

WRITING SAMPLE (OP-ED)

Please see below an op-ed I wrote earlier this week (April 3rd, 2018) on fine dust levels and the need to reduce reliance on coal power in South Korea. I believe this piece demonstrates my ability to express views with supporting evidence and hard-hitting prose.

Let's Not Forget: Korea's Fine Dust Has Domestic Origins, Too

By Jessica Yun

Seoul residents can barely breathe.

Last week [MARCH 25], ultra-fine dust concentrations hit 101 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) in the South Korean capital -- and a whopping $106 \mu\text{g}/\text{m}^3$ in Gyeonggi Province.¹ Both levels are considered "bad" by the country's air-quality index.

And just a few days later [MARCH 29], an online petition on the Cheong Wa Dae (Blue House) website demanding that Korea's government complain to China for fine dust levels racked up 200,000 signatures -- the number needed to require an official response from the president's office.²

The perception that China is the main culprit behind domestic air issues, however, dismisses Korea's role in its fine dust problem and only serves the interests of polluting South Korean industries. Given the detrimental health impacts of growing fine dust levels, the public and government need to stop simply diverting blame and more aggressively pursue domestic air cleanup solutions.

The share of fine dust produced by domestic sources and that emitted abroad differs on a day-to-day basis.

But the fine dust increasingly enveloping South Korea's landscape is more homegrown than the public may want to believe.

A joint study between NASA and the Korean government conducted in the summer of 2016 found that more than half of air pollution in its samples came from local sources, while the remainder came from neighboring countries.³

¹ https://www.upi.com/Top_News/World-News/2018/03/25/South-Korea-takes-emergency-measures-to-tackle-fine-dust-levels/7501521958162/

² <http://www.koreaherald.com/view.php?ud=20180329000825>

³ <https://www.npr.org/sections/parallels/2017/10/10/552264719/armed-with-nasa-data-south-korea-confronts-its-choking-smog>

Another study⁴ by South Korea's National Institute of Environmental Research this January found that foreign sources contributed more to Korea's fine dust than did local sources only on one of the four consecutive days analyzed. Over the sample period, domestic sources accounted for a greater share of Korean fine dust levels.

Neighboring countries certainly play a role in aggravating Korea's fine dust levels, as demonstrated by a recent study on Lunar New Year firework particles arriving on the peninsula from China.⁵

Thus, multilateral cooperation and commitments must be fostered to curb foreign pollution.

However, local and national government agencies, along with the public, must also prioritize solutions on the domestic front in order to achieve substantial results.

President Moon promised to shut down 10 aging coal power plants within his five-year term.⁶ Korea's energy ministry also announced plans last December to meet 20 percent of the country's electricity needs with renewable sources by 2030.⁷

The benefits of such measures in terms of fine dust levels, however, would be offset by the administration's future proposals for fossil fuels on the peninsula. Currently under review by Moon's government are plans to build nine new coal power plants -- two of which will be converted to gas.⁸

Talk about one step forward, two steps back.

If South Korea is serious about combatting its fine dust issues, the government needs to make absolute reductions in coal-fired electricity production, the country's largest source of domestic fine dust, and put a moratorium on new coal plants.

Such measures are being pushed abroad. Earlier this year, China halted 100 coal-fired power projects -- some even in the midst of construction -- in order to curb its fossil-fuel usage.⁹ National energy companies across the European Union pledged to not build new coal plants after 2020.¹⁰

⁴ http://english.hani.co.kr/arti/english_edition/e_international/828670.html

⁵ http://world.kbs.co.kr/english/news/news_Sc_detail.htm?No=134848

⁶ <https://qz.com/983626/moon-jae-in-south-koreas-new-president-is-shutting-down-10-big-coal-power-plants-in-his-first-week-in-office/>

⁷ <https://www.reuters.com/article/us-southkorea-energy-policy/south-korea-finalizes-energy-plan-to-boost-renewable-power-generation-idUSKBN1EN0KT>

⁸ <https://www.reuters.com/article/us-southkorea-energy-policy/south-korea-plans-shift-to-renewables-but-coal-nuclear-to-remain-strong-idUSKBN1E80FZ>

⁹ <https://www.nytimes.com/2017/01/18/world/asia/china-coal-power-plants-pollution.html>

¹⁰ <https://www.theguardian.com/environment/2017/apr/05/the-end-of-coal-eu-energy-companies-pledge-no-new-plants-from-2020>

Scaling down coal power is not just an environmental fix -- it's a security one, as well. Korea currently relies almost entirely on imports -- mostly from Australia and Indonesia -- for its coal demand.¹¹

To meet its energy needs by cleaner and more independent means, South Korea must aggressively ramp up investment into alternative energy sources. The nation's share of renewables in its energy mix -- which hovers around four percent -- is the lowest among OECD countries.¹²

In addition to implementing other measures, such as stricter vehicle standards and incentives to reduce manufacturing emissions, South Korea needs to wean itself off coal-fired electricity production to properly address rising dust levels. It's hypocritical to ask China to reduce its fine dust contributions without confronting domestic addiction to dirty power. Where's the Blue House petition on that?

¹¹ <https://www.eia.gov/beta/international/analysis.cfm?iso=KOR>

¹² <http://www.oecd.org/environment/korea-needs-to-put-green-growth-vision-into-action.htm>