# 20 Countries with the Highest Resource Consumption in the World

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In this article:

RIO -4.63%

In this piece, we will look at 20 Countries with the Highest Resource Consumption in the World. You can skip our detailed discussion on the issue of scarcity of global resources, and go directly to 5 Countries with the Highest Resource Consumption in the World.

As we look at the world population reaching 10 billion by 2050, already surpassing 8 billion by the end of 2022, our planet feels an increasing strain on its resources. This rapid population growth is set to result in a 70% surge in the food demand by 2050 from the demand level in 2017. In the past twenty years, population growth has had a 27% contribution to the growth rate of resource extraction, according to  $W \not = OU$ .

As such, resource use has grown threefold in the past 50 years and is currently increasing at a rate of over 2.3% per year, according to  $\tilde{O}/[\hat{a}x/M]/[c]/\hat{a}/M$  \(\lambda\). The outcome? Drastic climate changes, increasing animal extinctions, water scarcity, and drought.

As reported by Insider Monkey in other articles, two billion people (26% of the global population) in the world don't have access to clean water, while 10% of global water is lost as waste every year. For a detailed discussion on the inaccessibility to clean water across the globe, and the wastage of water, you can go and see 25 Countries with the Least Access to Safe Drinking Water and 15 Countries That Waste the Most Water.

Thus, the finite nature of the planet and its resources coupled with a growing population and demand calls upon actions for sustainability in global resource use.

The implications extend beyond just resource scarcity. According to Professor Usha Haley of West Virginia University, major conflicts over the accessibility of basic resources such as water and food could erupt, potentially leading countries into a fight for survival. This can be seen through the findings that resource extraction has tripled in the past 50 years, and as a result, it has contributed to 90% of the global water stress, as reported in our article -- 20 <u>Most Important Companies in the World</u> -- discussing the global resource constraint.

As noted by  $V@^{A}Y[:] dA \hat{O}[^{*}] c \bullet$ , the earth's ecosystem's consumption far exceeds its regenerative capacity and will continue to grow by a worrisome 75% by 2050; given that this trend continues, we could require two planets to meet our consumption level. Moreover, it's

# **Companies Striving Towards Sustainable Resource Use**

Entities like BaniQL and SiTration have emerged in recent times to drive the world to better use of resources. BaniQL is striving towards technologies to drive down water, energy, and chemical use in the mining sector. It produces nickel from metal waste, while also making lower-grade nickel through a process that applies less heat. For the said purpose, the startup secured funding of \$1.6 million in May 2024 to start its operations in Indonesia.

Every ton of copper extracted leaves behind roughly 100-150 tons of waste, and this is where SiTration comes into play; it makes silicon-based filters which it uses to manage the waste from copper extraction and cuts down the need for chemicals for applying heat in metal refining by 95%.

Furthermore, the big giants of the mining industry also look forward to bringing sustainability to their mining operations. Namely, in May 2024, Rio Tinto Group (NYSE:RIO) and BHP Group Limited (NYSE:BHP) collaborated with Caterpillar and Komatsu in the hope of bringing into use electric and hybrid haul trucks in the Pilbara region in Australia, known for the extensive mineral deposits. Currently, both Rio Tinto Group (NYSE:RIO) and BHP Group Limited (NYSE:BHP) are planning to test out the trucks, and the related equipment to assess their feasibility. The outcome is expected to be a reduction in the reliance on diesel fuel which contributes heavily to greenhouse gas emissions.

Rio Tinto Group (NYSE:RIO) has also gotten into an agreement with Wartsila in June 2024, wherein the company will be using Wartsila's GEMS Digital Energy Platform that will optimize energy assets at QMM's (Rio Tinto's subsidiary) 24 MW power plant; this will mean reduced emissions, increased renewable energy use, and enhanced efficiency through the deployment of machine learning. Machine Learning (ML) achieves this by accurately predicting real-time energy requirements, optimizing the use of renewable energy sources, and reducing energy waste. Moreover, ML allows predictive maintenance which would mean that equipment is serviced before it runs out, extending the machinery's life and minimizing downtime, further contributing to eco-friendly resource extraction.

With this, let's now go and have a look at the 20 Countries with the Highest Resource Consumption in the World.

While we acknowledge the potential of RIO as an investment, our conviction lies in the belief that some AI stocks hold greater promise for delivering higher returns and doing so within a shorter time frame. If you are looking for an AI stock that is more promising than RIO but that trades at less than 5 times its earnings, check out our report about the **cheapest AI stock**.



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# Methodology

To curate our list of 20 Countries with the Highest Resource Consumption in the World, we made use of credible sources of the U.S. Energy Information Administration (EIA) and the Food and Agriculture Organization of the United Nations (FAO). We picked out countries' consumption of the following resources: Oil, natural gas, coal, electricity, biofuel, and water; oil consumption pertains to 2023, water consumption pertains to 2021, and the rest of the consumption figures pertain to 2022. Based on the respective resource consumption by each country, we normalized the data because of the varying units of measurement for different resources and added the overall consumption, and ranked on the basis of absolute consumption, although we've also mentioned their per capita consumption.

Thus, let's get on with our list of 20 Countries with the Highest Resource Consumption in the World.

At Insider Monkey we are obsessed with the stocks that hedge funds pile into. The reason is simple: our research has shown that we can outperform the market by imitating the top stock picks of the best hedge funds. Our quarterly newsletter's strategy selects 14 small-cap and

large-cap stocks every quarter and has returned 275% since May 2014, beating its benchmark by 150 percentage points (see more details here).

## 20. Malaysia

On our list of the 20 Countries with the Highest Resource Consumption in the World, we have a country that witnessed an 11.1% increase in oil consumption in 2023 from the prior year. Furthermore, it imported \$12.2 billion worth of oil in 2022 alone. To read more on this, go to **Top 25 Countries with the Highest Oil Consumption in the World**.

However, the country is quite aware of the scarcity of natural resources. This can be seen through its requirement, according to which, sustainability practices' public disclosures need to be made by public-listed companies in their annual reports.

Furthermore, Malaysia's big companies like SD Guthrie Berhad, a palm oil producer, and Tenaga Nasional Berhad (TNB), the country's biggest electricity utility company, are making good use of AI technology. They are planning to deploy AI-powered energy management systems, and monitoring systems for plantations to prevent deforestation.

#### 19. Serbia

Serbia is next on our list of Countries with the Highest Resource Consumption in the World. The situation in the country is something to look at because the country is a mining hub. The investments that have rolled in the country have been <u>massive</u>: from \$131.5 million worth of investments in 2021, the number has increased to \$787.27 million in 2023.

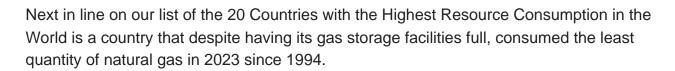
The outcome is increasing waste and environmental damage. In the last three years, roughly speaking, a 150% increase in mining waste has been incurred, according to a report by \$\epsilon\$.

## 18. Philippines

Next, we have the Philippines. It was reported in May 2024 that the country exchanged dialogue with the U.S. in which the country discussed its goals to capitalize on space technology to monitor its maritime awareness. They also discussed how to make use of various technologies for better predictions of weather and improvement of natural resource usage.

This demonstrates the country's active efforts to assess and improve the usage of the country's resources and its impact on the environment.

# 17. Czech Republic



The YoY change in consumption was a decrease of 7%, which was a result of reduced dependence on natural gas to produce electricity, according to @:^/p^ . •.

#### 16. Thailand

Thailand is a country that is dealing with the global resource consumption issue through its sustainable plans, such as Etix Everywhere's green energy project. In June 2024, the company installed solar power in its #1 data center in Bangkok, which produces 11% of the center's energy. It resulted in a reduction of CO2 emissions by 480 tons annually.

#### 15. Taiwan

Next, we have Taiwan, which is 17<sup>th</sup> on the list of <u>countries with most carbon dioxide</u> <u>emissions per capita</u>. The per capita electricity consumption in Taiwan is three times the per capita consumption in the U.S. This could come off as surprising, especially when you consider that the U.S. GDP per capita is twice that of Taiwan.

However, the disproportionate energy consumption is most likely due to Taiwan's industry-intensiveness. The energy consumption in Taiwan is reported to be three times higher than the Asian average, as reported by the  $Re \{ \land \bullet c [ \ \} \not | \emptyset [ \ ] \}$ 

#### 14. Vietnam

As of April 2024, the country is suffering from extreme resource scarcity amidst drought situations and saltwater intrusion in the Mekong River Delta. This has resulted in a clean water shortage for almost 74,000 households, according to  $WP \hat{O}OO$ .

This demonstrates the country's vulnerability to climate change. Vietnam is ranked 9<sup>th</sup> on the list of the <u>Top 20 Countries with Highest Water Consumption</u>, with a water consumption of 82-billion-meter cubes as of 2020.

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Next, we have Kazakhstan on our list of the 20 Countries with the Highest Resource Consumption in the World.

The country has a significant dependence on outside sources for 44% of its water. To make it worse, it has experienced a substantial amount of decrease in water run-off due to decreased inflows from neighboring countries in the last decade. The decline amounts to 15% in the Aral-Syrdarya basin and 21.5% in the Irtysh.

Thus, the country has invested \$66.9 million in the last ten years to sustain the water level in its biggest rivers – Zhaiyk (Ural) and Yertis (Irtysh).

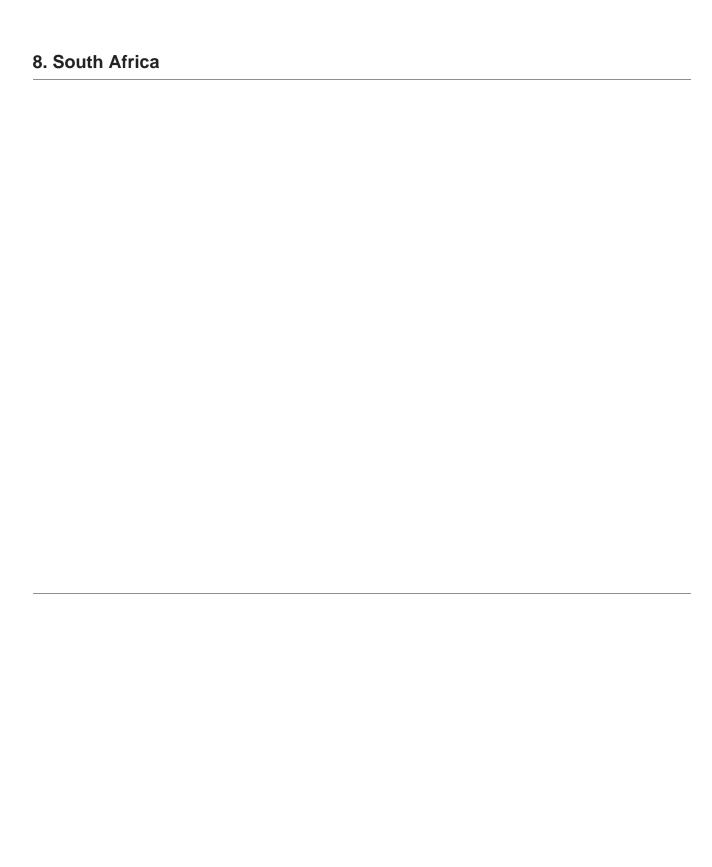
#### 12. Australia

Next on our list of the 20 Countries with the Highest Resource Consumption in the World is Australia, a country that's 10 on the list of countries with the most CO2 emissions per capita due to its dependence on coal for power generation.

Especially, the country's energy and agricultural sectors are suffering greatly from the impact of excess consumption in the country, as intense heat and drought are pushing the country's soil into becoming a net emitter of CO2. This poses challenges for the country to achieve its goal of decreasing greenhouse gas emissions by 43% by 2030, as reported by  $V@^{\bullet}$   $\tilde{O}$   $\tilde{a}$ / $\tilde{a}$ iæ}.

Despite the country's commendable progress in clean energy – record-high 38% use of renewable sources to generate electricity in 2023 – the country is one of the biggest CO2 emitters in the world.

### 11. Turkey



Over half of the electricity produced in the country was through the use of renewables, cutting down emissions by 46 million tons. However, there's still a long way to go as 85% of this reduction of emissions is regarded as temporary.

## 6. Japan

Being the <u>12<sup>th</sup> most populated country in the world</u>, it's obvious that Japan would make it to the list. Despite that, it's impressive to see the efforts the country is making to mitigate the environmental risks associated with the excessive use of resources.

The country's greenhouse gas emission fell by 2.5% to an all-time low of 1.14 billion metric tons in 2023, showcasing the country's sustainable growth of the industrial sector.

### 5. Indonesia

China, the third largest in the world by size, is a country in which a whopping 1.4 billion people reside – the second highest in the world. Thus, understandably, one can expect it to be here on the list.

However, what might seem astonishing is the share of consumption of resources the country has -15% of the world's resources are consumed by China alone!

READ NEXT: \$30 Trillion Opportunity: 15 Best Humanoid Robot Stocks to Buy According to Morgan Stanley and Jim Cramer Says NVIDIA 'Has Become A Wasteland'.

**Disclosure**: None. This article was originally published at **Insider Monkey**.