



# **DOUBLE STANDARD**

# 二重基準

**A DEADLY DOUBLE STANDARD**

**How Japan's financing of highly  
polluting overseas coal plants  
endangers public health**

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# A deadly double standard

**How Japan's financing of highly polluting overseas coal plants endangers public health**

# Executive summary

Japan is the only G7 country still actively building new coal-fired power plants at home and abroad, and is the second biggest public investor in overseas coal-fired power plant projects among the G20 countries through its public finance agencies (PFAs). Coal is the single worst contributor to global climate change, responsible for almost half the world's carbon dioxide emissions.<sup>1,2</sup> In addition, burning coal releases high amounts of dangerous air pollutants that are known to be responsible for premature deaths by causing a range of severe diseases.<sup>3,4</sup> Most overseas coal power projects supported by Japan employ emission control techniques far inferior to those required at home. In effect, Japan is operating a deadly double standard: financing coal-fired power plants overseas that create air pollution at levels that would not be accepted in Japan.

The double standard in emission limits for dangerous air pollutants allows Japanese-financed coal power plants to emit up to 13 times more nitrogen oxides (NO<sub>x</sub>), 33 times more sulfur dioxide (SO<sub>2</sub>) and 40 times more dust pollution than those built in Japan. This report reveals the deadly consequences of that double standard, in terms of premature deaths caused by air pollution, and evaluates how many of those deaths could be avoided if the projects funded by Japan overseas applied the same emission limits as the new coal power plants in Japan.

The impact of Japan's double standard in emission limits is evaluated by comparing the number of premature deaths caused in two different scenarios:

- **Scenario 1:** Predicted coal-fired power plant emissions based on the application of current local emission limits and actual or projected plant utilization.
- **Scenario 2:** Predicted coal-fired power plant emissions if median Japanese emission limits from coal power plants that were permitted or under assessment or planning since January 2012 were applied.

Despite the complexity of Japan's national standards for emissions from coal-fired power plants, emission limits set in environmental permits for new power plant projects are strict. We carried out detailed atmospheric modeling and health impact assessments for 17 coal power plants financed by Japanese PFAs overseas during the period January 2013 to May 2019, located in the top five invested countries: Indonesia, Vietnam, Bangladesh, Morocco, India.<sup>5</sup>

Our results indicate that if the median Japanese emission limits were applied – not just in Japan but to all coal power plants financed by Japanese PFAs outside of Japan – an estimated 5,000 to 15,000 premature deaths would be avoided each year. Over the typical 30-year operation period of such power plants, this amounts to between 148,000 and 410,000 avoidable premature deaths resulting from the 17 coal power plants financed by Japanese PFAs and operating under poor emission limits. Most of the deaths would occur in India, Indonesia, Vietnam and Bangladesh,

countries where dangerous air pollution is already a problem. Japanese investments in coal power are making it even harder for these countries to reduce air pollution and meet public health standards.

All countries need to shift immediately away from coal and toward renewable energy sources to avoid catastrophic climate change and prevent the health impacts of coal emissions, including premature death. Countries must work together towards a carbon-neutral economy, and Japan should play a leadership role in doing so. In contrast to the unethical and deadly double standard that Japan is applying now to coal power projects – causing illness, premature death and climate change – Japan's PFAs should support renewable energy solutions instead. Renewable energy and energy efficiency are getting cheaper than building new coal-fired power plants, and rather than exacerbating air pollution and climate change, they provide a solution.

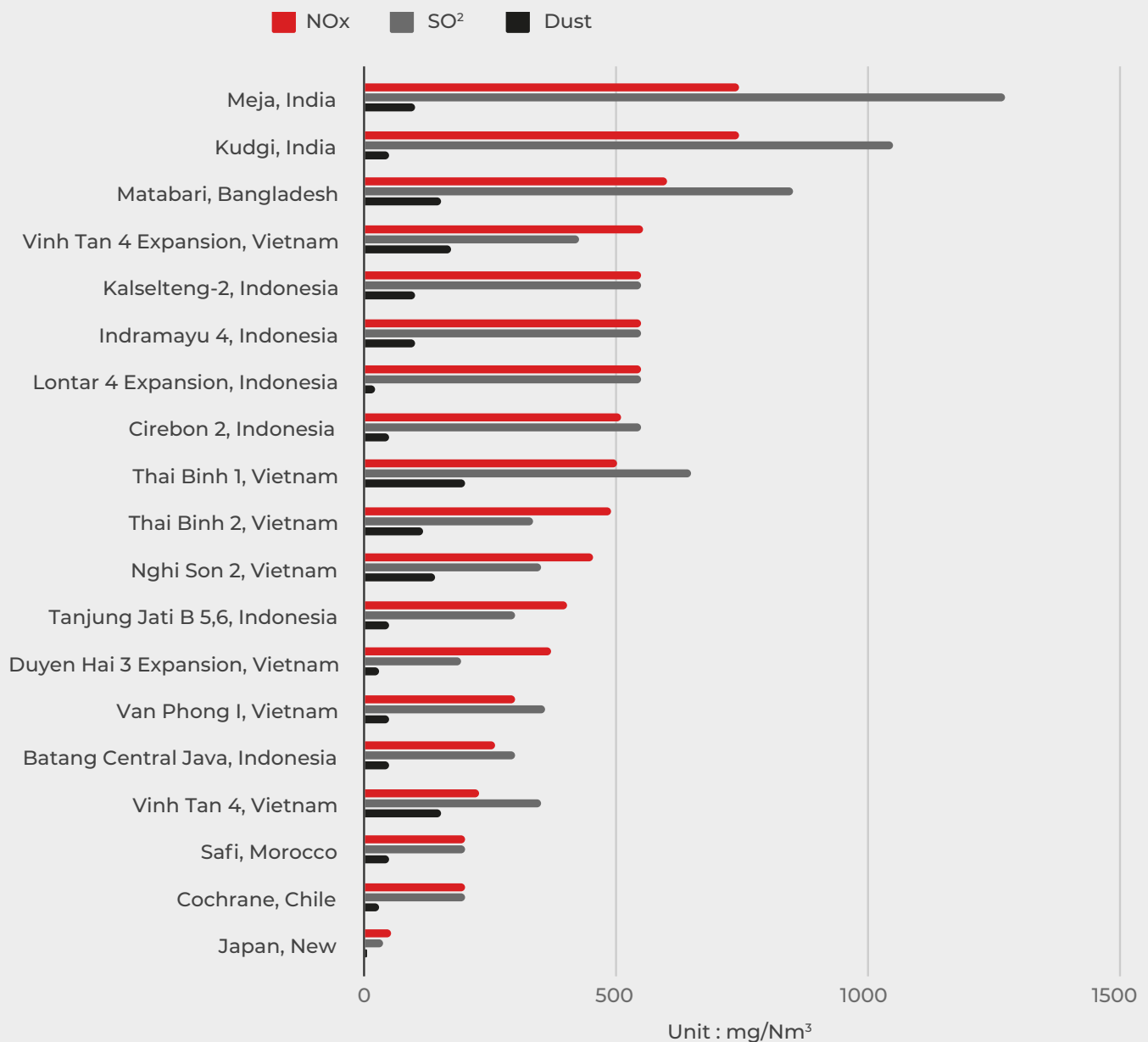


Figure: Emission limits for air pollutants NO<sub>x</sub>, SO<sub>2</sub> and Dust for Japanese coal power plants<sup>6</sup> compared to Japanese-financed coal power plants in other countries

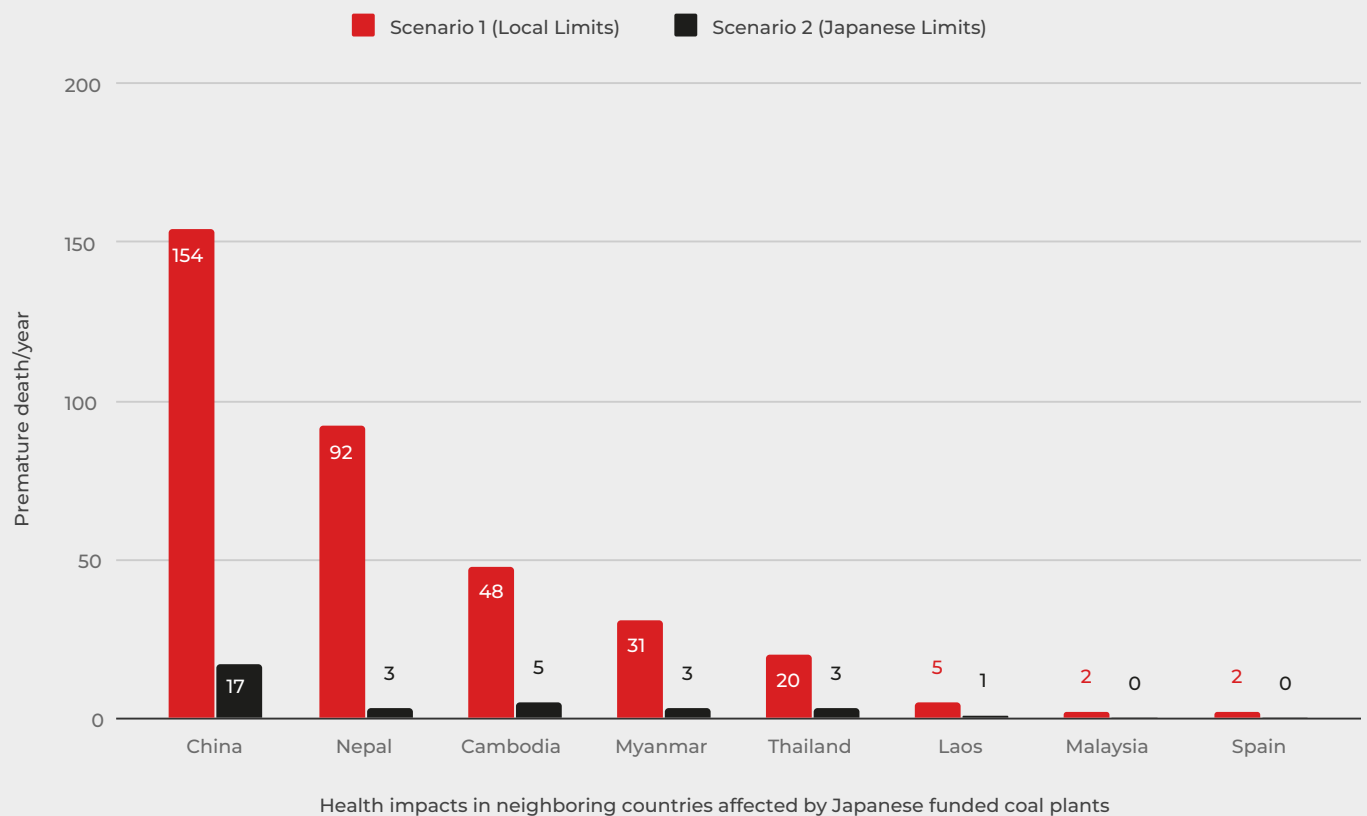
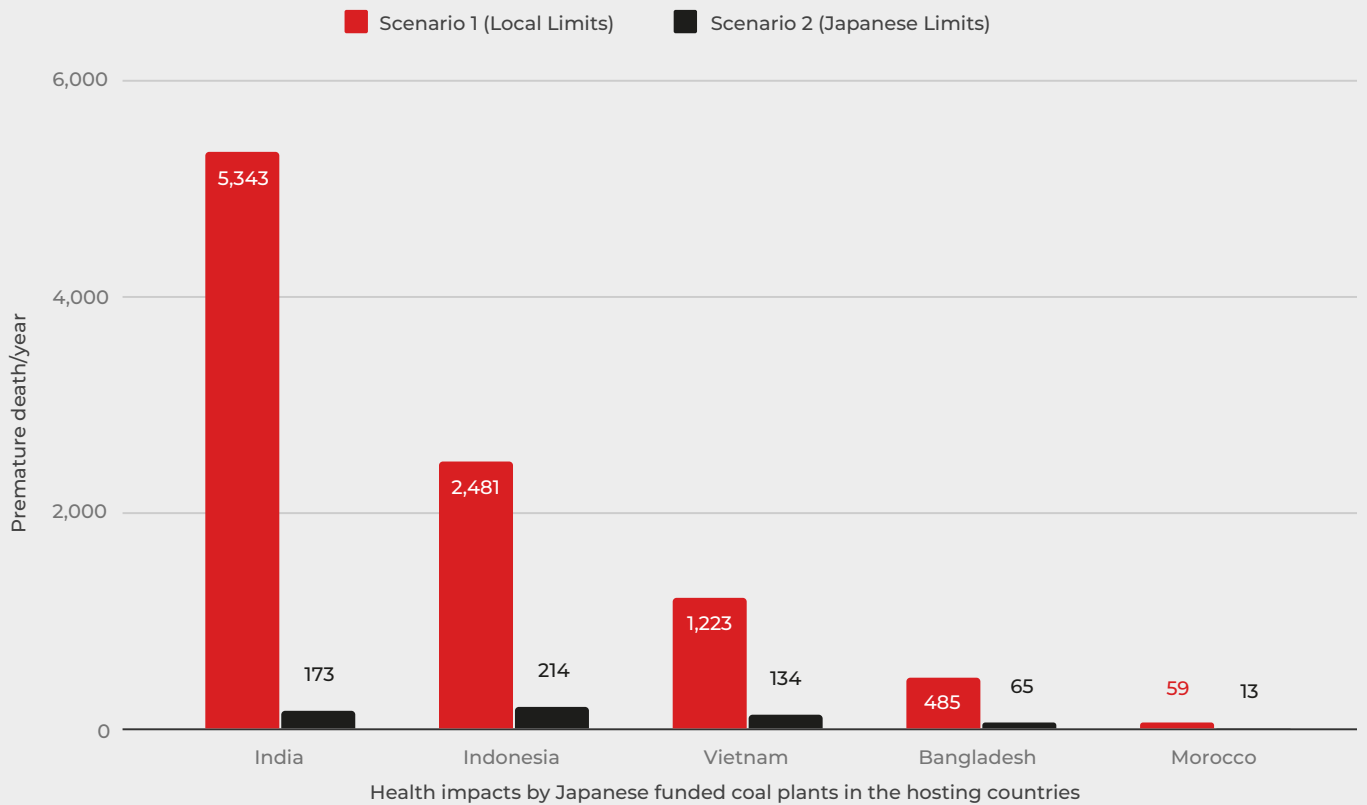


Figure: Projected number of premature deaths per year in the hosting/neighboring countries due to Japanese PFA-financed coal power plants operated under local emission limits (red) vs. operated in line with Japanese emission limits (black). Uncertainty range is about 50% (exact values are shown in the result section).

## **The Japanese Government must immediately stop its PFAs from investing in overseas coal power plants for which emission limits do not meet the limits applied to coal power plants in Japan. By ending this deadly double standard, hundreds of thousands of lives could be saved.**

Following international trends, Japan's private banks, insurance companies and trading houses have already started taking the first steps to limit their investments in coal power plant projects. However, Japan's public finance agencies (PFAs) still invest heavily in coal-fired power plants in other countries. Japanese Government must take urgent action to end this and ensure its PFAs move to fund renewable solutions rather than coal.

Additionally, the Japanese Government must immediately stop its PFAs from investing in overseas coal power plants for which emission limits do not meet the

limits applied to coal power plants in Japan. By ending this deadly double standard, hundreds of thousands of lives could be saved.

At the same time, the governments in the host countries of these coal projects should protect their citizens' right to safe and healthy environment, by significantly strengthening their emission standards for already existing coal power plants, while undertaking energy transition from coal to renewable energy in their countries. This change in policies and investments must be accelerated now, for human and environmental health, and to safeguard the future of our planet.



Figure: Locations of Japanese PFA-financed coal power projects overseas, from January 2013 to May 2019.





Children play by the beach near a coal power plant in Jepara, Central Java, oblivious to the possible threats to their health © Kemal Jufri / Greenpeace

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5. For certain projects, this public financing was followed by substantial additional financing from Japan's three largest private banks - Mitsubishi UFJ Financial Group (MUFG), Mizuho Financial Group, and Sumitomo Mitsui Banking Corporation (SMBC).
6. Median emission limits for 26 coal-fired power plants which is  $\geq 200$  MW in Japan since January 2012