China’s Plan on Energy Conservation and Emission Reduction Guides Action to Address non-CO\textsubscript{2} Climate Pollutants

24 January 2022 — Today China’s State Council issued the 14\textsuperscript{th} Five-Year Comprehensive Work Plan on Energy Conservation and Emission Reduction (hereinafter referred to as the “Energy Work Plan” or “Plan”). The Energy Work Plan reflects key actions to implement the 14\textsuperscript{th} Five-Year Plan (2021-2025) for National Economic and Social Development and Long-Range Objectives Through the Year 2035, adopted on 11 March 2021. (Essentially, the Plan adopted 11 March 2021 constitutes China’s master five-year planning outline that is supported by and implemented through subsequently issued sectoral and ministerial work plans).

The Energy Work Plan lays out the targets, prioritizes government-led projects, and describes supporting policy mechanisms to promote energy conservation and reduce pollution emissions during the 14\textsuperscript{th} Five-Year period (2021-2025). This Work Plan will serve as a primary nationwide guide for China’s actions to address non-CO\textsubscript{2} climate pollutants and achieve the green transformation of its economy.

In particular, the Energy Work Plan will help steer China’s efforts to prevent loss of control of the climate system. Energy efficiency improvements included in the Plan will indirectly reduce greenhouse gas emissions from energy generation. Additionally, pollution control policies incorporated into the Plan would help reduce emissions of the short-lived climate pollutants (SLCPs)—particularly hydrofluorocarbons, methane, black carbon soot, and tropospheric ozone. Fast mitigation strategies that bend the warming curve down in the near term by reducing SLCP emissions complement efforts to stabilize climate by reducing long-lived N\textsubscript{2}O, CO\textsubscript{2}, PFCs, and SF\textsubscript{6} in the longer term. Reduction of SLCPs therefore also helps limit temperature increases to 1.5°C and reduces the likelihood that we will trigger catastrophic climate impacts that can put mid-century carbon neutrality goals out of reach.

The Energy Work Plan specifies the following targets relevant to SLCP reduction:

- Reduce energy consumption per unit of GDP by 13.5% from the 2020 level by 2025;
- Reduce emissions of volatile organic compounds (VOCs) and nitrogen oxides (NOx) by over 10% from 2020 levels by 2025; and
- Raise energy efficiency levels and reduce major pollutant emissions in key industries to match international advanced levels.

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The energy intensity target in the Energy Work Plan (i.e., the target specifying energy consumption per unit of GDP) is coupled with a loosened energy consumption cap. The Plan provides that renewable energy will not be counted in the total energy consumption of localities during the 14th Five-Year period (2021-2025). This aspect of the Plan further incentivizes the deployment of renewable energy to achieve carbon neutrality before 2060. However, the Plan also indicates that the use of fuel as feedstocks for chemical processes will not figure in national and provinces’ energy consumption or intensity calculations either. The exemption will likely boost the use of coal in the coal-to-chemical industry.

Additionally, the Energy Work Plan sets the stage for energy conservation and emissions reduction projects relevant to SLCPs reduction, including:

- Carrying out clean production transformation and industrial wastewater reutilization for key industries;
- Improving collective storage and disposal of solid waste and control of VOC emissions for industrial parks;
- Promoting green and high-efficiency cooling; implementing green building standards for all new buildings in cities and towns and significantly increasing the market share of green and high-efficiency cooling products by 2025;
- Reducing emissions from the transportation sector, including strengthening emissions standards for diesel engines and promoting new-energy vehicles; setting the target for sales of new-energy vehicles to reach about 20% of total new vehicle sales by 2025;
- Mitigating agricultural emissions; setting targets of raising the efficiency of chemical fertilizers and pesticides applied to main crops to 43%, the comprehensive reutilization of crop straw to over 86%; the reutilization of livestock and poultry manure to over 80% and the domestic sewage treatment in rural areas to 40% by 2025;
- Continuing to promote the comprehensive regulation of VOCs and coordinating this with NOx emissions control;
- Strictly and rationally controlling the increase of coal consumption; setting targets such as increasing, by 2025, the percentage of non-fossil fuels to around 20% of total energy consumption; setting regional targets, including reducing the coal consumption in Beijing, Tianjin, Hebei, and surrounding areas by about 10%, reducing the coal consumption in the Yangtze River Delta region by about 5%, and achieving the negative growth of coal consumption in the Fenwei Plain region by 2025; and
- Expanding environmental infrastructure for treatment of wastewater and solid waste; setting targets such as, by 2025, achieving harmless disposal of 90% of urban sludge and incineration treatment for about 65% of municipal domestic waste.

The Plan also lays out a regulatory and policy “toolbox” available to authorities to support plan implementation. This includes specifying mandatory measures in the form of laws, regulations, and standards, providing financial incentives in the form of subsidies, tax benefits and green
procurement, employing market trading mechanisms, and providing for environmental monitoring and data integrity.

**Additional IGSD Resources:**

- China issues policy to control new production capacity for selected HFCs (28 December 2021).
- China releases zero-waste cities plan that will contribute to mitigating methane and other waste-sector emissions during the 14th Five-Year period (15 December 2021).
- China announces next steps on methane emissions control during the 14th Five-Year period (25 November 2021).
- China issues the 14th Five-Year Plan on Industry Green Development incorporating actions to address non-CO₂ climate pollutants (15 November 2021).
- China issues policy document guiding further action on pollution and climate change (2 November 2021).
- China releases white paper and convenes press conference on climate change ahead of COP26, including highlights involving non-CO₂ greenhouse gases (27 October 2021).
- China holds press briefing announcing plans for additional HFC-related policies and measures to implement the Kigali Amendment (16 October 2021).
- China releases regulatory notice to prohibit direct emissions of HFC-23 from production processes for HCFC-22 (14 September 2021).
- China convenes press conference announcing plans for domestic regulatory and policy action to implement the Kigali Amendment on HFC phasedown (26 July 2021).