



HOUSE OF LORDS

# Library Note

## Global Action on Climate Change

This short Library Note outlines the recent international discussions on climate change and negotiations for an agreement on the global response. It then briefly summarises the UK Government's policies on adaptation to the changing climate.

This Note has been prepared in advance of the debate in the House of Lords on 29 October 2015:

[...] that this House takes note of the case for action on global climate change and in particular its impact on the urban environment in the United Kingdom.

Sarah Tudor  
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## 1. Background

In 1992, at the United Nations Conference in Rio de Janeiro, the [United Nations Framework Convention on Climate Change](#) (UNFCCC) was signed. It came into force in 1994, and there are currently 196 parties to the Convention.<sup>1</sup> It “sets an overall framework for intergovernmental efforts to tackle the challenge posed by climate change”.<sup>2</sup> In 1997, an additional protocol to the UNFCCC was adopted in Kyoto, Japan. It set binding targets for 37 industrialised countries and the European Union for reducing greenhouse gas emissions.<sup>3</sup> The targets amounted to an average 5 percent reduction in emissions compared to 1990 levels over the five-year period from 2008 to 2012. The protocol was not ratified by the US. At the 2012 UN Climate Change Conference in Doha, Qatar, a timetable was set to adopt a universal climate agreement by 2015, to come into effect in 2020, and a new commitment period under the Kyoto Protocol was agreed.<sup>4</sup>

In the United Kingdom, the Climate Change Act 2008 committed the UK to reducing climate-change-inducing greenhouse gas (GHG) emissions by 80 percent from 1990 levels by 2050, and required the Government to set up interim five-yearly carbon budgets for GHG emissions.<sup>5</sup> The first four carbon budgets, leading to 2027, have been set in law.<sup>6</sup> The UK is currently in the second carbon budget period (2013–17). According to the [Committee on Climate Change](#), meeting the fourth carbon budget (2023–27) would require that emissions be reduced by 50 percent on 1990 levels in 2025. By 2014, UK GHG emissions had fallen by 36 percent since 1990.<sup>7</sup>

## 2. Recent International Developments

The fifth assessment report of the [Intergovernmental Panel on Climate Change](#) (IPCC), finalised in 2014, set out the expected impacts of climate change.<sup>8</sup> It argued that human influence on the climate system was “clear” and that increased greenhouse gas concentrations have led “to uptake of energy by the climate system”.<sup>9</sup> The IPCC stated that continued emission of greenhouse gases would cause further warming and long-lasting changes to the climate system, increasing the likelihood of severe impacts for people and ecosystems.<sup>10</sup> It concluded that limiting climate change would require substantial and sustained reductions in greenhouse gas emissions which, together with adaptation, could limit climate change risks.<sup>11</sup> The IPCC also highlighted that even if emissions of CO<sub>2</sub> were stopped immediately, “most aspects of climate change will persist for many centuries”.<sup>12</sup>

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<sup>1</sup> UNFCCC, [‘Status of Ratification of the Convention’](#), accessed 19 October 2015.

<sup>2</sup> UNFCCC, [‘The United Nations Framework Convention on Climate Change’](#), accessed 19 October 2015.

<sup>3</sup> UNFCCC, [‘Kyoto Protocol’](#), accessed 19 October 2015.

<sup>4</sup> House of Commons Library, [Lima Climate Change Conference](#), 30 November 2014, SN7041, pp 3–4.

<sup>5</sup> Parliamentary Office for Science and Technology, [Trends in Energy](#), September 2015, PN503, p 1.

<sup>6</sup> Committee on Climate Change, [‘Carbon Budgets and Targets’](#), accessed 20 October 2015.

<sup>7</sup> Parliamentary Office for Science and Technology, [Trends in Energy](#), September 2015, PN503, p 1.

<sup>8</sup> The IPCC was established by the World Meteorological Organisation (WMO) and the United Nations Environment Programme (UNEP) in 1998, to provide a scientific view on the current state of knowledge in climate change and its potential environmental and socio-economic impacts. The establishment of the IPCC was endorsed by the UN General Assembly.

<sup>9</sup> IPCC, [Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change](#), March 2015, pp 2–4.

<sup>10</sup> *ibid*, p 8.

<sup>11</sup> *ibid*.

<sup>12</sup> IPCC, [Summary for Policymakers. In: Climate Change 2013: The Physical Science Basis](#), December 2013.

In December 2015, a conference of the parties of the UNFCCC is scheduled to take place in Paris, at which it is hoped to “achieve a new international agreement on the climate, applicable to all countries, with the aim of keeping global warming below 2°C”.<sup>13</sup> The conference will focus on reaching an agreement between the parties on reducing greenhouse gas emissions, which would come into force in 2020.<sup>14</sup> In addition, for the first time individual countries will set their own commitments to reduce their emissions. Each country is required to publish its [Intended National Designated Contributions](#) (INDCs) before the conference, and the UNFCCC secretariat will publish a summary of the contributions, “to give an indication of the cumulative impact”.<sup>15</sup> This is in contrast to the 5.2 percent global greenhouse gas emissions reduction target set in Kyoto in 1997, which only applied to developed countries.

In September 2014, the UK Government published the report [Paris 2015 Securing Our Prosperity Through a Global Climate Change Agreement](#), in which it argued that an agreement at the Paris conference would “create the vital framework the world needs to keep the global goal of limiting average global temperature increases to below 2°C within reach, and avoid the worst impacts of climate change”.<sup>16</sup> It further argued that the commitments should reflect a range of factors, such as GDP, mitigation potential and contributions to past and future climate change.<sup>17</sup> In July 2015, the Secretary of State for Energy and Climate Change, Amber Rudd, reiterated the Government’s commitment to an international agreement, stating that “getting a global deal on climate change in Paris in December is one of my highest priorities this year”.<sup>18</sup> On 11 November 2014, the US and Chinese Governments released a joint announcement in which they set out their commitment to reaching an “ambitious” agreement in 2015, to reduce carbon emissions.<sup>19</sup>

Following the G7 summit in Germany in June 2015, the leaders released a joint statement in which they also affirmed their “strong determination” to adopt at the conference in Paris “another legal instrument or an agreed outcome with legal force” under the UNFCCC.<sup>20</sup> They also expressed support for sharing with all parties to the UNFCCC the upper end of the latest IPCC recommendation of 40 to 70 percent reductions by 2050 compared to 2010, stating that they “recognis[ed] that this challenge can only be met by a global response”.

Goal 13 of the United Nations Sustainable Development Goals (SDGs), which were agreed in September 2015, is to “take urgent action to combat climate change and its impacts”. It acknowledges that the UNFCCC is the primary international forum for negotiating the global response to climate change.<sup>21</sup> However, during the negotiation process there was debate about whether there should have been a standalone goal on climate change, or whether it should have been integrated as a cross-cutting theme throughout the framework. The House of Commons Environmental Audit Committee noted in its report that the “similar timing of the SDG and climate change negotiations presents an important opportunity to embed climate change thinking throughout the SDGs—to avoid development that exacerbates climate change while

<sup>13</sup> Paris 2015 UN Climate Change Conference website, ‘[What is COP21/CMPI 1?](#)’, accessed 19 October 2015.

<sup>14</sup> Paris 2015 UN Climate Change Conference website, ‘[COP21 Main Issues](#)’, accessed 19 October 2015.

<sup>15</sup> *ibid.*

<sup>16</sup> HM Government, [Paris 2015 Securing Our Prosperity Through a Global Climate Change Agreement](#), September 2014, p 5.

<sup>17</sup> *ibid.*, p 8.

<sup>18</sup> Speech by Amber Rudd, Secretary of State for Energy and Climate Change, on ‘[Climate Change](#)’, Aviva Conference on Climate Change, 24 July 2015.

<sup>19</sup> The White House: Office of the Press Secretary, ‘[U.S.–China Joint Announcement on Climate Change](#)’, 12 November 2014.

<sup>20</sup> G7 Germany, [Leaders’ Declaration G7 Summit](#), June 2015, p 12.

<sup>21</sup> United Nations, ‘[Sustainable Development Goals](#)’, accessed 19 October 2015.

also building decarbonisation and adaptation into development”.<sup>22</sup> In its response to the Committee report, the UK Government indicated that it favoured “visible integration” of climate change across the SDG framework.<sup>23</sup> However, the Government also cautioned that the post-2015 framework should complement and not duplicate the “international climate negotiations already underway”. The SDGs on energy, resilience, sustainable cities, and sustainable consumption and production, all contain key points of integration with the climate change goal.<sup>24</sup> The final document stated an undertaking to boost resilience to climate-related hazards such as flooding and drought, and to mobilise US\$100 billion of finance a year by 2020 to help “address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalise the [Green Climate Fund](#) through its capitalisation as soon as possible”.<sup>25</sup>

Figures published by the International Energy Agency (IEA) in June 2015 indicated that the global economy grew by around 3 percent in 2014, but energy-related carbon dioxide (CO<sub>2</sub>) emissions stayed flat.<sup>26</sup> The IEA also found that the use of low-carbon energy sources was expanding rapidly, and that there were signs that “growth in the global economy and energy-related emissions may be starting to decouple”. However, the IEA concluded that:

[...] increased effort is still needed if we are to keep open the possibility of limiting the rise in global mean temperature to 2°C. The pledges—or Intended Nationally Determined Contributions (INDCs)—made by individual countries for the 21st UN Conference of the Parties (COP21) in December 2015 will determine whether this goal will remain attainable.<sup>27</sup>

### 3. Adaptation Programme to Climate Change in the UK

The Climate Change Act 2008 requires the UK Government to conduct a [Climate Change Risk Assessment](#) (CCRA), and in light of the risks identified, develop a [National Adaptation Programme](#) (NAP).

The UK CCRA is a five-yearly government assessment of the main impacts of climate change on the UK. The first assessment in 2012 identified a number of potential impacts, including: increased flood damage and disruption; pressure on some water supplies; decrease in output for UK businesses due to an increase in supply chain disruption as a result of extreme events; risks to health; hotter summers; and damage to ecosystems.<sup>28</sup> The CCRA informed the first NAP, published by the Government in 2013. The NAP set out what Government, businesses and others had put in place to adapt better to the changing climate. The House of Commons Environmental Audit Committee examined the progress being made on adaptation. The Committee argued that the NAP placed the UK “ahead of most countries”.<sup>29</sup> However, it

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<sup>22</sup> House of Commons Environmental Audit Committee, [Connected World: Agreeing Ambitious Sustainable Development Goals in 2015](#), 15 December 2014, HC 452 of session 2014–15, p 19.

<sup>23</sup> House of Commons Environmental Audit Committee, [Connected World: Agreeing Ambitious Sustainable Development Goals in 2015: Government Response](#), 16 February 2015, HC 1067 of session 2014–15, p 2.

<sup>24</sup> House of Commons Library, [The Sustainable Development Goals and the Post-2015 Development Agenda](#), 28 September 2015, CBP-7291, p 23.

<sup>25</sup> *ibid.*; and United Nations, ‘[Sustainable Development Goals](#)’, accessed 19 October 2015.

<sup>26</sup> International Energy Agency, [Energy and Climate Change: World Energy Outlook Special Report](#), June 2015, p 3.

<sup>27</sup> *ibid.*

<sup>28</sup> Department for Environment, Food and Rural Affairs, [UK Climate Change Risk Assessment: Government Report](#), January 2012.

<sup>29</sup> House of Commons Environmental Audit Committee, [Climate Change Adaptation](#), 15 March 2015, HC 453 of session 2014–15 p 43.

stated that the Government had not “identified proactive adaptation policies or driven action in a coordinated way”, and recommended a set of measures and targets against which progress could be measured.<sup>30</sup> The Committee also suggested that responsibility for the “actions needed to deliver the required climate resilience” should be assigned to specific organisations and groups.<sup>31</sup> The [Committee on Climate Change Adaptation sub-Committee](#) has also stated that the next NAP, scheduled to be published in 2017, should reflect regional differences in climate change impacts, and local organisations and interests should continue to play a role in delivery.<sup>32</sup> The Government has stated that it “fully intend[s] to set clear adaptation priorities in the second NAP report”, and that it would “explore a two tier approach to adaptation actions”. The first tier would focus on the highest impact and most needed policies and actions with clear timeframes, targets, monitoring and evaluation, and the second tier would “capture a summary of much broader activity across Government and beyond that supports [its] adaptation objectives”.<sup>33</sup>

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<sup>30</sup> *ibid*, pp 43–4.

<sup>31</sup> *ibid*.

<sup>32</sup> Committee on Climate Change, [Progress in Preparing for Climate Change: 2015 Report to Parliament](#), June 2015. p 6.

<sup>33</sup> HM Government, [Government Response to the Committee on Climate Change: Progress on Preparing for Climate Change](#), October 2015, pp 10–11.

## Further Information

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