

## VIII. Other Thematic Issues

### THE ENVIRONMENT

#### *Findings*

- During the Commission's 2025 reporting year, the Chinese Communist Party and government continued to state their intention to prioritize environmental protection.
- China continued to contribute to domestic and cross-border pollution, which experts suggested may contribute to "a vicious cycle of poverty and health hazards." Authors of a February 2025 study revealed "the existence of unidentified exposure sources" of lithium in Beijing municipality, resulting in higher lithium levels in maternal and umbilical cord blood samples of pregnant women in the city.
- While food and water security reportedly remain a top priority for the Party and government, PRC citizens continued to face difficulty accessing these resources. Local surface water monitoring stations located along the Leishui River in Hunan province detected "abnormal concentrations of thallium" in March 2025. In April 2025, the Guangxi Zhuang Autonomous Region experienced a severe drought, causing direct economic losses. More than 16,000 hectares of crops were severely damaged and 83,000 people faced a shortage of drinking water.
- Dams built by the PRC government, both in China and abroad, continued to contribute to environmental damage. The PRC government's building of dams in Tibet and along the Mekong River contributed to rapidly changing water levels and destruction of agriculture. A dam built in northwest China may have contributed to forced relocations and forced labor programs in the Xinjiang Uyghur Autonomous Region (XUAR).
- The Commission observed reports of environmental degradation tied to PRC-affiliated mines globally, including in the Democratic Republic of Congo, Indonesia, Laos, Peru, Tajikistan, and Zambia.
- PRC authorities sentenced 29-year-old Tibetan **Tsongon Tsering** to eight months in prison for "disrupting social order." Tsongon Tsering had posted a video online denouncing local officials for failing to adequately address the environmental damage to the Tsaruma River caused by illegal mining.

*PRC Government Actions and Legal Developments*

During the Commission's 2025 reporting year, Chinese Communist Party (CCP) and government officials repeated their commitment to environmental protection in their public messaging, both domestically and internationally.<sup>1</sup> At the December 2024 Central Economic Work Conference, members of the Standing Committee of the Chinese Communist Party Central Committee Political Bureau urged continued efforts to "keep the skies blue, waters clear and lands clean."<sup>2</sup> Subsequently, in Premier Li Qiang's March 2025 government work report at the National People's Congress, he reaffirmed the CCP's commitment to ecological protection, pollution reduction, and resource conservation.<sup>3</sup> He also emphasized the Party's desire to "actively engage in and steer global environmental and climate governance."<sup>4</sup> General Secretary and President Xi Jinping delivered remarks at a virtual summit in April 2025 hosted by U.N. Secretary-General António Guterres and Brazil's President Luiz Inácio Lula da Silva, where Xi extolled environmental protection and "harmonious coexistence between humanity and nature."<sup>5</sup>

PRC government actions and legal developments in the past year addressing environmental protection included the following:

- On July 4, 2024, the China Meteorological Administration published the annual *Blue Book on Climate Change of China 2024*.<sup>6</sup> The publication noted that instances of heavy precipitation and extreme high temperatures in China were "more frequent and severe," compared to extreme low temperature events in the country.<sup>7</sup>
- On July 11, 2024, the PRC State Council Information Office released a white paper titled *Marine Eco-Environmental Protection in China*.<sup>8</sup> The white paper featured an overview of the government's efforts to achieve "harmonious coexistence between humans and the ocean."<sup>9</sup> Approaches discussed in the white paper included regional-specific monitoring mechanisms and pollution prevention initiatives across land and sea.<sup>10</sup>
- Effective October 1, 2024, the PRC Rare Earth Management Regulations aim to address the protection and development of rare earth resources within the country.<sup>11</sup> The regulations require companies engaged in rare earth mining and smelting to "adopt reasonable environmental risk prevention, ecological protection, and safety protection measures" to prevent environmental pollution.<sup>12</sup> The International Energy Agency noted that the regulations seemingly underscore that "rare earth resources belong to the state."<sup>13</sup>
- On December 27, 2024, the China Meteorological Administration and the Chinese Academy of Social Sciences released the *Green Book of Climate Change*, an annual report that compiles the PRC's domestic policies addressing challenges posed by climate change and provides an update on their implementation.<sup>14</sup> The report highlighted the application of new technologies such as artificial intelligence to provide accurate predictive analytics about climate.<sup>15</sup>

- Effective January 1, 2025, the *PRC Energy Law* aims to safeguard national energy security and coordinate development and use of coal, solar, oil, natural gas, hydrogen, wind, and other forms of energy.<sup>16</sup> The law is China's first piece of legislation that provides a legal structure at the national level for cross-sectoral energy planning.<sup>17</sup> The world's largest solar plant is located in the Xinjiang Uyghur Autonomous Region (XUAR), and as of November 2024, the XUAR was reported to be an emerging key hub for coal production in China.<sup>18</sup> [For more information about industries implicated in or at risk of complicity in rights abuses in the XUAR, see Chapter 12—Business and Human Rights.]
- On February 23, 2025, the Chinese Communist Party Central Committee and State Council released the *2025 No. 1 Document*, which outlines annual top priorities for the country's agricultural sector and rural development.<sup>19</sup> Initiatives include using new technologies to increase productivity, coordinating waste and sewage management, and "curbing illegal activities that damage arable land."<sup>20</sup> According to an analysis by the U.S. Department of Agriculture's Foreign Agricultural Service, the document reveals that "[w]hile food security remains a cornerstone, the policy now places greater emphasis on reforming and modernizing rural practices to address emerging challenges in China's rural revitalization efforts."<sup>21</sup>
- On February 28, 2025, the China Meteorological Administration's National Climate Center released the *China Climate Bulletin 2024*, which revealed that in 2024, the national average temperature "reached a record high."<sup>22</sup> The bulletin also noted that the country experienced more precipitation in 2024 compared to previous years.<sup>23</sup>

### Pollution

China continued to contribute to domestic and cross-border pollution, which experts suggested may contribute to "a vicious cycle of poverty and health hazards."<sup>24</sup> In the fall of 2024, high humidity and low wind speeds in Beijing municipality and other parts of northern China exacerbated and contributed to air pollution and persistent smog.<sup>25</sup> Researchers found that the number of "air-pollution-induced premature deaths" varied by province, with southern and southwestern China, in particular, impacted by heavy pollution from northerly winds in the winter.<sup>26</sup> Chinese workers with sufficient means tend to seek opportunities in areas with better air quality, amplifying economic disparities with low-income individuals or rural residents who have lower mobility.<sup>27</sup> One study noted that "air pollution will significantly reduce the innovation output of inventors . . . and ultimately impede labor productivity as well as hinder economic and social advancement."<sup>28</sup> In February 2025, Li Tianwei, Director of the Ministry of Ecology and Environment's Department of Atmospheric Environment, announced that the Ministry "aims to eliminate days with heavy pollution [in 2025], despite expecting less favorable weather conditions," by bolstering its air quality forecasting systems and emission reduction efforts.<sup>29</sup> A briefing published in June 2025 by a researcher at the Centre for Research on Energy

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and Clean Air noted that although China’s national average fine particulate matter (PM2.5) level decreased in the first quarter of 2025, certain provinces in western China experienced “significant increases.”<sup>30</sup> The researcher observed that the XUAR surpassed Henan province to become the most polluted region in the country, with a PM2.5 level 14 times higher than the World Health Organization’s recommended PM2.5 level of 5 µg/m<sup>3</sup>.<sup>31</sup>

**“Mystery” Lithium Pollution in Beijing Municipality**

In a February 2025 research report, authors uncovered in Beijing municipality “the existence of unidentified exposure sources” of lithium—a critical mineral used in batteries—which resulted in higher lithium levels in maternal and umbilical cord blood samples of pregnant women in the city.<sup>32</sup> The researchers warned that “as lithium demand continues to grow, increasing environmental lithium concentrations pose potential health risks to sensitive populations, particularly pregnant women and fetuses.”<sup>33</sup> In a *South China Morning Post* article summarizing the report, the author noted that a lithium battery factory opened in October 2024 in Beijing municipality.<sup>34</sup> International human rights standards on health include Article 12 of the International Covenant on Economic, Social and Cultural Rights, which China signed on October 27, 1997, and ratified on March 27, 2001.<sup>35</sup>

*Food and Water Security*

While food and water security reportedly remains a top priority for the Party and government, PRC citizens continued to face difficulty accessing these resources.<sup>36</sup> In August 2024, Chinese media outlets *China Central Television (CCTV)* and *Sixth Tone* reported that high temperatures and other severe weather patterns have resulted in a more than 40 percent increase in vegetable prices—the highest increase recorded in China in this past decade.<sup>37</sup> The weighted average price of vegetables that month reportedly was 25 percent higher than the previous year.<sup>38</sup> In the first half of 2024, citizens reportedly had difficulty accessing water due to droughts and insufficient water storage.<sup>39</sup> In October 2024, Chinese state media reported that authorities established contingency plans and monitoring stations to gather grain market information across the country to bolster “its emergency food supply in response to increasing extreme weather events and natural disasters.”<sup>40</sup>

According to observers and Chinese media, local surface water monitoring stations located between Chenzhou municipality and Hengyang municipality along the Leishui River in Hunan province detected “abnormal concentrations of thallium” in March 2025.<sup>41</sup> Water contaminated by thallium, a toxic colorless metal, causes adverse health effects including cancer and organ damage.<sup>42</sup> The *Southern Metropolis Daily (Nanfang Dushi Bao, 南方都市报)*, owned by Party-run *Nanfang Media Group*,<sup>43</sup> noted that the abnormal levels of thallium caused “trans-municipal pollution and threat[ened] downstream water safety.”<sup>44</sup> Residents reportedly rushed to stock-pile drinking water.<sup>45</sup>

In April 2025, China experienced higher-than-average temperatures and low precipitation levels.<sup>46</sup> Chinese state media reported that 52 counties in the Guangxi Zhuang Autonomous Region in southern China were impacted by a severe drought, causing direct economic losses of up to 210 million yuan (US\$28.8 million).<sup>47</sup> A *Global Times* article directly acknowledged that the drought has affected agricultural production and access to drinking water for livestock and people.<sup>48</sup> More than 16,000 hectares of crops were severely damaged and 83,000 people faced a shortage of drinking water.<sup>49</sup>

### *Impact of the PRC's Dams*

Dams built by the PRC government, both in China and abroad, continued to pose threats to the environment and local communities. In July 2024, a dam located in Dongting Lake, Huarong county, Hunan province, ruptured and resulted in flooding and the evacuation of more than 5,000 people.<sup>50</sup> The PRC government's building of hydropower dams in Tibet and along the Mekong River has contributed to the displacement of local Tibetan communities, rising water levels, and increased the risk of landslides and earthquakes.<sup>51</sup> According to the International Campaign for Tibet, at least 193 known hydropower dams have been "built or planned across Tibet" since 2000.<sup>52</sup> Reports from international media this past year discussed China's previously approved plans to construct the Yarlung Tsangpo dam—the "world's largest hydropower dam"—and raised concerns about further exploitation of Tibetan land and downstream effects on the livelihoods of local communities in India and Bangladesh.<sup>53</sup> [For more information on threats to Tibetan culture, see Chapter 14—Tibet.]

Local communities in Southeast Asia have expressed concern about the PRC's dams along the Mekong River—dams constructed without prior consultation with downstream countries Cambodia, Laos, Thailand, and Vietnam.<sup>54</sup> Compared to other forms of infrastructure, China's 12 hydropower dams located in the upper basin of the Mekong River "are arguably the source of the greatest environmental harm," according to experts at the International Crisis Group.<sup>55</sup> In December 2024, more than 150 people in northern Thailand peacefully protested the construction of the Pak Beng Hydropower Project, a dam to be built in Laos bordering Thailand's Chiang Rai province by China Datang Overseas Investment Co., Ltd. and Thailand-based Gulf Energy Development.<sup>56</sup> China Datang Overseas Investment Co., Ltd. is a subsidiary of PRC state-owned China Datang Corporation.<sup>57</sup> Thai protesters and experts called for more ecological studies to first be conducted to determine the project's environmental impact, including the risk of rising water levels and the destruction of agriculture and culturally important sites.<sup>58</sup> In addition, several environmental organizations and residents from Laos and Thailand voiced opposition to the construction of the Laos-based Sanakham hydropower dam developed by Datang (Lao) Sanakham Hydropower Co. Ltd, a subsidiary of China Datang Corporation, citing concerns about potential forced relocations and disruptions to local biodiversity.<sup>59</sup>

A dam built by the PRC government in northwest China may have contributed to forced relocations and forced labor programs

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in the Xinjiang Uyghur Autonomous Region (XUAR).<sup>60</sup> A reporter from Party-run media outlet *Global Times* made a visit to the XUAR’s largest hydropower dam—the Aratax Water Conservation Project, referred to as “Xinjiang’s Three Gorges”—and to an “ethnic minority community village that was relocated due to the project’s construction,” according to an in-depth report published in August 2024.<sup>61</sup> The report featured an individual from the dam construction company who “mobiliz[ed] villagers to relocate”<sup>62</sup> and also included a photo documenting “local women work[ing] at a factory in Tong’an township that produces socks.”<sup>63</sup> [For information on forced relocations and forced labor involving Turkic and Muslim XUAR residents, see Chapter 12—Business and Human Rights and Chapter 15—Xinjiang Uyghur Autonomous Region.]

Repression of Environmental Advocacy in the Tibet Autonomous Region

China’s Constitution provides for freedom of speech, assembly, and association, as do the International Covenant on Civil and Political Rights—which China has signed but not ratified—and the Universal Declaration of Human Rights.<sup>64</sup> In November 2024, reports emerged that officials sentenced 29-year-old Tibetan **Tsongon Tsering** to eight months in prison for “disrupting social order.”<sup>65</sup> Tsongon Tsering had posted a video online denouncing local officials for failing to adequately address the environmental damage to the Tsaruma River caused by illegal mining activities conducted by Chinese construction company Anhui Xianhe Construction Engineering Company.<sup>66</sup> According to the International Campaign for Tibet, Tsongon Tsering’s case is “not isolated but rather symptomatic of broader challenges facing Tibet’s environment and its defenders.”<sup>67</sup> [For more information on Tsongon Tsering and the PRC’s suppression of advocacy in Tibet, see Chapter 14—Tibet.]

Impact of the PRC’s Mining

The Commission observed reports of environmental degradation this past year tied to PRC-affiliated mines globally, including in:

- **Democratic Republic of Congo.** In a November 2024 article posted on *Africa Defense Forum Magazine*, a quarterly publication of U.S. Africa Command, authors warned that the environmental impact of PRC gold mining companies operating illegally in South Kivu province in the eastern part of the country is “devastating,” citing water pollution, river dredging, and land degradation.<sup>68</sup> The *Associated Press* reported that a Chinese-run gold mine is “rapidly encroaching” on the Okapi Wildlife Reserve, recognized as an endangered U.N. World Heritage site, increasing the risk of poaching and pollution.<sup>69</sup> In a February 2025 report, researchers noted that PRC state-owned Sicominex’ copper and cobalt mining operations resulted in destruction of local agricultural infrastructure and raised concerns about potential forced evictions.<sup>70</sup>
- **Indonesia.** According to the Center for Advanced Defense Studies, a non-profit research organization, Chinese companies or shareholders—several of which have direct links to the PRC



government or receive support from PRC state-owned banks—control at least 75 percent of Indonesia’s nickel refining industry.<sup>71</sup> Observers reported examples of negative environmental impacts associated with these companies, including water pollution, particulate pollution, and severe flooding.<sup>72</sup>

- **Laos.** Residents of northern Laos continued to express concern this reporting year about water and food security following a February 2024 chemical leak from Laos’s largest rare earth mining site jointly owned by Beijing Platinum World Technology Development and Laos’s Phadang Hungheuang Huaphan Mining Sole Company.<sup>73</sup> A Laos-based journalist documented evidence of ongoing harm to local aquaculture from the leak, including water contamination and agricultural land loss, as well as illness.<sup>74</sup>

- **Peru.** Beginning in 2013, nearly the entire population of Morococha, a town located in central Peru, was forced to relocate to a flood-prone wetland area due to a Chinese mining company’s construction of an open pit copper mine.<sup>75</sup> A report in October 2024 revealed that the relocated residents faced extreme poverty, and residents who refused to relocate had limited access to electricity and clean water.<sup>76</sup> In a February 2025 data analysis of the PRC’s financing for transition minerals, researchers identified Las Bambas and Toromocho copper mines in Peru as “two of the largest destinations for Chinese state-directed financing for overseas transition mineral operations.”<sup>77</sup> Communities near Las Bambas’s mining operations reportedly have previously raised concerns about toxic chemicals, dust pollution, and water pollution.<sup>78</sup> These instances are reflective of the PRC’s lack of safeguards to ensure “compliance with environmental or labor regulations” in its economic deals with Peru.<sup>79</sup>

- **Tajikistan.** A July 2024 report entitled *Dead Fish and Dirty Air: Chinese Firms Leave Waste as They Mine Tajikistan’s Gold* by *Radio Free Europe/Radio Liberty* assessed the health and environmental impacts of four PRC-affiliated projects.<sup>80</sup> The report revealed damaged crops, health issues, including breathing problems and stillbirths, and troubling exposures to cyanide.<sup>81</sup> The report also found that some Tajik officials “protect[ed] the Chinese companies from public scrutiny because China is Tajikistan’s main source of foreign investment.”<sup>82</sup>

- **Zambia.** A February 2025 acid spill of an estimated 50 million liters of acidic waste from a copper mine owned by Sino-Metals Leach Zambia Limited contaminated the country’s most important waterway, the Kafue River, resulting in widespread threats to water and food security.<sup>83</sup> Sino-Metals Leach Zambia Limited is an enterprise of PRC state-owned China Nonferrous Mining Corporation Limited.<sup>84</sup> A local environmental activist described the leak as “an environmental disaster” with “catastrophic consequences.”<sup>85</sup> Zambian civil society organizations urged Sino-Metals to “finance and conduct cleanup efforts,” and an environmental coalition called on the Zambian government to immediately prosecute Chinese companies for their “environmental crimes.”<sup>86</sup> Civil society advocates expressed concern about how China’s “significant economic and political influence . . . could potentially undermine” their push for accountability.<sup>87</sup>

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### *The PRC in the South China Sea*

In January 2025, an analysis published by the Center for Strategic and International Studies documented environmental damage in the South China Sea linked to regional claimants, including the PRC.<sup>88</sup> The authors reviewed commercial satellite imagery and found that the PRC's artificial island expansion activities—including landfilling and dredging—have destroyed about 4,648 acres of coral reefs since 2013.<sup>89</sup> According to the researchers' analysis, China caused more reef destruction than Vietnam, the Philippines, Malaysia, and Taiwan combined.<sup>90</sup> The United Nations Convention on the Law of the Sea, which China ratified, includes the obligation to “protect and preserve the marine environment.”<sup>91</sup>



## Notes to Chapter 11—The Environment

<sup>1</sup>Diao Fanchao, “刘振民：科技创新引领产业升级，环保企业要敢于‘揭榜挂帅’” [Liu Zhenmin: Technological innovations leads industrial upgrading, environmental protection should dare to “Take the lead”], *Paper*, April 10, 2025; Congressional-Executive Commission on China, “Annual Report 2024,” *U.S. Government Publishing Office*, December 2024, 202. The CECC has been covering the Environment in the Annual Report since 2005 as part of its mandate to monitor the PRC’s compliance with commitments made in law, treaties, and international covenants.

<sup>2</sup>Xi Delivers Important Speech at Central Economic Work Conference,” *Xinhua*, reprinted in *National Committee of the Chinese People’s Political Consultative Conference*, updated December 17, 2024; Congressional-Executive Commission on China, “Annual Report 2024,” *U.S. Government Publishing Office*, December 2024, 203.

<sup>3</sup>State Council, “Full text: Report on the Work of the Government,” updated March 12, 2025, 28–29.

<sup>4</sup>State Council, “Full text: Report on the Work of the Government,” updated March 12, 2025, 28–29.

<sup>5</sup>“习近平向气候和公正转型领导人峰会发表致辞” [Xi Jinping delivers a speech to the Leaders’ Meeting on Climate and the Just Transition], *Xinhua*, April 23, 2025; Laura Quinones, “World Leaders Rally for ‘Full-Speed’ Climate Action Ahead of COP30,” *UN News*, April 23, 2025.

<sup>6</sup>Blue Book on Climate Change 2024 Unveiled,” *China Meteorological News Press*, reprinted in *China Meteorological Administration*, updated July 5, 2024.

<sup>7</sup>Blue Book on Climate Change 2024 Unveiled,” *China Meteorological News Press*, reprinted in *China Meteorological Administration*, updated July 5, 2024.

<sup>8</sup>White Paper: China Sees Marked Improvement in Marine Environment,” *Xinhua*, reprinted in *PRC State Council Information Office*, July 11, 2024.

<sup>9</sup>Full Text: Marine Eco-Environmental Protection in China,” *Xinhua*, reprinted *PRC State Council Information Office*, July 11, 2024.

<sup>10</sup>Full Text: Marine Eco-Environmental Protection in China,” *Xinhua*, reprinted *PRC State Council Information Office*, July 11, 2024. For more information on marine environmental protection in China, see Congressional-Executive Commission on China, “Annual Report 2024,” *U.S. Government Publishing Office*, December 2024, 202.

<sup>11</sup>Ministry of Human Resources and Social Security, “李强签署国务院令 公布‘稀土管理条例’” [Li Qiang signed a State Council Order to announce the “Rare Earth Management Regulations”], July 1, 2024; International Energy Agency, “Regulations on the Management of Rare Earths,” updated January 30, 2025.

<sup>12</sup>State Council, “稀土管理条例” [Rare Earth Management Regulations], June 22, 2024.

<sup>13</sup>International Energy Agency, “Regulations on the Management of Rare Earths,” updated January 30, 2025.

<sup>14</sup>Annual Report on Actions to Address Climate Change (2024) Released,” *China Meteorological News Press*, December 31, 2024.

<sup>15</sup>Annual Report on Actions to Address Climate Change (2024) Released,” *China Meteorological News Press*, December 31, 2024.

<sup>16</sup>“中华人民共和国能源法” [PRC Energy Law], passed November 8, 2024, effective January 1, 2025, arts. 1, 2.

<sup>17</sup>“China’s First Energy Law Officially Enforced to Ensure National Energy Security, Promote Green Transition,” *Global Times*, January 1, 2025; “Clean Energy: China’s First Energy Law Takes Effect,” *CGTN*, January 1, 2025.

<sup>18</sup>“Rise of China’s Xinjiang as Coal Hub Undercuts Climate Goals,” *Bloomberg*, November 27, 2024; Nithin Coca, “The World’s Largest Solar Plant Is Greenwashing China’s Uyghur Genocide,” *Atmos*, December 11, 2024.

<sup>19</sup>Foreign Agricultural Service, U.S. Department of Agriculture, “China: Number One Document Provides Beijing’s Thoughts and Highlights Food Security and Rural Reform,” March 17, 2025.

<sup>20</sup>“中共中央 国务院关于进一步深化农村改革 扎实推进乡村全面振兴的意见” [Opinions of the CPC Central Committee and State Council on further deepening rural reform and promoting comprehensive rural revitalization], *Xinhua*, reprinted in *PRC Government*, February 23, 2025; Foreign Agricultural Service, U.S. Department of Agriculture, “China: Number One Document Provides Beijing’s Thoughts and Highlights Food Security and Rural Reform,” March 17, 2025; Sun Yiwen et al., “Chart of the Day: Key Takeaways from China’s 2025 No. 1 Central Document,” *CGTN*, February 25, 2025.

<sup>21</sup>Foreign Agricultural Service, U.S. Department of Agriculture, “China: Number One Document Provides Beijing’s Thoughts and Highlights Food Security and Rural Reform,” March 17, 2025.

<sup>22</sup>“中国气候公报 China Climate Bulletin (2024),” *China Meteorological Administration*, 2; “China Climate Bulletin 2024 Rolled Out,” *China Meteorological News Press*, reprinted in *China Meteorological Administration*, updated March 1, 2025.

<sup>23</sup>“中国气候公报 China Climate Bulletin (2024),” *China Meteorological Administration*, 2; “China Climate Bulletin 2024 Rolled Out,” *China Meteorological News Press*, reprinted in *China Meteorological Administration*, updated March 1, 2025.

<sup>24</sup>Biao Luo et al., “Dietary Changes are Associated with an Increase in Air Pollution-Related Health and Environmental Inequity in China,” *Communications Earth and Environment*, vol. 6, art. 79, February 2025. See also Weiyang Hu, et al., “Health Burdens Related to Emission Sources and Cross-Provincial Air Pollution in China,” *npj Climate and Atmospheric Science*, vol. 7, art. 312, December 2024; Congressional-Executive Commission on China, “Annual Report 2023,” *U.S. Government Publishing Office*, May 2024, 235.

<sup>25</sup>Niu Yuhuan, “Air Pollution Lingers in Northern China,” *Dialogue Earth*, November 7, 2024.

<sup>26</sup>Weiyang Hu, et al., “Health Burdens Related to Emission Sources and Cross-Provincial Air Pollution in China,” *npj Climate and Atmospheric Science*, vol. 7, art. 312, December 2024.

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<sup>27</sup> Jinhuang Chen and Xuewen Long, “The Impact of Air Pollution on Career Changes among Chinese Workers,” *Scientific Reports*, vol. 15, art. 3782, January 30, 2025, 9, 11.

<sup>28</sup> Jinhuang Chen and Xuewen Long, “The Impact of Air Pollution on Career Changes among Chinese Workers,” *Scientific Reports*, vol. 15, art. 3782, January 30, 2025, 2.

<sup>29</sup> Hou Liqiang, “Ministry Aims to Bring an End to Heavy Pollution Days,” *China Daily*, updated February 24, 2025; “China Aims to Eliminate Severe Air Pollution This Year,” *Reuters*, February 25, 2025.

<sup>30</sup> Chengcheng Qiu, “China’s Air Pollution Shifts West: Industrial Relocation Outpaces Clean Energy Transition,” *Centre for Research on Energy and Clean Air*, June 4, 2025.

<sup>31</sup> Chengcheng Qiu, “China’s Air Pollution Shifts West: Industrial Relocation Outpaces Clean Energy Transition,” *Centre for Research on Energy and Clean Air*, June 4, 2025; Congressional-Executive Commission on China, “Annual Report 2024,” *U.S. Government Publishing Office*, December 2024, 204. China’s PM<sub>2.5</sub> national standard is 35 µg/m<sup>3</sup>.

<sup>32</sup> Yu Li et al., “Lithium Levels in Umbilical Cord Blood from Two Cities in China: Indicating Unidentified Sources of Human Exposure,” *Environmental Science & Technology*, vol. 59, no. 9, February 24, 2025; Shi Huang, “Unusually High Lithium Levels Among Beijing’s Pregnant Women and Newborns: Study,” *South China Morning Post*, March 5, 2025, updated March 23, 2025; “A New Frontier for Global Energy Security: Critical Minerals,” *International Energy Agency*, (webpage), accessed May 15, 2025.

<sup>33</sup> Yu Li et al., “Lithium Levels in Umbilical Cord Blood from Two Cities in China: Indicating Unidentified Sources of Human Exposure,” *Environmental Science & Technology*, vol. 59, no. 9, February 24, 2025.

<sup>34</sup> Shi Huang, “Unusually High Lithium Levels Among Beijing’s Pregnant Women and Newborns: Study,” *South China Morning Post*, March 5, 2025, updated March 23, 2025.

<sup>35</sup> “International Covenant on Economic, Social and Cultural Rights,” *United Nations*, adopted December 16, 1966, entry into force January 3, 1976, art. 12; “International Covenant on Economic, Social and Cultural Rights,” *United Nations Treaty Collection*, Chapter IV Human Rights.

<sup>36</sup> Tiffany May and Claire Fu, “Record Rainfall Spoils Crops in China, Rattling Its Leaders,” *New York Times*, September 2, 2024; “China Intensifies Emergency Food Supply Amid Increasing Weather Events,” *Xinhua*, reprinted in *China Daily*, updated October 16, 2024; Yun Wang, “Explained: Why is China So Worried About Food Security?” *Radio Free Asia*, February 26, 2025; “China Outlines Key Tasks to Deepen Rural Reforms, Advance Rural Revitalization,” *CGTN*, updated February 23, 2025; “China Advances Food Security Amid Record Grain Output,” *China Daily*, reprinted in *Ministry of Agriculture and Rural Affairs*, March 9, 2025; Charles Parton, “China’s National People’s Congress 2025: Putting the Politics into Perspective,” *Council on Gestrategy*, March 26, 2025. For a discussion on food security in the PRC from previous Commission reporting, see Congressional-Executive Commission on China, “Annual Report 2023,” *U.S. Government Publishing Office*, May 2024, 137–38; Congressional-Executive Commission on China, “Annual Report 2024,” *U.S. Government Publishing Office*, December 2024, 203–5.

<sup>37</sup> “蔬菜价格创近10年同期最高值 为何持续上涨?” [Vegetable prices hit the highest level in the past 10 years. Why does it continue to rise?], *CCTV News*, August 14, 2024; Qitong He, “Extreme Weather Sends Food Prices Soaring in China,” *Sixth Tone*, August 21, 2024.

<sup>38</sup> Bernard Orr, “China’s Extreme Weather Takes Bite out of Produce as Prices Soar,” *Reuters*, August 22, 2024.

<sup>39</sup> “国家防灾减灾救灾委员会办公室 应急管理部发布2024年上半年全国自然灾害情况” [Office of National Disaster Prevention, Reduction and Relief Committee, Ministry of Emergency Management’s release of national natural disasters in the first half of 2024], *PRC Ministry of Emergency Management*, July 12, 2024.

<sup>40</sup> “China Intensifies Emergency Food Supply amid Increasing Weather Events,” *Xinhua*, reprinted in *China Daily*, updated October 16, 2024.

<sup>41</sup> Diao Fanchao, “湖南湘江支流耒水一断面监测出铊浓度异常, 涉事企业已锁定” [Abnormal thallium concentration levels detected in a section of Leishui, a tributary of the Xiang River in Hunan province. Company involved has been identified], *Paper*, March 24, 2025; Xu Shuting, “湖南耒水铊大面积污染 民众抢购饮用水” [Large-scale thallium pollution in Leishui in Hunan province causes people to rush to purchase drinking water], *Radio Free Asia*, March 24, 2025; David Bandurski, “A River Crisis Prompts Rare Coverage,” *China Media Project*, March 24, 2025.

<sup>42</sup> David Bandurski, “A River Crisis Prompts Rare Coverage,” *China Media Project*, March 24, 2025.

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