

# ENERGY TRANSITION DIALOGUES INSIGHTS



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## EXCLUSIVE SERIES VIEWS YOU CAN USE

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### **Bending the Emission Curve: what tools does China have?**

With annual CO<sub>2</sub> emissions equivalent to those of the US, EU, Japan and India combined, China holds the key of “make-it-or-break-it” in the global race to net zero by mid of the century. In order to deliver its commitments to the Paris Agreement of peaking emissions before 2030 and achieving carbon neutrality before 2060, China must bend its emission curve during the current decade.

### **How Rigid is China’s Emissions Curve?**

China’s CO<sub>2</sub> emissions, to a large extent, followed the environmental Kuznets Curve – GDP growth accompanied by rising emissions at early stage, but started to decouple over the last 15 years. The challenge now is to drive a much deeper disassociation aligned with netting zero pathway. Unlike Europe, Japan or America where emissions have already peaked naturally, China must artificially peak its emissions, drastically reduce them while maintaining economic growth. Continuing growth requires ample and affordable energy supply. Dramatic reduction of CO<sub>2</sub> wouldn’t happen without ensuring energy supply security, food security, supply chain security, financial system security and maintaining social order and cohesion. Those constraints, along with the rigidity of carbon emitting infrastructure, make the curve-bending a delicate act.

### **“All-of-the-Above” Toolbox?**

A comprehensive toolbox is required against the backdrop of the complexity, interconnectivity and inter-vulnerability of all physical infrastructure and social systems to deliver net-zero goals. Such a toolbox is called “1+N” by the Chinese decision-makers, representing a national guide for a coordinated endeavor. The “1” refers to the overall policy framework for achieving the “2030-2060” goals, while “N” designates all the implementation plans across major sectors, fields and regions.

### **Climate Challenge Needs “Two Hands” – Government & Market Forces?**

Climate change is a public good challenge. It requires strong “visible hand” (government intervention) in combination and coordination with “invisible hand” (market forces). China stands strong on the “visible” side, as is clearly reflected in its governance mechanisms. National goals are “deconstructed” into provincial targets, and then further cascaded down to municipal and county levels. And local government officials are literally held accountable to deliver those targets with their performance measured against the milestones on the way.

Our analysis shows that all the tools on the table remain inadequate to bend the curve this decade, in particular when put against the 1.5C goal, without causing economic disruptions. ■

*Paraphrased comments\**

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