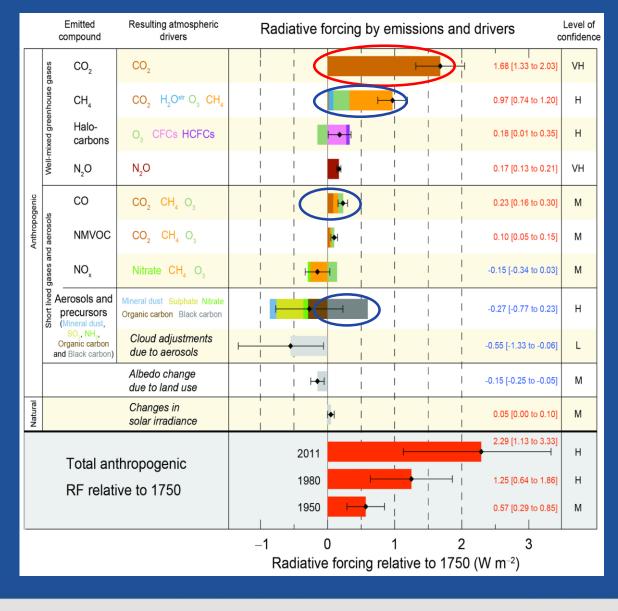


# QUICK ACTION ON SLCPs FOR QUICK RESULTS WITH MULTIPLE BENEFITS

ADDRESSING NEAR-TERM CLIMATE CHANGE & AIR POLLUTION

Dr Drew Shindell Professor, Duke University & CCAC SAP Chair



Historical methane + CO + BC (soot) approximately equal to CO<sub>2</sub>

Contribute to PM2.5 and tropospheric ozone air pollution

Relatively shortlived in atmosphere (15 years or less)

### Air Pollutants Contribute to Climate Change





~1.2°C of warming since preindustrial times

6.5 million premature deaths/yr from air pollution

110 million tonnes/yr lost crops due to tropospheric ozone

# The SLCP Challenge: Climate and Air Pollution Impacts



#### **ANNUAL BENEFITS**

From large-scale mitigation by 2030

CLIMATE



AVOIDED WARMING



REDUCED RATE OF SEA-LEVEL RISE BY ~20% BY 2050

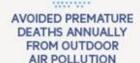


REDUCED RATE
OF SEA-LEVEL RISE
BY ~20% BY 2050

HEALTH



2.4



REDUCED AIR POLLUTION
- WORLD'S LARGEST
ENVIRONMENTAL HEALTH RISK

CROPS

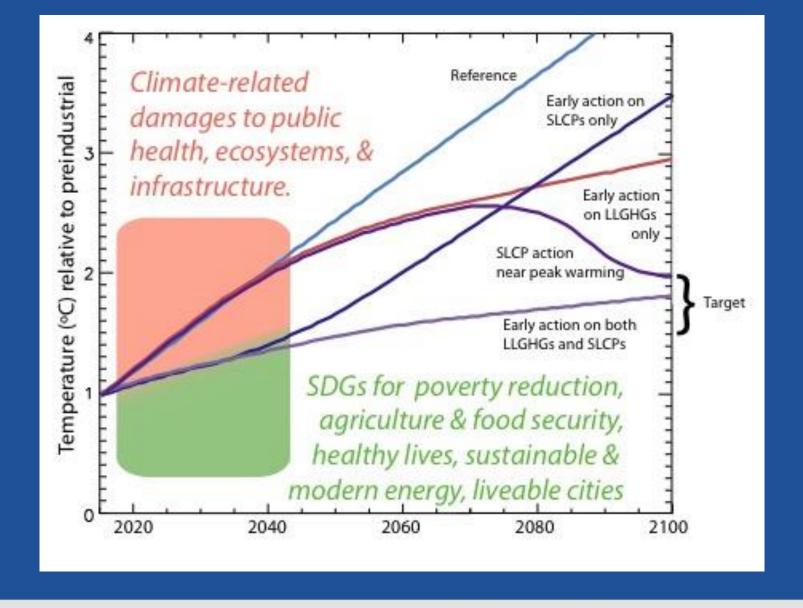


52 MILLION

TONNES OF AVOIDED CROP LOSSES FROM 4 MAJOR STAPLES YEAR

The SLCP Opportunity: Nearterm Multiple Benefits





### Defining a Sustainable Path to the Future



Control measures that involve already existing technologies and practices could significantly reduce SLCPs emissions if implemented around the world.

- 25% of methane emissions
- 75% of black carbon emissions

## How Can SLCP Emissions Be Reduced?



#### Thank you!

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#### **LEARN MORE:**









www.ccacoalition.org