Nitrous Oxide and Climate Change

Nitrous Oxide and Climate Change

Nitrous Oxide and Climate Change
Nitrous oxide, N2O, is the third most important (in global warming terms) of the greenhouse gases, after carbon dioxide and methane. As this book describes, although it only comprises 320 parts per billion of the earth's atmosphere, it has a so-called Global Warming Potential nearly 300 times greater than that of carbon dioxide. N2O emissions are difficult to estimate, because they are predominantly biogenic in origin. The N2O is formed in soils and oceans throughout the world, by the microbial processes of nitrification and denitrification, that utilise the reactive N compounds ammonium and nitrate, respectively. These forms of nitrogen are released during the natural biogeochemical nitrogen cycle, but are also released by human activity. In fact, the quantity of these compounds entering the biosphere has virtually doubled since the beginning of the industrial age, and this increase has been matched by a corresponding increase in N2O emissions. The largest source is now agriculture, driven mainly by the use of synthetic nitrogen fertilisers. The other major diffuse source derives from release of NOx into the atmosphere from fossil fuel combustion and biomass burning, as well as ammonia from livestock manure. Some N2O also comes directly from combustion, and from two processes in the chemical industry: the production of nitric acid, and the production of adipic acid, used in nylon manufacture.

Action is being taken to curb the industrial point-source emissions of N2O, but measures to limit or reduce agricultural emissions are inherently more difficult to devise. As we enter an era in which measures are being explored to reduce fossil fuel use and/or capture or sequester the CO2 emissions from the fuel, it is likely that the relative importance of N2O in the 'Kyoto basket' of greenhouse gases will increase, because comparable mitigation measures for N2O are inherently more difficult, and because expansion of the land area devoted to crops, to feed the increasing global population and to accommodate the current development of biofuels, is likely to lead to an increase in N fertiliser use, and thus N2O emission, worldwide.

The aim of this book is to provide a synthesis of scientific information on the primary sources and sinks of nitrous oxide and an assessment of likely trends in atmospheric concentrations over the next century and the potential for mitigation measures.

Download and Read Free Online Nitrous Oxide and Climate Change

---

From reader reviews:

Carol Hughes:

Do you have favorite book? In case you have, what is your favorite's book? Guide is very important thing for us to learn everything in the world. Each e-book has different aim or perhaps goal; it means that e-book has different type. Some people sense enjoy to spend their time for you to read a book. They can be reading whatever they get because their hobby will be reading a book. How about the person who don't like looking at a book? Sometime, man or woman feel need book after they found difficult problem or perhaps exercise. Well, probably you will require this Nitrous Oxide and Climate Change.

Melissa Sands:

Have you spare time for a day? What do you do when you have considerably more or little spare time? Yes, you can choose the suitable activity to get spend your time. Any person spent their very own spare time to take a wander, shopping, or went to the actual Mall. How about open or maybe read a book allowed Nitrous Oxide and Climate Change? Maybe it is being best activity for you. You know beside you can spend your time together with your favorite's book, you can cleverer than before. Do you agree with it has the opinion or you have various other opinion?

Andrea Lampkin:

Reading a publication tends to be new life style on this era globalization. With reading you can get a lot of information that could give you benefit in your life. Having book everyone in this world can easily share their idea. Books can also inspire a lot of people. Plenty of author can inspire their own reader with their story as well as their experience. Not only the storyplot that share in the books. But also they write about advantage about something that you need illustration. How to get the good score toefl, or how to teach children, there are many kinds of book that exist now. The authors these days always try to improve their talent in writing, they also doing some analysis before they write on their book. One of them is this Nitrous Oxide and Climate Change.

Ryan Walker:

Are you kind of active person, only have 10 or 15 minute in your morning to upgrading your mind expertise or thinking skill perhaps analytical thinking? Then you are experiencing problem with the book when compared with can satisfy your short time to read it because pretty much everything time you only find publication that need more time to be go through. Nitrous Oxide and Climate Change can be your answer because it can be read by an individual who have those short spare time problems.

Read Nitrous Oxide and Climate Change for online ebook

Nitrous Oxide and Climate Change Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Nitrous Oxide and Climate Change books to read online.

Online Nitrous Oxide and Climate Change ebook PDF download

Nitrous Oxide and Climate Change Doc

Nitrous Oxide and Climate Change Mobipocket

Nitrous Oxide and Climate Change EPub