



**INDUSTRIAL
ENERGY
ACCELERATOR**
CHINA



June 2019

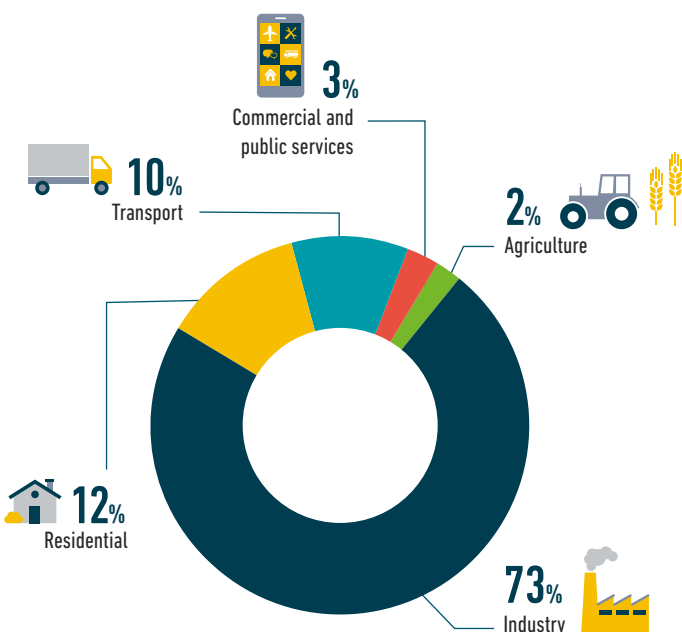
The world's industrial powerhouse looks to energy efficiency in a bid to accelerate its green economy

Decades of unprecedented economic growth driven by industry has fueled Chinese demand for energy. As a result, China is considered the world's largest energy user, the largest producer and consumer of coal, and the world's largest emitter of carbon emissions. However, as the Chinese economic boom inevitably slows, the country's industrial backbone is looking for ways to reduce emissions and remain competitive.

As climate change and pollution influence Chinese policy, energy efficiency and conservation strategies are gaining ground among national decision-makers and major industrial players. Between 2000 and 2015, several leading companies made impressive headway and energy efficiency improved by 30 per cent¹.

Engaging energy intensive micro, small and medium industrial enterprises, while promoting efficient technology abroad, is key to significantly reducing emissions and furthering the vast potential of China's energy efficiency market.

Sub-sector industrial energy consumption



Sub-sector Energy Consumption in 2015, NBS, 2017

FAST FACTS

Population: 1.4 billion people.

National energy mix

While heavily dependent on coal, the past five years have seen a decrease in coal consumption, from 70 per cent to 64 per cent, and a notable increase in the consumption of electricity generated from renewable sources.

Industrial energy consumption

China's industrial sector is by far the biggest consumer of energy accounting for 73 per cent of nation's total end-user consumption. That's more than the residential, agriculture and transport sectors combined.

The industrial sector and the economy

National statistics show that the industrial sector represented 34 per cent of national GDP in 2015. An estimated 28 per cent of the Chinese population is employed by the industrial sector².

Industrial energy growth

UC Berkeley Laboratory predicts Chinese energy consumption to at least double from 2005 to 2050.

Industrial energy policy

During the 2015 Paris Climate Change Conference, China made a commitment to drastically reduce carbon dioxide emissions and its dependence on coal. Alongside a host of new energy efficiency laws, regulations and standards, China set an ambitious five-year target to reduce energy consumption per unit of GDP to decrease 15 per cent by 2020.

Accelerating industrial energy efficiency in China

China's commitment to industrial energy efficiency has been impressive. The International Energy Agency (IEA) even refers to China as "the world heavyweight" when it comes to making progress on energy efficiency. However, a number of financial and regulatory barriers are limiting the energy efficiency potential of small to medium industrial enterprises.

¹Hao & Couto (2018) 'Can Brazil follow China's lead on energy efficiency?'

² World Bank Data (2018)



FINANCE

Recommending incentives to accelerate efficient technology

A general reliance on government-based financial assistance — such as the provision of guaranteed loans and efficiency funding — is inhibiting the development of the energy service market as well as the distribution of energy efficiency technologies and products. It is often difficult for smaller enterprises to apply for affordable loans due to collateral and data requirements.

The Accelerator is analyzing a number of low-carbon financial incentives to catalyze industrial energy efficiency. Incentives including tax relief and concessional loans are seen as the next strategic step to drive China's energy efficiency revolution further.



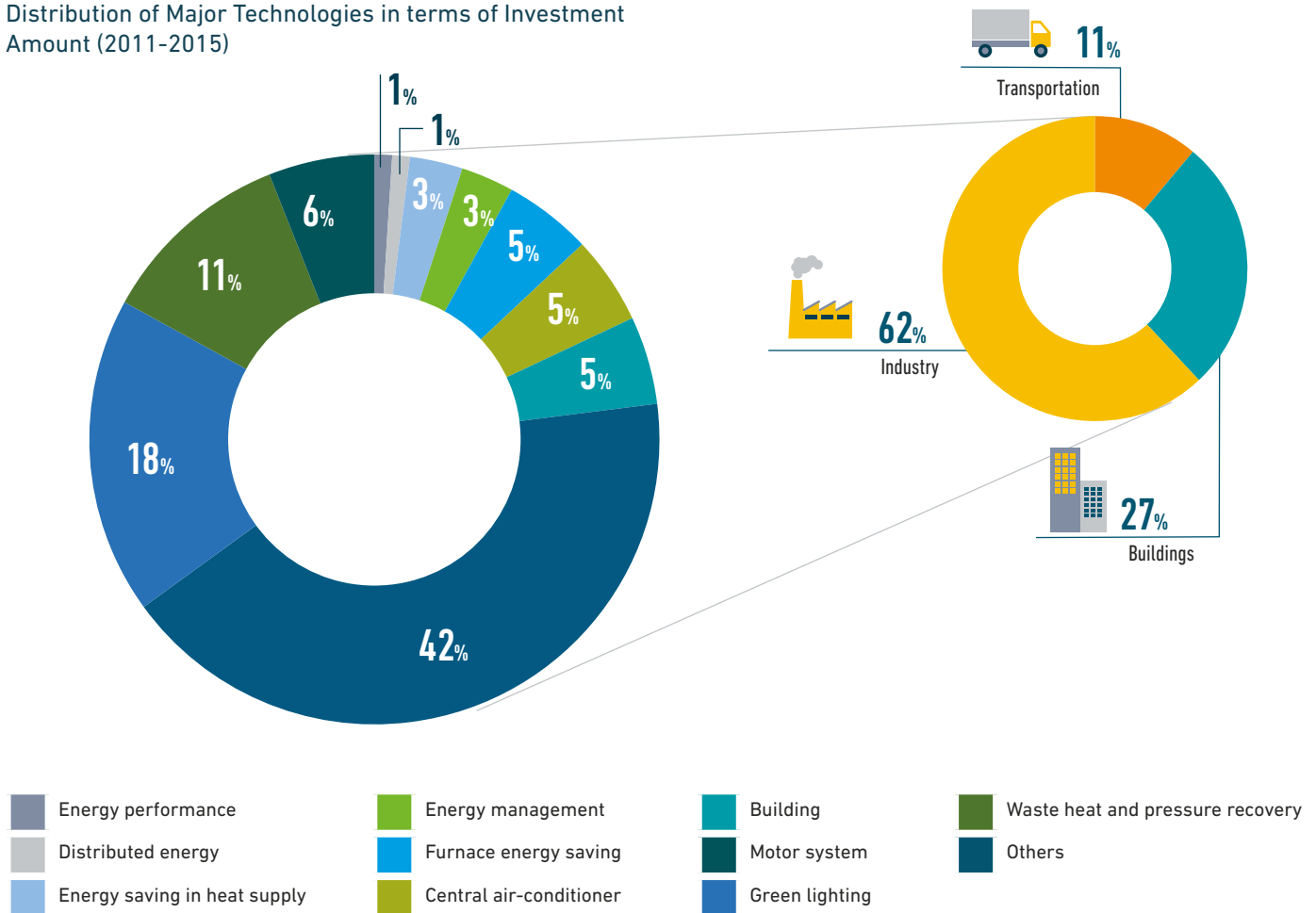
POLICY

Promoting energy efficiency along the Belt and Road Initiative (BRI)

While China's commitment and progress on industrial energy efficiency has drawn global acclaim, there is still room for policy improvement and wider dissemination. In close partnership with government and local stakeholders, the Accelerator is working to promote the integration of industrial energy efficiency and low-carbon technologies in China and along the Belt and Road Initiative (BRI).

Stretching across Asia, the Middle East, Africa, and Europe, the BRI represents a strategic trade network for Chinese goods and services. China's emerging energy services market is poised to benefit from **investments in more than \$6 trillion** in low-carbon power generation and other clean-energy technologies over the next 20 years.

Distribution of Major Technologies in terms of Investment Amount (2011-2015)



SOURCE: 1,059 Energy Project Contracts (EPCs) collected by EMCA

CONTACT

Since its launch, the Accelerator has engaged dozens of critical actors on the road to energy efficiency. For more information on how your organization can support and join the movement contact the Accelerator's China project coordinator, Nurzat Myrsaliev: n.myrsaliev@unido.org

To find out more about the Industrial Energy Accelerator contact our global project manager, Rana Ghoneim: R.Ghoneim@unido.org

About the Industrial Energy Accelerator

In partnership with key government agencies and industry stakeholders, the Industrial Energy Accelerator works on the ground to rally government, industry and finance around solutions that ignite change in energy-intensive industries. We then take our knowledge and experience to the world, sharing what we have learned to inspire a global movement for industrial energy efficiency.



Funded by:

