



# Climate commitments of subnational actors and business

**A quantitative assessment of their emission reduction impact**



UNEP

Published by the United Nations Environment Programme (UNEP), June 2015

Copyright © UNEP 2015

ISBN: 978-92-807-3465-2

DEWA Job Number: DEW/1917/NA

This publication may be reproduced in whole or in part and in any form for educational or non-profit services without special permission from the copyright holder, provided acknowledgement of the source is made. UNEP would appreciate receiving a copy of any publication that uses this publication as a source.

No use of this publication may be made for resale or any other commercial purpose whatsoever without prior permission in writing from the United Nations Environment Programme. Applications for such permission, with a statement of the purpose and extent of the reproduction, should be addressed to the Director, DCPI, UNEP, P. O. Box 30552, Nairobi 00100, Kenya.

#### Disclaimers

Mention of a commercial company or product in this document does not imply endorsement by UNEP or the authors. The use of information from this document for publicity or advertising is not permitted. Trademark names and symbols are used in an editorial fashion with no intention on infringement of trademark or copyright laws.

We regret any errors or omissions that may have been unwittingly made.

© Images and illustrations as specified.

#### Citation

This document may be cited as:

UNEP 2015. Climate commitments of subnational actors and business: A quantitative assessment of their emission reduction impact. United Nations Environment Programme (UNEP), Nairobi

A digital copy of this report along with supporting appendices is available at <http://uneplive.unep.org>

Supported by the Netherlands Ministry for Infrastructure and the Environment

Supported by:



Ministry of Infrastructure and the Environment

Cover graphic © Shutterstock

UNEP promotes environmentally sound practices globally and in its own activities. This report is printed on paper from sustainable forests including recycled fibre. The paper is chlorine-free, and the inks vegetable-based. Our distribution policy aims to reduce UNEP's carbon footprint.



# Climate commitments of subnational actors and business

A quantitative assessment of their emission reduction impact

June 2015

# Contents



ii

Acronyms .....	iii
Glossary .....	iv
Acknowledgements .....	v
Executive Summary .....	vi
<b>1 Introduction .....</b>	<b>1</b>
<b>2 Non-state climate initiatives .....</b>	<b>3</b>
<b>3 Methodology .....</b>	<b>5</b>
3.1 Introduction .....	5
3.2 Categorisation of initiatives .....	5
3.3 Criteria for the selection of initiatives .....	5
<b>4 Company initiatives .....</b>	<b>7</b>
4.1 Introduction and scope .....	7
4.2 Description of selected initiatives .....	8
4.3 Quantifying company initiatives .....	8
4.3.1 Determining company GHG emissions .....	9
4.3.2 Projecting company emissions to 2020 .....	9
4.3.3 Estimating the impact of company initiatives .....	9
4.4 Results and conclusions .....	9
<b>5 Initiatives of cities and regions .....</b>	<b>11</b>
5.1 Introduction and scope .....	11
5.2 Description of selected initiatives .....	12
5.3 Quantifying city and regional level initiatives .....	13
5.4 Results and conclusions .....	13
<b>6 Sectoral initiatives .....</b>	<b>15</b>
6.1 Introduction .....	15
6.2 Energy efficiency initiatives .....	15
6.3 Oil and gas initiatives .....	17
6.4 Forestry initiatives .....	18
6.5 Agriculture Initiatives .....	19
6.6 Finance Initiatives .....	20
6.7 Other Initiatives .....	21
<b>7 Overlap analysis .....</b>	<b>23</b>
7.1 Overlap between non-state action areas .....	23
7.2 Overlap with national pledges .....	24
<b>8 Conclusion .....</b>	<b>27</b>
References .....	29
Appendix 1 List of major non-state initiatives quantified in this study .....	31
Appendix 2 Specific methodologies and assumptions for the quantification of the selected initiatives .....	33
Methodological steps for company initiatives .....	33
Methodological steps for city and regional level initiatives .....	34
Methodological steps for sectoral initiatives .....	35

# Acronyms



ACCO	Association of Climate Change Officers	IPCC	Intergovernmental Panel on Climate Change
ADP	Ad-Hoc Working Group on the Durban Platform for Enhanced Action	IRENA	International Renewable Energy Agency
ACEC	Africa Clean Energy Corridor	ITF	International Transport Forum (of the OECD)
ASEI	Asia Solar Energy Initiative	IUCN	International Union for Conservation of Nature
BAU	Business As Usual	LNG	liquefied natural gas
BEI	Baseline Emission Inventory	Mt	megaton
BELC	Business Environmental Leadership Council	NAZCA	Non-State Actor Zone for Climate Action
CBD	Convention on Biological Diversity	NGO	non-governmental organization
CCAC	Climate and Clean Air Coalition	nrg4SD	Network of Regional Governments for Sustainable Development
CCBA	Climate, Community and Biodiversity Alliance	OECD	Organisation for Economic Co-operation and Development
cCR	carbonn Climate Registry	PDC	Portfolio Decarbonisation Coalition
CDP	(formerly) Carbon Disclosure Project	REDD+	Reduced Emissions from Deforestation and Forest Degradation
CISL	Cambridge Institute of Sustainable Leadership	R20	Regions of Climate Action
CoM	Covenant of Mayors	SBT	Science Based Targets
CO <sub>2</sub> e	carbon dioxide equivalent	SEAD	Super-efficient Equipment and Appliance Deployment
COP	Conference of the Parties (to the UNFCCC)	SEAP	Sustainable Energy Action Plan
CSI	Cement Sustainability Initiative	SEII	Solar Europe Industry Initiative
C2ES	Center for Climate and Energy Solutions	SIDS	Small Islands Developing States
C40	C40 Cities Climate Leadership Group	SLCP	short-lived climate pollutant
EERE	US Department of Energy	TFA	Tropical Forest Alliance
FIA	Fédération Internationale de l'Automobile	UCLG	United Cities and Local Governments
GBPN	Global Buildings Performance Network	UITP	International Association of Public Transport
GCF	Governors' Climate and Forest Task Force	ULCOS	Ultra-Low CO <sub>2</sub> Steelmaking
GEF	Global Environment Facility	UNEP	United Nations Environment Programme
GFEI	Global Fuel Economy Initiative	UNFCCC	United Nations Framework Convention on Climate Change
GGFR	Global Gas Flaring Reduction Partnership	UNGC	United Nations Global Compact
GHG	greenhouse gas	WBCSD	World Business Council on Sustainable Development
Gt	gigatonne	WEO	World Energy Outlook
ICCT	International Council on Clean Transportation	WMCCC	World Mayors Council on Climate Change
ICLEI	International Council for Local Environmental Initiatives	WRI	World Resources Institute
IDFC	International Development Finance Club	WWF	World Wide Fund for Nature
IEA	International Energy Agency		
IEA ETP	IEA Energy Technology Perspectives		
IGO	intergovernmental organization		

# Glossary



iv

**Additionality:**

A criterion sometimes applied to projects aimed at reducing greenhouse gas emissions. It stipulates that the emission reductions accomplished by the project must not have happened anyway had the project not taken place.

**Business-as-usual:**

A scenario that describes future greenhouse gas emission levels in the absence of additional mitigation efforts and policies (with respect to an agreed set).

**Carbon dioxide equivalent:**

A way to place emissions of various radiative forcing agents on a common footing by accounting for their effect on climate. It describes, for a given mixture and amount of greenhouse gases, the amount of carbon dioxide that would have the same global warming ability, when measured over a specified time period. For the purpose of this report, greenhouse gas emissions (unless otherwise specified) are the sum of the basket of greenhouse gases listed in Annex A to the Kyoto Protocol, expressed as carbon dioxide equivalents assuming a 100 year warming potential.

**Extensification:**

Development of a more extensive production system in agriculture, i.e., one which utilizes large areas of land, but with minimal inputs and expenditures of capital and labour.

**Intensification:**

An increase in agricultural production per unit of inputs.

**Non-state climate initiatives:**

Initiatives outside of the United Nations Framework Convention on Climate Change aimed at reducing emissions of greenhouse gases by, for example, promoting actions that are less greenhouse gas intensive, compared to prevailing alternatives. Cooperative initiatives also involve national and subnational partners (they are often referred to as, simply, 'cooperative initiatives').

**Pledges:**

For the purpose of this assessment, pledges include Annex I targets and non-Annex I actions, as included in Appendix I and Appendix II to the Copenhagen Accord, and subsequently revised and updated in some instances.

**Regions:**

Areas in a country. Often, but not always, self-governing. Also called provinces or states.

**Sensitivity:**

A technique used to determine how different values an input variable will impact the results of a calculation under a given set of assumptions.

**State actors:**

Any national or subnational government. In this context, non-state actors refer to parties outside any formal government structure.

# Acknowledgements



## Lead authors

Kornelis Blok (Ecofys, Netherlands), Ann Gardiner (Ecofys, United Kingdom)

## Contributing authors

Arno van den Bos (Ecofys, Netherlands), Lara Esser (Ecofys, Germany), Luis Janeiro (Ecofys, Netherlands), Long Lam (Ecofys, United Kingdom), Karlien Wouters (Ecofys, Netherlands).

## Reviewers

Volodymyr Demkine (UNEP, Nairobi)  
Jonathan Duwyn (UNEP, Paris)  
Michel den Elzen (Netherlands Environmental Assessment Agency, PBL)  
Jacqueline McGlade (UNEP, Nairobi)  
Sunday Leonard (UNEP, Nairobi)  
Bert Metz (European Climate Foundation, Netherlands)  
Ian Ponce (UNFCCC Secretariat, Germany)  
Daniel Puig (UNEP DTU Partnership, Denmark)  
Mark Roelfsema (Netherlands Environmental Assessment Agency, PBL)  
Michiel Schaeffer (Climate Analytics, Germany)  
Walter Vergara (World Resources Institute, USA)

## Other input

Jon Hutton (UNEP-WCMC, United Kingdom)

## Thanks also to

CDP (United Kingdom) for their assistance in this report through the provision of data from their reporting platform.

## Project coordination

Philip Drost (UNEP), Volodymyr Demkine (UNEP)

## Design and layout

Audrey Ringler (UNEP)

V

# Executive Summary



vi

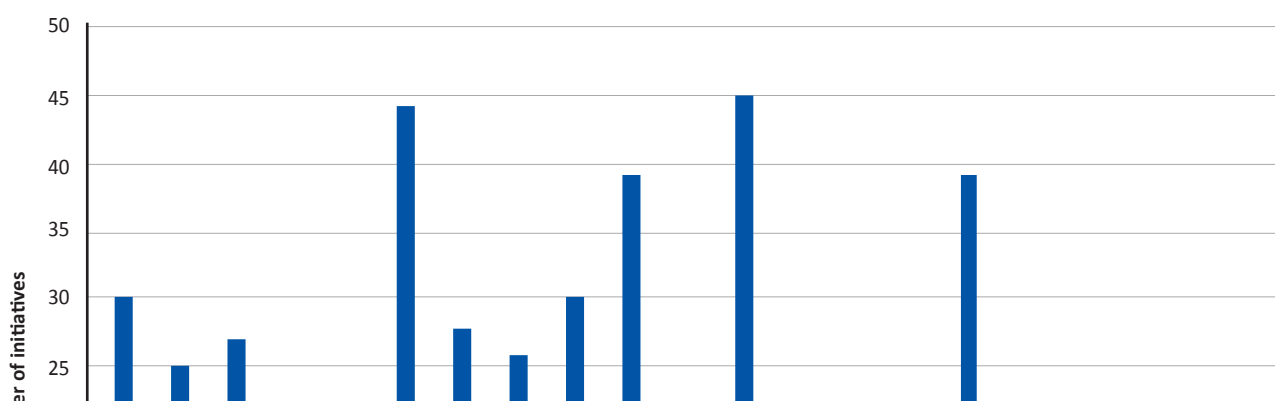
Initiatives which catalyse climate action are now recognised increasingly as playing an important role in mitigating greenhouse gas emissions (GHG) and bridging the global emissions gap. The number and range of these initiatives is growing rapidly. There are several open questions about these initiatives at a global scale, including what contribution they can make to closing the emissions gap, but also what makes a successful initiative and how can this be replicated and scaled up. This paper focuses on the first of these questions.

Quantifying the emission reduction contribution these initiatives can (or are likely to) make is now critically important to understanding their overall impact on international climate mitigation efforts. By demonstrating what is already being achieved through these initiatives, such analysis could also play an important role in encouraging national governments to pledge more ambitious commitments through the international negotiations. In this report, we present a quantitative assessment of the total GHG emissions mitigation impact in 2020 of current important non-state climate action.

## 1. What are non-state initiatives?

Non-state climate initiatives is the name given to the set of initiatives that are driven by other actors than central governments: cities, regions, companies, NGOs, etc. The aims and activities of initiatives range from high level political or technical dialogue to concrete mitigation objectives and actions. There is a wide variety of initiatives across many sectors. These initiatives often deliver emission reductions on a short term – in many cases ahead of government action – and also deliver other benefits linked to sustainable growth. We concentrate in this analysis on co-operative initiatives, that are international in nature, which involve groups of actors working together in a structured way. In addition to these co-operative initiatives, many individual actors, such as cities, regions, companies, NGOs, but also citizen collectives, have committed to action on their own.

By April 2015, more than 180 co-operative initiatives had been identified and included in the Climate Initiatives Platform, with more than 20,000 participant organisations (including NGOs, IGOs, companies, research institutions, national and subnational governments as well as international



预览已结束，完整报告链接和二维码如下：

[https://www.yunbaogao.cn/report/index/report?reportId=5\\_16383](https://www.yunbaogao.cn/report/index/report?reportId=5_16383)

