

# SYNTHESIS REPORT ON THE AGGREGATE EFFECT OF INTENDED NATIONALLY DETERMINED CONTRIBUTIONS (INDCS)



United Nations  
Framework Convention on  
Climate Change

This document summarizes the main findings of the synthesis report on the aggregate effect of INDCs prepared by the secretariat in response to a mandate by the Conference of the Parties to the UNFCCC. It shows that INDCs represent a major step forward in efforts to address climate change and presents some challenges and opportunities relating to keeping temperature rise below 2C.

In December 2013, all Parties to the UNFCCC were invited to communicate their Intended Nationally Determined Contributions (INDCs) well in advance of the Paris Conference (COP 21). These contributions outline national efforts towards low emissions and climate resilient development in pursuit of the Convention's objective and represent one of the main deliverables of COP21.

Out of the 119 INDCs\* received, 100 included an adaptation component. This demonstrates the global imperative of adapting to climate change alongside efforts to reduce greenhouse gas (GHG) emissions and a common determination to strengthen adaptation efforts under the 2015 agreement

A total of 147 Parties\* (75% of all Parties to the UNFCCC) responded to this invitation by 1 October 2015. Together, they represent approximately 86% of global greenhouse gas emissions in 2010.

\* 147 Parties corresponding to 146 countries submitted 119 INDCs by 1 October 2015. The INDC of the European Union and its 28 Member States is counted as one INDC representing 29 Parties / 28 countries



## THE AGGREGATE EFFECT

The implementation of the communicated INDCs by 1 October 2015 is estimated to put global emission levels at 55 (52 to 57) Gt CO<sub>2</sub> eq in 2025 and 57 (53 to 59) Gt CO<sub>2</sub> eq in 2030.

Compared with global emissions in 1990, 2000 and 2010, global aggregate emission levels resulting from the INDCs are expected to remain higher. However, the growth in emissions is expected to slow down by a third in the 2010–2030 period compared to the period 1990–2010, reflecting the impact from the INDCs.

Global average per capita emissions are expected to decline by 8 and 4 per cent by 2025 and by 9 and 5 per cent by 2030 compared with the levels in 1990 and 2010, respectively.

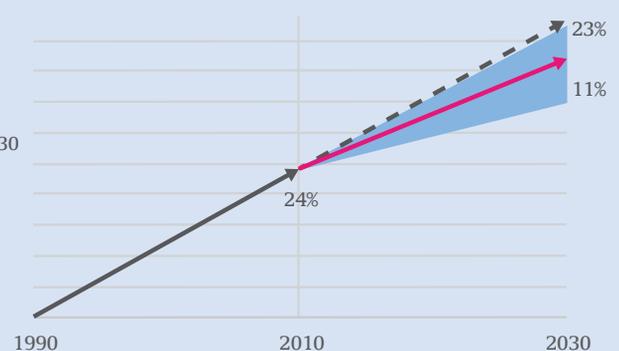
The aggregate effect of the INDCs means global cumulative CO<sub>2</sub> emissions are expected to equal 54 (52 to 56) per cent by 2025 and 75 (72 to 77) per cent by 2030 of the total global cumulative emissions since 2011 that are consistent with a global average temperature rise of less than 2°C above pre-industrial levels.\*

Aggregate global emission levels resulting from the implementation of INDCs will not fall within least-cost 2°C scenarios and remain higher by 9 (5 to 13) Gt CO<sub>2</sub>eq in 2025 and 15 (11 to 22) Gt CO<sub>2</sub>eq in 2030.

Implementation of the INDCs would lead to lower aggregate global emission levels than in pre-INDC trajectories by 3 (0 to 6) Gt CO<sub>2</sub>eq in 2025 and 4 (0 to 8) Gt CO<sub>2</sub>eq in 2030; the conditional component can bring reductions that account for approximately one fourth of the upper level of the range.

### SLOW DOWN OF EMISSION GROWTH DUE TO INDCs

- growth rate 1990-2010
- - - extended growth rate 2010-2030
- estimated growth rate with INDCs 2010-2030 (median and range)



\*= (According to IPCC Fifth Assessment Report This is 1,000 Gt CO<sub>2</sub> at a likely (>66 per cent) probability)

# THE ADAPTATION COMPONENT

For many Parties adaptation is a priority issue linked to national development, sustainability, and security in the reality of the changing climate. For a number of Parties, it is already a matter of survival.

The adaptation components include actions in virtually all sectors of national economies. The sectors of highest concern are water resources, agriculture, health, ecosystems, and forestry

Several Parties elaborated on the synergies between adaptation and mitigation as part of their overall low carbon, climate-resilient development strategies.

Loss and damage associated with past and projected impacts of climate variability and change were reported by several Parties, some of which have quantified projected losses and damages

In light of current and projected climate change impacts, Parties are determined to scale up their adaptation efforts with sufficient finance, technical capacities and adaptation technology. Finance needs of individual Parties for implementing the adaptation actions in their INDC range from USD 100 million to over 200 billion

Parties are pursuing their adaptation efforts through climate change laws, national or sectoral adaptation plans, strategies, and in many cases through the process to formulate and implement national adaptation plans (NAPs). Most of the Parties that have embarked on NAPs will have a NAP ready by 2020

# CONCLUSION

- 1** Parties have submitted their INDCs with the understanding that they would be anchored in a broader new climate agreement that would support sustainable actions nationally and globally.
- 2** The INDCs indicate a significant increase in the number of countries taking climate action, which is often national in scope and covers a large number of sectors and greenhouse gases. This is reflected in the increase in the number of Parties that have moved from project programme or sector based action to economy-wide policies and objectives.
- 3** INDCs are expected to deliver sizeable emission reductions and slow down emissions growth in the coming decade. They will, however, not be sufficient to reverse by 2025 and 2030 the upward trend of global emissions. Furthermore, estimated annual aggregate emission levels resulting from their implementation do not fall within least-cost 2 °C scenarios levels.
- 4** The extent to which efforts to reduce emissions enshrined in the INDCs contribute to limiting the global average temperature rise to less than 2 °C is defined by the estimated emission reductions before and after 2030 and also by the long-term changes in the key social, economic and technology drivers that will be catalyzed by the implementation of the INDCs. This contribution is also defined by most Parties by the potential for long term transformation towards low carbon society and economy.
- 5** National processes put in place to prepare the INDCs helped to place climate change high on the political agenda in many governments, to create a new and significant momentum for action in the areas of renewable energy, energy efficiency sustainable transport, carbon capture and storage, conservation and sustainable management of forests, sustainable agriculture and opportunities to reduce emissions of non-CO<sub>2</sub> gases. These processes also helped to create institutional infrastructure that provides a foundation for enhanced action in the future towards limiting the global average temperature rise to less than 2 °C.
- 6** The adaptation components of the INDCs constitute a representative overview of how Parties, building on progress made so far, intend to address adaptation and loss and damage at the national level in the next decades. The wide range of initiatives to enhance adaptation that Parties have communicated reflects the relevance of adaptation to all areas of social and economic activity and the strong interest of Parties in continuing to strengthen their adaptation efforts together with their mitigation ones.



United Nations  
Framework Convention on  
Climate Change

For further information contacts:  
United Nations Climate Change Secretariat  
Platz der Vereinten Nationen 1  
53113 Bonn, Germany

Telephone: +49 228 815 1000  
Telefax: +49 228 815 1999

All rights reserved |

This publication is issued for public information purposes and is not an official text to the Convention in any legal or technical sense. Unless otherwise noted in captions or graphics all matter may be freely reproduced in part or in full, provided the source is acknowledged.