IDDRI

BLOG POST December 8th 2015

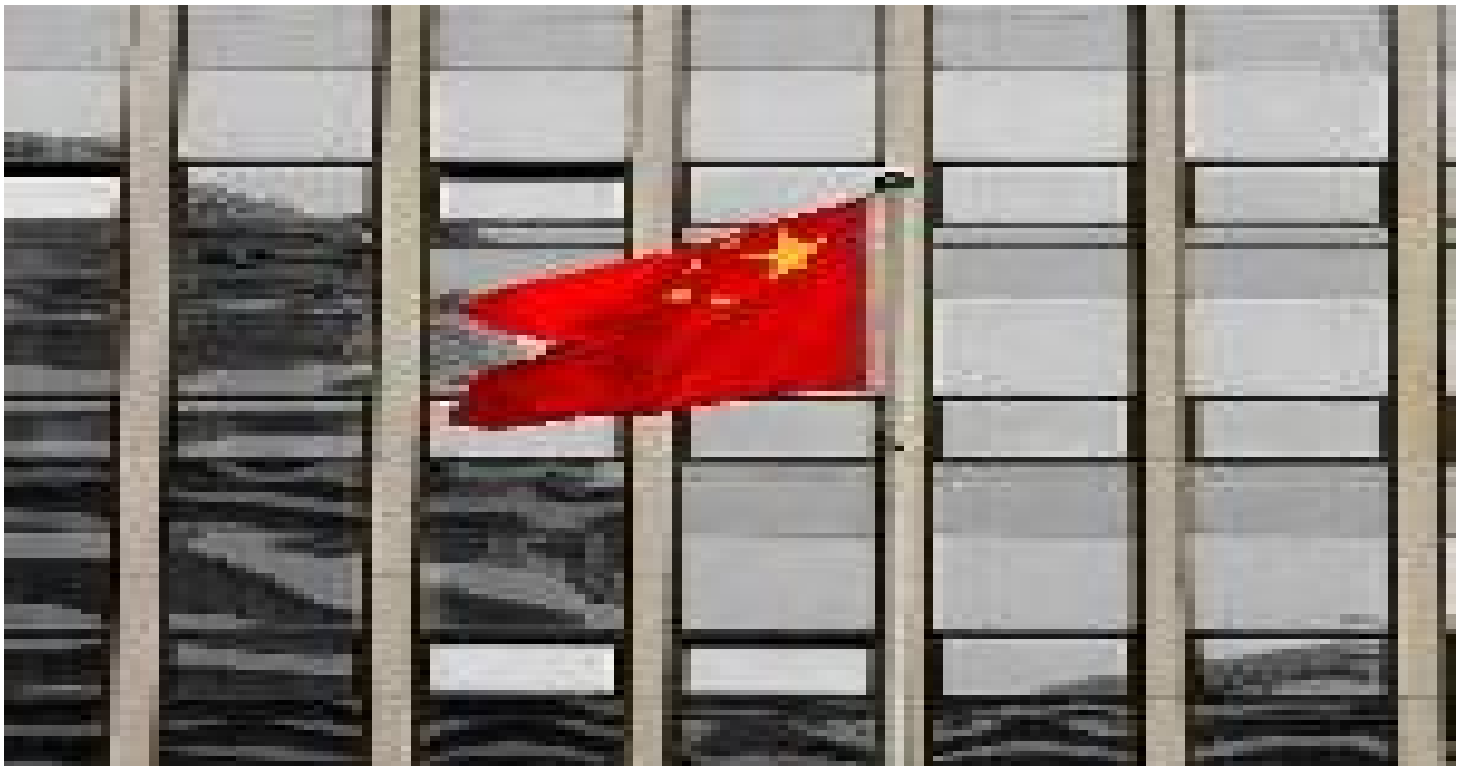
Deep decarbonization, an instrumental strategy to control local air pollution in Chinese cities

Auteur

Henri Waisman

Director, Deep Decarbonization Pathways programme

Reading time: 1 min



Local authorities in Beijing upgraded the chinese air pollution alert from orange to red–most severe smog warning—effective from 7 a.m. Dec. 8 to noon Dec. 10, according to a statement by the Beijing Municipal Environmental Protection Bureau.

This is the first time the municipal government issues this level of alert with consequences like the stop (or limit) of industrial production, the ban of outdoor construction work or the cancelling of classes in primary school; and kindergartens are advised to cancel classes. Even healthy people should try to avoid outdoor activity and choose

public transportation.This event is the latest and most spectacular of a long series of alerts to local air pollution in China over the recent years. This question has become a crucial concern in the country and is now at the forefront of the political agenda.

The analysis conducted in the Deep Decarbonization Pathways Project (DDPP) demonstrates that the deep decarbonization of energy systems, i.e. the large-scale reduction of GHG emissions from the production and consumption of energy, is an instrumental strategy to control air pollution in cities. Indeed, both environmental problems have common sources, notably the use of coal in industry and electricity generation and the use of oil-based fuels in fastly-growing transport.

The Chinese report of the DDPP , prepared by the Chinese DDPP Country Research Team in Tsinghua University and NCSC (a governmental climate think tank), demonstrates that " under a peak carbon emissions and coal consumption scenario, […] air-quality modelling results show that air quality in China's major cities could meet national Grade II standards by 2030 and […] SO2, NOx, PM2.5, VOC and NH3 emissions will decrease by 78%, 77%, 79%, 52%, and 42%, respectively, from 2010 levels."

This is one among the many examples of the important socio-economic benefits of the deep decarbonization of energy systems as identified in the national-scale analyses of deep decarbonization pathways.

CLIMATE