



Addendum 3 – The Burden of Responsibility for Creating a Lead-Safe World... and Averting Climate Crisis

There is a special duty of care for countries which financially benefit from mining and exporting lead and fossil fuels to assist countries which import the exported lead and fossil fuels, especially Low- and Middle-Income Countries (LMICs) to create their own national policy aimed at achieving lead safety.

For the countries that profit most from exporting lead and fossil fuels, such as Australia, both the national and other countries', especially LMIC's, lead safety programs could be funded by lead and/or fossil-fuel mining royalties. (See also Addendum 5, below.)

According to Workman ([2022a](#), [2022b](#), [2022c](#), [2022d](#)), for the 2021 year, the following countries were the top 15 exporters based on the highest dollar value worth –

[The top 15 Lead exporting countries:](#)

Below are the 15 countries that exported the highest dollar value worth of lead (including articles made from lead) during 2021.

1. Australia: US\$841.3 million (9.4% of total lead exports)
2. South Korea: \$722 million (8%)
3. United Kingdom: \$606 million (6.7%)
4. Germany: \$558 million (6.2%)
5. Canada: \$476.4 million (5.3%)
6. India: \$460.6 million (5.1%)
7. Belgium: \$454.7 million (5.1%)
8. China: \$273.6 million (3%)
9. United States: \$270.4 million (3%)
10. Russia: \$263.8 million (2.9%)
11. France: \$248.6 million (2.8%)
12. Poland: \$228.7 million (2.5%)
13. Mexico: \$219.1 million (2.4%)
14. Netherlands: \$215.5 million (2.4%)
15. Kazakhstan: \$215.2 million (2.4%)



2023 Volcano Art Prize Entry. Artist: Suvana Parajuli

Title: Burnt Bush

Lead-Safety Message: Trees take up lead from the soil which is why oil, coal and gas contain lead. If we stop burning fossil fuels to stop climate change, we'll have fewer bushfires releasing that lead as smoke and ash!

School: Creative Einstein

Age: 11

Description of Work: Colouring pencils on paper

<https://volcanoartprize.com/portfolio-item/burnt-bush/>



By value, the listed 15 countries shipped 67.4% of globally exported lead in 2021 ([Workman 2022a](#)).

Top 15 Coal exporting countries:

1. Australia: US\$43.9 billion (35.7% of total coal exports)
2. Indonesia: \$26.5 billion (21.6%)
3. Russia: \$17.6 billion (14.3%)
4. United States: \$9.7 billion (7.9%)
5. South Africa: \$6.08 billion (4.9%)
6. Canada: \$6.05 billion (4.9%)
7. Colombia: \$4.4 billion (3.6%)
8. Mongolia: \$1.9 billion (1.5%)
9. Mozambique: \$1.1 billion (0.9%)
10. Kazakhstan: \$929 million (0.8%)
11. Netherlands: \$882.5 million (0.7%)
12. Poland: \$828 million (0.7%)
13. Philippines: \$596.4 million (0.5%)
14. Mainland China: \$419.4 million (0.3%)
15. Vietnam: \$315.1 million (0.3%)

By value, the listed 15 countries shipped 98.6% of global coal exports in 2021 ([Workman 2022b](#)).

The top 15 Petroleum Gas exporting countries:

1. United States: US\$67.6 billion (18% of exported petroleum gas)
2. Norway: \$58 billion (15.5%)
3. Australia: \$37.98 billion (10.1%)
4. Qatar: \$37.97 billion (10.1%)
5. Canada: \$15.3 billion (4.1%)
6. Germany: \$14.18 billion (3.8%)
7. Algeria: \$14.15 billion (3.8%)
8. Belgium: \$11.8 billion (3.2%)
9. United Arab Emirates: \$10.1 billion (2.7%)
10. Malaysia: \$9.9 billion (2.7%)
11. Russia: \$8.8 billion (2.4%)
12. Indonesia: \$7.5 billion (2%)



2023 Volcano Art Prize Entry. Artist: Julia Jia
Title: Spreadable Lead Sunset Clause
Lead-Safety Message: To protect our air, land, rivers and oceans from spreadable lead, the world needs to ban all leaded products that are easily dispersed. For example lead sinkers, ammunition, weights and old style lead acid batteries that leak.
School: Creative Einstein
Age: 9
Description of Work: Colouring pencils on paper

<https://volcanoartprize.com/portfolio-item/spreadable-lead-sunset-clause/>



13. Oman: \$7.2 billion (1.9%)
14. Turkmenistan: \$6.3 billion (1.7%)
15. Nigeria: \$5.9 billion (1.6%)

By value, the listed 15 countries shipped 83.5% of global petroleum gas exported in 2021 ([Workman 2022c](#)).

The top 15 Crude Oil exporting countries:

1. Saudi Arabia: US\$161.7 billion (16.5% of exported crude oil)
2. Russia: \$82 billion (8.3%)
3. Canada: \$74 billion (7.5%)
4. Iraq: \$72.1 billion (7.3%)
5. United Arab Emirates: \$69.4 billion (7.1%)
6. United States: \$41 billion (4.2%)
7. Norway: \$40.2 billion (4.1%)
8. Kuwait: \$36.3 billion (3.7%)
9. Nigeria: \$30.6 billion (3.1%)
10. Brazil: \$27.9 billion (2.8%)
11. Libya: \$27.8 billion (2.8%)
12. Angola: \$25.4 billion (2.6%)
13. Oman: \$24 billion (2.4%)
14. Mexico: \$23.6 billion (2.4%)
15. Kazakhstan: \$17.6 billion (1.8%)

By value, the listed 15 countries shipped 76.7% of globally exported crude oil in 2021 ([Workman 2022d](#)).



2023 Volcano Art Prize Entry. Artist: Julia Jia
Title: Glacier and Penguins
Lead-Safety Message: Lead emitted into the air anywhere travels in wind currents to contaminate the highest peaks and ice at the poles. Switching to renewable energy will keep global temperatures stable, stop ice melting and also save our wildlife from lead.
School: Creative Einstein
Age: 9
Description of Work: Colouring pencils on paper

<https://volcanoartprize.com/portfolio-item/glacier-and-penguins/>