

# The ultra-low emission campaign on heavy industries in China

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China's ultra-low emission (ULE) campaign on heavy industries from the Ministry of Ecology and Environment (MEE) is part of a broader effort to address air pollution and environmental degradation.<sup>1</sup> It targets several industries, including steel, cement, and coking. This policy update focuses on the campaign's transport provisions.

## POLICY LANDSCAPE AND PROVISIONS

The ULE campaign is a bucket of policies that began in 2015 and first targeted thermal power plants. In 2019, the steel industry was added to ULE campaign by MEE, marking the first time that a quantitative target was set for clean transport modes in the policies. In 2024, cement and coking were also included in the ULE campaign.<sup>2</sup> Requirements for coal-fired boilers and self-owned power plants were proposed by MEE in June 2024, but they have not been finalized.<sup>3</sup>

A mix of subsidies, incentives, penalties, and real-time monitoring systems have been adopted under the ULE campaign to ensure compliance, and these were accompanied by financial and technological support for facility updates and retrofits. For instance, steel companies that meet ultra-low emission standards are eligible for tax incentives. If the concentration of taxable air pollutants emitted is 30% lower than the pollutant emission standards, an environmental protection tax is levied at 75% of the standard rate; if the concentration is 50% lower than the standards, the tax is levied at 50% of the standard rate. Additionally, steel companies can trade their surplus emission rights through ultra-low emission retrofits for extra profits.

Several cross-ministerial policies also impact key industries involved in the ULE campaign. These policies offer general guiding principles, in addition to specific targets

- 1 Ministry of Ecology and Environment, "关于印发《全面实施燃煤电厂超低排放和节能改造工作方案》的通知 [Notice on Issuing the 'Work Plan for Comprehensive Implementation of Ultra-Low Emission and Energy-Saving Retrofits in Coal-Fired Power Plants']," 2015, [https://www.mee.gov.cn/gkml/hbb/bwj/201512/t20151215\\_319170.htm](https://www.mee.gov.cn/gkml/hbb/bwj/201512/t20151215_319170.htm).
- 2 Ministry of Ecology and Environment, "关于印发《关于推进实施水泥行业超低排放的意见》《关于推进实施焦化行业超低排放的意见》的通知 [Notice on Issuing the 'Opinions on Promoting the Measures of Ultra-Low Emissions in the Cement Industry' and the 'Opinions on Promoting the Measures of Ultra-Low Emissions in the Coking Industry']," 2024, [https://www.mee.gov.cn/xxgk/xxgk03/202401/t20240119\\_1064243.html](https://www.mee.gov.cn/xxgk/xxgk03/202401/t20240119_1064243.html).
- 3 Ministry of Ecology and Environment, "关于公开征求《关于高质量推进实施燃煤锅炉超低排放的意见（征求意见稿）》意见的函 [Letter on Soliciting Public Opinions on the 'Opinions on Promoting Implementation of Ultra-Low Emissions from Coal-Fired Boilers (Proposal for Public Comments)']," 2024, [https://www.mee.gov.cn/xxgk2018/xxgk/xxgk06/202406/t20240624\\_1078858.html](https://www.mee.gov.cn/xxgk2018/xxgk/xxgk06/202406/t20240624_1078858.html).

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and requirements. The three-year *National Plan of Blue-Sky Defense*, which began in 2018, was the first cross-ministerial policy to control emissions from industries that involved the State Council, MEE, the National Development and Reform Commission, the National Energy Administration, and several others.<sup>4</sup> Two cross-ministerial policies released in 2022, the *Action Plan for Deepening the Battle against Severely Polluted Weather, Ozone Pollution Prevention and Control* and the *Action Plan for the Battle Against Diesel Truck Pollution*, set targets for clean transportation in key industries.<sup>5</sup> The purpose of all of these efforts is to substantially decarbonize diesel-powered transportation fleets, including on-road diesel vehicles, off-road diesel equipment, and shipping engines, and the key industries include thermal power, steel, coal, coking, and non-ferrous metals.

The main focus of the transport provisions is shifting high-carbon-intensity transport modes to cleaner modes (e.g., railway, waterway, belt conveyors) and decarbonizing truck fleets by requiring cleaner engines (i.e., certified to China VI standards) or zero-emission trucks. Table 1 lists the ULE regulations for each industry and the related transport targets.

**Table 1**  
**Summary of industries involved in the ULE campaign and details of requirements for transport**

Industry	Effective year	Target year	Transport target details
Thermal power plants	2015	2020	Transport fleets are not mentioned
Steel	2019	2025	80% of goods to be transported by clean transport modes (e.g., railway, waterway, belt conveyor), and zero-emission and China VI trucks should be adopted to compensate for any gaps in implementing clean transport modes
Ports, nonferrous metals, and coal mining	2022	2025	80% of goods to be transported by clean transport modes for key regions; <sup>a</sup> 70% of goods to be transported by clean transport modes for other regions
Coal-fired boiler and self-owned power plants (Proposal)	2024	2028	80% of goods to be transported by clean transport modes (e.g., railway, waterway, belt conveyor), and zero-emission and China VI trucks should be adopted to compensate for any gaps in implementing clean transport modes
Coking	2024	2028	80% of goods to be transported by clean transport modes (e.g., railway, waterway, belt conveyor), and zero-emission and China VI trucks should be adopted to compensate for any gaps in implementing clean transport modes
Cement	2024	2028	80% of goods to be transported by clean transport modes (e.g., railway, waterway, belt conveyor), and zero-emission and China VI trucks should be adopted to compensate for any gaps in implementing clean transport modes

<sup>a</sup> The policies listed in the table, with the exception of those for thermal power plants and steel, mention several cities as provinces as key regions. These are: Beijing, Tianjin, Shijiazhuang, Tangshan, Handan, Xingtai, Baoding, Cangzhou, Langfang, Hengshui, Xiong'an New District, Taiyuan, Yangquan, Changzhi, Jincheng, Jinan, Zibo, Jining, Dezhou, Liaocheng, Binzhou, Heze, Zhengzhou, Kaifeng, Anyang, Hebi, Xinxiang, Jiaozuo, Puyang (incl. Dingzhou, Xinji, Jiyuan), Shanghai, Jiangsu province, Zhejiang province, Anhui province, Jinzhong, Yuncheng, Linfen, Lvliang, Luoyang, Sanmenxia, Xi'an, Tongchuan, Baoji, Xianyang, Weinan, and Yangling (including Xi'an-Xianyang New District, Hancheng).

## MEASURES AND TOOLS FOR COMPLIANCE

In conjunction with other relevant agencies, including the National Development and Reform Commission, the Ministry of Technology, and the Ministry of Industry and Information Technology, MEE evaluates the ULE campaign annually. The evaluation is part of the air pollution prevention and control performance assessment system. Below are details of two tools that were implemented to support compliance with the policies.

4 State Council, Ministry of Ecology and Environment, National Development and Reform Commission et al., “打赢蓝天保卫战三年行动计划 [Three-year Action Plan on Winning the Battle for Blue Sky],” 2018, [https://www.gov.cn/zhengce/content/2018-07/03/content\\_5303158.htm](https://www.gov.cn/zhengce/content/2018-07/03/content_5303158.htm).

5 Ministry of Ecology and Environment et al., “关于印发《深入打好重污染天气消除、臭氧污染防治和柴油货车污染治理攻坚战行动方案》的通知 [Notice on Issuing the Action Plan for Deepening the Battle against Severely Polluted Weather, Ozone Pollution Prevention and Control, and Battle against Diesel Truck Pollution],” 2022, [https://www.gov.cn/zhengce/zhengceku/2022-11/17/content\\_5727605.htm](https://www.gov.cn/zhengce/zhengceku/2022-11/17/content_5727605.htm).

## Performance rating scheme

- » In 2019, MEE introduced a performance rating scheme for 15 industries in which companies are classified as either level A, B, or C. Companies rated as level A can operate as usual during days designated by the Meteorological Administration as heavily polluted, and level B companies should reduce operations by 20% to 50%. Level C companies should scale down total operating capacity to half or even suspend work during heavily polluted days and for some industries, companies must shut down to control emissions during these times.<sup>6</sup> Cement companies that have completed ultra-low emission retrofitting can apply for a level A performance rating. Level A companies are also allowed, though not required, to adopt pollution control measures during heavily polluted days. Companies that have not completed ultra-low emission retrofits at their facilities must strictly implement emergency emission reduction measures according to the regulation during heavily polluted days.

## Electronic gate access control and video surveillance system

- » An electronic gate access control system covers vehicles carrying raw materials, fuels, and products entering and leaving a factory, and a video monitoring system should cover the entire process. Digital records should be recorded and uploaded to MEE's management platform. This includes logs that cover vehicle license plates, in/out activity timestamps, screenshots of the surveillance footage, vehicle type, cargo type and volume, vehicle identification number (VIN), vehicle model, engine model, manufacturer, registration date, fuel type, emission standard, fleet owners, and other information. The activity logs should be stored for no fewer than 5 years, and the video footage should be kept for at least 12 months.
- » Activity logs for vehicles and non-road machinery that operated in the factory grounds should also be recorded and uploaded to MEE's management platform. The information should be kept for no fewer than 5 years.

## OUTLOOK

The ULE campaign is part of a long-term effort by China to achieve its goal of improved air quality and a beautiful China.<sup>7</sup> It is expected that MEE will expand the regulated industries in the coming years. Although regulated industries will have various pathways to achieve clean transport in compliance with the rules, it is also expected that the ULE standards will continue driving the demand for electric freight trucks.

6 Ministry of Ecology and Environment, “关于加强重污染天气应对夯实应急减排措施的指导意见 [Guidance for Emergency Measures during Heavily Polluted Days],” 2019, [https://sthj.gansu.gov.cn/\\_\\_\\_local//E/2F/78/B0186454F5497C8CFCE6FBEFE0C\\_25083ECE\\_15A5FE1.pdf](https://sthj.gansu.gov.cn/___local//E/2F/78/B0186454F5497C8CFCE6FBEFE0C_25083ECE_15A5FE1.pdf).

7 State Council of People's Republic of China, “国务院关于印发《空气质量持续改善行动计划》的通知 [Notice from the State Council on Issuing the 'Action Plan for Continuous Improvement of Air Quality'],” 2023, [https://www.gov.cn/zhengce/content/202312/content\\_6919000.htm](https://www.gov.cn/zhengce/content/202312/content_6919000.htm); China Communist Party Central Committee and State Council of People's Republic of China, “中共中央 国务院关于全面推进美丽中国建设的意见 [Opinions from the CPC Central Committee and the State Council on Comprehensively Promoting the Construction of a Beautiful China],” 2023, [https://www.gov.cn/zhengce/202401/content\\_6925405.htm](https://www.gov.cn/zhengce/202401/content_6925405.htm).



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