

# Copper and Pollution Reduction in China

ICA is focused on the development and adoption of clean copper technologies in China.

Coal burning is causing an enormous pollution problem in major cities in China, including the chronic smog problems in Beijing.

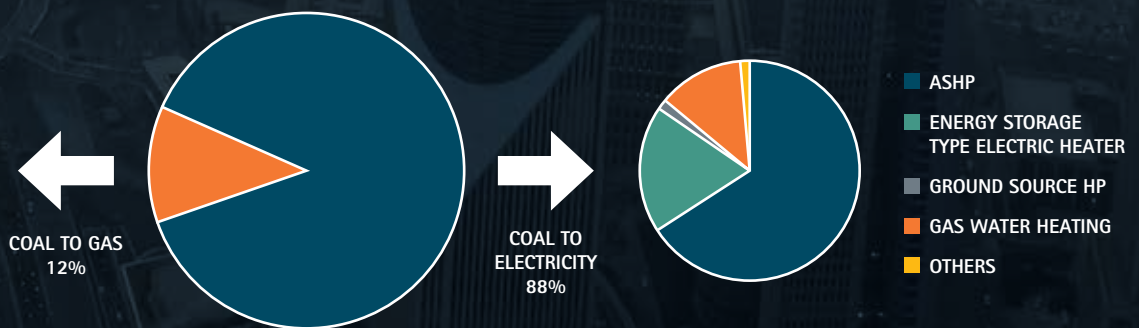
The use of air source heat pumps (ASHP) rather than coal-fired boilers is part of the solution to the pollution problem. In partnership with the China Energy Conservation Association, ICA worked to overcome initial doubt and resistance toward ASHPs. ICA developed a series of working plans for residential uptake, proposed that Beijing and North China province governments include ASHP water-heating equipment as a renewable energy product in China's 13th five-year building energy conservation plan, worked on industrial standards and specifications for after-sale service, and boosted the Product Council's building and technician installation capacity through targeted training.

The result is that 12 key cities in Northern China will invest 20 billion RMB (\$3.2 billion USD) in clean heating in the next three years. In the case of Beijing, government subsidies are currently 24,000 RMB per ASHP unit, with the remaining 2,000 RMB paid by homeowners.

For copper this means an additional 130kt of copper use between 2017 and 2020, due to the additional equipment and required infrastructure.

2016 CONTRIBUTIONS (000 tons)	
Coal reduction	50.3
SO <sub>2</sub> reduction	3722
Nox reduction	805
CO <sub>2</sub> reduction	70466
VOCs reduction	2012
PM10 reduction	6790
PM2.5 Reduction	5432

In 2016, Beijing completed coal to clean energy tasks for 227 thousand households in 663 villages, including coal to electricity for nearly 200 thousand households and coal to gas in 28,000 households.



Data source: Beijing Rural Work Committee