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The
G20 Research Group
at Trinity College at the Munk School of Global Affairs
in the University of Toronto
presents the

2016 G20 Hangzhou Summit Interim Compliance Report

6 September 2016 to 17 February 2017

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8 April 2017

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"The University of Toronto ... produced a detailed analysis to the extent of which each G20 country has met its commitments since the last summit ... I think this is important; we come to these summits, we make these commitments, we say we are going to do these things and it is important that there is an organisation that checks up on who has done what."

— David Cameron, Prime Minister, United Kingdom, at the 2012 Los Cabos Summit

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6. Climate Change

"We reiterate our commitment to sustainable development and strong and effective support and actions to address climate change."

G20 Hangzhou Leaders' Communiqué

Assessment

| | No Compliance | Partial Compliance | Full Compliance |
|----------------|---------------|--------------------|-----------------|
| Argentina | | | +1 |
| Australia | | | +1 |
| Brazil | | 0 | |
| Canada | | | +1 |
| China | | | +1 |
| France | | | +1 |
| Germany | | 0 | |
| India | | 0 | |
| Indonesia | | | +1 |
| Italy | -1 | | |
| Japan | | 0 | |
| Korea | | 0 | |
| Mexico | | | +1 |
| Russia | -1 | | |
| Saudi Arabia | | 0 | |
| South Africa | -1 | | |
| Turkey | | 0 | |
| United Kingdom | | | +1 |
| United States | | | +1 |
| European Union | | | +1 |
| Average | | +0.35 | |

Background

At the 2009 London Summit, the G20 pledged to do "whatever is necessary to: ...build an inclusive, green, and sustainable recovery," as well as committed to "address the threat of irreversible climate change, based on the principle of common but differentiated responsibilities, and to reach agreement at the United Nations (UN) Climate Change conference in Copenhagen in December 2009."

At Pittsburgh in 2009, the G20 endorsed the United Nations Framework Convention on Climate Change (UNFCCC) negotiations and the Copenhagen Accord from the 2009 15th Conference of the Parties (COP) meeting in Denmark. Also in Pittsburgh, the G20 committed, for the first time to foster sustainable development. At the 2010 Seoul Summit, the G20 recognized that sustainable green growth as inherently a part of sustainable development.

At the 2014 Brisbane Summit, the G20 pledged "consistent with the United Nations Framework Convention on Climate Change (UNFCCC) and its agreed outcomes, our actions will support sustainable development." ⁸⁶⁵ At the 2015 Antalya Summit the G20 stated "We affirm our determination to adopt a protocol, another legal instrument or an agreed outcome with legal force under the UNFCCC that is applicable to all Parties. Our actions will support growth and sustainable

⁸⁶⁵ The 2014 G20 Brisbane Summit Commitments, G20 Information Centre 17 December 2014. Access Date: 7 November 2016. http://www.g20.utoronto.ca/analysis/commitments-14-brisbane.html

development."866 On 12 December 2015, at the 21st Conference of the Parties of the UNFCCC in Paris, the 2015 Paris Climate Change Agreement was adopted by consensus.

On 29 June 2016, the G20 energy ministers issued a communique, recognizing the importance of sustainable development and expressing support for climate-related action. 867

At the 2016 Hangzhou Summit, China's presidency introduced green-financing into the G20 agenda for the first time. The summit released the Green Finance Synthesis Report that encouraged G20 members to increase green financing in their respective countries.

At the 2016 Hangzhou Summit, G20 leaders once again reiterated its commitment to sustainable development and strong and effective support and actions to address climate change. Ahead of the summit, the United States (US) and China ratified the Paris Agreement and called for other G20 members to do the same, according to national circumstance.

On 5 October 2016, the threshold for entry into force of the Paris Agreement was achieved. The Paris Agreement entered into force on 4 November 2016.

Commitment Features

The G20 reiterated its commitment to sustainable development and strong and effective support and actions to address climate change. This commitment has two parts 1) commitment to sustainable development and 2) strong and effective support and actions to address climate change.

Part One: Commitment to Sustainable Development

'Sustainable development' is understood as the pattern of resource use aimed to meet human needs while preserving the environment both domestically and internationally. The commitment is a reiteration of the 2014 Brisbane commitment and therefore, G20 member actions must be consistent with the United Nations Framework Convention on Climate Change (UNFCCC) and its agreed outcomes, which includes the 2015 Paris Agreement.

The 2015 Paris Agreement builds upon the Convention with the central aim to keep a global temperature rise this century well below two degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. It also aims to strengthen the ability of countries, particularly developing countries, to deal with the impacts of climate change. The Paris Agreement requires all Parties to put forward their best efforts through "nationally determined contributions" (NDCs) and to strengthen these efforts in the years ahead. This includes requirements that all Parties report regularly on their emissions and on their implementation efforts. Therefore, G20 members, must act according to their NDCs to achieve the aims of the Agreement, particularly aiding developing countries, as well as report regularly on their emissions and on their implementation efforts.

Part Two: Strong and Effective Support and Actions to Address Climate Change.

In addition to its commitment to sustainable development in accordance with the UNFCCC, the G20 committed to addressing climate change. 'Climate change' is understood as a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global

⁸⁶⁷ G20 Energy Ministerial Meeting Beijing Communiqué, G20 Information Center (Beijing) 29 June 2016. Access Date: 22 October 2016. http://www.g20.utoronto.ca/2016/160629-energy.html

⁸⁶⁶ The 2015 G20 Antalya Summit Commitments, G20 Information Centre 19 November 2015. Access Date: 7 November 2016. http://www.g20.utoronto.ca/analysis/commitments-15-antalya.html

⁸⁶⁸ G20 Green Finance Synthesis Report, G20 Green Finance Study Group 5 September 2016. Access Date: 22 October 2016. http://unepinquiry.org/wp-content/uploads/2016/09/Synthesis Report Full EN.pdf

atmosphere and which is in addition to natural climate variability observed over comparable time periods. This definition is as per Article 1: Definitions, United Nations Framework Convention on Climate Change. 869

'Support' is understood as the action, or act of providing aid, assistance, or backing up an initiative, or entity.

'Effective' is interpreted to mean operating in a way that produces the intended result. It does not mean any effort, especially thoughtless ones. 'Strong' is interpreted to mean deliberate, widespread, unique and grand. Actions must be outside the status quo, generate a possibility for new strategies, ways to engage others, and create breakthrough results. For example, actions such as allocating additional funding to an existing program will not count towards compliance. Effective and strong actions are evident as such. Actions that will contribute toward compliance include, but are not limited to, initiatives such as passing new and unique wide-spread legislation, implementing new and innovative policy initiatives, and executing nation-wide programs to combat climate change.

Thus, full compliance is achieved when the G20 member takes steps to comply with both parts of the commitment. The G20 member must act in accordance with the UNFCCC and Paris Agreement, as well as take effective and strong actions to address climate change. Partial compliance is achieved when the G20 member complies with one part of the commitment but not the other. No compliance will result from the G20 member not complying with either part of the commitment.

Scoring Guidelines

| -1 | G20 member does not commit to sustainable development AND does not make strong and effective support and actions to address climate change. |
|----|---|
| 0 | G20 member is committed to sustainable development BUT not strong and effective support and actions to address climate change OR G20 member is committed to strong and effective support and actions to address climate change BUT is not committed to sustainable development. |
| +1 | G20 member is committed to sustainable development AND strong and effective support and actions to address climate change. |

Lead Analyst: Angela Min Yi Hou

Argentina: +1

Argentina has fully complied with its commitment to sustainable development and strong and effective support and actions to address climate change.

On 21 September 2016, Argentina ratified the Paris Agreement. 870

Argentina outlined the following goals in its Intended Nationally Determined Contribution (INDC), submitted 1 October 2015 to the United Nations Framework Convention on Climate Change (UNFCCC). ⁸⁷¹ The Argentinian government unconditionally agreed to lower greenhouse gas emissions by 15 per cent by 2030 compared to the anticipated business-as-usual (BAU) emissions of that year. The country's conditional goal agreed to lower greenhouse gas emissions by 30 per cent by 2030. Argentina further stated it would enhance adaptation actions in early warning systems for

869 Article 1: Definitions, United Nations Framework Convention on Climate Change. (New York) 2014. Date of Access: 6

cent20Pages/submissions.aspx

July 2014. http://unfccc.int/essential_background/convention/background/items/2536.php

870 Paris Agreement- Status of Ratification, United Nations Framework Convention on Climate Change (Bonn) 21

September 2016. Access Date: 10 November 2016. http://unfccc.int/paris_agreement/items/9444.php

871 Intended Nationally Determined Contributions, United Nations Framework Convention on Climate Change (Bonn) 1

October 2015. Access Date: 10 November 2016. http://www4.unfccc.int/submissions/indc/Submission per

climate disasters, sustainable forest and biodiversity management, and water resource management with the assistance of international finance and capacity development.⁸⁷²

On 7 October 2016, Argentina's Energy Minister approved a 0.8 per cent month-on-month reduction of ethanol prices. The reduction will lessen the cost to oil refiners in producing the state-required 12 per cent ethanol-oil blend of gasoline.⁸⁷³ Ethanol combinations are an attempt to reduce the country's reliance on fossil fuels and diversify the energy sector.⁸⁷⁴

On 15 October 2016, Argentina agreed to the Kigali Amendment of the Montreal Protocol on Substances that Deplete the Ozone Layer. ⁸⁷⁵ The amendment calls for the reduction of hydrofluorocarbons (HFCs), powerful chemicals that impact the ozone layer and contribute to climate change. The Kigali agreement includes a timetable to reduce production of HFCs in developed and developing countries. Argentina agreed to stop its production and use of the pollutants by 2024.

On 20 October 2016, the Argentine Ministry of Energy and Mining announced the successful completion of the first round of its energy auction, as part of the government's RenovAR program. 29 projects were awarded, including companies specializing in biogas, biomass, wind, solar, photovoltaic, and hydroelectric technologies. 1,142 megawatts of energy was auctioned off, constituting an additional 2.8 per cent of national electricity consumption. The Ministry also announced that it will be hosting another round of solar and wind projects. The RenovAR initiative was introduced as an attempt to transition Argentine energy usage from fossil fuels to renewable resources.⁸⁷⁶

On 26 October 2016, Argentina announced a management support program in 21 urban areas, supported by the Inter-American Development Bank (IDB) and other investment lines of credit. The IDB project leader, Francisca Rojas, stated that "effective management of these [metropolitan] areas requires coordinated actions that tackle critical issues such as transportation and climate change adaptation." The plan will implement a series of climate related adaptation initiatives, including integrated watershed management, integrated solid waste management, sustainable mobility systems (like pedestrian paths and bicycle lanes), parks, and public spaces.⁸⁷⁷

On 17 November 2016, the Government of Argentina submitted its first Nationally Determined Contribution (NDC) at the 22nd Conference of the Parties to the United Nations Framework

http://www4.unfccc.int/Submissions/INDC/Published per cent20Documents/Argentina/1/Argentina per cent20INDC per cent20Non-Official per cent20Translation.pdf.

⁸⁷² Argentine Republic Intended Nationally Determined Contribution, United Nations Framework Convention on Climate Change (Bonn) 1 October 2015. Access Date: 10 November 2016.

Argentina cuts ethanol prices for oil refiners in October month on month, S&P Global Platts (London) 9 October 2016. Access Date: 10 November 2016. https://www.platts.com/latest-news/agriculture/buenosaires/argentina-cuts-ethanol-prices-for-oil-refiners-27683744

Argentina to boost ethanol use in fuels: industry body, Reuters (London) 8 April 2016. Access Date: 10 November 2016. http://www.reuters.com/article/us-argentina-biofuels-idUSKCN0X51TZ

⁸⁷⁵ Countries Adopt Kigali Amendment to Phase Down HFCs, NRDC (New York) 14 October 2016. Access date: 2 January 2017. https://www.nrdc.org/experts/david-doniger/countries-adopt-kigali-amendment-phase-down-hfcs

⁸⁷⁶ Programa RenovAr cerró exitosamente su Ronda 1 con la adjudicación de 29 proyectos por 1142 MW, Ministry of Energy and Mining (Buenos Aires) 20 October 2016. Access Date: 10 November 2016.

https://www.minem.gob.ar/prensa/25369/programa-renovar-cerro-exitosamente-su-ronda-1-con-la-adjudicacion-de-29-proyectos-por-1142-mw.html

Argentina to implement metropolitan areas development program with IDB support, Business News Americas (Santiago) 27 October 2016. Access Date: 10 November 2016.

http://www.bnamericas.com/en/news/insurance/argentina-to-implement-metropolitan-areas-development-program-with-idb-support

Convention on Climate Change in Marrakesh, Morocco. ⁸⁷⁸ Minister of the Environment and Sustainable Development Sergio Bergman announced that Argentina will "reduce carbon dioxide emissions from 570 to 483 million tonnes by 2030...raising the [country's previous] commitment to reduce unconditional emissions - that is, those not tied to external financing - from 15 to 18 per cent." ⁸⁷⁹

On 24 November 2016, the Argentinian government launched the Biogas Bureau. The department will promote bioenergy and attempt to increase biomass production by 10 to 15 per cent, further reducing the country's reliance on fossil fuels. 880

On 25 November 2016, the Government of Argentina completed round 1.5 of the RenovAR renewable energy program. 30 contracts were distributed to wind and solar companies, totalling 1,281.5 megawatts of renewable energy. Minister of Energy and Mining Juan José Aranguren concluded that in addition to the first round of awarded projects in October, the RenovAr program will produce 2,423.5 megawatts of renewable energy.⁸⁸¹

On 30 November 2016, the Argentine Ministry of Agriculture announced a bioplastic production program. The initiative is a collaboration of academic, public, and private participants to transform agricultural residue into usable materials and encourage sustainable development. 882

On 15 December 2016, President Mauricio Macri and Minister of Energy and Mining Juan José Aranguren opened the 1st National Energy Efficiency Conference in Buenos Aires. The conference discussed the importance of energy management. Undersecretary of Savings and Energy Efficiency Andrea Heins announced plans for a national energy efficiency bill in 2017 to enhance Argentina's energy matrix.⁸⁸³

On 21 December 2016, President Mauricio Macro announced the creation of the 50,000 hectares Bicentennial National Park located in the Tucuman province. The space consists of protected forest and snow-covered regions. During the announcement, President Macro stated, "We Argentines have made ... the commitment ... (to) fight against climate change, with the responsibility to take care of this planet and, clearly, expanding, caring for (and) strengthening our national park system goes

⁸⁷⁸ NDC Registry, United Nations Framework Convention on Climate Change (Bonn) 11 November 2016. Access Date: 2 January 2017. http://www4.unfccc.int/ndcregistry/Pages/All.aspx

Argentina pledges to reduce carbon dioxide emissions by 20 million by 2030, MercoPress (Montevideo) 18 November 2016. Access Date: 2 January 2017. http://en.mercopress.com/2016/11/18/argentina-pledges-to-reduce-carbon-dioxide-emissions-by-20-million-by-2030

Enfocados en las Energías Renovables: se conformó la Mesa de Biogás, Ministerio de Agroindustria (Buenos Aires) 24 November 2016. Access Date: 2 January 2017.

 $http://www.agroindustria.gob.ar/sitio/areas/prensa/?accion=noticia\&id_info=161124112546$

Argentina awards 1,282 MW in RenovAR 1.5 tender, SeeNews (Sofia) 28 November 2016. Access Date: 2 January 2017. http://renewables.seenews.com/news/argentina-awards-1-282-mw-in-renovar-1-5-tender-548539

Agroindustria fomenta la transformación de la biomasa en biomateriales, Ministerio de Agroindustria (Buenos Aires) 24 November 2016. Access Date: 2 January 2017.

http://www.agroindustria.gob.ar/sitio/areas/prensa/?accion=noticia&id info=161130181551

⁸⁸³ El Presidente Macri inauguró la 1ra Jornada Nacional de Eficiencia Energética, Ministro de Energía y Minería (Buenos Aires) 15 December 2016. Access Date: 2 January 2017

 $https://www.minem.gob.ar/prensa/25874/el-presidente-macri-inauguro-la-1 ra-jornada-nacional-de-eficiencia-energetica. \\html$

along these lines." The Bicentennial National Park is an attempt to safeguard Argentina's biodiversity and encourage sustainable environmental management. 884

Argentina has taken strong and effective action in its commitment to sustainable development by taking steps inline with the UNFCCC and its agreed outcomes, such as its RenovAr program and continued public statements in accordance with its NDCs. Thus, Argentina receives a score of +1.

Analyst: Harrison Myles

Australia: +1

Australia has fully complied with its commitment to sustainable development and strong and effective support and actions to address climate change.

On 8 September 2016, the Australian Renewable Energy Agency (ARENA) announced its solar power-related projects. The plants will generate about one-tenth of the power needed to meet Australia's 2020 Renewable Energy Target, supply enough electricity for 150,000 average homes, and create 2,300 direct jobs alone. They are expected to enable an extra 480 megawatts of solar capacity.⁸⁸⁵

On 9 September 2016, the Prime Minister of Australia pledged "a major package of new Australian support to manage climate change and improve resilience in the Pacific." Australia will provide AUD300 million to Pacific Island countries over the next four years including AUD75 million for disaster prepardness.⁸⁸⁶

On 17 October 2016, the Australian Renewable Energy Agency (ARENA) pledged AUD1 billion to bioenergy, enabling, geothermal, hybrid, ocean and solar PC and solar thermal power projects. 887

On 7 November 2016, the Joint Standing Committee on Treaties tabled *Report 163: Paris Agreement, Kyoto Protocol - Doha Amendment.* In the report, the National Interest Analysis outlined the following domestic economy-wide targets to achieve Australia's Nationally Determined Contribution. The Australian NDC is an economy-wide target to reduce greenhouse gas emissions by 26 to 28 per cent below 2005 levels by 2030): halving Australia's per capita emissions compared with 2005 levels and reduce the emissions intensity of the Australian economy by two-thirds; support obligations including the Emissions Reduction Fund and its Safeguard mechanism, a Renewable Energy Target and a National Energy Productivity Plan; a commitment of AUS200 million over four years to the Green Climate Fund to support developing countries to grow their economies in a sustainable way and help adapt to climate change; a commitment of at least AUS1 billion over five years from Australia's existing aid budget to support developing countries in their efforts to build resilience to climate change and reduce their emissions; and maintenance of Australia's national system for

⁸⁸⁴ Macri calls for fight against climate change, taking care of planet, EFE (Buenos Aires) 21 December 2016. Access Date: 2 January 2017. http://www.efe.com/efe/english/world/macri-calls-for-fight-against-climate-change-taking-care-of-planet/50000262-3131331

Solar power sector handed huge boost by ARENA funding, Sydney Morning Herald (Sydney), 8 September 2016. Access date: 14 November 2016. http://www.smh.com.au/environment/climate-change/largescale-solar-handed-huge-boost-from-arena-funding-20160906-gr9yqe.html

Prime Minister of Australia, Remarks at Pacific Island Forum. Access date: 14 November 2016.

https://www.pm.gov.au/media/2016-09-09/remarks-pacific-island-forum

⁸⁸⁷ Environment and Energy Portfolio bodies, Parliament of Australia (Canberra)

 $http://www.aph.gov.au/^\sim/media/Committees/ec_ctte/estimates/supp_1617/environment\ per\ cent20 and\ per\ cent20 energy/Tabled_doc_dept_portfolio_bodies.pdf$

estimating anthropogenic emissions and reports a full national inventory to the UNFCCC annually etc. 888

As of 9 November 2016, Australia ratified the Paris Agreement. Australia has also put additional policy measures in place to promote the deployment of renewable energy and improve energy efficiency. Under Australia's Renewable Energy Target scheme, over 23 per cent of Australia's electricity will come from renewable sources by 2020.883

Australia has fully complied with its commitment by supporting sustainable development in neighbouring Small Island Developing States (SIDS) and committing resources to local climate change resistance initiatives. Australia has demonstrated commitment to sustainable development by taking action to effectively manage green domestic initiatives. Australia has provided strong and effective support and actions to address climate change. Thus, Australia receives a score of +1.

Analyst: Zoë David-Delves

Brazil: 0

Brazil has partially complied with its commitment to sustainable development and strong and effective climate change action.

On 13 September 2016, Brazil ratified the Paris Agreement and submitted its NDC with a commitment to reduce greenhouse gas emissions by 37 per cent below 2005 levels by 2025. Specific goals include increasing the share of sustainable biofuels in the Brazilian energy mix by 18 per cent, achieve 45 per cent of renewables in the energy mix by 2030.890

On 4 October 2016, the Brazil's National Development Bank (BNDES) increased solar funds while cutting the cost for fossil fuels and large hydro. The new policy removed investments in new coal and oil-fired power stations.891

On 18 November 2016, President Temer vetoed USD1.5 billion in coal subsidies for the period 2023-2027, that were approved by Brazil's senate in October 2016. Brazil's Environment Ministry, Ministerio do Meio Ambiente (MMA), claimed that this incentive would jeopardize the commitments Brazil has made under the Paris Climate Agreement. 892

Brazil has taken some steps to encourage sustainable development, however has not taken strong and effective action. Thus, Brazil receives a score of 0.

Analyst: Fatmire Feka

Canada: +1

Canada has fully complied with its commitment to sustainable development and strong and effective support and actions to address climate change.

⁸⁸⁸ Report 163, Parliament of Australia (Canberra) 7 November 2016. Access Date: 23 January 2017.

http://www.aph.gov.au/Parliamentary Business/Committees/Joint/Treaties/ParisAgreement/Report 163

⁸⁸⁹ CAIT Climate Data Explorer, INDC Detailed View, Australia, 8 November 2015. Access date: 14 November 2016. http://cait.wri.org/indc/#/profile/Australia

Brazil's Intended Nationally Determined Contribution, UNFCCC. Access Date 4 February 2017.

http://www4.unfccc.int/ndcregistry/PublishedDocuments/Brazil per cent20First/BRAZIL per cent20iNDC per cent20english per cent20FINAL.pdf

891
Brazil shifts funds from coal to solar power, Climate Change News. 4 October 2016. Access Date: 4 February 2017.

http://www.climatechangenews.com/2016/10/04/brazil-shifts-funds-from-coal-to-solar-power/

Brazil's President Vetoes \$1.5B in Coal Subsidies, Ministerio do Meio Ambiente, 18 November 2016, Access Date: 11 January 2017 http://www.mma.gov.br/index.php/comunicacao/agencia-informma?view=blog&id=2006

Canada's submitted Nationally Determined Contribution commits Canada to reducing greenhouse gas emissions by 30 per cent below 2005 levels by 2030. 893

On 19 September 2016, the Minister of Innovation, Science and Economic Development announced the investment of CAD39.6 million on fourteen different clean technology projects. The projects will be carried out in four Canadian provinces and in various sectors including power generation, energy production and exploration; agriculture, and waste management.⁸⁹⁴

On 3 October 2016, the Government of Canada announced its plan for pan-Canadian pricing on carbon pollution. The plan will institute a price on carbon pollution which will start at CAD10 per tonne in 2018, and rise by CAD10 a year to CAD50 per tonne in 2022. The revenues from this pricing of carbon pollution will remain in the provinces and territories where the pollution originated.⁸⁹⁵ Canada will join fellow G20 members France, Japan, Mexico and South Africa in instituting a national carbon tax.⁸⁹⁶

On 5 October 2016, Canada ratified the Paris Agreement. 897

On 6 October 2016, the Government of Canada released its 2016-2019 Federal Sustainable Development Strategy (FSDS). The FSDS is the government's third cycle in producing a three-year strategy which is designed to make "environmental decision-making more transparent and accountable to the Canadian Parliament." It will act as Canada's primary strategy for sustainable development planning. 898

On 15 October 2016, the Government of Canada adopted an amendment to the 1987 Montreal Protocol to reduce the usage of hydrofluorocarbons (HFCs), which will further restrict the use of HFCs.

On 7 November 2016, Prime Minister Justin Trudeau announced a CAD1.5 billion National Oceans Protection Plan. The plan's goal is to ensure that Canada's oceans and coastlines are protected and managed in such a way as to ensure environmental sustainability. 900

⁸⁹³ Canada's INDC Submission to the UNFCCC, CAIT Climate Data Explorer 10 May 2016. Access Date: 14 November 2016. http://cait.wri.org/indc/

Government of Canada Invests Over CAD 45 million in Advanced Clean Technology Projects, Government of Canada (Vancouver) 19 September 2016. Access Date: 14 November 2016. http://news.gc.ca/web/article-en.do?mthd=advSrch&crtr.mnthndVl=&crtr.mnthStrtVl=&crtr.page=3&nid=1126829&crtr.yrndVl=&crtr.kw=oil&crtr.yrStrtVl=&crtr.dyStrtVl=&crtr.dyndVl=

⁸⁹⁵ Government of Canada Announces Pan-Canadian Pricing on Carbon Pollution, Government of Canada (Montreal) 3 October 2016. Access Date: 14 November 2016. http://news.gc.ca/web/article-

en. do?mthd=advSrch&crtr.page=2&crtr.dpt1D=6672&nid=1132149&crtr.tp1D=1

State and Trends of Carbon Pricing, World Bank Group Climate Change (Washington D.C.) October 2016. Access Date; 30 December 2016.

https://openknowledge.worldbank.org/bitstream/handle/10986/25160/9781464810015.pdf?sequence=6&isAllowed=y Minister of Environment and Climate Change Marks Canada's Ratification of the Paris Agreement, Government of Canada (Gatineau). 5 October 2016. Access Date: 14 November 2016. http://news.gc.ca/web/article-en.do?mthd=advSrch&crtr.page=2&crtr.dpt1D=6672&nid=1133599

The Government of Canada Responds to Canadians' Call for a Sustainable Development Vision for Canada, Government of Canada (Ottawa) 6 October 2016. Access Date: 14 November 2016. http://news.gc.ca/web/article-en.do?mthd=advSrch&crtr.page=1&crtr.dpt1D=6672&nid=1133919&crtr.tp1D=1

Canada and the World Agree to Phase Down the World's Fastest Growing Source of Greenhouse Gas Emissions, Government of Canada (Kigali) 15 October 2016. Access Date: 14 November 2016. http://news.gc.ca/web/article-en.do?mthd=advSrch&crtr.page=2&crtr.dpt1D=6672&nid=1138389

On 17 November 2016, Canada announced a CAD14 million agreement with Mexico and Chile to reduce short-lived climate pollutants (SLCPs). 901

On 19 November 2016, the Minister of Environment and Climate Change, Catherine McKenna announced Canada's Mid-Century Long-Term Low-Greenhouse Gas Development Strategy at COP22 in Marrakech, Morocco. The strategy examines an "emissions-abatement pathway consistent with net emissions falling by at least 80 per cent in 2050, from 2005 levels." Canada was one of only five countries (Canada, France, Germany, Mexico, United States) to release its long term strategy. 103

On 21 November 2016, the Minister of Environment and Climate Change, Catherine McKenna announced an acceleration of Canada's phase-out of coal power and its transition to clean energy sources. This announced acceleration is expected to increase the per centage of energy coming from non-emitting sources to 90 per cent from 80 per cent by 2030. 904

On 28 November 2016, the Minister of Environment and Climate Change, Catherine McKenna announced preliminary regulations to reduce the amount of HFCs used domestically. 905

On 29 November 2016, the Minister of Natural Resources, Jim Carr and the Minister of Transport, Marc Garneau announced four important decisions on the transportation of oil via pipelines and tankers. The Trans Mountain Expansion Project and the Line 3 Replacement Projects were approved, while the Northern Gateway Pipelines Project dismissed and a moratorium on crude and persistent oil tankers along British Columbia's north coast was announced. 906

903 Communication of Long-term Strategies, United Nations Framework Convention on Climate Change (Bonn) 28 December 2016. Access Date: 30 December 2016. http://unfccc.int/focus/long-term_strategies/items/9971.php 904 The Government of Canada Accelerates Investments in Clean Electricity, Environment and Climate Change Canada (Ottawa) 21 November 2016. Access Date: 30 December 2016. http://news.gc.ca/web/article-en.do?crtr.sj1D=&crtr.mnthndVl=12&mthd=advSrch&crtr.dpt1D=&nid=1157989&crtr.lc1D=&crtr.tp1D=&crtr.yrStrtVl= 2016&crtr.kw=climate+change&crtr.dyStrtVl=1&crtr.aud1D=&crtr.mnthStrtVl=11&crtr.page=16&crtr.yrndVl=2016&crt r.dyndVl=30

Ganada Proposes to Phase Down HFCs - Powerful Greenhouse Gases, Environment and Climate Change Canada (Ottawa) 28 November 2016. Access Date: 30 December 2016. http://news.gc.ca/web/article-en.do?crtr.sj1D=&crtr.mnthndVl=12&mthd=advSrch&crtr.dpt1D=&nid=1161289&crtr.lc1D=&crtr.tp1D=&crtr.yrStrtVl= 2016&crtr.kw=climate+change&crtr.dyStrtVl=1&crtr.aud1D=&crtr.mnthStrtVl=11&crtr.page=12&crtr.yrndVl=2016&crt r.dyndVl=30

r.dyndVl=30

906 Government of Canada Announces Pipeline Plan that will Protect the Environment and Grow the Economy, Natural Resources Canada (Ottawa) 29 November 2016. Access Date: 30 December 2016. http://news.gc.ca/web/article-en.do?crtr.sj1D=&crtr.mnthndVl=12&mthd=advSrch&crtr.dpt1D=&nid=1162449&crtr.lc1D=&crtr.tp1D=&crtr.yrStrtVl= 2016&crtr.kw=climate+change&crtr.dyStrtVl=1&crtr.aud1D=&crtr.mnthStrtVl=11&crtr.page=11&crtr.yrndVl=2016&crt r.dyndVl=30

⁹⁰⁰ The Prime Minister of Canada Announces the National Oceans Protection Plan, Justin Trudeau Prime Minister of Canada (Vancouver) 7 November 2016. Access Date: 14 November 2016.

http://pm.gc.ca/eng/news/2016/11/07/prime-minister-canada-announces-national-oceans-protection-plan

⁹⁰¹ Canada invests in clean technology in Mexico and in Chile to reduce pollution for a cleaner world, CNW Group
(Marrakech) 14 November 2016. Access Date: 2 January 2017. http://www.newswire.ca/news-releases/canada-invests-in-clean-technology-in-mexico-and-in-chile-to-reduce-pollution-for-a-cleaner-world-601133406.html

⁹⁰² Canada Submits Mid-Century Strategy for a Clean Growth Economy, Environment and Climate Change Canada
(Marrakech) 19 November 2016. Access Date: 30 December 2016. http://news.gc.ca/web/article-en.do?crtr.sj1D=&crtr.mnthndVl=12&mthd=advSrch&crtr.dpt1D=&nid=1157389&crtr.lc1D=&crtr.tp1D=&crtr.yrStrtVl=
2016&crtr.kw=climate+change&crtr.dyStrtVl=1&crtr.aud1D=&crtr.mnthStrtVl=11&crtr.page=16&crtr.yrndVl=2016&crtr.dyndVl=30

On 2 December 2016, Jonathan Wilkinson, Parliamentary Secretary to the Minister of Environment and Climate Change announced a CAN1.9 million investment in Nano One, a Canadian company which develops cutting-edge electric vehicle battery technology.⁹⁰⁷

On 20 December 2016, Prime Minister Justin Trudeau and President Barack Obama announced the designation of all Arctic Canadian waters as off-limits to future offshore oil and gas licensing. This also applied to a large majority of US waters in the Chukchi and Beaufort Seas. 908, 909

On 21 December 2016, Ambassador Marc-Andre Blanchard, Permanent Representative of Canada to the United Nations announced that Canada had re-acceded to the United Nations Convention to Combat Desertification (UNCCD).⁹¹⁰

Canada has demonstrated commitment to sustainable development by transitioning to renewable energy sources, phasing out the HFCs, and protecting its oceans. Canada has also provided strong and effective support and actions to address climate change by instituting a nationwide carbon price. Thus, Canada receives a score of +1.

Analyst: Lauren Dalgliesh

China: +1

China has fully complied with its commitment to sustainable development and strong and effective support and actions to address climate change.

On 30 June 2015, China submitted its Intended Nationally Determined Contributions to the United Nations Framework Convention on Climate Change (UNFCCC). China has determined the following actions by 2030: to peak carbon dioxide emissions around 2030, to lower carbon dioxide per unit of Gross Domestic Product (GDP) by 60 to 65 per cent from 2005 levels, to increase nonfossil fuel as the primary source of energy consumption to around 20 per cent, to increase forest stock volume by 4.5 billion cubic meters based on the 2005 amount, and to adapt to climate change by increasing efforts to defend against climate change risks in agriculture, forestry, and water resources. China plans to strengthen laws and regulations on climate change, improve regional strategies on

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http://news.gc.ca/web/article-

⁹⁰⁷ Vancouver-based Company Received CAD1.9 million to Develop Technologies for the Cars of the Future, Innovation, Science and Economic Development Canada (Vancouver) 2 December 2016. Access Date: 30 December 2016.

⁹⁰⁸ United States - Canada Joint Arctic Leaders' Statement, Justin Trudeau Prime Minister of Canada (Ottawa) 20 December 2016. Access Date: 30 December 2016. http://pm.gc.ca/eng/news/2016/12/20/united-states-canada-joint-arctic-leaders-statement

⁹⁰⁹ United States - Canada Joint Arctic Leaders' Statement, The White House (Washington D.C.) 20 December 2016. Access Date: 30 December 2016. https://www.whitehouse.gov/the-press-office/2016/12/20/united-states-canada-joint-arctic-leaders-statement
⁹¹⁰ Canada to Rejoin United Nations Convention to Combat Desertification, Global Affairs Canada (New York) 2

⁹¹⁰ Canada to Rejoin United Nations Convention to Combat Desertification, Global Affairs Canada (New York) 2 December 2016. Access Date: 30 December 2016. http://news.gc.ca/web/article-

climate change, build low-carbon energy and industrial systems, enhance efforts to address climate change through science and technology, and promote international cooperation.⁹¹¹

On 19 September 2016, Chinese Premier Li Keqiang announced the release of China's National Plan on Implementation of the 2030 Agenda for Sustainable Development at the United Nations Headquarters in New York. China will integrate INDC goals into future national strategies, improve education on environmental protection, encourage developed countries to commit in addressing climate change issues, and through the South-South Cooperation Fund on Climate Change, support developing countries in their capacity to combat climate change.

On November 2016, China introduced a new climate plan to achieve goals listed in the Paris Agreement and China's 13th Five Year Plan. The State Council announced through this plan that China will reduce carbon emissions per unit of GDP by 18 per cent by the end of 2020, and total energy consumption will be kept within five billion tonnes of standard coal by the end of 2020. ⁹¹³ China also stated that it will promote energy conservation across sectors by using more nuclear power, wind power, solar power, geothermal power, and biomass power. ⁹¹⁴ Furthermore, the plan announced the promotion of green technologies and introduced a carbon emission trading system to meet its commitment of peaking carbon emissions by 2030. ⁹¹⁵ Finally, the plan stated that China would begin to restore forests, eliminate the use of chemical fertilizers to promote low carbon agriculture, and promote a low carbon lifestyle through recycling. ⁹¹⁶

On 2 November 2016, Chinese President Xi Jinping met with Guinean President Alpha Conde in Beijing. President Xi promised to reinforce bonds on China-African renewable energy cooperation, climate change, and the goals listed in the 2030 Agenda for Sustainable Development. ⁹¹⁷

On 4 November 2016, Chinese President Xi Jinping stressed the importance of climate change as he sent a congratulatory letter to the United Nations Secretary-General. The letter stated that China is willing to continue communication and cooperation in order to ensure that climate change issues are being tackled. 918

⁹¹¹ Enhanced Actions on Climate Change: China's Intended Nationally Determined Contributions, Department of Climate Change, National Development, and Reform Commission of China (Beijing) 30 June 2015. Access date: 5 January 2017. http://www4.unfccc.int/Submissions/INDC/Published per cent20Documents/China/1/China's per cent20INDC per cent20- per cent20on per cent2030 per cent20June per cent202015.pdf

⁹¹² China's National Plan on Implementation of the 2030 Agenda for Sustainable Development, Ministry of Foreign Affairs of the People's Republic of China 12 October 2016. Access date: 12 November 2016.

http://www.fmprc.gov.cn/mfa eng/zxxx 662805/W020161014332600482185.pdf

⁹¹³ State Council issues plans to promote low carbon development, The State Council The People's Republic of China 4 November 2016. Access date: 11 November 2016.

http://english.gov.cn/policies/latest_releases/2016/11/04/content_281475482956889.htm

⁹¹⁴ State Council issues plans to promote low carbon development, The State Council The People's Republic of China 4 November 2016. Access date: 11 November 2016.

http://english.gov.cn/policies/latest_releases/2016/11/04/content_281475482956889.htm

⁹¹⁵ State Council issues plans to promote low carbon development, The State Council The People's Republic of China 4 November 2016. Access date: 11 November 2016.

http://english.gov.cn/policies/latest_releases/2016/11/04/content_281475482956889.htm

⁹¹⁶ State Council issues plans to promote low carbon development, The State Council The People's Republic of China 4 November 2016. Access date: 11 November 2016.

http://english.gov.cn/policies/latest_releases/2016/11/04/content_281475482956889.htm

⁹¹⁷ Chinese, Guinean presidents announce strategic cooperation partnership, Xinhua News (Beijing) 2 November 2016. Access date: 11 November 2016. http://news.xinhuanet.com/english/2016-11/02/c 135801137.htm

⁹¹⁸ Xi sends congratulatory message to Ban over taking effect of Paris Agreement, Xinhua News (Beijing) 4 November 2016. Access date: 11 November 2016. http://news.xinhuanet.com/english/2016-11/04/c 135806808.htm

On 7 November 2016, the deputy chief of China's delegation to 22^{nd} Conference of the Parties to the United Nations Framework Convention on Climate Change (COP22) in Marrakech, introduced China's plan to build ten low-carbon demonstration zones, launch 100 projects to address climate change issues, and offer over 1000 training places in China to help its developing partners deal with the challenge of climate change.⁹¹⁹

On 14 November 2016, China's Foreign Ministry spokesperson, Geng Shuang, announced that China would commit to strengthening cooperation with other countries, such as the United States. China will address issues of climate change and facilitate further negotiations of the Paris Agreement by promoting sustainable and low-carbon development. 920 China sees the implementation of the Agreement as a "new start for global efforts in addressing climate change, and offers guidance for a new stage of green and low-carbon development."921

On 22 December 2016, China launched a carbon dioxide monitoring satellite to monitor the effects of greenhouse gases. TanSat was sent into orbit for a three-year mission to monitor the concentration and distribution of carbon dioxide in the atmosphere. 922

China has demonstrated commitment to sustainable development by further implementing its climate plans. China has also provided strong and effective support and actions to address climate change by increasing cooperation with other parties and announcing new initiatives. Thus, China receives a score of +1.

Analyst: Jing Wang

France: +1

France has fully complied with its commitment to sustainable development and strong and effective support and actions to address climate change.

On 7 September 2016, Minister Ségolène presented the Ministry of Environment's progress on climate, energy transition, biodiversity and presented the new projects of the Ministry. This included rendering the implementation of the energy transition law for green growth irreversible, making steps toward the implementation of the biodiversity protection law, launching the Mediterranean plan for blue growth, and presenting the second edition of the National Flood Risk Management Strategy. 923

On 16 September 2016, Minister Royal announced the Programmation Pluriannuelle de l'Énergie (PPE) (Multiannual Energy Program), which would greatly reduce energy consumption (negative 12 per cent by 2023) and the consumption of fossil fuels (negative 22 per cent by 2023). This would benefit purchasing power, competitiveness, and energy independence in France; increase the capacity of electrical renewable energy and a 50 per cent increase renewable heat production over 50 per cent; develop clean mobility through the deployment of active modes, collective and shared, and diversification of fuel to electric and natural gas vehicles; reduce the production of electricity from

http://www.shanghaidaily.com/nation/Chinas-new-eye-on-climate-change/shdaily.shtml

⁹¹⁹ China backs major principles of COP22, China Daily Asia (Marrakech) 8 November 2016. Access date: 12 November 2016. http://www.chinadailyasia.com/nation/2016-11/08/content_15522620.html

⁹²⁰ Foreign Ministry Spokesperson Geng Shuang's Regular Press Conference on November 14, 2016, Ministry of Foreign Affairs of the People's Republic of China (China) 14 November 2016. Access date: 2 January 2017. http://www.fmprc.gov.cn/mfa_eng/xwfw_665399/s2510_665401/t1415345.shtml

China vows stronger cooperation in implementing Paris Agreement, Xinhua News (Beijing) 10 October 2016. Access

date: 11 November 2016. http://news.xinhuanet.com/english/2016-10/10/c_135743735.htm ⁹²² China's new eye on climate change, Shanghai Daily 23 December 2016. Access date: 22 December 2016.

Actions engagées et nouvelles initiatives pour les grands chantiers du ministère. Access date : 14 November 2016. http://www.developpement-durable.gouv.fr/Actions-engagees-et-nouvelles,48495.html

nuclear power in response to changes in electricity consumption and the development of renewable energies. 924

On 26 September 2016, Minister Royal launched the "participatory funding for green growth" label to boost financing on environmentally focused projects. The label would aim to enhance participatory funding for projects working towards the energy and ecological transition, ensure transparency of the project, involvement and citizen participation, monitoring of the project over time, and provide information on the environmental quality of the project. 925

On 21 October 2016, the French Secretary of State Christian Eckert announced that the plans to include a carbon tax in its 2016 fiscal year budget would be abandoned.

On 26 October 2016, Minister Royal presented the 2017 budget of the Ministry of the Environment, Energy and the Sea. In total, EUR35.7 billion will be committed, including EUR14.1 billion for energy transition, EUR2.9 billion for water and biodiversity and EUR2.4 billion for research and innovation. 926

On 13 November 2016, Minister Royal declared that USD100 million had already been made available to global green initiatives, with USD10 million particularly available to countries across the African continent. The minister reaffirmed France's commitment to advocate for climate justice and to capacity build in developing countries, especially in Africa. 927

On 14 November 2016, Ségolène Royal, Minister of Environment, Energy and the Sea, announced that France and Germany will fund a branch of the African Development Bank to finance 240 green initiatives across the African continent. 928

France has demonstrated commitment to sustainable development by considerable domestic efforts moving towards sustainable development. France has also provided strong and effective support and actions to address climate change by building capacity in developing countries and devoting more resources to combatting climate change. Thus, France receives a score of +1.

Analyst: Zoë David-Delves

Germany: 0

Germany has partially complied with its commitment to sustainable development and strong and effective support and actions to address climate change.

927 Ségolène Royal : « 100 milliards de dollars pour le financement des projets climatiques », AfricTelegraph (Paris), 13 November 2016. Access date: 14 November 2016.

http://www.jeuneafrique.com/373571/politique/segolene-royal-projets-lies-aux-energies-renouvelables-seront-geres-africains/

⁹²⁴Programmation Pluriannuelle de l'Énergie, Ministry of the Environment, Energy and the Sea (Paris, France) 15 September 2016. Access date: 14 November 2016. http://www.developpement-durable.gouv.fr/Programmation-pluriannuelle-de-l,48569.html

⁹²⁵Mobiliser les financements : Ségolène Royal annonce le lancement d'un nouveau label « Financement participatif pour la croissance verte », Ministry of the Environment, Energy and the Sea (Paris, France) 27 September 2016. Access date : 14 November 2016. http://www.developpement-durable.gouv.fr/Mobiliser-les-financements.html

⁹²⁶ Budget 2017 : la transition énergétique pour tous et par tous, Ministère de l'Environnement, de l'Énergie et de la Mer, Republique Française, 27 October 2016. Access date: 14 November 2016.

http://www.developpement-durable.gouv.fr/Budget-2017-la-transition.html

http://www.africtelegraph.com/segolene-royal-100-milliards-de-dollars-pour-le-financement-des-projets-climatiques/ Ségolène Royal: « Les projets liés aux énergies renouvelables seront gérés par les Africains », Jeune Afrique (Gabon), 14 November 2016. Access date: 14 November 2016.

On 17 November 2016, Germany released its Climate Action Plan 2050. The framework includes target corridors for "reducing greenhouse gas emissions in individual economic sectors." The plan focuses on the restructuring of the energy sector with renewable electricity generation, other sectors such as transport will be in a position to phase out climate-damaging fossil fuels. 929

On 12 January 2017, Germany released its first policy guide to the G20 Hamburg Summit. "One main concern is to make progress on realizing the goals of the 2030 Agenda for Sustainable Development and the Paris Agreement on climate change."

On 1 February 2017, Germany announced that it aims to cut greenhouse gas emissions (GHG) by 40 per cent by 2020 and up to 95 per cent by 2050, compared to 1990 levels. Germany also aims to raise the share of renewables in gross final energy consumption by 60 per cent by 2050. 931

Germany has taken concrete steps in moving towards sustainable development through the release of its Climate Action Plan. It has also announced its intention to focus on climate change at the G20 Hamburg Summit. However, Germany has not taken any strong and effective action with widespread impact. Thus, Germany receives a score of 0.

Analyst: Cindy Ou

India: 0

India has partially complied with its commitment to sustainable development and strong and effective support and actions to address climate change.

On 1 October 2015, India submitted its Intended Nationally Determined Contribution (INDC), outlining the following goals. The Government of India agreed to reduce the emissions intensity of its GDP by 33-35 per cent over 2005 levels by 2030, to achieve 40 per cent of its electricity from renewable energy sources by 2030, and to create a carbon sink of 2.5 to 3 billion tonnes of CO2 by 2030 through reforesting 33 per cent of India's geographical area. The Indian government agreed to invest in development programmes for agriculture, water, in the Himalayan and coastal regions, and health and disaster management. The government of India further agreed to build capacities for joint research and discovery of future climate technologies.

On 21 September 2016, the Indian government provided five more cities with funding for initiating urban reforms towards the Smart Cities Mission, increasing the total number of India's smart cities to 27. ⁹³² India's Intended Nationally Determined Contribution (INDC) states that it intends to build 100 smart cities under the Smart Cities Mission. ⁹³³

⁹³⁰ Germany makes climate change G20 priority, Climate Change News. 12 January 2017. Access Date: 3 February 2017. http://www.climatechangenews.com/2016/12/01/germany-makes-climate-change-g20-priority/

⁹²⁹ Climate Action Plan 2050: Cabinet adopts guide to climate neutral Germany, Federal Ministry for the Environment (Berlin) 14 November 2016. Access Date: 3 February 2017. http://www.bmub.bund.de/en/press/press-releases/detailansicht-en/artikel/climate-action-plan-2050-cabinet-adopts-guide-to-climate-neutral-germany/

⁹³¹ Germany's greenhouse gas emissions and climate targets, Clean Energy Wire. 1 February 2017. Access Date: 3 February 2017. https://www.cleanenergywire.org/factsheets/germanys-greenhouse-gas-emissions-and-climate-targets ⁹³² 27 new cities selected under Centre's Smart Cities mission, The Economic Times (New Delhi) 21 September 2016. Access date: 14 November 2016. http://economictimes.indiatimes.com/news/economy/infrastructure/27-new-cities-selected-under-centres-smart-cities-mission/articleshow/54423653.cms

⁹³³ India's intended nationally determined contribution: Working towards climate justice, UNFCCC (India) 25 September 2015. Access Date: 14 November 2016. http://www4.unfccc.int/submissions/INDC/Published per cent20Documents/India/1/INDIA per cent20INDC per cent20TO per cent20UNFCCC.pdf

On 2 October 2016, India ratified the Paris Agreement. 934

On 23 October 2016, India's environment ministry announced its plan to distribute INR400 billion to state government afforestation programs, in accordance with its NDCs. 935

On 24 October 2016, Prime Minister Narendra Modi reported that the Indian government plans to allocate INR210 billion to India's solar manufacturing industry. 936

On 31 October 2016, the Indian Government installed Solar Energy Projects with a renewable energy capacity of over 8727.62 Megawatts (MW). 937

On 16 December 2016, the US-India Clean Energy Finance (USICED) launched its cooperation between the governments of the United States and India. This project will provide USD20 million for renewable energy projects in India. 938

On 21 December 2016, Energy Minister Shri Piyush Goyal, released the following reports on India's plan to integrate renewable energy into its National Grid: 1) Renewable Energy Integration: Transmission an Enabler; 2) Green Energy Corridor II, and; 3) Electricity Demand Pattern Analysis. 939

On 28 December 2016, the Government of India approved the proposal by the Ministry of New and Renewable Energy (MNRE) for ratification of the International Solar Alliance's (ISA) Framework Agreement. Made up of 121 nations, the ISA encourages further research, financing, and development of solar energy. 940

India has demonstrated commitment to sustainable development by increasing the number of smart cities to 27, investing in solar energy and afforestation programs, and constructing the world's largest solar power plant. However, India has not provided strong and effective support and actions to address climate change. Thus, India receives a score of 0.

Analyst: Jenna Cardoso

Indonesia: +1

Indonesia has fully complied with its commitment to sustainable development and strong and effective support and actions to address climate change.

⁹³⁵ Experts cast doubt on India's Dh22bn tree-planting plan, The National, 23 October 2016. Access Date: 14 November 2016. http://www.thenational.ae/world/south-asia/experts-cast-doubt-on-indias-dh22bn-tree-planting-plan

⁹³⁷ India makes remarkable strides on the renewable energy front, Energy Infra Post, 27 December 2016. Access Date: 3 January 2017 http://energyinfrapost.com/india-makes-remarkable-strides-renewable-energy-front/

⁹³⁹ India's power sector under minister Piyush Goyal achieves major milestones during 2016, Energy Infra Post, 28 December 2016. Access Date: 3 January 2017 http://energyinfrapost.com/indias-power-sector-under-minister-piyush-goyal-achieves-major-milestones-during-2016/
⁹⁴⁰ Government nod for ratifying International Solar Alliance Agreement, The Indian Express, 28 December 2016.

Government nod for ratifying International Solar Alliance Agreement, The Indian Express, 28 December 2016. Access Date: 3 January 2017 http://indianexpress.com/article/india/government-nod-for-ratifying-international-solar-alliance-agreement-4448904/

⁹³⁴ Status of Ratification (Paris) 12 December 2015. Access Date: 14 November 2016. http://unfccc.int/paris agreement/items/9444.php.

⁹³⁶ Modi said to plan \$3.1 billion boost for India's solar factories, Renewable Energy Network, 24 October 2016. Access Date: 14 November 2016 http://www.renewableenergyworld.com/articles/2016/10/modi-said-to-plan-3-1-billion-boost-for-india-s-solar-factories.html

⁹³⁸ OPIC, Government of India will deploy up to USD 20 million for distributed solar PV projects, Solar Server, 21 December 2016. Access Date: 3 January 2017 http://www.solarserver.com/solar-magazine/solar-news/current/2016/kw51/opic-government-of-india-will-deploy-up-to-usd-20-million-for-distributed-solar-pv-projects html

On 24 September 2015, Indonesia submitted its Intended Nationally Determined Contributions (INDC) to the United Nations Framework Convention on Climate Change. Indonesia has committed to reduce its greenhouse gas emissions by 26 per cent by the year 2020, and by 29 per cent by the year 2030. Indonesia plans to build resilience in utilization of degraded land for renewable energy, energy efficiency, and water management. 941

On 15 October 2016, during a conference in Kigali, Indonesia made amendments to the Montreal protocol treaty. Through the amendments, Indonesia committed itself to stop using products that contain hydrofluorocarbons (HFCs) by 2024, and to phase out all HFCs by 2050. 942

On 19 October 2016, Indonesia ratified the Paris Agreement. Indonesia committed to cut greenhouse gas emissions by 29 per cent by the end of 2030, and up to 41 per cent with the help of foreign technology and finance. 943

On 21 October 2016, Indonesia signed an agreement with the Asian Development Bank (ADB) to begin a program of sustainable growth until 2019. This includes ADB's support for Indonesia's energy infrastructure in promoting cleaner energy sources. 944

On 26 October 2016, the Indonesian government launched the Tropical Landscapes Finance Facility (TLFF), an initiative that will use public funding to provide long-term finance to projects and companies in order to stimulate green growth and ameliorate rural livelihoods. ⁹⁴⁵

In November 2016, at the 22nd Conference of the Parties to the United Nations Framework Convention on Climate Change (COP22) in Marrakech, Morocco, the Government of Indonesia announced that it will suspend the clearing of super-high carbon-intact peatlands in order to protect its forests. ⁹⁴⁶ Furthermore, Indonesia's Peatland Restoration Agency held discussions with the United Nations Food and Agriculture Agency and the International Union for Conservation of Nature. The discussion focused on the reduction of emissions from deforestation and forest degradation (REDD+) movement, and proposed three strategies in order to restore peatlands in the country. ⁹⁴⁷

On 1 December 2016, President Jokowi signed a regulation on governing peatlands that banned all new land clearance, established a minimum ratio between cultivation and conservation areas, and created guidelines for managing peatland plantations in an effort to restore damaged peatland areas.

⁹⁴² RI agrees to quit using hazardous coolants, The Jakarta Post (Jakarta) 19 October 2016. Access date: 11 November 2016. http://www.thejakartapost.com/news/2016/10/19/ri-agrees-quit-using-hazardous-coolants.html-0

⁹⁴¹ Intended Nationally Determined Contribution Republic of Indonesia, Intended Nationally Determined Contribution, United Nations Framework Convention on Climate Change (Bonn) 24 September 2015. Access date: 5 January 2017. http://www4.unfccc.int/Submissions/INDC/Published per cent20Documents/Indonesia/1/INDC_REPUBLIC per cent20OF per cent20INDONESIA.pdf

⁹⁴³ Indonesia's Parliament ratifies Paris Agreement on climate change, Straits Times (Jakarta) 19 October 2016. Access date: 11 November 2016. http://www.straitstimes.com/asia/se-asia/indonesias-parliament-ratifies-paris-agreement-on-climate-change

⁹⁴⁴ ADB to Support Clean, Inclusive Growth in New Partnership with Indonesia, The Asian Development Bank (Jakarta) 21 October 2016. Access date: 11 November 2016. https://www.adb.org/news/adb-support-clean-inclusive-growth-new-partnership-indonesia

⁹⁴⁵ Tropical Landscapes Finance Facility unlocks private sector finance for climate, biodiversity and jobs, The United Nations Environment Programme (Jakarta) 26 October 2016. Access date: 12 November 2016.

http://web.unep.org/tropical-landscapes-finance-facility-unlocks-private-sector-finance-climate-biodiversity-and-jobs ⁹⁴⁶ Marrakech: New initiatives on forest protection give boost to climate action agenda, UN News Centre 9 November 2016. Access date: 11 November 2016. http://www.un.org/apps/news/story.asp?NewsID=55510#.WCftmeErKAx ⁹⁴⁷ Indonesia proposes three strategies in COP22 to restore peatlands, The Jakarta Post (Jakarta) 11 November 2016.

Access date: 11 November 2016. http://www.thejakartapost.com/news/2016/11/11/indonesia-proposes-three-strategies-in-cop-22-to-restore-peatlands.html

The Peat Restoration Agency of Indonesia (BRG) wants to re-wet peatland areas and improve fire preparedness by installing wells and monitoring systems. This would decrease the frequency of forest fires, that would otherwise lead to a mass burning of carbon dioxide.⁹⁴⁸

On 5 December 2016, President Jokowi signed a revised regulation to add to its peatland moratorium. The revised regulation includes a moratorium on any new land clearing in peatland areas, protection in peatland ecosystems, prohibition on new canal developments, prohibition on burning peatlands, and a new approach to water level compliance to help describe peatland ecosystem damage. This is an effort to hold corporations accountable for the damage made to peatlands and to decrease carbon dioxide in the area. 950

Indonesia has demonstrated commitment to sustainable development by ratifying the Paris Agreement and acting in accordance with its NDCs. Indonesia has provided strong and effective support and actions to address climate change by protecting its peatlands. Thus, Indonesia receives a score of +1.

Analyst: Jing Wang

Italy: −1

Italy has not complied with its commitment to sustainable development and strong and effective support and actions to address climate change.

On 4 November 2016, the Paris Agreement entered into force which commits all signatory members to commit to their nationally determined contributions (NDCs). The European Union's NDC which was submitted by Latvia and the European Commission on behalf of its member states (including Italy) has a collective target to reduce greenhouse gas emissions by at least 40 per cent by 2030 compared to 1990 levels. 951

On 11 November 2016, Italy ratified the Paris agreement. 952

On 25 November 2016, the Government of Rwanda represented by Minister Biruta and Italy government represented by the Minister of the Environment, land and Sea, Gian Luca Galletti signed the Memorandum of understanding on cooperation on climate action. The signing took place was

UG9saWNpZXMgYW5kIE1lYXN1cmVzPC9hPjxzcGFuPiAmZ3Q7Jmd0OyA8L3NwYW4-

PGEgaHJIZj0iL3BvbGljaWVzYW5kbWVhc3VyZXMvY2xpbWF0ZWNoYW5nZS8iPkNsaW1hdGUgQ2hhbmdlPC9hPjxzcGFulGNsYXNzPSJsYXN0lj48L3NwYW4-PC9uYXY-SNSYXNZPSJsYXN0lj48L3NwYW4-PC9uYXY-SNSYXNZPSJsYXN0lj48L3NwYW4-PC9uYXY-SNSYXNZPSJSYXNZPSJSYXNZPSJSYXNZPSJSYXNZPSJSYXNZPSJSYXNZPSJXNZP

⁹⁴⁸ Kudos and cooperation to combat climate change, The Jakarta Post (Jakarta) 27 December 2016. Access date: 30 December 2016. http://www.thejakartapost.com/academia/2016/12/27/kudos-and-cooperation-to-combat-climate-change.html

⁹⁴⁹ Indonesia strengthens peatland moratorium, Value Walk 9 December 2016. Access date: 30 December 2016. http://www.valuewalk.com/2016/12/indonesia-peatlands/

⁹⁵⁰ Indonesia just made a huge move to protect the environment, The Washington Post 6 December 2016. Access date: 30 December 2016. https://www.washingtonpost.com/news/energy-environment/wp/2016/12/06/indonesia-just-made-a-huge-move-to-protect-the-climate/?utm term=.d58af29a3c35#comments

Nationally Determined Contribution to the Paris Agreement: Italy (EU), IEA. 21 December 2016. Access Date: 3 February 2017. http://www.iea.org/policiesandmeasures/pams/italy/name-156409-en.php?s=dHlwZT1jYyZzdGF0dXM9T2s,&return=PG5hdiBpZD0iYnJlYWRjcnVtYil-PGEgaHJlZj0iLyl-SG9tZTwvYT48c3Bhbj4gJmd0OyZndDsgPC9zcGFuPjxhlGhyZWY9li9wb2xpY2llc2FuZG1lYXN1cmVzLyl-

⁹⁵² Paris Agreement: Status of Ratification, UNFCC. 4 November 2016. Access Date: 3 February 2017. http://unfccc.int/paris_agreement/items/9444.php

established in the UN Framework Convention on Climate Change, known as COP22, in Marrakech, Morocco. 953

While the Italian government has ratified the Paris Agreement and agreed to cooperate with Rwanda on climate action, no actions were taken to promote sustainable development. Italy has not taken strong and effective action against climate change. Thus, Italy receives a score of -1.

Analyst: Fatmire Feka

Japan: 0

Japan has partially complied with its commitment to sustainable development and strong and effective support and actions to address climate change.

On 17 July 2015, Japan submitted its Intended Nationally Determined Contributions (INDC) to the United Nations Framework Convention on Climate Change. Japan's INDCs commits to reducing greenhouse gas emissions by 26 per cent by 2030 compared to 2013. Japan will do this by promoting a low-carbon society, promoting forest management and industry measures, and contributing internationally towards human resource development and the development and diffusion of technologies relating to emission reductions in developing countries through the Joint Crediting Mechanism.⁹⁵⁴

On 15 October 2016, Japan committed to reduce the use of hydrofluorocarbons (HFCs) at the 28th Meeting of the Parties to the Montreal Protocol in Kigali, Rwanda. Japan was among one of the developed countries committed to taking early action by 2019, as opposed to 2024. 955

On 1 November 2016, Japan released a statement committing to a donation of approximately USD100,000 to the Trust Fund for Participation in the United Nations Framework Convention on Climate Change (UNFCCC). The goal of this is to support developing countries in addressing climate change issues at the 22nd Conference of the Parties (COP22). 956

On 8 November 2016, Japan ratified the Paris Agreement. The Agreement was ratified after the 19 October 2016 deadline, thus, Japan attended COP22 as an observer with no voting rights. 957

On 8 November 2016, Prime Minister Shinzo Abe released a statement regarding the ratification of the Paris Agreement. 958 His statement declared that Japan would make global warming countermeasures a Cabinet priority, strive to create innovative technologies in environmental and

⁹⁵⁴ Intended Nationally Determined Contribution, United Nations Framework Convention on Climate Change (Bonn) 17 July 2015. Access date: 5 January 2017. http://www4.unfccc.int/Submissions/INDC/Published per cent20Documents/Japan/1/20150717 Japan's per cent20INDC.pdf

Ontribution to Trust Fund for Participation in the UNFCCC Process, Ministry of Foreign Affairs of Japan (Japan) 1 November 2016. Access date: 12 November 2016. http://www.mofa.go.jp/ic/ch/page22e_000795.html

⁹⁵³ Rwanda and Italy Sign Memorandum of Understanding on Climate Action. All Africa 25 November 2016. Access date: 26 November 2016. http://allafrica.com/stories/201611290599.html

Nations reach deal to reduce hydrofluorocarbons, The Japan Times (Kigali) 15 October 2016. Access date: 12 November 2016. http://www.japantimes.co.jp/news/2016/10/15/world/science-health-world/rwanda-meet-nations-reach-agreement-reducing-hfcs-environmental-groups-say/#.WCkBleErKAw

⁹⁵⁷ Paris global warming accord kicks in but Japanese ratification delayed by TPP, The Japan Times 4 November 2016. Access date: 12 November 2016. http://www.japantimes.co.jp/news/2016/11/04/national/paris-global-warming-accord-kicks-japanese-ratification-delayed-tpp/#.WCjVLuErJE5

⁹⁵⁸ Statement by the Prime Minister on the acceptance of the Paris Agreement, Ministry of Foreign Affairs of Japan (Japan) 8 November 2016. Access date: 12 November 2016. http://www.mofa.go.jp/ic/ch/page4e 000546.html

energy sectors, and commit to implementing climate change assistance of JPY1.3 trillion to developing countries by 2020. 959

On 11 November 2016, Japan announced its Assistance Initiatives to Address Climate Change plan, in which it highlighted a variety of support partnerships to help developing countries combat climate change. The document enlists five main areas of Japanese contribution: Mitigation, Adaptation, Transparency, Measures Against Fluorocarbons, and Support for Sustainable Societies. The support of the

On 11 November 2016, Japan submitted its updated strategies for scaling up climate finance from 2014 to 2020. The submission builds on a previous submission from 2014. The updates include efforts to enhance providing and mobilizing climate finance through financial institutions and government agencies such as Japan Bank for International Cooperation and Nippon Export and Investment Insurance. The updates also implements policies and programmes in cooperation with cities and sub-governmental authorities that align with the initiative, Action for Cool Earth 2.0. This ensures a balance between adaptation and mitigation to aid developing countries in addressing the effects of climate change; and assist the dissemination of information related to climate change. ⁹⁶²

On 13 December 2016, Minister of Foreign Affairs, Fumio Kishida, met with the Honourable Kamina Johnson Smith, the Minister of Foreign Affairs and Foreign Trade of Jamaica. Minister Kishida committed Japan in following up on the Joint Statement on Enhancing the Partnership between Japan and Jamaica (J-J Partnership). The statement includes an affirmation of cooperation in building a post-2020 framework.

Japan has demonstrated commitment to sustainable development by increasing climate financing. Japan, however, has not provided strong and effective support and actions to address climate change. Thus, Japan receives a score of 0.

Analyst: Jing Wang

Korea: 0

Korea has partially complied with its commitment to sustainable development and strong and effective support and actions to address climate change.

On 30 June 2015, Korea outlined the following goals in its Intended Nationally Determined Contribution (INDC) submitted. The Government of Korea plans to implement an economy-wide

⁹⁶¹ Japan's Assistance Initiatives to Address Climate Change: Responding to the Needs of the Developing Countries, Ministry of the Environment Government of Japan (Japan) 11 November 2016. Access date: 12 November 2016. https://www.env.go.jp/press/files/en/696.pdf

⁹⁵⁹ Statement by the Prime Minister on the acceptance of the Paris Agreement, Ministry of Foreign Affairs of Japan (Japan) 8 November 2016. Access date: 12 November 2016. http://www.mofa.go.jp/ic/ch/page4e_000546.html ⁹⁶⁰ Initiative for Climate Action Plan in Developing Countries, Ministry of the Environment Government of Japan (Japan)

¹¹ November 2016. Access date: 12 November 2016. https://www.env.go.jp/en/headline/2277.html

⁹⁶² Biennial submission on Japan's updated Strategies and Approaches for scaling up climate finance from 2014 to 2020, Ministry of Foreign Affairs of Japan (Japan) 13 December 2016. Access date: 22 December 2016. http://www.mofa.go.jp/ic/ch/page25e_000106.html

⁹⁶³ Japan-Jamaica Foreign Ministers' Meeting, Ministry of Foreign Affairs of Japan (Japan) 13 December 2016. Access date: 27 December 2016. http://www.mofa.go.jp/press/release/press4e_001407.html

⁹⁶⁴ Joint Statement on Enhancing the Partnership between Japan and Jamaica (J-J Partnership), Ministry of Foreign Affairs of Japan (Japan) 30 September 2015. Access date: 27 December 2016. http://www.mofa.go.jp/files/000102204.pdf

reduction of greenhouse gas emissions by 37 per cent, below the levels of 850.6 MtCO₂eq by 2030.965

On 5 October 2016, South Korea announced its plan to build a large-scale laboratory for solar photovoltaic technology in Seoul, which will allow solar companies to test the safety and reliability of their products. 966

On 25 October 2016, the Korean government declared its goal to help create new energy industries in the country and enhance assistance to the clean energy sector. 967

On 3 November 2016, Korea ratified the Paris Agreement. 968

On 12 December 2016, the Korean government announced its plan to invest KRW47.5 billion in commercial carbon recycling technology over the next six years. 96

On 14 December 2016, the Ministry of Trade, Industry and Energy announced that Korea's renewable energy-based power is predicted to reach 27.9 Gigawatts (GW) in 2020. 970

Korea has demonstrated commitment to sustainable development by planning to invest in clean energy and commercial carbon recycling technology. Korea has not provided strong and effective support and actions to address climate change. Thus, Korea receives a score of 0.

Analyst: Jenna Cardoso

Mexico: +1

Mexico has fully complied with its commitment to sustainable development and strong and effective support and actions to address climate change.

Mexico outlined the following goals in its Intended Nationally Determined Contribution (INDC), submitted 30 March 2015 to the United Nations Framework Convention on Climate Change.9 The Government of Mexico unconditionally agreed to lower its greenhouse gas emissions and short lived climate pollutants emissions by 25 per cent by 2030, compared to business-as-usual (BAU) levels. Mexican government conditionally agreed to raise the emission reduction of 25 per cent to 40

⁹⁶⁵ Submission by the Republic of Korea: Intended Nationally Determined Contribution, 30 June 2016, UNFCCC. Access date: 3 January 2017 http://www4.unfccc.int/submissions/INDC/Published per cent20Documents/Republic per cent20of per cent20Korea/1/INDC per cent20Submission per cent20by per cent20the per cent20Republic per cent20of per cent20Korea per cent20on per cent20June per cent2030.pdf

⁹⁶⁶ S. Korea to build large-scale lab for solar photovoltaic technology, 5 October 2016, Yonhap News Agency. Access date: 3 January 2017

http://english.yonhapnews.co.kr/news/2016/10/05/11/0200000000AEN20161005004700320F.html

⁹⁶⁷ Address by President Park Geun-hye at the National Assembly on the government proposal for FY 2017 budget plan. 25 October 2016. Access date: 14 November 2016. http://www.korea.net/Government/Briefing-Room/Presidential-Speeches/view?articleId=141957

⁹⁶⁸ Status of Ratification (Paris) 12 December 2015. Access date: 14 November

^{2016.}http://unfccc.int/paris agreement/items/9444.php.

⁹⁶⁹ South Korean government working on commercial carbon recycling, 13 December 2016, Business Korea. Access date: 3 January 2017 http://www.businesskorea.co.kr/english/news/industry/16732-carbon-recycling-south-korean-

government-working-commercial-carbon-recycling ⁹⁷⁰ New and renewable energy-based power generation to exceed atomic power in 2020, 14 December 2016, Business Korea. Access date: 3 January 2017 http://www.businesskorea.co.kr/english/news/industry/16744-replacementatomic-energy-new-and-renewable-energy-based-power-generation-exceed

⁹⁷¹ Intended Nationally Determined Contributions, United Nations Framework Convention on Climate Change (Bonn) 30 March 2015. Access Date: 10 November 2016. http://www4.unfccc.int/submissions/indc/Submission per cent20Pages/submissions.aspx

per cent. The Government of Mexico further agreed to implement adaptation actions regarding deforestation, early warning systems for climate disasters, and vulnerable municipalities. 972

On 7 September 2016, the Mexican government announced the adoption of a cap and trade carbon emission program. The program will commence in November and act as a precursor to a national carbon market planned for 2018. 60 countries volunteered to participate in the carbon pricing system, an initiative intended to reduce carbon emissions in Mexico and satisfy its NDC. 973

On 12 September 2016, Mexican President Enrique Peña Nieto inaugurated the Ventika Wind Farms. The President declared that the 84,116 megawatt turbines will prevent the production of pollutants equivalent to 40,000 vehicles. The wind farms are intended to reduce the country's reliance on nonrenewable energy resources. 974

On 16 September 2016, the European Union, Mexico and the Marshall Islands released a joint statement at the International Civil Aviation Organization summit in Montreal, agreeing to support a proposal to reduce aviation emissions after 2020.⁹⁷⁵

On 20 September 2016, President Enrique Peña Nieto addressed the United Nations General Assembly, stating that Mexico will host the thirteenth meeting of the Conference of Parties (COP13) to the Convention on Biological Diversity (CBD) in December 2016. Mexico will also host the Global Platform for Disaster Risk Reduction in 2017. Each international environmental forum will discuss issues relating to climate change and sustainable development. 976

On 21 September 2016, Mexico ratified the Paris Agreement. 977

On 13 October 2016, President Enrique Peña Nieto announced that MXN40 billion was allocated to 12 infrastructure projects in the Valley of Mexico. Amongst initiatives to connect the inhabitants of the region, the President stated the government is "significantly investing in hydraulic infrastructure to prevent future floods." Hydraulic infrastructure programs are intended to alleviate the effects of hydrometeorological disasters. ⁹⁷⁸

On 15 October 2016, Mexico agreed to the Kigali Amendment of the Montreal Protocol on Substances that Deplete the Ozone Layer. The amendment calls for the reduction of

http://www.gob.mx/presidencia/prensa/40-billion-pesos-allocated-for-12-infrastructure-works-to-improve-the-quality-of-life-of-the-inhabitants-of-the-metropolitan-zone-of-the-valley-of-mexico-epn? idiom=en

⁹⁷² Intended Nationally Determined Contribution, United Nations Framework Convention on Climate Change (Bonn) 30 March 2015. Access Date: 10 November 2016. http://www4.unfccc.int/Submissions/INDC/Published per cent20Documents/Mexico/1/MEXICO per cent20INDC per cent2003.30.2015.pdf

⁹⁷³ Mexico Will Launch Carbon Pricing In November, CleanTechnica (Atlanta) 7 September 2016. Access Date: 2 January 2017. https://cleantechnica.com/2016/09/07/mexico-will-launch-carbon-pricing-november

⁹⁷⁴ President EPN highlights government's commitment to respect for the environment and clean energy generation, President of the Republic (Mexico City) 12 September 2016. Access Date: 11 November 2016.

http://www.gob.mx/presidencia/prensa/president-epn-highlights-government-s-commitment-to-respect-for-the-environment-and-clean-energy-generation? idiom=enurgencer.

⁹⁷⁵ EU, Mexico, Marshall Islands back UN aviation pact, Climate Home (London) 16 September 2016. Access Date: 2 January 2017. http://www.climatechangenews.com/2016/09/16/eu-mexico-marshall-islands-back-un-aviation-pact ⁹⁷⁶ "Mexico reiterates its firm commitment to democratic principles as the only way to achieve sustainable development goals": EPN, President of the Republic (Mexico City) 20 September 2016. Access Date: 11 November 2016. http://www.gob.mx/presidencia/prensa/mexico-reiterates-its-firm-commitment-to-democratic-principles-as-

the-only-way-to-achieve-sustainable-development-goals-epn?idiom=en Paris Agreement- Status of Ratification, United Nations Framework Convention on Climate Change (Bonn) 21 September 2016. Access Date: 11 November 2016. http://unfccc.int/paris_agreement/items/9444.php 978 \$40 billion pesos allocated for 12 infrastructure works to improve quality of life of inhabitants of Valley of Mexico.

⁹⁷⁸ \$40 billion pesos allocated for 12 infrastructure works to improve quality of life of inhabitants of Valley of Mexico EPN, President of the Republic (Mexico City) 13 October 2016. Access Date: 11 November 2016.

hydrofluorocarbon (HFC) emissions, a contributive factor to ozone depletion and climate change. The HFC amendment to the 1987 protocol was first suggested by Canada, Mexico, the United States, and the Maldives in 2009. 979

On 18 October 2016, Undersecretary of the Secretariat of Agriculture, Livestock, Rural Development, Fisheries and Food (SAGARPA), Jorge Narvaez Narvaez, led the inauguration of the Photovoltaic Interconnected System in Yoreme. The Under-Secretary emphasized the importance in accessing "new sources of clean, affordable energy" to further conserve the environment. 980

On 24 October 2016, Mexico and Austria signed a declaration of intent to collaborate on environmental issues, including sustainable cities, clean transportations, and solid waste management.⁹⁸¹

On 27 October 2016, the governments of Mexico and Colombia signed an environmental cooperation agreement. The Memorandum of Understanding (MoU) will foster bilateral cooperation in the conservation of biodiversity, sustainable production, water management, and sustainable forestry. The MoU will likewise encourage the exchange of expertise and experience between the two countries to further support actions against the effects of climate change. 982

On 28 October 2016, the Secretariat of Environment and Natural Resources (SEMARNAT) announced that the federal government will invest MXN32.3 billion to enhance reforestation and wetland care, primarily mangrove restoration. 983 The program will further the rehabilitation and sustainable management of Mexico's forests.

On 17 November 2016, the Mexican Secretary of Energy, Pedro Joaquín Coldwell as well as the Head of the Delegation of the European Union (EU) in Mexico, Andrew Standley, announced a EUR20 million joint Mexican-EU geothermal initiative. The three-year GEMex program will explore the cost-effective use of geothermal energy, and it will be supervised by the Innovation and Networks Executive Agency (INEA). GEMex is an attempt to diversify Mexico's energy system and reduce reliance on fossil fuels.

⁹⁸¹ México y Austria abrirán agenda bilateral en materia ambiental, Secretariat of Environment and Natural Resources (Mexico City) 24 October 2016. Access Date: 11 November 2016. http://www.gob.mx/semarnat/prensa/mexico-y-australia-abriran-agenda-bilateral-en-materia-ambiental?idiom=es

⁹⁸² México y Colombia acuerdan cooperación en temas ambientales, Secretariat of Environment and Natural Resources (Mexico City) 27 October 2016. Access Date: 11 November 2016. http://www.gob.mx/semarnat/prensa/mexico-y-colombia-acuerdan-cooperacion-en-temas-ambientales?idiom=es

⁹⁸³ Semarnat fortalece trabajos de recuperación de manglar en Nayarit, Secretariat of Environment and Natural Resources (Mexico City) 28 October 2016. Access Date: 11 November 2016.

http://www.gob.mx/semarnat/prensa/semarnat-fortalece-trabajos-de-recuperacion-de-manglar-en-nayarit?idiom=es ⁹⁸⁴ México y la Unión Europea anuncian proyecto para la investigación de sistemas geotérmicos, Secretariat of Energy (Mexico City) 17 November 2016. Access Date 2 January 2017. http://www.gob.mx/sener/prensa/mexico-y-la-union-europea-anuncian-proyecto-para-la-investigacion-de-sistemas-geotermicos?idiom=es

⁹⁸⁵ Key joint EU – Mexico geothermal research project kicks off. Innovation and Networks Executive Agency (Brussels) 18 November 2016. Access Date: 2 January 2017. https://ec.europa.eu/inea/en/news-events/newsroom/key-joint-eu-mexico-geothermal-research-project-kicks

⁹⁷⁹ 140 countries will phase out HFCs. What are these and why do they matter?, Washington Post (Washington D.C.) 3 November 2016. Access Date: 2 January 2017. https://www.washingtonpost.com/news/monkey-cage/wp/2016/11/03/140-countries-will-now-phase-out-hfcs-what-are-these-and-why-do-they-matter/?utm_term=.4747f0ea0075

Instala SAGARPA mil 715 sistemas de energía renovable en el campo, Secretariat of Agriculture, Livestock, Rural Development, Fisheries and Food (Mexico City) 18 October 2016. Access Date: 11 November 2016. http://www.gob.mx/sagarpa/prensa/instala-sagarpa-mil-715-sistemas-de-energia-renovable-en-el-campo?idiom=es

On 17 November 2016, Canada announced a CAD14 million agreement with Mexico and Chile to reduce short-lived climate pollutants (SLCPs). 986

On 18 November 2016, Mexico proposed a mid-century Climate Change Strategy of updated scope and objectives at COP22. The extended climate change strategy includes a reduction of Mexico's greenhouse gas emissions (GHGs) by 50 per cent by 2050 compared to levels in 2000. 987

On 28 November 2016, Mexico participated in the two day 2016 Budapest Water Summit, and signed a MOU on water management with Hungary. The agreement encouraged technical and experiential collaboration between the two countries regarding, among other issues, river basin management planning, drought monitoring and flood control, wastewater treatment, and climate change. 988

On 4 December 2016, SAGARPA and SEMARNAT signed an agreement to preserve the forests of Mexico, while encouraging sustainable energy production. Secretary Rafael Pacchiano Alamán concluded that "based on the coordination between both agencies, we will be able to fulfill the commitment that Mexico acquired in the Paris Agreement to achieve a zero rate of deforestation." 989

On 4 December 2016, the Government of Mexico initiated the 13th Conference of the Parties to the Convention on Biological Diversity (CBD) in Cancun, Mexico. 167 countries participated in the 13 day conference and agreed to several measures on forestry, fisheries, and ecosystem restoration intended to satisfy the 2030 Agenda on Sustainable Development and the Aichi Biodiversity Targets by 2020. 990

On 5 December 2016, President Enrique Peña Nieto, in conjunction with the SEMARNAT and the National Commission of Protected Areas (CONANP), authorized the creation of three additional Marine Protected Areas (MPAs). The new reserves further contribute to Mexico's commitment to the international Biodiversity Convention MPA Target 11. 991

On 7 December 2016, the Government of Mexico established five new Safeguard Zones, regions protected from hydrocarbon exploration and extraction. The zones include all of the country's Ramsar sites (wetlands) and mangrove forests. Dr. Braulio Ferreira de Souza Dias, Executive Secretary of the Convention on Biological Diversity, commented that the new reserves are "a

⁹⁸⁶ Canada invests in clean technology in Mexico and in Chile to reduce pollution for a cleaner world, CNW Group (Marrakech) 14 November 2016. Access Date: 2 January 2017. http://www.newswire.ca/news-releases/canada-invests-in-clean-technology-in-mexico-and-in-chile-to-reduce-pollution-for-a-cleaner-world-601133406.html

Nations Take Forward Global Climate Action at 2016 UN Climate Conference, United Nations Framework Convention on Climate Change (Marrakech) 18 November 2016. Access Date: 2 January 2017 http://newsroom.unfccc.int/unfccc-newsroom/nations-take-forward-global-climate-action-at-2016-un-climate-conference/

Mexico, Hungary sign co-op agreement on water management, Business News Americas (Santiago) 1 December 2016. Access Date: 2 January 2017 http://www.bnamericas.com/en/news/waterandwaste/mexico-hungary-sign-co-opagreement-on-water-management

⁹⁸⁹ Firman Sagarpa y Semarnat acuerdo de colaboración para preservar bosques y fortalecer la sustentabilidad alimentaria del país, Secretariat of the Environment and Natural Resources (Mexico City) 4 December 2016. Access Date: 2 January 2017. http://www.gob.mx/semarnat/prensa/firman-sagarpa-y-semarnat-acuerdo-de-colaboracion-para-preservar-bosques-y-fortalecer-la-sustentabilidad-alimentaria-del-pais-85846?idiom=es

Governments make strong commitments to biodiversity at UN conference in Mexico, United Nations (New York City) 19 December 2016. Access Date: 2 January 2017.

http://www.un.org/apps/news/story.asp?NewsID=55835#.WGPrMqOZPeQ

Mexico Committed to the Conservation of their Oceans, The Nature Conservancy (Cancun) 5 December 2016. Access Date: 2 January 2017. http://www.nature.org/newsfeatures/pressreleases/mexico-committed-to-the-conservation-of-their-oceans.xml

remarkable step towards reaching Aichi Biodiversity Target 11 to protect marine and terrestrial areas, and a fitting opening of the UN Biodiversity Conference. It demonstrates Mexico's commitment to achieve Aichi Target 11 and to contribute significantly to implementation of the Biodiversity Strategic Plan."992

Mexico has demonstrated through strong and effective action through implementing a cap and trade emission program, its commitment to sustainable development by creating environmental protection plans, investing in renewable energy, and signing bilateral agreements. Thus, Mexico receives a score of +1.

Analyst: Harrison Myles

Russia: -1

Russia has not complied with its commitment to sustainable development and strong and effective support and actions to address climate change.

On 22 April 2016, Russia signed the Paris Agreement. On 16 June 2016, Special Presidential Representative on Climate Issues Alexander Bedritsky said that Russia plans to ratify the Paris Agreement no sooner that in 2019-2020.

According to Russia's Intended Nationally Determined Contribution (INDC) towards achieving the objective of the United Nations Framework Convention on Climate Change (UNFCCC), Russia aims to limit anthropogenic greenhouse gases in Russia to 70-75 per cent of 1990 levels by 2030. The period for this goal implementation begins on 1 January 2020. 993

On 21 September 2016, Special Representative Bedritsky stated that Russia needs to evaluate the economic and social impact of the Paris Agreement before it ratifies the Agreement. 994

In November 2016, Special Presidential Representative Bedritsky participated in the joint high-level segment of the Conference of the Parties to the UN Framework Convention on Climate Change, 12th Conference of the Parties to the Kyoto Protocol and 1st Conference of the Parties to the Paris Agreement in Marrakesh. ⁹⁹⁵ He noted that Russia considers the entry into force of the Paris Agreement to be "a good incentive and opportunity to evolve toward a low carbon future." Mr. Bedritsky said that the Russian Government was developing a package of measures to improve state regulation of greenhouse gas emissions and prepare for ratification of the Agreement, including through elaboration of a strategy for long-term development (middle of the century) with low greenhouse emissions. According to him by 2024 Russia plans to put into service solar and wind power stations and small hydroelectric plants with the capacity of about 6 GW. Mr. Bedritsky also emphasised that although the UNFCCC and the Paris Agreement did not legally bind Russia to

 $http://www4.unfccc.int/Submissions/INDC/Published\%20Documents/Russia/1/Russian\%20Submission\%20INDC_eng_rev1.doc. \\$

⁹⁹² Mexico declares four new protected areas, The International Union for Conservation of Nature and Natural Resources (Gland) 7 December 2016. Access Date: 2 January 2017. https://www.iucn.org/news/mexico-declares-four-new-protected-areas

⁹⁹³ Russia's INDC Submission, UNFCCC. Access Date:1 March 2017.

⁹⁹⁴ Presidential Aide: Russia will not Artificially Speed Up Paris Agreement Ratification, ITAR-TASS News Agency 21 September 2016. Accessed Date: 1 March 2017, http://tass.ru/obschestvo/3639933

Alexander Bedritsky took part in the Conference of the Parties to the UN Framework Convention on Climate Change, President of Russia 16 November 2016. http://en.kremlin.ru/catalog/persons/51/events/53267

provide financial assistance to developing countries, it provided climate-related donor support voluntarily. 996

In October 2016, the Russia-funded project of the UN programme aimed at enhancing the capabilities of small developing island nations in the Pacific to effectively prepare for and respond to natural disasters, including those linked with climate change was launched in Fiji. The project's total budget amounts to USD 7.5 million. 997

On 23 December 2016, Russian President stated that "Russia made fairly stringent commitments" under the Paris Agreement and that it would comply with them. He said that Russia was ready for implementation of these agreements. 998

As of February 2017, Russia did not ratify the Paris Agreement on Climate Change. 999

On 3 November 2016, the Government of Russia adopted the plan for implementation of a set of measures to ratify the Paris agreement on climate change. According to the Plan are report assessing social and economic consequences from the ratification of the Paris Agreement will be drawn up by December 2017, and a final report for the president on the expediency of ratifying the Paris Agreement is due in the first quarter of 2019.

Russia has not demonstrated commitment to sustainable developmentand has not provided strong and effective support to address climate change. Thus, Russia receives a score of -1.

Analysts: Yi Fan Zheng & Mark Rakhmangulov

Saudi Arabia: 0

Saudi Arabia has partially complied with its commitment to sustainable development and strong and effective support and actions to address climate change.

Saudi Arabia outlined the following goals in its Intended Nationally Determined Contribution (INDC), submitted 10 November 2015. The Government of Saudi Arabia agrees to mitigate 130 million tons of CO2 by 2030 through economic diversification away from oil and climate change adaptation.

On 9 October 2016, Japan and Saudi Arabia agreed to advance cooperation in the renewable energy sectors. 1002

⁹⁹⁶ Alexander Bedritsky took part in the Conference of the Parties to the UN Framework Convention on Climate Change, President of Russia 16 November 2016. http://en.kremlin.ru/catalog/persons/51/events/53267

⁹⁹⁷ Alexander Bedritsky took part in the Conference of the Parties to the UN Framework Convention on Climate Change, President of Russia 16 November 2016. http://en.kremlin.ru/catalog/persons/51/events/53267

⁹⁹⁸ Vladimir Putin's annual news conference, President of Russia, 23 December 2016. Access Date: 20 February http://en.kremlin.ru/events/president/transcripts/press_conferences/53573

Paris Agreement - Status of Ratification, United Nations Framework Convention on Climate Change 1 November 2016, Access Date: 3 November 2016. http://unfccc.int/paris_agreement/items/9444.php

Government of Russia Resolution No. 2344-p of 3 November 2016. Access Date: 20 February 2017. http://government.ru/docs/25221/

Russia approves plan for Paris climate agreement ratification — minister, TASS 7 November 2016. Access Date: 20 February 2017. http://tass.com/politics/910774.

Japanese, Saudi Arabian ministers meet, agree to cooperate ion internet of things, renewable energy, 9 October 2016, Japan Times. Access Date: 3 January 2017 http://www.japantimes.co.jp/news/2016/10/09/national/politics-diplomacy/japanese-saudi-arabian-ministers-meet-agree-cooperate-internet-things-renewable-energy/

In November 2016, Saudi Arabia along with nine other members of the Oil and Gas Climate Initiative (OCGI) announced a plan to invest USD1 billion into the development of innovative, low emissions technologies over the next ten years. ¹⁰⁰³

On 3 November 2016, Saudi Arabia ratified the Paris Agreement. 1004

On 21 November 2016, Saudi Arabia announced plans to establish a national program to optimize water and energy consumption. 1005

On 19 December 2016, the first wind turbine was delivered to Saudi Arabia. Implementation is projected to occur sometime in January 2017. 1006

Saudi Arabia has demonstrated commitment to sustainable development by advancing renewable energy sources and optimizing water consumption. Saudi Arabia has not provided strong and effective support and actions to address climate change. Thus, Saudi Arabia receives a score of 0.

Analyst: Jenna Cardoso

South Africa: -1

South Africa has not complied with its commitment to sustainable development and strong and effective support and actions to address climate change.

On 1 November 2016, South Africa ratified the Paris Agreement on Climate Change. Thus, South Africa receives a score of -1.

Analyst: Yi Fan Zheng

Turkey: 0

Turkey has partially complied with its commitment to sustainable development and strong and effective support and actions to address climate change.

As of February 2017, Turkey did not ratify the Paris Agreement on Climate Change. 1008

According to Turkey's presented Intended Nationally Determined Contributions (INDC) towards achieving the objective of the United Nations Framework Convention on Climate Change (UNFCCC), Turkey aims to achieve up to 21 per cent reduction in Greenhouse Gas (GHG)

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¹⁰⁰³ Saudi Arabia takes its place as global citizen at COP22 (Jeddah, Saudi Arabia) 11 November 2016. Access Date: 14 November 2016.

http://saudigazette.com.sa/business/saudi-arabia-takes-its-place-as-global-citizen-at-cop22/

Status of Ratification (Paris) 12 December 2015. Access Date: 14 November 2016.

http://unfccc.int/paris agreement/items/9444.php.

Saudi Arabia to establish national water and energy efficiency program, 21 November 2016, Reuters. Access Date: 3 January 2017 http://www.reuters.com/article/us-saudi-utilities-idUSKBN13G21V

Saudi Aramco and GE deliver first wind turbine to Saudi Arabia, 19 December 2016, CNBC. Access Date: 3 January 2017 http://www.cnbc.com/2016/12/19/saudi-aramco-and-ge-deliver-first-wind-turbine-to-saudi-arabia.html

Paris Agreement - Status of Ratification, United Nations Framework Convention on Climate Change 1 November 2016. Access Date: 3 November 2016, http://unfccc.int/paris_agreement/items/9444.php

Paris Agreement - Status of Ratification, United Nations Framework Convention on Climate Change 1 November 2016, Access Date: 3 November 2016. http://unfccc.int/paris_agreement/items/9444.php

emissions from the Business-as-usual (BAU) level by 2030. The implementation period of the INDC goal begins in 2021.

On 20 December 2016, the World Bank approved a USD132.7 million loan for the Turkish Sustainable Cities Project. 1010 This government initiated project is the first of a series of projects that aim at improving economic, financial, environmental, and social sustainability of Turkish cities. 1011

Turkey has not provided strong and effective support and actions to address climate change. Turkey has supported sustainable development. Thus, Turkey receives a score of 0.

Analyst: Yi Fan Zheng

United Kingdom: +1

The United Kingdom has partially complied with its commitment to sustainable development and strong and effective support and actions to address climate change.

The EU Nationally Determined Contribution commits the European Union and its member states (including Britain) to domestic greenhouse gas reductions of 40 per cent below 1990 levels by 2030. However, in light of the UK's separation from the EU, this target may change.

ON 24 October 2016 the Roadmap to US\$100 billion was published. The Roadmap saw developed countries come together to set a plan for meeting the collective goal of mobilizing US\$100 billion per year in climate finance for developing countries by 2020. It was led by the UK and Australia. 1013

On 18 November 2016, the UK ratified the Paris Agreement. 1014

On 22 January 2017, the UK announced that it will assist Fiji in two key areas of climate change development this year. "The UK has offered assistance to the Government of Fiji" said British High Commissioner to Fiji Melanie Hopkins, with a focus on aiding Fiji in its presidency for the upcoming COP23 this year. 1015

On 23 January 2017, Prime Minister Theresa May announced plans to turn nation's early adoption of clean energy into a global business after Brexit in the newly released industrial-strategy paper. One of the main pillars of the proposed strategy is to support affordable energy and clean growth towards

http://www.fijitimes.com/story.aspx?id=386297

¹⁰⁰⁹ Republic of Turkey - Intended Nationally Determined Contribution, United Nations Framework Convention on Climate Change, Access Date: 13 November 2016,

http://www4.unfccc.int/Submissions/INDC/Published%20Documents/Turkey/1/The INDC of TURKEY v.15.19.30.pdf ¹⁰¹⁰ Turkey's Cities to Become Socially, Environmentally, and Financially Sustainable with World Bank Support, The Financial. Access Date: 5 January 2017, https://www.finchannel.com/business/62327-turkey-s-cities-to-becomesocially-environmentally-and-financially-sustainable-with-world-bank-support

Turkey's Cities to Become Socially, Environmentally, and Financially Sustainable with World Bank Support, The Financial. Access Date: 5 January 2017, https://www.finchannel.com/business/62327-turkey-s-cities-to-becomesocially-environmentally-and-financially-sustainable-with-world-bank-support

¹⁰¹² Submission by Latvia and the European Commission on Behalf of the European Union and its Member States, CAIT Climate Data Explorer (Riga) 6 May 2015. Access Date: 14 November 2016. http://cait.wri.org/indc/

¹⁰¹³ Climate Finance Roadmap to US\$100 billion, 24 October 2016, UK Government. Date of Access: 03 April 2017. https://www.gov.uk/government/publications/climate-finance-roadmap-to-us100-billion

¹⁰¹⁴ Paris Agreement - Status of Ratification, UNFCCC. 4 November 2016. Access Date: 3 February 2017. http://unfccc.int/paris agreement/items/9444.php

UK offers climate change help, Fiji Times. 22 January 2017. Access Date: 3 February 2017.

a low-carbon economy. 1016 According to the strategy paper, the UK will prioritize costs and security of supply. 1017 On this pillar the UK states it "will keep energy costs down for businesses, build the energy infrastructure we need for new technologies, and secure the economic benefits of our move towards a low-carbon economy. 1018

On 2 February 2017, the UK government released its White Paper on the United Kingdon's exit from and new partnership with the European Union that provides assurances that the nation will remain a "leading actor working with European and other international partners, in global efforts to tackle major challenges, including climate change" and environmental policy following its imminent departure from the EU. The Paper commits "to leave the environment in a better state than we found it" with particular mentions in farming and marine protections. ¹⁰¹⁹

The United Kingdom has taken strong and effective steps to assure the public of its commitment to climate change action and sustainable development that would have widespread impact. Thus, the United Kingdom receives a score of +1.

Analyst: Cindy Ou

United States: +1

The United States has fully complied with its commitment to sustainable development and strong and effective support and actions to address climate change.

The US Nationally Determined Contribution (NDC) commits to "reducing its greenhouse gas emissions by 26 per cent - 28 per cent below its 2005 level in 2025 and to make best efforts to reduce its emissions by 28 per cent." 1020

On 7 September 2016, the US Environmental Protection Agency (EPA) updated the Cross-State Air Pollution Rule (CSAPR) to reduce power plant nitrogen oxide emissions in 22 states that contribute to cross-state ozone problems in the eastern US. 1021

On 9 September 2016, the US Secretary of Energy and the US Secretary of the Interior announced a collaborative strategy on the development of offshore wind power in the US. The strategy, National Offshore Wind Strategy: Facilitating the Development of the Offshore Wind Industry in the United

 $http://www.coast2capital.org.uk/storage/downloads/industrial_strategy_10_pillars-1486469958.pdf$

¹⁰¹⁶ Theresa May Seeks Clean Energy to Buoy Vision of Global Britain, Bloomberg. 23 January 2017. Access Date: 3 February 2017. https://www.bloomberg.com/news/articles/2017-01-23/theresa-may-seeks-clean-energy-to-buoy-vision-of-global-britain

Industrial Strategy: 10 Pillars, UK Government. 23 January 2017. Access Date: 3 February 2017. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/585107/industrial-strategy-10-pillars.pdf

ional Building our Industrial Strategy, HM Government. Date of Access: 03 April 2017.

Brexit White Paper: Government underlines vision for 'cleaner, healthier environment'. 2 February 2017. Access Date: 3 February 2017. http://www.edie.net/news/11/Brexit-White-Paper-reiterates-UK-s--world-leading--climate-change-ambitions/

¹⁰²⁰ US NDC, CAIT Climate Data Explorer 9 March 2016. Access Date: 14 November 2016. http://cait.wri.org/indc/ ¹⁰²¹ EPA Finalizes Rule to Reduce Smog-Forming Pollution Transported Across State Lines, EPA (Washington D.C.) 7 September 2016. Access Date: 14 November 2016. https://www.epa.gov/newsreleases/epa-finalizes-rule-reduce-smog-forming-pollution-transported-across-state-lines

States, lays out a plan which could develop 86 giga-watts of offshore wind power in the US by $2050.^{1022}$

On 13 September 2016, the Department of Energy announced USD37 million to fund 16 projects which could transform energy storage and conversion and overcome the current technological limitations with batteries and fuel cells. 1023

On 15 September 2016, President Obama designated 4,913 square miles of deep-sea ecosystem off the coast of New England as the Northeast Canyons and Seamounts Marine National Monument. This designation will protect the ecosystem and marine species living within it.¹⁰²⁴

On 15 September 2016, the Department of the Interior announced the approval of a 100 mega-watt solar project in Nevada. The project is expected to generate enough electricity to power 25,000 homes. 1025

On 22 September 2016, the EPA announced the release of its strategy to reduce air pollution at US ports. 1026

On 26 September 2016, the Office of the Press Secretary announced USD80 million in federal investments to the Smart Cities Initiative which aims to make US cities more habitable, cleaner and more equitable. It will also double the number of cities and communities participating in the initiative to over 70 total. This funding will be focused on climate, transportation, public safety and transforming city services. ¹⁰²⁷

On 6 October 2016, the White House announced that the US will adopt the Global Market-Based Measures (GMBM) to reduce the carbon emissions produced by international aviation. By 2020, US airlines will need to offset any increases in carbon emissions through carbon credits. 1028

conversion

Fact Sheet: President Obama to Continue Global Leadership in Combating Climate Change and Protecting Our Ocean by Creating the First Marine National Monument in the Atlantic Ocean, The White House (Washington D.C.) 15 September 2016. Access Date: 14 November 2016. https://www.whitehouse.gov/the-press-office/2016/09/15/fact-sheet-president-obama-continue-global-leadership-combatting-climate

Secretary Jewell Approves Utility-Scale Solar Project on Tribal Land in Nevada, Department of the Interior (Clark County) 15 September 2016. Access Date: 14 November 2016. https://www.doi.gov/pressreleases/secretary-jewell-approves-utility-scale-solar-project-tribal-land-nevada

¹⁰²⁶ EPA Releases National Assessment of Strategies to Reduce Air Pollution at Ports, EPA (Washington D.C.) 22 September 2016. Access Date: 14 November 2016. https://www.epa.gov/newsreleases/epa-releases-national-assessment-strategies-reduce-air-pollution-ports

Fact Sheet: Announcing Over USD 80 million in New Federal Investment and a Doubling of Participating Communities in the White House Smart Cities Initiative, The White House (Washington D.C.) 26 September 2016. Access Date: 14 November 2016. https://www.whitehouse.gov/the-press-office/2016/09/26/fact-sheet-announcing-over-80-million-new-federal-investment-and

¹⁰²⁸ Fact Sheet: 191 Countries Reach a Global Climate Deal for International Aviation, The White House (Washington D.C.) 6 October 2016. Access Date: 14 November 2016. https://www.whitehouse.gov/the-press-office/2016/10/06/fact-sheet-191-countries-reach-global-climate-deal-international

¹⁰²² Energy Secretary Moniz and Interior Secretary Jewell Announce New National Offshore Wind Strategy to Drive Deployment, US Department of Energy (Boston) 9 September 2016. Access Date: 14 November 2016. http://www.energy.gov/articles/energy-secretary-moniz-and-interior-secretary-jewell-announce-new-national-offshore-wind

¹⁰²³ Department of Energy Announces 16 New Projects to Transform Energy Storage and Conversion, US Department of Energy (Washington D.C) 13 September 2016. Access Date: 14 November 2016. http://www.energy.gov/articles/department-energy-announces-16-new-projects-transform-energy-storage-and-

On 15 October 2016, the White House announced that the US will adopt an amendment to the Montreal Protocol which will see the production and consumption of hydroflourocarbons (HFCs) decrease by 80 per cent by 2030. 1029

On 25 October 2016, the Department of the Interior announced the creation of Great Thicket National Wildlife Refuge. The refuge will help to conserve and manage shrubland and young forests for wildlife in New England and New York. 1030

On 2 November 2016, the Department of Energy announced USD32 million in funding for ten projects which will attempt to reduce the energy usage of individual vehicles (cars and trucks) by 20 per cent. This funding is part of the Next-Generation Energy Technologies for Connected and Autonomous On-Road Vehicles (NEXTCAR).¹⁰³¹

On 10 November 2016, the Secretary of the Interior Sally Jewell and Bureau of Ocean Energy Management (BOEM) Director Abigail Ross Hopper finalized the rules governing the development of solar and wind energy projects on public lands. Created by these finalized rules is a new leasing program that will support "renewable energy development through competitive leasing processes and incentives to encourage development in suitable areas." 1032

On 18 November 2016, the Secretary of the Interior Sally Jewell and Bureau of Ocean Energy Management (BOEM) Director Abigail Ross Hopper released the government's plan to guide future energy development in Nation's Outer Continental Shelf (OCS) for 2017 - 2022. The final plan includes 11 potential lease sales for oil and gas development, 10 in the Gulf of Mexico and one off the coast of Alaska in the Cook Inlet area. ¹⁰³³

On 8 December 2016, the US Environmental Protection Agency awarded approximately USD1.1 million to projects in Virginia which protect wetlands. Wetlands provide a source of drinking water, help to prevent flooding and provide resilience to climate change. 1034

On 16 December 2016, the Secretary of the Interior Sally Jewell and Bureau of Ocean Energy Management (BOEM) Director Abigail Ross Hopper announced the US's sixth competitive lease sale

http://www.energy.gov/articles/department-energy-announces-10-new-projects-improve-connected-and-automated-vehicle

¹⁰²⁹ Fact Sheet: Nearly 200 Countries Reach a Global Deal to Phase Down Potent Greenhouse Gases and Avoid Up to 0.5oC of Warming, The White House (Washington D.C.) 15 October 2016. Access Date: 14 November 2016. https://www.whitehouse.gov/the-press-office/2016/10/15/fact-sheet-nearly-200-countries-reach-global-deal-phase-down-potent

Secretary Jewell Announces Great Thicket National Wildlife Refuge, US Department of the Interior (Washington D.C.) 25 October 2016. Access Date: 14 November 2016. https://www.doi.gov/pressreleases/secretary-jewell-announces-great-thicket-national-wildlife-refuge

Department of Energy Announces 10 New Projects to Improve Connected and Automated Vehicle Efficiency, Us Department of Energy (Washington D.C.) 2 November 2016. Access Date: 14 November 2016.

¹⁰³² Interior Department Finalizes Rule Providing a Foundation for the Future of BLM's Renewable Energy Program, US Department of the Interior (Washington D.C.) 10 November 2016. Access Date: 30 December 2016. https://www.doi.gov/pressreleases/interior-department-finalizes-rule-providing-foundation-future-blms-renewable-energy

Secretary Jewell Announces Offshore Oil and Gas Leasing Plan for 2017 - 2022, US Department of the Interior (Washington D.C.) 18 November 2016. Access Date: 30 December 2016. https://www.doi.gov/pressreleases/secretary-jewell-announces-offshore-oil-and-gas-leasing-plan-2017-2022

1034 EPA Awards USD1.1 Million to Virginia Projects to Protect Wetlands and Adapt to Climate Change, United States

¹⁰³⁴ EPA Awards USD1.1 Million to Virginia Projects to Protect Wetlands and Adapt to Climate Change, United States Environmental Protection Agency (Washington D.C.) 8 December 2016. Access Date: 30 December 2016. https://www.epa.gov/newsreleases/epa-awards-11-million-virginia-projects-protect-wetlands-and-adapt-climate-change

for renewable energy in federal waters. The completed lease sale included 79,350 acres of federal waters offshore of New York for the development of wind energy. 1035

On 16 December 2016, President Barack Obama signed the Water Infrastructure Improvements for the Nation (WIIN) into law. WIIN includes projects which will help restore watersheds, improve waterways and flood control and improve drinking water infrastructure. The Act includes USD170 million for communities around the country which face drinking water crisis. 1036

On 20 December 2016, President Barack Obama and Prime Minister Justin Trudeau announced the designation of all Arctic Canadian waters as off limits to future offshore oil and gas licensing as well as a large majority of US waters in the Chukchi and Beaufort Seas as off limits to future offshore oil and gas leasing. 1037, 1038

The United States has demonstrated commitment to sustainable development by instituting various protections against the environmental degradation of its lands and oceans and by investing in making cities more habitable and environmentally friendly, and in renewable energy sources. The United States has also provided strong and effective support and actions to address climate change by developing various national climate change adaptation and mitigation policies, rules and strategies. Thus, the United States receives a score of +1.

Analyst: Lauren Dalgliesh

European Union: +1

The European Union has fully complied with its commitment to sustainable development and strong and effective support and actions to address climate change.

The EU Nationally Determined Contribution commits the European Union and its member states to domestic greenhouse gas reductions of 40 per cent below 1990 levels by 2030. 1039

On 4 October 2016, the European Parliament approved the ratification of the Paris Agreement by the EU. 1040

On 7 October 2016, the European Commission announced that all EU members will participate in the landmark agreement reached by the International Civil Aviation Organization to adopt a Global Market-Based Measure (GMBM) which will reduce international aviation greenhouse gas emissions.

https://www.doi.gov/pressreleases/interior-department-auctions-over-79000-acres-offshore-new-york-wind-energy Statement by the President on the Water Infrastructure Improvements for the Nation (WIIN) Act, The White House (Washington D.C.) 16 December 2016. Access Date: 30 December 2016. https://www.whitehouse.gov/the-pressoffice/2016/12/16/statement-president-water-infrastructure-improvements-nation-wiin-act

¹⁰³⁵ Interior Department Auctions Over 79,000 Acres Offshore New York for Wind Energy Development, US Department of the Interior (Washington D.C.) 16 December 2016. Access Date: 30 December 2016.

¹⁰³⁷ United States - Canada Joint Arctic Leaders' Statement, Justin Trudeau Prime Minister of Canada (Ottawa) 20 December 2016. Access Date: 30 December 2016. http://pm.gc.ca/eng/news/2016/12/20/united-states-canada-jointarctic-leaders-statement

United States - Canada Joint Arctic Leaders' Statement, The White House (Washington D.C.) 20 December 2016. Access Date: 30 December 2016. https://www.whitehouse.gov/the-press-office/2016/12/20/united-states-canadajoint-arctic-leaders-statement ¹⁰³⁹ Submission by Latvia and the European Commission on Behalf of the European Union and its Member States, CAIT

Climate Data Explorer (Riga) 6 May 2015. Access Date: 14 November 2016. http://cait.wri.org/indc/

Paris Agreement to Enter into Force as EU Agrees Ratification, European Commission (Strasbourg) 4 October 2016. Access Date: 14 November 2016. http://europa.eu/rapid/press-release IP-16-3284 en.htm

The GMBM requires that post 2020 airlines offset any growth in the greenhouse gas emissions by buying emission credits generated from other sectors of the economy. 1041

On 13 October 2016, the European Commission announced EUR3 million to help replace hydroflourocarbons (HFCs) in Latin America and the Caribbean. 1042

On 18 October 2016, the European Union and the Eastern Partner countries (Armenia, Azerbaijan, Belarus, Georgia, Republic of Moldova and Ukraine) adopted a Ministerial Declaration stating that the European Union and the Eastern Partners will increase their cooperation on environmental issues and climate change as well as promoting sustainable and inclusive economic development. 1043

On 20 October 2016, the European Commission announced three commitments to implement the New Urban Agenda. These commitments are to deliver the New Urban Agenda through the Urban Agenda for the EU, develop a global, harmonized definition of cities and foster cooperation between cities in the field of sustainable urban development. ¹⁰⁴⁴

On 3 November 2016, the European Commission announced the approval of EUR222.7 million to be invested in the EU's transition to a sustainable and low-carbon economy. This funding package will be used to help fund 144 innovative LIFE projects in a variety of areas including Environment & Resource Efficiency; Nature & Biodiversity; Climate Change Adaptation and Mitigation; and Climate & Environmental Governance and Information. The LIFE programme is the programme through which the European Union funds its environment and climate projects and has been running since 1992. 1045

On 22 November 2016, the European Commission released its strategy for achieving sustainable development both in Europe and around the world. The strategy lays out how the EU's top political priorities align with or contribute to the implementation of the United Nations 2030 Agenda for Sustainable Development and achieving the Sustainable Development Goals. 1046

On 24 November 2016, the European Commission Vice-President for Energy Union Maroš Šefčovič and Energy Minister of Ukraine, Ihor Nasalyk signed a new Memorandum of Understanding (MOU) on a Strategic Energy Partnership between the EU and the Ukraine. The MOU will enhance cooperation between the two countries on energy security, energy market integration, energy efficiency, decarbonizing the economy and energy research. 1047

EU and Eastern Partners to Step Up Cooperation on Environment and Climate Action, European Commission (Brussels) 18 October 2016. Access Date: 14 November 2016. http://europa.eu/rapid/press-release_IP-16-3443 en.htm

¹⁰⁴¹ Commission Welcomes Landmark International Agreement to Curb Aviation Emissions, European Commission (Brussels) 7 October 2016. Access Date: 14 November 2016. http://europa.eu/rapid/press-release_IP-16-3326_en.htm ¹⁰⁴² Commission Announces New EUR 3 million Project to Kick-start HFC Action, European Commission Climate Action 13 October 2016. Access Date: 14 November 2016.

https://ec.europa.eu/clima/news/articles/news_2016101301_en.htm

Commission Puts Forward Commitments to Reach Global Targets in Sustainable Urban Development, European Commission (Quito) 20 October 2016. Access Date: 14 November 2016. http://europa.eu/rapid/press-release_IP-16-3477 en.htm

Commission Invests Over 222 million EUR in Green and Low-Carbon Projects, European Commission (Brussels) 3 November 2016. Access Date: 3 November 2016. http://europa.eu/rapid/press-release IP-16-3482_en.htm

¹⁰⁴⁶ Sustainable Development: EU Sets Out its Priorities, European Commission (Strasbourg) 22 November 2016. Access Date: 30 December 2016. http://europa.eu/rapid/press-release_IP-16-3883_en.htm

EU-Ukraine Summit: EU and Ukraine Intensify Energy Partnership. European Commission (Brussels) 24 November 2016. Access Date: 30 December 2016. http://europa.eu/rapid/press-release_IP-16-3926_en.htm

On 30 November 2016, the European Commission announced the program, Clean Energy for All Europeans, which is a series of measures to keep the EU competitive during the global energy markets' transition to clean energy. The program focuses on a wide range of initiatives including new regulations around Ecodesign, improving the energy efficiency of buildings and increasing access to financing. 1048

On 12 December 2016, the European Commission approved EUR7.681 billion for four renewable energy projects (geothermal, biogas, hydroelectric and wind) to help France boost its renewable energy production capacity by approximately 2148MW. 1049

On 14 December 2016, the European Parliament and the Council signed the National Emissions Ceilings (NEC) Directive into law. The directive sets stricter limits on each country's emissions of the five main pollutants in Europe, sulphur dioxide, ammonia, volatile organic compounds, nitrogen oxides and fine particulate matter. The law will enter into force on 31 December 2016. 1050

The European Union has demonstrated commitment to sustainable development by increasing funding to renewable energy projects and enhancing cooperation on energy and the environment both within the EU and between the EU and surrounding countries. The European Union has provided strong and effective support and actions to address climate change by implementing multicountry programs. Thus, the European Union receives a score of +1.

Analyst: Lauren Dalgliesh

December 2016. Access Date: 30 December 2016. http://europa.eu/rapid/press-release IP-16-4358 en.htm

EU Approves New Rules for Member States to Drastically Cut Air Pollution, European Commission (Brussels) 14

¹⁰⁴⁸ Clean Energy for All Europeans - Unlocking Europe's Growth Potential, European Commission (Brussels) 30 November 2016. Access Date: 30 December 2016. http://europa.eu/rapid/press-release IP-16-4009 en.htm 1049 State Aid: Commission Approved Four Support Measures for Renewable Energy in France, European Commission (Brussels) 12 December 2016. Access Date: 30 December 2016. http://europa.eu/rapid/press-release IP-16-