United Nations FCCC/SBI/2016/INF.10

Framework Convention on Climate Change

Distr.: General
7 October 2016

English only

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

Item 3(b) of the provisional agenda
Reporting from and review of Parties included in Annex I to the Convention
Compilation and synthesis of second biennial reports from Parties included in Annex I to the Convention

Compilation and synthesis of second biennial reports

Executive summary

Report by the secretariat

Summary

This document contains a summary of the compilation and synthesis of the second biennial reports submitted to the secretariat by Parties included in Annex I to the Convention. The summary highlights key findings in relation to: quantified economy-wide emission reduction targets; progress made towards the achievement of those targets, including information on mitigation actions and their effects, estimates of emission reductions and removals and the use of units from market-based mechanisms and land use, land-use change and forestry activities; greenhouse gas emission trends and projections; and the provision of financial, technological and capacity-building support to developing country Parties.

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Contents

I. Mandate and approach

1. The Conference of the Parties (COP), by decision 2/CP.17, decided that developed country Parties should submit their biennial reports (BRs) two years after the due date of a full national communication. The submission of the second biennial reports (BR2s) was due on 1 January 2016. In addition, the COP, by decisions 2/CP.17 and 19/CP.18, decided that developed country Parties should use the "UNFCCC biennial reporting guidelines for developed country Parties" and the common tabular format for those guidelines for the preparation of their BRs.

2. Also by decision 2/CP.17, the COP requested the secretariat to prepare compilation and synthesis reports on the BRs. The latest report is contained in document FCCC/SBI/2016/INF.10/Add.1 and provides a compilation and synthesis of the information provided in the BR2s. This document provides an executive summary of that information. Information on the status of submission of the BR2s is contained in document FCCC/SBI/2016/INF.9.

II. Key messages from the compilation and synthesis of second biennial reports

3. **Reporting has improved.** Parties[1] have significantly advanced the reporting in their second biennial reports (BR2s) compared with that in their first biennial reports (BR1s). Parties reported more information and at a greater level of detail on their quantified economy-wide emission reduction targets, progress in achieving those targets, implemented policies and measures (PaMs) and the provision of financial, technological and capacity-building support.

4. **Parties are closer to their targets.** The targets for 2020 for the majority of Parties remain the same as reported previously. Unconditional targets range from at least 3.8 per cent below the 2005 emission level to 30 per cent below the 1990 emission level. Four Parties (Belarus, Kazakhstan, the Russian Federation and Ukraine) already reached their targeted emission reduction levels for 2020 in 2013. Remaining Parties are approaching their targeted emission reduction levels by implementing PaMs across all sectors and accounting for units from market-based mechanisms and land use, land-use change and forestry (LULUCF). However, further efforts are required to attain the targeted emission levels by 2020. For some Parties the use of units from LULUCF and market-based mechanisms will make a sizable contribution towards achieving the targets. The targets continue to cover all sectors and gases. For a few Parties the coverage of their targets by gas has been increased by adding nitrogen trifluoride while insignificantly increasing the greenhouse gas (GHG) emission levels.

5. **Historical GHG emissions have continued to decrease.** During the period 1990–2014, GHG emissions excluding LULUCF for Parties included in Annex I to the Convention (Annex I Parties)[2] dropped by 11.3 per cent, whereas GHG emissions including LULUCF declined by 15.7 per cent. Those changes were caused largely by the structural

[1] "Parties" in this report means Parties included in Annex I to the Convention (Annex I Parties) and Kazakhstan, which, in accordance with a request made by the Conference of the Parties at its twelfth session (FCCC/CP/2006/5, paragraph 96), follows the reporting requirements for Annex I Parties.

[2] "Annex I Parties" refers to 43 Parties. All Annex I Parties, except Ukraine, have submitted their BR2s. Unless specified otherwise, information provided on Ukraine in this report is taken from its BR1.

changes in Parties with economies in transition (EIT Parties) in the period 1990–2000, and the implementation of new and strengthening of existing PaMs in all Parties with emphasis on the employment of greener technologies in the period 1990–2014.

6. **GHG emissions are projected to further decline.** In terms of GHG emission projections until 2020, GHG emissions are projected to drop further. Compared with the 1990 level, a 13.7 per cent decrease in total GHG emissions excluding LULUCF and a 9.9 per cent decrease including LULUCF is projected for 2020 for Annex I Parties according to the scenario that takes into account implemented and adopted PaMs. This primarily reflects the impact of the economic transformation of EIT Parties in the 1990s and the strengthening of climate change mitigation PaMs by all Parties from the beginning of the 2010s.

7. **The portfolio of PaMs has been expanded.** With regard to mitigation actions, in the period 2013–2014 Annex I Parties applied a similar but more diversified and broader portfolio of policies and policy instruments than previously. This is reflected in 18 per cent more mitigation PaMs being reported for 2013–2014 compared with 2011–2012. Annex I Parties have increased the use of framework targets and enhanced international cooperation and partnerships with other Parties and non-state actors. Regulatory and economic PaMs in the energy, industry/industrial processes and transport sectors continued to be the most frequently reported PaMs with the highest mitigation impacts. The United States of America's Clean Power Plan and Australia's Emissions Reduction Fund are the highlights of the new policy instruments reported in the BR2s.

8. **Financial support has grown.** Parties included in Annex II to the Convention (Annex II Parties) provided more information on methodological issues in reporting on financial support and private finance. Despite the challenges in comparing financial data sets reported for the periods 2011–2012 and 2013–2014, it is clear that Annex II Parties provided significantly more financial support to developing countries in the latest reporting period. Overall, financial allocation patterns remain similar to those identified in the BR1s. However, the larger portion of the total amount of support reported was identified as being climate-specific as opposed to core/general financial support. Within country-specific support, the larger portion was devoted to mitigation. In terms of sectoral distribution, the information provided suggests that the largest amount of funding was provided to the energy sector, followed by cross-cutting, transport, agriculture, water and sanitation, and forestry.

9. **Technological support provided for adaptation and to Africa has been augmented**. Annex II Parties reported more activities for the provision of technological support to developing countries. Support for adaptation technology activities has grown substantially since the period 2011–2012, with such activities accounting for 40 per cent of all reported activities in the BR2s. Africa has become the predominant recipient of technology transfer. Most activities continued to be focused on the energy sector and were predominantly related to the transfer or deployment of mature climate technologies.

10. **Capacity-building support has ascended.** Parties reported 37 per cent more capacity-building projects in their BR2s compared with their BR1s. Particularly, the number of capacity-building activities has increased in Asia-Pacific, Latin America and the Caribbean, and Africa. Annex II Parties provided more capacity-building support to adaptation activities and reported in their BR2s slightly fewer projects aimed at building capacity for mitigation and technology transfer.

III. Executive summary

A. Quantified economy-wide emission reduction targets

11. All Parties included in Annex I to the Convention (Annex I Parties), except Turkey, have pledged targets as agreed in the Copenhagen Accord, which are contained in document FCCC/SBSTA/2014/INF.6. All of those Parties, except Ukraine, submitted relevant information relating to their targets and progress in their achievement in their BR2s. Each target is stipulated as a percentage reduction in absolute emissions from the base year level to be achieved by 2020 and is supported by information on assumptions and conditions, base year, coverage of gases and sectors, and the role of land use, land-use change and forestry (LULUCF) and use of units from market-based mechanisms. Some Parties have taken on multiple targets: one that is unconditional (or independent of forthcoming circumstances) and others that are conditional (or contingent upon certain conditions, such as treaty provisions or pledges made by other Parties). In essence, the targets for 2020 reported in the BR2s remain the same as those reported in document FCCC/SBSTA/2014/INF.6, with the exception of those of Belarus[3] and Japan.[4]

12. The emission reduction targets (unconditional) for 2020 range from at least 3.8 per cent below the 2005 emission level (Japan) to 30 per cent below the 1990 emission level (Monaco and Norway). Norway reported that its unconditional target for 2020 is consistent with its quantified emission limitation or reduction commitment as defined in the Doha Amendment to the Kyoto Protocol; thus, compliance under the Kyoto Protocol should ensure that Norway meets its emission reduction target by 2020. The conditional emission reduction targets for 2020 – taken on by Australia, Belarus, Canada, the European Union (EU), Iceland, New Zealand, the Russian Federation, Switzerland and Ukraine – range from 5–10 per cent below the 1990 emission level (Belarus) to 30 per cent below the 1990 emission level (EU, Iceland and Switzerland) and 40 per cent below that level (Norway).

13. Some Parties have also established as part of their pledges referred to in paragraph 3 above long-term targets or objectives for the post-2020 time-horizon and reported them in their BRs. All Parties have pledged post-2020 targets for 2030 or 2025 in their intended nationally determined contributions (INDCs) and some reported thereon in their BR2s. In most cases, the INDCs provide an update of previously submitted post-2020 targets under the Copenhagen Accord.

14. The INDC targets for 2030 range from a 15 per cent emission reduction (Kazakhstan) to a 50 per cent emission reduction (Monaco and Switzerland) relevant to the 1990 emission level. Other INDC targets are within that range; for example, Canada set an emission reduction target of 30 per cent, Australia 26–28 per cent and Japan 25.4 per cent below their 2005 emission levels by 2030. The United States of America set an INDC target of a 26–28 per cent emission reduction by 2025 relative to its 2005 emission level.

[3] Belarus communicated to the secretariat a conditional target of a 5–10 per cent emission reduction compared with the 1990 level, which is reflected in document FCCC/SBSTA/2014/INF.6, while it communicated an emission reduction target of 8 per cent in its first and second biennial reports.

[4] After the publication of document FCCC/SBSTA/2014/INF.6, Japan formally resubmitted its emission reduction target as a 3.8 per cent or more emission reduction by 2020 compared with the 2005 level. See <http://unfccc.int/focus/mitigation/items/9736.php>.

B. Progress made in achieving the quantified economy-wide emission reduction targets and use of units from market-based mechanisms

15. Total aggregate greenhouse gas (GHG) emissions without emissions and removals from LULUCF for all Annex I Parties decreased by 11.3 per cent, from 20,130 to 17,855 million tonnes of carbon dioxide equivalent (Mt CO_2 eq), in the period 1990–2014 (see f). Total aggregate GHG emissions with LULUCF decreased by 15.7 per cent, from 19,164 to 16,149 Mt CO_2 eq, in the same period.

16. Over the period 1990–2014, the GHG emissions of Parties with economies in transition (EIT Parties) decreased by 37.2 per cent without LULUCF and by 47.0 per cent with LULUCF. Owing to the deep economic decline, there was a large decrease in the emissions of EIT Parties (by 40.9 per cent without LULUCF and by 49.0 per cent with LULUCF) between 1990 and 2000. Emissions rose in the subsequent period, between 2000 and 2014, by 6.2 per cent without LULUCF and by 3.9 per cent with LULUCF. This trend suggests that the structural changes in the economy which resulted in major emission reductions in the 1990s, may no longer fully outweigh the impact of economic growth on GHG emissions in EIT Parties.

17. Over the same period, for non-EIT Parties GHG emissions without LULUCF increased by 1.2 per cent, while GHG emissions with LULUCF increased by 0.5 per cent. The increase in emissions was much lower than economic growth for those Parties, measured in terms of gross domestic product (GDP), which rose by 59.5 per cent from 1990 to 2014. Between 1990 and 2000, emissions increased significantly (by 8.7 per cent without LULUCF and by 8.5 per cent with LULUCF). This was followed by a notable decrease in GHG emissions in the period 2000–2014 (by 6.8 per cent without LULUCF and by 7.3 per cent with LULUCF), reflecting both the impact of the economic crisis in the late 2000s and the effect of policies and measures (PaMs).

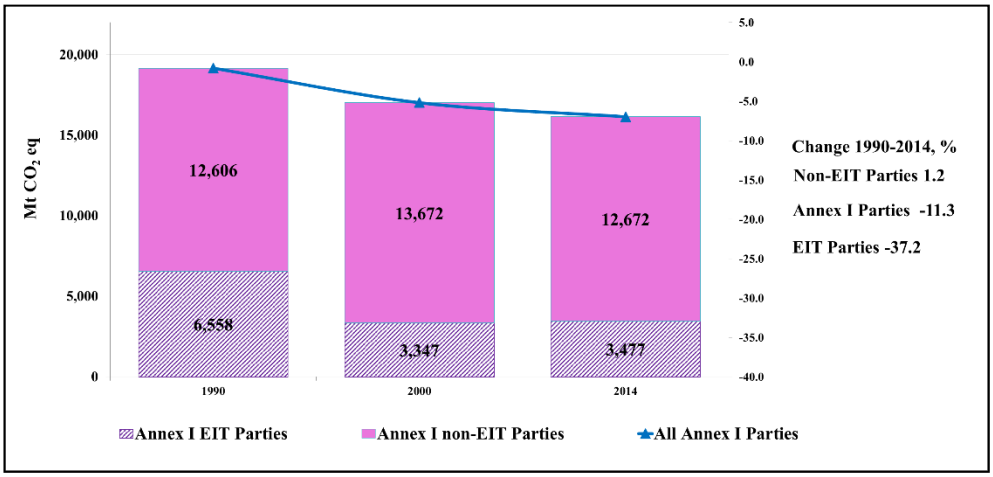
18. The level of GHG emissions per capita continued its downward trend for most Annex I Parties, though there were small increases for some Parties. From 1990 to 2014, GHG emissions per capita for Annex I Parties dropped by 19.4 per cent, from 16.96 to 13.67 t CO_2 eq per capita, and at the same time GHG emissions per capita for EIT Parties and non-EIT Parties practically converged. It is important to put these reductions in the context of demographic trends and to highlight that, while the total population of EIT Parties decreased by 5.8 per cent over the period 2012–2014, that of non-EIT Parties increased by 17.4 per cent, indicating that the growth in population of non-EIT Parties was not matched by a proportional increase in GHG emissions.

19. Similarly, the level of GHG emissions per unit of GDP (emission intensity of the economy) for Annex I Parties dropped by 42.0 per cent between 1990 and 2014, from 0.65 to 0.37 kg CO_2 eq/USD. The gap that existed between EIT and non-EIT Parties in 1990 (between 1.30 and 0.52 kg CO_2 eq/USD) was therefore narrowed in 2014 (between 0.65 and 0.33 kg CO_2 eq/USD). These reductions were realized against the backdrop of GDP growth values of 28.3 per cent and 59.4 per cent, respectively, for EIT and non-EIT Parties between 1990 and 2014.

20. Emissions of CO_2, methane and nitrous oxide decreased over the entire 1990–2014 period as well as during the periods 1990–2000 and 2000–2014. The decrease in emissions in the earlier period can be largely attributed to fundamental drivers such as economic decline and restructuring in EIT Parties, while the stabilization of emissions in the subsequent period can be attributed to the continuous impact of structural changes in the economies of EIT Parties and to the implementation of PaMs. In contrast, emissions of hydrofluorocarbons (HFCs), perfluorocarbons, sulphur hexafluoride and nitrogen trifluoride taken together increased over all three periods, owing mainly to increases in

emissions of HFCs used as a substitute for ozone-depleting substances controlled by the Montreal Protocol.

Figure 1
Greenhouse gas emissions without land use, land-use change and forestry for Annex I Parties, 1990–2014



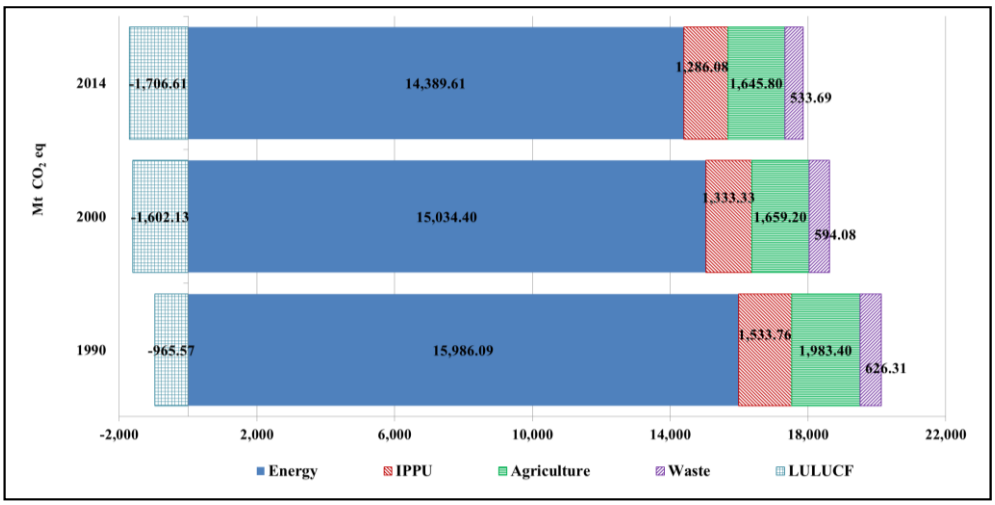
Abbreviations: EIT Parties = Parties with economies in transition, non-EIT Parties = Parties that do not have economies in transition.

21. Emissions from all sectors decreased between 1990 and 2014 (see figure 2). The greatest decrease occurred in agriculture (–17.0 per cent), followed by industrial processes and product use (–16.1 per cent), waste (–14.8 per cent) and energy (–10.0 per cent). Net GHG removals from LULUCF increased by 76.7 per cent over the same period.

22. In 2014, emissions relating to fuel sold for use in international aviation and navigation bunkers were higher by 85.9 per cent and 11.4 per cent, respectively, than in 1990. During the period 1990–2000, emissions from aviation increased, whereas emissions from navigation slightly decreased. Subsequently, during the period 2000–2014, emissions from both international aviation and navigation bunkers increased, by 22.4 per cent and 11.9 per cent, respectively.

23. In general, the GHG emission trends were driven by a combination of economy-wide and sector-specific drivers, including, but not limited to: structural changes in Annex I Parties' economies (i.e. the shift from manufacturing-based to service-oriented economies, which was particularly pronounced in EIT Parties); technological improvements in production processes and a shift to using less carbon-intensive fuels (i.e. from coal to natural gas); an increased share of renewable energy sources (RES) in power generation (both electricity and heat); and increased energy efficiency in all sectors, in particular in the transport sector. One of the sector-specific drivers that led to an increase in emissions was increased activities related to oil and gas extraction and processing, influencing fugitive emissions.

Figure 2
Greenhouse gas emissions and removals for Annex I Parties by sector, 1990–2014



Note: The solvent and other product use sector is not included in the figure because its contribution to the total emissions was very small.

Abbreviations: IPPU = industrial processes and product use, LULUCF = land use, land-use change and forestry.

24. Taking into account emission levels up to 2013 and reported contributions from LULUCF as well as units from market-based mechanisms, individual Parties have made progress toward their 2020 targets to varying degrees. The emissions levels of Belarus (for 2012), Kazakhstan (for 2013), the Russian Federation (for 2013) and Ukraine (for 2012) were already lower than their respective 2020 targeted emission levels.

25. The emissions levels in 2013 combined with the contributions from LULUCF and/or units from market-based mechanisms, where applicable, of the EU, Japan, Liechtenstein and the United States indicate that while these Parties have achieved most of the emission reductions needed to attain their 2020 targets, further efforts are needed to achieve the targets. The EU achieved the highest emission reductions, which brought it very close to the 2020 target level. Australia, Canada, Monaco and Switzerland reported information that indicates that while they have made progress towards their targets, the bulk of the reductions needed to achieve their 2020 targets remain to be made.

26. The emissions of Iceland, New Zealand and Norway were above their base year levels in 2013. Those Parties intend to use units from LULUCF and market-based mechanisms to meet their respective targets.

27. The assessment of the individual progress made towards targeted emission levels for 2020 based on actual emission levels in 2013 can give only a general indication of how Parties' implemented, adopted and planned PaMs (along with shifts in key economic, demographic, technological and behavioural drivers) have contributed and will contribute to the meeting of the respective targets. A comparative analysis of the progress towards targeted emission levels for 2020 across Parties is challenging because of differences in the global warming potential values and LULUCF accounting methods used and different base years selected by the Parties.

C. Mitigation actions

28. The overall portfolio of PaMs reported in the BR2s is very similar to that in the first biennial reports (BR1s). Some new PaMs have been added, but most of the changes pertain to the continued development, refinement and strengthening of already existing PaMs to align them with Parties' targets for 2020 and to prepare them for anticipated more stringent targets for beyond 2020. As such, most PaMs were presented in the context of Parties' pledged targets agreed in the Copenhagen Accord. While some Parties provided additional information in their BR2s about their INDCs, from the perspective of their longer-term targets, generally Parties did not discuss their PaMs in that light.

29. Parties reported 1,706 PaMs, an increase of about 18 per cent on the 1,448 reported in the BR1s submitted two years earlier. The majority of the PaMs (80 per cent) have already been implemented; adopted and planned PaMs account for 10 per cent each of the total. The PaMs are used at all levels of governmental jurisdiction – regional, national, state/provincial and municipal.

30. The trend emerging from the information reported in the BR1s of Parties having broader policy coverage through a diverse portfolio of policies and policy instruments has continued; for example, there has been increased use of broad coverage framework targets (or burden-sharing commitments). Such targets are increasingly specific – and often legally binding – in their overall emission reduction, renewable energy or energy efficiency mandates.

31. Some Parties reported having joined international cooperation and partnerships together with other Parties and non-state actors to benefit from experience in designing and using certain PaMs and to help inform successful policy development. For example, the Carbon Pricing Leadership Coalition is a voluntary partnership of national and subnational governments, businesses and civil-society organizations that have agreed to advance the carbon pricing agenda by working with each other towards the long-term objective of a carbon price applied throughout the global economy by strengthening carbon pricing policies and enhancing cooperation.

32. Some Parties are revising some aspects of their PaMs in consideration of changing economics and operational sustainability. For example, Italy and Spain reduced their incentives for RES-based electricity production, because their previous incentives were deemed too expensive given recent cost reductions in maturing relevant technologies, and also because of new EU state aid guidelines, which apply to RES support schemes. Switzerland is transitioning its Energy Strategy 2050 package from the current subsidy-based system to a mainly incentive-based system.

33. Some Parties reported PaMs focused on project-based abatement opportunities. For example, Canada uses its Low-Carbon Economy Trust Fund and Australia uses its Clean Energy Finance Corporation to fund projects that yield emission reductions and other benefits.

34. Of the new PaMs reported in BR2s, two stand out, namely the United States Clean Power Plan and the Australian Emissions Reduction Fund. The Clean Power Plan sets out state-level emissions goals (i.e. fleet performance standards) for power plants. The Emissions Reduction Fund underpins the purchase (through reverse auction) of emission abatement credited and certified in accordance with approved methods.

35. Parties provided mitigation impact estimates for 742 PaMs, about 43 per cent of the total reported. The estimated impacts by 2020 totalled 4,058 Mt CO_2 eq, compared with

3,765 Mt CO_2 eq by 2020 reported in the BR1s.[5] The PaMs vary considerably in their levels of impact. The PaMs with the 13 largest estimated impacts range from 100 to 750 Mt CO_2 eq avoided emissions and, on aggregate account for 56 per cent of the total impact of all the PaMs. The next 32 largest-impact PaMs, ranging from 10 to 99 Mt CO_2 eq avoided emissions each, account for an additional 33 per cent of the total impact. Of the PaMs with estimated impacts, some 90 per cent have individual impacts of lower than 10 Mt CO_2 eq by 2020.

36. Regulatory and economic PaMs in the energy, industry/industrial processes and transport sectors continued to be the most frequently reported PaMs with the highest mitigation impacts (see figure 3).

37. A few Parties reported major changes in their domestic institutional arrangements since the BR1s, but most provided brief descriptions of some facets of their institutions. Exceptions were Portugal and Ireland, which established new policy frameworks in 2015. Portugal overhauled its political and institutional response to climate change, establishing the Strategic Framework for Climate Policy.

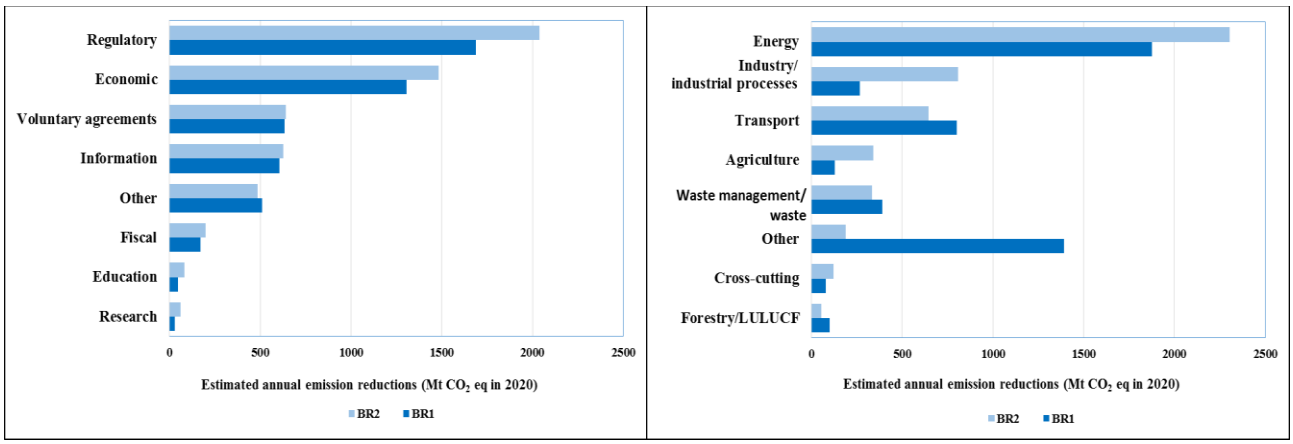
38. In addition, Ireland's Climate Action and Low Carbon Development Act provides a statutory basis for the institutional arrangements necessary to pursue and achieve the national objective of transition to a low-carbon, climate-resilient and environmentally sustainable economy by 2050.

39. The need for rigorous, comprehensive measurement, reporting and verification (MRV) of emissions and PaMs is increasing as Parties seek greater emission reductions and as more government (i.e. regional, national, state/provincial and local/municipal) and private-sector organizations take on formal responsibilities and commitments in relation to mitigating climate change. MRV helps ensure the progress of and compliance with commitments and regulations and increases the accountability of the entities responsible for the actions. It also alerts to the need for possible mid-course revisions to PaMs, when real (ex post) results differ from projected (ex ante) performance.

40. Most Parties reported on some aspect of their MRV activities, including MRV used to ensure that accounting systems for inventories, projections and the effects of mitigation actions are compatible. Some Parties reported on MRV in the context of compliance with devolved commitments or the functioning of certain PaMs, including: MRV and accreditation within crediting or certification mechanisms; MRV of emissions by non-state actors; and MRV and the evaluation of the effectiveness of PaMs or compliance with devolved commitments by national governments.

[5] These figures include the estimated impacts of the PaMs of all Annex I Parties, including EU member States but excluding the EU. The figures exclude the impacts of the European Union Emissions Trading System (EU ETS) reported by EU member States, but include the EU-wide impacts of the EU ETS, estimated by the UNFCCC to be 494 Mt CO_2 eq. The figure reported in relation to the BR1s (previously reported as 3,195 Mt CO_2 eq) reflects data revisions received after the publication of the compilation and synthesis of BR1s (FCCC/SBI/2014/INF.20/Add.1). The total mitigation impacts of the PaMs reported in the BR1s and BR2s do not necessarily cover identical PaMs.

Figure 3
Ranking of policies and measures by type of policy instrument (left) and sector affected (right)



Abbreviations: BR2 = second biennial report; BR1 = first biennial report.

D. Greenhouse gas emission projections

41. Total aggregate GHG emissions without LULUCF for Annex I Parties are projected to decrease by 13.7 per cent, taking into account the effect of implemented and adopted PaMs, in the period 1990–2020 (see figure 4). This is the result of steep emission reductions for EIT Parties (by 41.4 per cent), which mostly occurred at the beginning of the 1990s, and the subsequent economic transformation, combined with a slight decrease in the emissions of non-EIT Parties (by 0.4 per cent), which is, in part, attributable to their PaMs.

42. A similar trend is projected for emissions over the period 1990–2030, with a decrease by 14.1 per cent, reflecting the continuous effect of PaMs and their strengthening over time as well as the target-driven climate policy implemented by all Parties at the beginning of the 2010s.

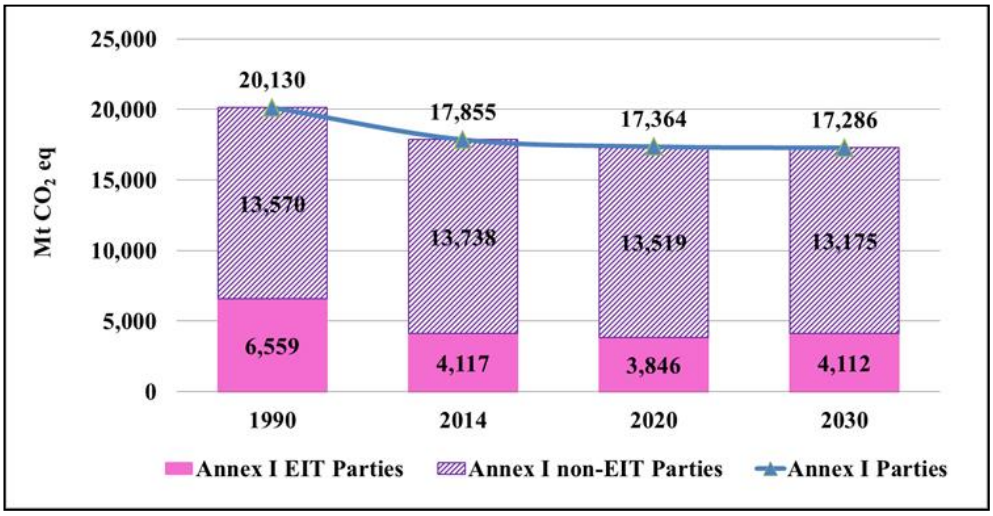
43. For EIT Parties, a significant drop in GHG emissions is projected for the period 1990–2020 (41.4 per cent) as well as for the period 1990–2030 (37.3 per cent). On the other hand, a 6.9 per cent increase in emissions is projected between 2020 and 2030. Compared with the emission level in 2014, the latest available GHG inventory year, the projected decrease in GHG emissions for EIT Parties is more moderate, by 6.6 per cent by 2020 and by 0.1 per cent by 2030.

44. For non-EIT Annex I Parties, a slight decrease in emissions is projected for the period 1990–2020 (0.4 per cent) as well as for the period 1990–2030 (2.9 per cent). Compared with the 2020 level, emissions are projected to decrease by 2.5 per cent by 2030. Emissions are projected to decrease below the 2014 level by 2020 and 2030 (by 1.6 per cent and 4.1 per cent, respectively), which at least in part can be attributed to the effects of PaMs. The emissions of non-EIT Parties will continue to account for the largest share of the total aggregate GHG emissions of Annex I Parties in 2020 (77.9 per cent of the total) and 2030 (76.2 per cent of the total).

45. Total aggregate GHG emissions with LULUCF for Annex I Parties are projected to decrease by 9.9 per cent in the period 1990–2020. Owing to a 0.2 per cent projected decrease in emissions between 2020 and 2030, projections for 2030 show emissions over the period 1990–2030 decreasing by 10.1 per cent. Compared with the 2014 emission level,

emission reductions are projected to occur by 2020 and 2030 (by 3.9 per cent and 4.1 per cent, respectively) for Annex I Parties taken together.

Figure 4
Projected greenhouse gas emissions without land use, land-use change and forestry in 2020 and 2030 under the 'with measures' scenario



Abbreviations: EIT Parties = Parties with economies in transition, non-EIT Parties = Parties that do not have economies in transition.

46. Over the period 1990–2020, GHG emission from all sectors for all Parties taken together are projected to decrease. GHG emissions from the dominant energy sector (excluding transport) are projected to decrease by 11.9 per cent from 1990 to 2020. GHG emissions from the transport sector are also projected to drop (by 5.0 per cent, reflecting the ongoing stabilization of those emissions and the expected downward trend in the future). The removals from the LULUCF sector are projected to be 60.2 per cent higher in 2020 than in 1990. On the other hand, in the period 2014–2020, emissions from the energy sector (excluding transport) are projected to increase by 3.8 per cent. Removals from the LULUCF sector are projected to be 9.4 per cent lower in 2020 than in 2014.

47. Similarly, over the period 1990–2030, GHG emissions from all sectors for all Parties taken together are projected to decrease, but at a higher rate than in the period up to 2020 (except for the industrial processes sector). Removals from the LULUCF sector are projected to increase at a lower rate (by 34.6 per cent) than in the period up to 2020.

E. Provision of financial, technological and capacity-building support to developing country Parties

48. Parties included in Annex II to the Convention (Annex II Parties)[6] provided in their BR2s quantitative as well as qualitative information on the provision of financial resources, technology transfer and capacity-building support to developing countries. The information

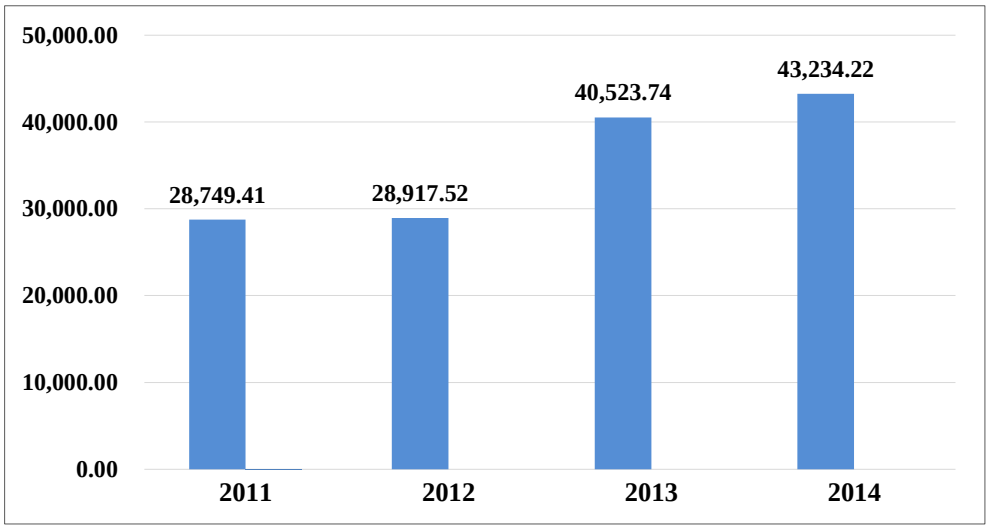
[6] "Annex II Parties" in this report refers to Parties included in Annex II to the Convention and those Annex I Parties that are not included in Annex II to the Convention but have provided in their BR2s information of financial, technological and capacity-building support.

provided refers to adaptation and mitigation activities that were supported by them, making use of multilateral and bilateral channels.

49. Overall, it is noteworthy that Annex II Parties have increased the amount of qualitative information provided since their BR1s, particularly with regard to methodological issues and private finance. Furthermore, some Annex I Parties not included in Annex II to the Convention also provided information on climate finance in their BR2s on a voluntary basis.

50. The identification of clear trends and patterns in the provision of financial resources as compared with the data provided in the sixth national communications and BR1s proves to be challenging in the light of the different underlying data sets and methodologies as well as various reporting issues identified. When comparing the BR1 summary information contained in the previous compilation and synthesis report[7] to the information provided in the BR2s, and taking into account the reporting issues that were identified with regard to that report,[8] an overall increase in the financial contributions reported by Annex II Parties in their BR2s can be identified, as shown in figure 5. This information shows not only a clear and significant increase in the provision of financial support in the periods 2011–2012 and 2013–2014, but also a slight increase within the reporting period 2013–2014.

Figure 5
Financial contributions reported by Annex II Parties for the period 2011–2014
(Millions of United States dollars)



51. Overall, the larger portion of the total amount of support reported was identified as climate-specific support and, within that, the largest amount of funding was labelled as support for mitigation, with comparable levels of support provided for adaptation and cross-cutting activities. Furthermore, the larger portion of financial support reported was identified as being channelled through bilateral, regional and other channels, of which the larger amount was labelled as committed and sourced from official development assistance, as identified in the BR2s.

52. Annex II Parties reported continued provision of funding to the Global Environment Facility, the Least Developed Countries Fund, the Special Climate Change Fund and the Adaptation Fund and a clear increase in funding provided to the Green Climate Fund.

[7] Contained in the annex to document FCCC/SBI/2014/INF.20/Add.1.
[8] As outlined in document FCCC/SBI/2014/INF.20/Add.1, paragraphs 269–271.

53. With regard to the type of support, the majority of funding was provided for mitigation, showing a clear increase within the reporting period, followed by adaptation and cross-cutting, the funding for which slightly decreased within the reporting period. In terms of sectoral distribution, the information provided suggests that the largest amount of funding was provided to the energy sector, followed by cross-cutting, transport, agriculture, water and sanitation, and forestry. However, a large portion of funding was reported under the category other, and, in cases where more than one sector was listed, such information was subsumed as multisectoral as it does not allow for a clear categorization of such funding. As a consequence, a large amount of funding reported could not be categorized and included in the sectoral analysis.

54. Almost all Annex II Parties provided information on support provided to Parties not included in Annex I to the Convention (non-Annex I Parties) for climate technology development and transfer. Over 75 per cent more supported technology development and transfer activities were reported by Annex II Parties in their BR2s than in their BR1s.

55. The technology support that Annex II Parties provided continued to be focused primarily on supporting non-Annex I Parties in reducing GHG emissions, especially from the energy sector (see figure 6). In particular, many activities related to renewable energy technologies and energy efficiency. Support for technology activities covered a full spectrum of mitigation technologies, ranging from high technology such as carbon capture and storage to relatively low technology such as efficient cooking stoves.

56. Support for adaptation technology development and transfer activities has grown significantly since the BR1s, with such activities accounting for 40 per cent of all reported activities in the BR2s. The most frequently reported adaptation technologies were for the agriculture sector, such as those for land management and crops (see figure 6).

57. Similar to in the BR1s, the reported activities in the BR2s were predominantly related to the later stages of the technology cycle. More than half of all reported technology activities were related to the transfer or deployment of mature climate technologies. In addition, as in the BR1s, the transfer of hard technologies (for instance, solar photovoltaic panels or climate monitoring computer systems), often accompanied by training or capacity-building, was the most common technology activity reported in the BR2s.

58. By region, the greatest quantity of technology transfer activities reported by Annex II Parties occurred in Africa. Overall, more than 50 per cent of projects covered the least developed countries and more than 40 per cent the small island developing States.

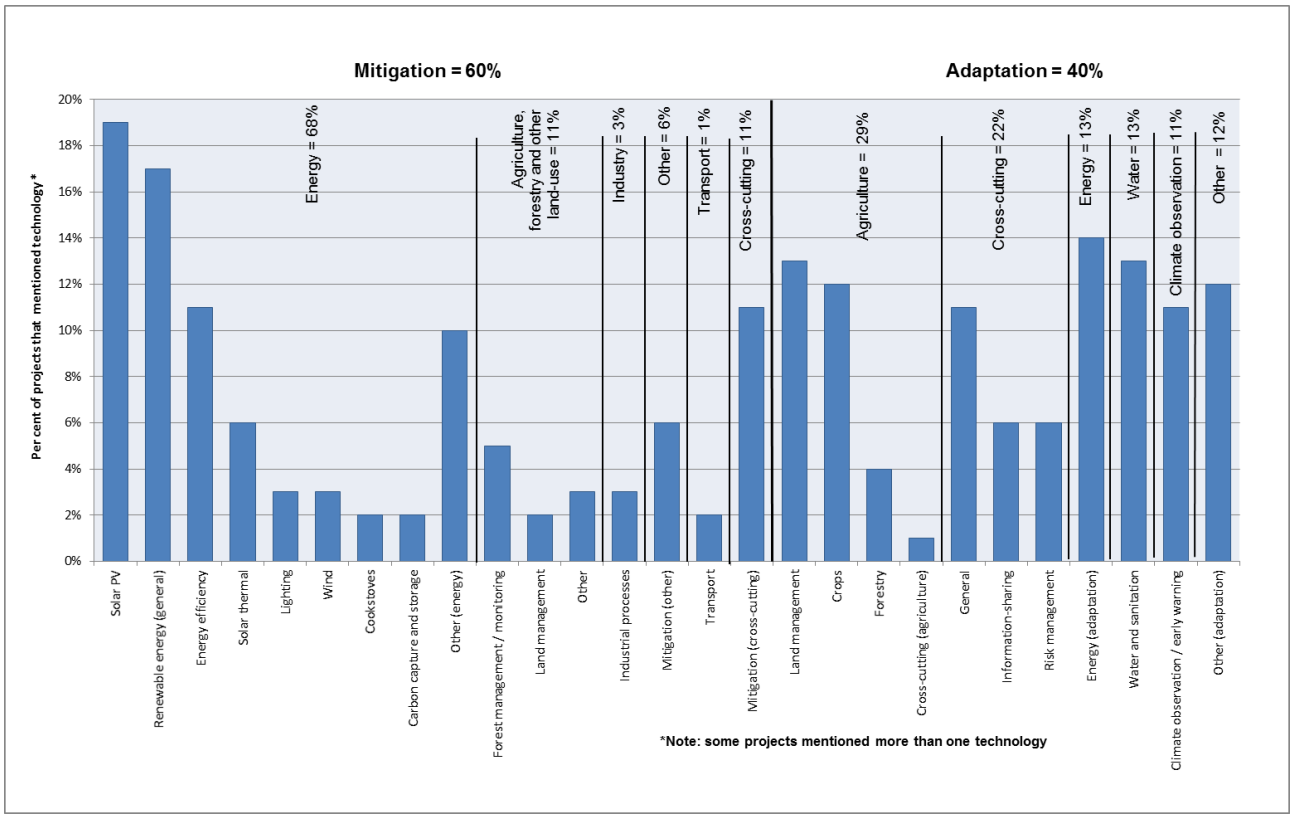
59. In terms of the provision of capacity-building support, Parties reported 37 per cent more projects in their BR2s compared with in their BR1s. The activities reported cover all levels of capacity-building from activities designed for building individual expert capacity to those for institutional and system-wide capacity-building. Yet, the greatest number of projects targeted capacity-building of individuals.

60. Owing to the cross-cutting character of capacity-building, a few Parties highlighted difficulties in reporting capacity-building as a stand-alone activity and opted to indicate capacity-building components within projects reported in different chapters of their BR2s. Further, the scale and scope of the financial support provided for projects reported was not indicated and therefore an assessment of trends in terms of overall support for capacity-building was not possible.

61. While bilateral cooperation was the primary channel used to implement capacity-building related projects, almost all Parties engaged in the provision of capacity-building support emphasized their cooperation with international organizations. All Parties reported projects with a wide spectrum of shareholders, including actors from the private sector, whereas a few Parties reported the involvement of private co-funding.

62. Regarding regional distribution, the proportion of projects in Asia-Pacific, Latin America and the Caribbean and Africa is great than in the BR1s on account of a decrease in the number of projects in Eastern Europe. As far as the target area, the proportion of projects that aim to build capacity for adaptation and multi-focal area projects has increased in the BR2 compared with the BR1s, while there has been a slight decrease in the proportion of reported projects that aim to build capacity for mitigation and technology transfer.

Figure 6
Distribution by sector and technology of reported technology transfer activities reported by Annex II Parties



Abbreviation: PV = photovoltaic.