales is committed to working in partnership to tackle climate change and more broadly the support development in all regions to be sustainable. This in underpinned by the commitment in the Well-being of Future Generations Act to a globally responsible Wales.

APPENDIX A.12

WASHINGTON

Washington State has a long history of commitment to its environment and a clean economy. Among the State's many strengths are its established policies that reduce greenhouse gas emissions; support renewable energy, green buildings and clean transportation; promote green economy jobs growth; and address economic and social goals.

In 2008, the state established statewide limits on greenhouse gas emissions for 2020, 2035 and 2050; and set goals to increase jobs in the clean energy sector by 25,000 (above 2004 levels) by 2020, reduce annual per capita vehicles miles traveled by 18 percent by 2020, 30 percent by 2035, and 50 percent by 2050 (from the baseline of 75 billion vehicles miles traveled), and reduce the state's expenditures on imported fuels.

Washington is recognized nationally for its success in implementing innovative approaches to achieving the GHG limits and the goals of a low carbon economy. Strong and well implemented building codes, a combined portfolio of renewable energy and energy efficiency standards, strict emissions performance standards for fossil-fuel generated electricity, cleaner cars and less carbon intensive fuels, and high levels of investments in renewable electricity, energy efficiency, and electric vehicle charging infrastructure are some of the strengths that are reducing Washington's emissions and make it a leader on clean economy. In addition, the State is home to companies on the cutting edge of clean energy technology – including wind, solar and advanced composites manufacturing, the development of advanced biofuels and low-impact hydropower, and energy-efficiency services.

Specific actions and commitments:

I. Greenhouse Gas Emissions Limits

By 2020 Washington State is required by law to limit emissions of greenhouse gases to the 1990 level; by 2035 emissions must be limited to 25 percent of the 1990 level; and by 2050 emissions must be limited to 50 percent below 1990 or 70 percent below the state's expected emissions that year. Since 2009, Washington has been driving down its GHG emissions, which are now relatively flat even as the state's economy grew by 2 percent. In 2008, the state committed to review its limits based on the most recent global, national and regional climate science. The review was completed in December 2014. The conclusion was that Washington State's existing limits should be adjusted to better reflect the current science, and that the limits need to be more aggressive in order for Washington to do its part to address climate risks. The state will recommend new limits after the UN climate conference negotiations are concluded in December 2015, using the results to inform how Washington's limits should be adjusted.

II. Clean Electricity

Washington leads the nation in electricity generation from renewable resources. The state generates more than 75 percent of its electricity from renewable resources, mostly hydroelectric power. Washington produces nearly one-fifth of all renewable electricity produced in the United

States. In 2006, Washington voters, seeking energy independence, required large utilities to obtain an additional 15% of their electricity from renewable resources (in addition to the existing hydroelectricity production) by 2020 and to undertake cost-effective conservation.

The state is on target to meet these required renewable energy targets. In 2013, wind energy provided 6.2% of all in-state electricity production. The state ranked 7th for installed wind capacity. Investments in wind totaled $5.3 billion and created close to 4,000 green jobs. The state is also expanding the use of solar energy. Washington, as a forestry state, is a substantial producer of energy from carbon-neutral biomass, primarily wood and wood waste. The state is also a national leader in integration of nutrient management and energy production (waste-to-energy) through research and development of anaerobic digesters. The largest landfill renewable energy producers in the U.S. Bio Energy Washington, gas-to-energy plant, generates over 15 million kilowatt hours of electricity from the landfill gas, reducing greenhouse gas emissions by about 82,300 metric tons per year. Washington still has room to expand its abundant wave ocean, geothermal, and other renewable energy resources.

Washington's only coal-fired power units, with a capacity of about 1,200 megawatts, will be decommissioned, with the first closing in 2020, and the other closing by 2025. In addition, the state is seeking agreements with key utilities and others to reduce the use of coal-fired electricity generated in other states and consumed Washington. These two efforts will make the state's electricity virtually coal-free.

III. Energy-neutral buildings

Washington's achievement in building energy efficiency is a great clean energy success story. Washington was the first state in the country to adopt high-performance green buildings standards for state-funded buildings. Washington has a long history of implementing energy efficiency in residential, commercial and industrial buildings. The state is on course to ensure all new buildings are energy-neutral by 2030, building on the state's aggressive energy code, with advanced envelopes, efficient appliances, on-site generation, smart controls, and other features. The 2013 State Energy Efficiency Scorecard, published by the American Council for an Energy Efficient Economy, ranked Washington one of the top three states for energy codes.

The state's electric utilities are required to undertake all cost-effective energy conservation. Actions taken, which are part of a regional effort, will yield enough energy savings to meet 85 percent of projected energy demand through 2029.

Washington offers significant incentives for energy efficiency investments and to support research and deployment of new technologies. In 2013 a new Clean Energy Fund was created providing $40 million to support building energy efficiency and renewable energy, advance renewable energy technologies and make Washington more competitive.

IV. Clean Transportation

Washington's greenhouse gas emissions are dominated by the transportation sector, contributing 45% of emissions in 2012. The state is taking concrete actions to drive down these emissions by supporting cleaner cars, clean fuels and reduction in miles travelled. With its clean and low cost electricity, Washington has emerged as one of the best places to own and drive an electric vehicle. Washington is on target to achieve its goal of 50,000 electric cars by 2020. The state is

investing in EV charging infrastructure to support the increase of sale and use of electric vehicles. Also, the state is committed to join with other states in adopting zero emission vehicles.

Washington is prepared to partner with neighboring jurisdictions on a West Coast clean fuels program, building on its state renewable fuel standard. In addition, the state is collaborating with the aerospace industry, airlines, several universities, federal partners and others to advance research and technology related to aviation biofuels being done under the Federal Aviation Administration Center of Excellence in Alternative Jet Fuels and Environment. Washington's largest airline included the use of biofuels in its 2020 sustainability goals and plans to start using biofuels in some of its flights in 2018.

The state is making meaningful investments in multimodal transportation in communities of all types and sizes across the state, and it's working with its local governments to promote transit oriented development and other low-carbon transportation solutions. Washington was the first state to formally adopt reduction goals for vehicle miles travelled, and the above actions support that commitment.

V. Emission Trading

Washington State has completed an extensive evaluation of the benefits of an emission trading system to implement the state's greenhouse gas emission limits from all major sources, and provide a price on carbon and a market program to ensure those limits are met. In January 2015, the Governor proposed legislation to create a carbon pollution market program for Washington State that, if and when enacted, would be linked to emission trading programs in other jurisdictions.

Exhibit 4

Pacific Coast Action Plan *on* Climate and Energy

Preamble

The Governments of California, British Columbia, Oregon and Washington,

Pursuant to the *Memorandum to Establish the Pacific Coast Collaborative* of June 2008, as provided for in Article 6;

Affirming our shared vision of Pacific North America as a model of innovation that sustains our communities and creates jobs and new economic opportunities for our combined population of 53 million;

Recognizing that the Pacific Coast is a region bound together by a common geography, shared infrastructure and a regional economy with a combined GDP of US $2.8 trillion, which makes it the world's fifth largest;

Acknowledging the clear and convincing scientific evidence of climate change, ocean acidification and other impacts from increasing concentrations of carbon dioxide in the atmosphere, which threaten our people, our economy and our natural resources;

Emphasizing that states and provinces around the world are battling climate change through technology innovation and actions that limit greenhouse gas emissions and other air pollution while creating economic growth, consumer savings and new jobs;

Celebrating that our own governments have reduced greenhouse gas emissions by adopting regulatory, policy and market-based measures that shift energy generation to clean and renewable sources, manage energy use through greater efficiency and conservation, and enable and promote consumer choice for clean vehicles;

Recalling the findings of the 2012 *West Coast Clean Economy* report which projected 1.03 million new jobs could be created in key sectors, such as energy efficiency and advanced transportation, assuming the right policy environment;

Supporting positive federal action to combat climate change, including President Obama's climate action plan and proposed rules to limit greenhouse gas emissions from power plants;

Joining the growing international convergence on the need to secure an international agreement to reduce global greenhouse gas emissions, including discussions at the coming Conference of Parties meetings in Warsaw (2013), Lima (2014) and Paris (2015); and

Agreeing that meaningful coordination and linkage between states and provinces across North America and the world on actions to reduce greenhouse gas emissions can improve the effectiveness of these actions, increase their overall positive impact and build momentum for broader international coordination to combat climate change;

NOW THEREFORE HEREBY AGREE AS FOLLOWS:

I. Lead national and international policy on climate change with actions to:

Direct our relevant agencies and officials to work together to:

1) **Account for the costs of carbon pollution in each jurisdiction.**

   Oregon will build on existing programs to set a price on carbon emissions. Washington will set binding limits on carbon emissions and deploy market mechanisms to meet those limits. British Columbia and California will maintain their existing carbon-pricing programs. Where possible, California, British Columbia, Oregon and Washington will link programs for consistency and predictability and to expand opportunities to grow the region's low-carbon economy.

2) **Harmonize 2050 targets for greenhouse gas reductions and develop mid-term targets needed to support long-term reduction goals.**

   Climate scientists have identified the scale of greenhouse gas reductions that must be achieved globally to stabilize the climate. Where they have not already done so, California, British Columbia, Oregon and Washington will establish long-term reduction targets that reflect these scientific findings. To advance long-term reductions, Washington already has in place a mid-term 2035 target. California and Oregon will establish their own mid-term targets. British Columbia has already legislated 2020 and 2050 targets and will explore whether setting a mid-term target will aid their achievement.

3) **Affirm the need to inform policy with findings from climate science.**

   Leaders of California, British Columbia, Oregon and Washington affirm the scientific consensus on the human causes of climate change and its very real impacts, most recently documented by scientists around the world in the Intergovernmental Panel on Climate Change's *Fifth Assessment Report* released in September 2013, as well as other reports such as the *Scientific Consensus on Maintaining Humanity's life Support Systems in the 21st Century*. Governmental actions should be grounded in this scientific understanding of climate change.

4) **Cooperate with national and sub-national governments around the world to press for an international agreement on climate change in 2015.**

   The governments of California, British Columbia, Oregon and Washington will join with other governments to build a coalition of support for national and international climate action, including securing an international agreement at the Conference of Parties in Paris in 2015. The governments of California, British Columbia, Oregon and Washington will coordinate the activities they undertake with other sub-national governments and combine these efforts where appropriate.

5) **Enlist support for research on ocean acidification and take action to combat it.**

   Ocean health underpins our coastal shellfish and fisheries economies. The governments of California, British Columbia, Oregon and Washington will urge the American and Canadian federal governments to take action on ocean acidification, including crucial research, modeling and monitoring to understand its causes and impacts.

II. Transition the West Coast to clean modes of transportation and reduce the large share of greenhouse gas emissions from this sector with actions to:

1) **Adopt and maintain low-carbon fuel standards in each jurisdiction.**

   Oregon and Washington will adopt low-carbon fuels standards, and California and British Columbia will maintain their

existing standards. Over time, the governments of California, British Columbia, Oregon and Washington will work together to build an integrated West Coast market for low-carbon fuels that keeps energy dollars in the region, creates economic development opportunities for regional fuel production, and ensures predictability and consistency in the market.

2) **Take actions to expand the use of zero-emission vehicles, aiming for 10 percent of new vehicle purchases by 2016.**

The Pacific Coast already has the highest penetration of electric cars in North America. The governments of California, British Columbia, Oregon and Washington will work together towards this ambitious new target by supporting public and private fleet managers to shift their procurement investments to catalyze toward electric car purchases and by continuing to invest in necessary infrastructure to enable low-carbon electric transportation.

3) **Continue deployment of high-speed rail across the region.**

Providing high-speed passenger rail service is an important part of the solution to expand regional clean transportation, improve quality of life and advance economic growth. The governments of California, British Columbia, Oregon and Washington continue to support the Pacific Coast Collaborative's Vision for high speed rail in the region, and will continue to seek opportunities to invest in rail infrastructure that moves people quickly, safely and efficiently, and encourages innovation in rail technology manufactured in the region.

4) **Support emerging markets and innovation for alternative fuels in commercial trucks, buses, rail, ports and marine transportation.**

The Pacific Coast of North America is emerging as a center of private sector innovation and investment in cleaner fuels and engine technologies for heavy-duty trucks and buses, rail, ports and marine transportation. The governments of California, British Columbia, Oregon and Washington will develop targets and action plans to accelerate public and private investment in low-carbon commercial fleets and support the market transition to biofuels, electricity, natural gas and other low-carbon fuels in local and export markets.

III. Invest in clean energy and climate-resilient infrastructure with actions to:

1) **Transform the market for energy efficiency and lead the way to "net-zero" buildings.**

Energy efficiency is the lowest cost way to reduce greenhouse gas emissions while creating good local jobs. The governments of California, British Columbia, Oregon and Washington will work to harmonize appliance standards, increase access to affordable financing products, and support policy that ensures that energy efficiency is valued when buildings are bought and sold. Our efforts intend to build a vibrant, growing regional market for energy efficiency products and services.

2) **Support strong federal policy on greenhouse gas emissions from power plants.**

The governments of California, British Columbia, Oregon and Washington will support the U.S. Environmental Protection Agency's initiative to regulate greenhouse gas emissions from power plants and emphasize the importance of allowing state flexibility to design ambitious reduction programs within this regulation. Our jurisdictions will also coordinate and provide joint testimony in federal proceedings on greenhouse gas emissions when appropriate.

3) **Make infrastructure climate-smart and investment-ready.**

The West Coast Infrastructure Exchange (WCX) is demonstrating how to attract private capital for infrastructure projects while increasing climate resilience through best practices and certification standards. To scale up these efforts, the governments of California, Oregon and Washington will sponsor pilot projects with local governments, state agencies and the WCX. WCX also works closely with Partnerships BC, a center of infrastructure financing expertise established by the government of British Columbia that has helped to secure financing for over 40 projects worth more than C$17 billion.

4) **Streamline permitting of renewable energy infrastructure.**

Meeting ambitious carbon-reduction goals will require scaling up wind, solar and other forms of renewable energy and effectively bringing clean power to customers in California, Oregon and Washington. Drawing on emerging models in California and the Pacific Northwest, the governments of California, Oregon and Washington will work with permitting agencies to streamline approval of renewables projects to increase predictability, encourage investment and drive innovation.

5) **Support integration of the region's electricity grids.**

Connecting the markets for buying and selling wholesale electricity in our region can increase local utilities' flexibility and reliability and provide consumer savings by enabling use of a wide variety of energy sources across the region. Integrating our region's electricity markets also expands energy users' access to renewable energy sources, such as solar and wind power.

IV. Interpretation

This Action Plan is intended to spur finding new, smart ways for our governments, agencies and staff to work together, and with other governments and non-government partners, as appropriate, to add value, efficiency and effectiveness to existing and future initiatives, and to reduce overlap and duplication of effort, with the objective of reducing, not increasing, resource demands to achieve objectives that are shared.

V. Limitations

This Action Plan shall have no legal effect; impose no legally binding obligation enforceable in any court of law or other tribunal of any sort, nor create any funding expectation; nor shall our jurisdictions be responsible for the actions of third parties or associates.

Signed at San Francisco, California, on the occasion of the Fourth Annual Leaders' Forum of the Pacific Coast Collaborative, this 28th day of October, 2013.

Original signed by

Edmund G. Brown Jr.
Governor of California

Original signed by

Christy Clark
Premier of British Columbia

Original signed by

John A. Kitzhaber
Governor of Oregon

Original signed by

Jay Inslee
Governor of Washington