

## NCCG-5, Wageningen, June 30 - July 3, 2009

### Preregistration and response to Call for Papers (preferentially using our website [www.ncgg5.org](http://www.ncgg5.org))

Name \_\_\_\_\_

Affiliation \_\_\_\_\_

Address \_\_\_\_\_

Country \_\_\_\_\_

Phone \_\_\_\_\_ Fax \_\_\_\_\_

E-mail \_\_\_\_\_

- will submit an abstract for a presentation (by e-mail only) to [cfp@ncgg5.org](mailto:cfp@ncgg5.org) not later than December 1st, 2008)

Title: \_\_\_\_\_

- considers participation in the symposium; please send a programme and registration form to the above address
- would be interested in an exhibition on NCCG-related technology (please mention topic)
- would be interested to visit an industrial or agricultural demonstration project
- has other suggestions (max. 100 words)

#### Please send this form to:

VVM, P.O. Box 2195, NL-5202 CD DEN BOSCH, The Netherlands

E-mail: [office@ncgg5.org](mailto:office@ncgg5.org)

Fax: +31 73 621 6985

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 Han van Dop, secretary for theme 1 and 2  
 Erik ter Avest, secretary for theme 3

#### Symposium secretariat

VVM/MILCON  
 P.O. Box 2195, 5202 CD Den Bosch, The Netherlands  
 Tel. +31 (0)73-621 5985, Fax: +31 (0)73-621 6985  
 E-mail: [office@ncgg5.org](mailto:office@ncgg5.org)

#### Website

A regularly updated website with information on all available details of the symposium can be accessed through:

[www.ncgg5.org](http://www.ncgg5.org)



Organised by the Netherlands Association of Environmental Professionals  
(VVM)

## Fifth International Symposium on Non-CO2 Greenhouse Gases (NCCG-5) Science, Reduction Policy and Implementation

Wageningen, The Netherlands

June 30 - July 3, 2009

In support of the IPCC process

*In cooperation with:*



Netherlands' Ministry of Housing,  
Spatial Planning and Environment



SenterNovem (Netherlands Agency  
for Innovation and Sustainability)



EUROPEAN FEDERATION OF CLEAN AIR AND  
ENVIRONMENTAL PROTECTION ASSOCIATIONS



IEA GHG R&D Programme



UN IPCC  
Intergovernmental Panel  
on Climate Change



US Environmental  
Protection Agency



European Commission



Royal Netherlands Academy  
of Arts and Sciences



UN Food and Agricultural  
Organisation



Australian Greenhouse  
Office



GLOBAL  
CHANGE International Geosphere-  
Biosphere Programme

## Introduction

The awarding of the Nobel Prize for peace to the IPCC and Al Gore in 2007, acknowledges the importance of scientific progress in climate change research and recognizes our increasing concern about the possible consequences of climate change on global environment and human society.

The political debate on measures to reduce the emission of greenhouse gases is making progress. It focuses mainly on the reduction of CO<sub>2</sub>, which is a major, but not the only contributor to climate change. The major non-CO<sub>2</sub> greenhouse gases (methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O) and halocarbons) contribute, compared to CO<sub>2</sub>, 60 % of the radiative forcing. This presents attractive opportunities in NCGG emission reductions.

From June 30 to July 3, 2009, the Air Quality and Climate Change Section of the Netherlands Association of Environmental Professionals (VVM) organizes its Fifth International Symposium on science, implementation and policy aspects of non-CO<sub>2</sub> greenhouse gases (NCGG-5).

NCGG-5 will be held in Wageningen in The Netherlands and will address not only the role of non-CO<sub>2</sub> greenhouse gases and aerosol in human-induced climate change, but also options for reduction and implementation in industry and society.

The symposium aims to remove barriers between policy, industry and science and fosters the dialogue between scientists, engineers and officials in industry and government who are all, though from a different perspective, involved in non-CO<sub>2</sub> greenhouse gas issues. This multidisciplinary approach is expected to yield realistic and achievable mitigation solutions that significantly lower NCGG emissions.

The conference welcomes papers on the themes presented below.

## Themes for NCGG-5

The symposium will focus on the non-CO<sub>2</sub> greenhouse gases (NCGGs); for that reason papers on general aspects of climate change or referring to CO<sub>2</sub> alone, will not be accepted.

A new issue in this conference series is the role of aerosols in climate change. The magnitude of radiative forcing of aerosols is equal, but of different sign, to all NCGGs together. A further study to their formation, abundance, future trends and interrelationship with NCGG emissions is therefore desired and relevant in this symposium.

Apart from the plenary opening and closing sessions, the symposium will be conducted in parallel sessions, focussing on the main themes:

1. Sources, sinks and inventories
2. Monitoring and modelling of atmospheric composition
3. Mitigation options and reduction policy and implementation.

### 1. Sources, sinks and inventories

Data on sources and sinks are basic for understanding atmospheric composition and change in climate forcing, for emission inventories at different scales, and as input for models at varying scales. Topics for contributions could include:

- combustion in stationary and mobile sources: various emissions from fossil fuels, biofuels and biomass burning, including forest fires
- industrial processes: fluorinated gases, nitrous oxide and methane
- crop production: (N)-nutrient cycling in agriculture, and related emissions from soils and aquatic systems; methane from biomass; management systems
- animal husbandry: methane from anaerobic processes in animals and manure
- facility level inventories: farm scale and site specific budgets
- natural sources and sinks
- progress in emission inventories: national reports and their verification against atmospheric data
- process-based high Tier emission models
- primary aerosol emissions
- verification of emissions and emission inventories and assessing uncertainties, taking into account possible new anthropogenic sources of NCGGs

### 2. Monitoring and modelling of atmospheric composition

There is a great need at various scales for reliable data for all greenhouse gases and other trace components which directly or indirectly affect the radiation balance, in order to improve the quality of emission inventories. Reports to be considered include the following topics:

- atmospheric processes
- relation between greenhouse gases and air pollution
- primary and secondary aerosols and their influence on the radiative balance
- monitoring of emissions and atmospheric composition from space
- monitoring at background stations and high towers and from aircrafts
- verification of emission fluxes and source strengths
- atmospheric budgets of greenhouse gases and related biogeochemical cycles
- modelling studies at varying scales, including inverse modelling

### 3. Mitigation options, reduction policy and implementation

NCGG emissions have already been partly reduced through implementation of non-climate, climate and specific NCGG directed policies. However, there is still room for considerable improvement in industry and especially in agriculture. Implementation of cost-effective policies and measures as well as new technologies both in the public and private sectors will contribute to further accelerating and increasing NCGG reduction. Reports and position papers could include the following topics on policy and implementation issues, including assessments of implementation programmes for NCGG-reduction and innovative approaches in policy implementations:

- new developments in national and international programmes
- fluorinated gases: alternatives for specific gases like HFCs

- the role of NCGGs in attaining national commitments for the first phase of the Kyoto Protocol
- evaluation of national and international policies and measures to reduce air pollution and greenhouse gas emissions, identification of trade-offs
- flexible instruments: Emissions Trading, Joint Implementation, Clean Development Mechanism and other policy options
- development of integrated policies for air quality and climate change
- inclusion of NCGGs in Emissions Trading Schemes
- economic analyses and scenario studies, including technology changes

## Call for papers

Participants interested in presenting a paper or poster on any of the mentioned themes and topics which have not been previously published in the open literature, are invited to e-mail an abstract in English with a maximum of 250 words to:

Han van Dop  
Co-ordinator Organizing Committee  
[cfp@ncgg5.org](mailto:cfp@ncgg5.org)  
[www.ncgg5.org](http://www.ncgg5.org)  
Tel: +31 73 621 5985  
Fax: +31 73 621 6985

Please provide a title and the name(s) of the author(s) and their affiliations. The text body should contain a problem definition, a brief indication of the research or implementation methods, main results and conclusions.

Abstracts should be received by December 1st, 2008. Notice on acceptance of proposals will be given by March 1st, 2009. Authors of selected papers will be asked to prepare a digital copy not later than June 1st, 2009, for inclusion in the CD-ROM which will be made available at the beginning of the conference. A selection of papers will be published in a peer reviewed international journal. The invitation to prepare a paper for review and authors instructions will be sent to you upon acceptance by the Conference Committee.

## Invited contributions

At the symposium a number of invited review papers will be presented.

## Conference chair

The conference will be co-chaired by Paul Crutzen, Scripps Institution for Oceanography, and Bert Metz, Co-chairman of IPCC Working Group III.

## Venue

Hotel and Congress Centre WICC, Wageningen, The Netherlands, June 30 – July 3, 2009.  
Website: [www.wicc.nl](http://www.wicc.nl) (also for hotel booking)

## Congress language

The congress language is English.