



Why this research is important



SHORT TIME WINDOW

China aims to reduce conventional pollutants and greenhouse gases (GHG) in a short time window.



CREATING CO-BENEFITS

There is a significant overlap in the sources of conventional air pollutants, such as sulfur or nitrogen, and GHGs including carbon.



SYNERGISTIC GOVERNANCE

Reducing pollution and GHG emissions in a synergized manner is key for an effective green transition and an important opportunity for sustainable growth in China.



Key figures

Coal power is the primary contributor to GHG and air pollutant emissions in China

35%

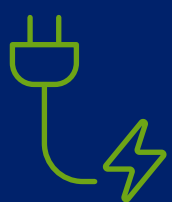
of its carbon emissions

15%

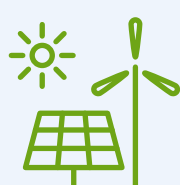
each of its sulfur and nitrogen emissions

According to estimations, electric vehicles in Beijing can achieve a 20% fuel cycle carbon reduction

if charging is well coordinated.



Electric vehicles can realize 30% to 60% carbon reduction benefits compared to traditional vehicles.



Transition from coal-based power to low-carbon energy sources—a key for China to achieve its dual carbon peaking and carbon neutrality goals, improve air quality, and safeguard human health.

Recommendations



Set and enforce ambitious sustainability targets for new energy heavy-duty trucks. It is technically feasible and cost-effective to reach 100% renewable energy heavy-duty trucks by 2040.



Set targets for the deployment of new energy heavy-duty trucks are: 45% of sales by 2030, 75% of sales by 2035, and 100% by 2040.