

Kleine Anfrage der Abgeordneten Lutz Heilmann, Eva Bulling-Schröter, Hans-Kurt Hill, Dorothee Menzner und der Fraktion DIE LINKE betreffend

„Nachrüstung von Dieselfahrzeugen mit Partikelminderungssystemen“

- Drucksache 16/12650

Anlage: Antwort der Bundesregierung auf die oben bezeichnete Kleine Anfrage
(mit 5 Mehrabdrucken)

Frage 1: *Welche Schlussfolgerungen zieht die Bundesregierung aus den neuen wissenschaftlichen Erkenntnissen über die Klimaerwärmung durch Rußpartikel?*

Antwort:

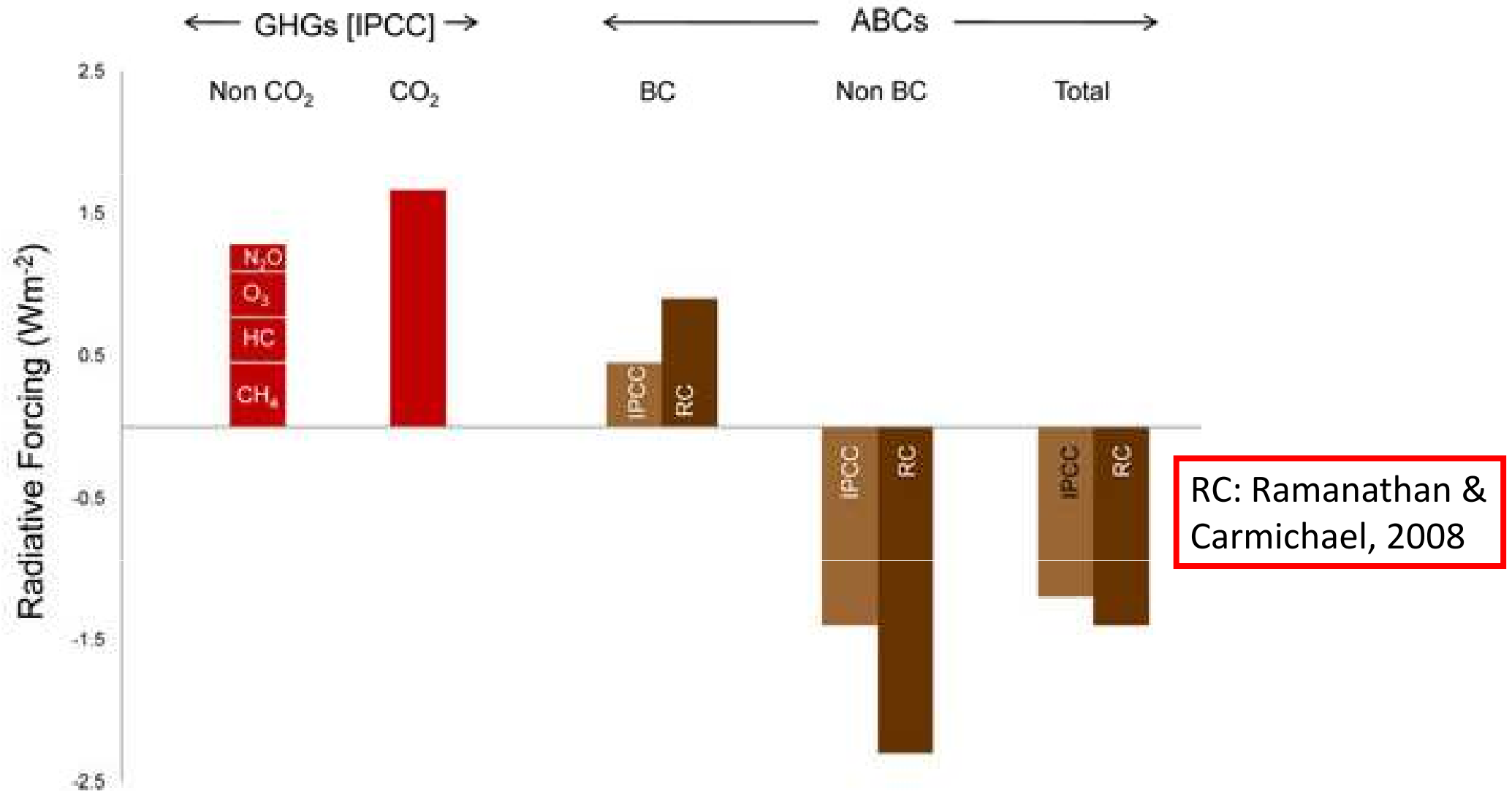
Die Klimawirkung von Rußpartikeln ist bekannt.

Im vierten Sachstandsbericht des Zwischenstaatlichen Ausschusses für Klimaänderungen (IPCC) wird deutlich, dass der erwärmende Effekt durch Ruß im Vergleich zum Strahlungsantrieb der anthropogenen Treibhausgase relativ gering ist.

Bezüglich der konkreten Maßnahmen der Bundesregierung zur Rußminderung zum Schutz der menschlichen Gesundheit vor Feinstäuben wird auf die Antworten zu den Fragen 2 und 3 verwiesen.

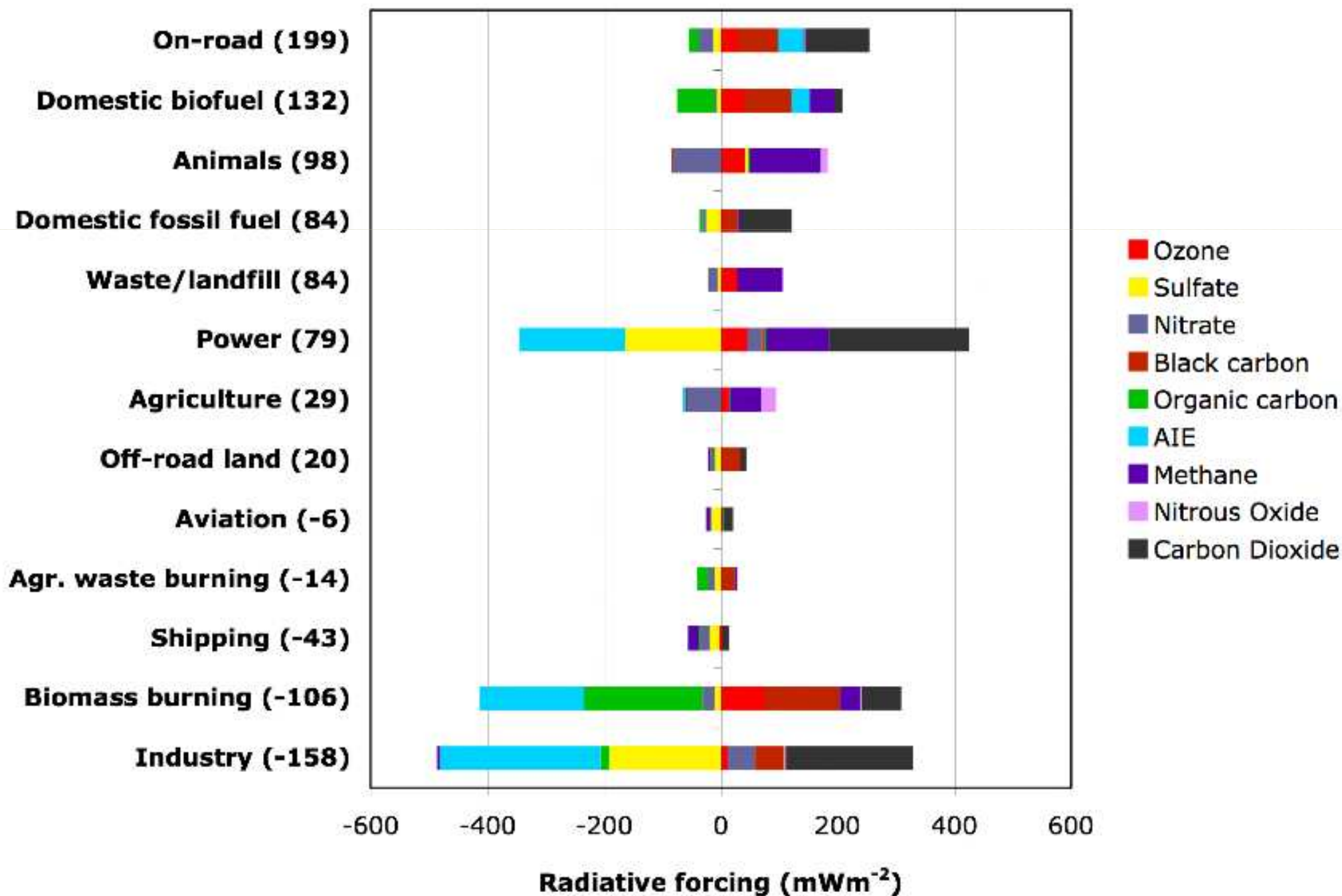
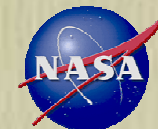
Global Radiative Forcing due to GHGs & ABCs

Ramanathan and Feng, 2008

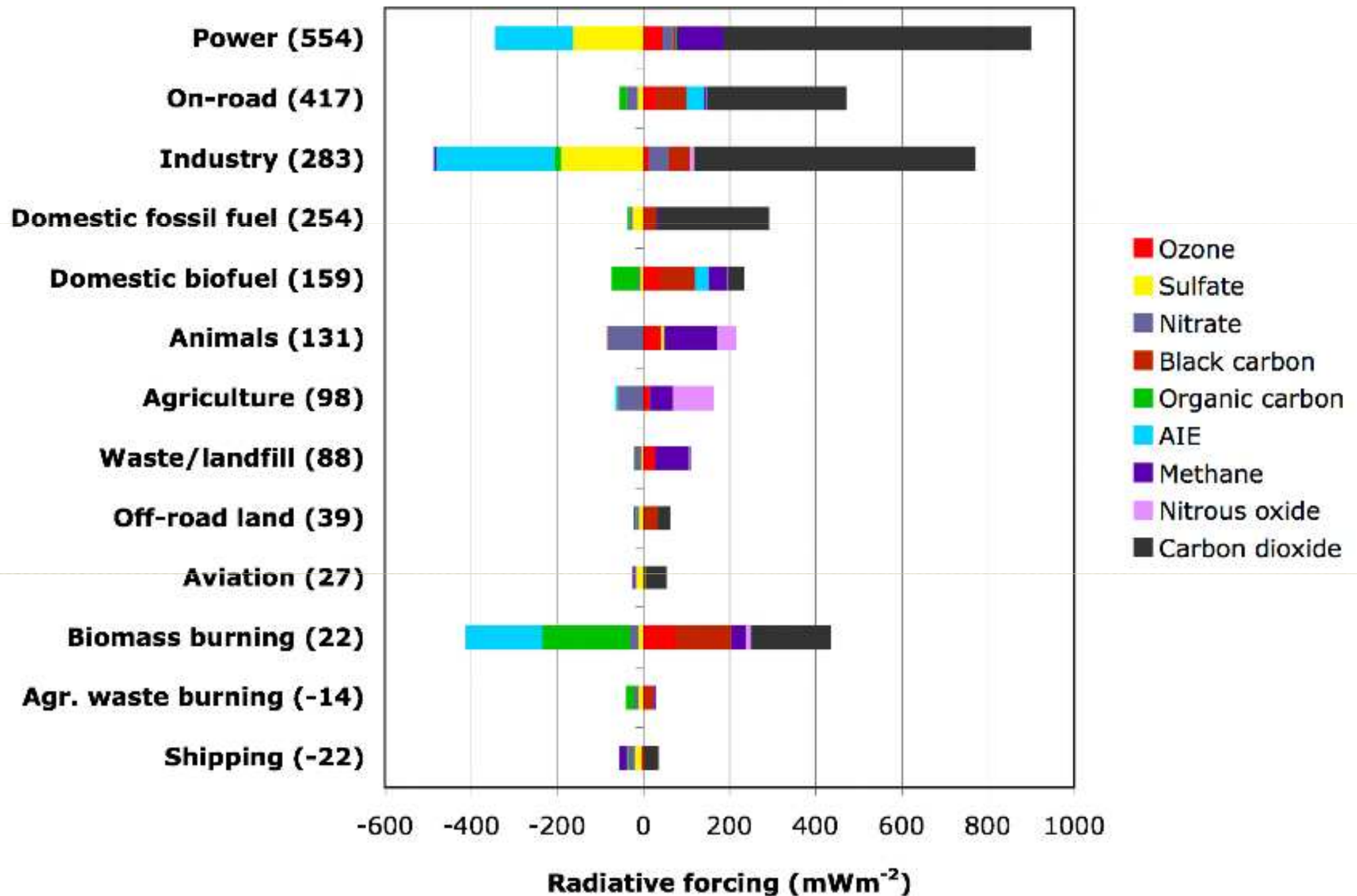
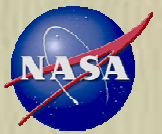


For high BC heating, also see: Jacobson, 2001; Hansen and Nazarenko, 2004; Chung and Seinfeld, 2005

Forcing by sector (20-yr)



Forcing by sector (100-yr)



There may be a way out:

Reduce short lived warming agents:

Black Carbon (BC); Ozone; Methane; HFCs

Contribution to 2005 forcing relative to CO₂

Black Carbon	: 20% - 50%
Ozone	: 20%
Methane	: 20%

Global Atmospheric



Pollution Forum

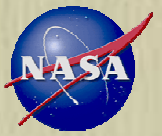
AIR POLLUTION AND CLIMATE CHANGE: DEVELOPING A FRAMEWORK FOR INTEGRATED CO-BENEFITS STRATEGIES
Stockholm 17 - 19 September 2008

The principal conclusions and recommendations made by the conference are summarized in the paragraphs below:

1. Current science emphasizes the urgent need to address air pollution and climate change in an integrated way. We should no longer treat these two issues separately as we strive to achieve sustainable development and a low carbon society.

6. Ground-level ozone and black carbon aerosols are both air pollutants and act as warming agents (see para. 8 below). Methane is a precursor of ozone formation and a GHG. Urgent action to decrease their concentrations in the atmosphere could provide opportunities, not only for significant air pollution benefits (e.g. health and crop-yield benefits) but also for rapid climate benefits by helping to slow global warming and avoid crossing critical temperature and environmental thresholds.

Conclusions



- Impact of short-lived pollutants not trivial vs long-lived (either to make warming worse, or hopefully, better).
- Reductions in BC, ozone and methane benefit health and ecosystem health (agriculture and forestry).
- Domestic fuel burning and transportation key sectors that improve both climate and air quality
- Model results generally robust for effects of methane, VOCs and CO on climate (aerosols have substantial uncertainties)
- Robust results for sectors in at least a broad sense
- Success may be difficult to assess for some species (e.g. methane, mid-high latitude ozone) due to poorly quantified climate responses