

World Leadership

With special consideration of China, USA, Europe and Russia

The USA is withdrawing from the position of the self-proclaimed "world police". China is expanding its military position. In terms of the world economy, China has already taken the lead. Where do Russia and Europe stand in this struggle for supremacy?

Summary

A clear ranking of world leadership such as in sporting disciplines with a first, second and third place is difficult to establish. The profiles are too different. But one can clearly count the USA, China, Russia and Europe among the leading nations.

The individual characteristics are different. Historically, the USA is the oldest leading nation. In the last few decades it has taken on the function of a "world police", from which it is gradually withdrawing. China is the New Comer who has developed from a developing country to a leading trading partner in a very short time. Europe is a nationally dispersed continent. Several organizations such as the European Union are trying to create a common appearance on the world market, but the national egoisms are too great. The existing economic power of Europe cannot be implemented. When it comes to military problems, Europe as a community is (almost) not present. Due to its geographic size and enormous raw material deposits, Russia is an important international player. In the future, however, climate policy measures will require other priorities that are currently lacking in Russia.

Conclusion: 4 players with different profiles.

The figures used here are intended to quantify this without making any claim to the topicality and precision of the figures.

World Leadership

The „Leadership Lexicon“ defines leadership in terms of the social identity theory of leadership. “Describes and explains in the context of the emergence of leadership in groups how people who embody prototypical values and characteristics of this group to a particular extent are classified as leaders in the context of attribution processes (social categorization). These attribution processes are the expression and reinforcement of the (ideal) self-concept and are therefore useful for self-worth. Within one's own social group, other people are no longer perceived as unique and multifaceted individuals, but as members of a community to which one would like to belong or would like to belong. This requires differentiating them from other groups ”.¹

So if we apply that to world politics, it's about domination. Who rules the world.

¹ <https://www.leadership-insiders.de/lexikon/soziale-identitaetstheorie-der-fuehrung/#:~:text=Soziale%20identit%C3%A4tstheorie%20der%20F%C3%BChrung%20Beschreibt%20und%20erkl%C3%A4rt%20im,von%20Zuschreibungsprozessen%20%28soziale%20Kategorisierung%29%20als%20F%C3%BChrende%20klassifiziert%20werden.>

Typical links to leadership are:²

Claim

Domination

Market share

Courage

Longing

Technology

World Market

absolutely

recognize

strive for

authoritarian

claim

resolutely

attain

gain

mentally

global

industrial

hold

intellectual

collective

moral

complain

religious

strategic

technical

technological

entrepreneurial

undisputed

take over

“Leading” someone is a dynamic process because the environment is constantly changing. A leader has to give others support, for which he has to have his own steadfastness. It is difficult for an unstable country to assume a leadership role. It's too busy with itself. This is also one of the reasons that the USA are increasingly withdrawing from its global leadership role. They focus on the internal problems. President Trump called it "America first". First solve the internal problems and only then can you teach others and help others.

World leadership relates to several areas:

- Military leadership
- Willingness to take on a mediating function for world peace
- Economic leadership
- Position in relation to combating the global climate

Military Leadership

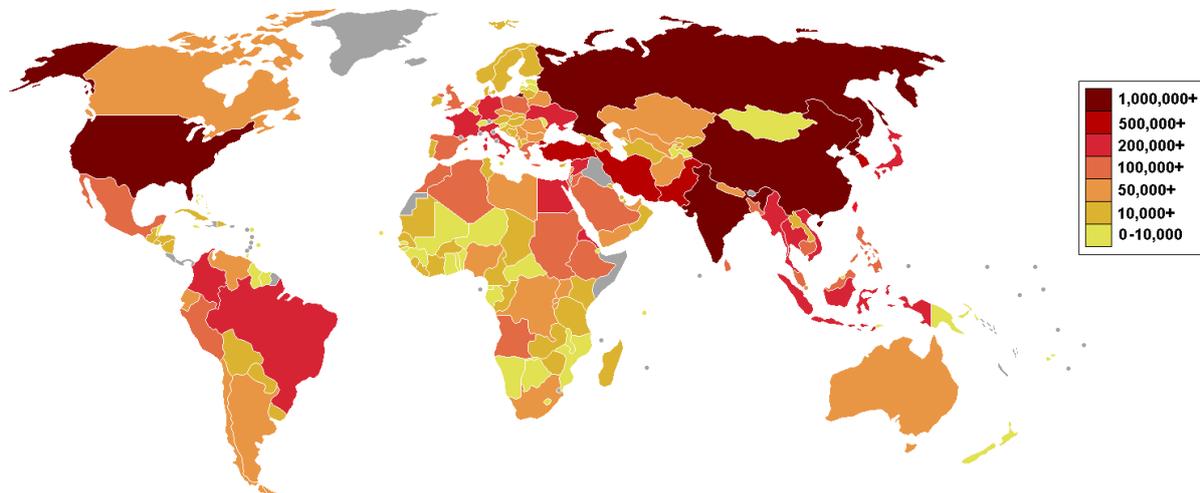
A country's military institutions represented state authority. Accordingly, the military is being equipped with weapons of war in order to be able to fulfill this.

In the past, military superiority was synonymous with a strong position in the world. The problems have become more complex today and other factors have become more important.

² „Der deutsche Wortschatz von 1600 bis heute“ (The German vocabulary from 1600 to today)
<https://www.dwds.de/wb/F%C3%BCherschaft>

The military power will

- deployed to defend their own territory,
- for area expansion, achievement of political goals, conquests
or
- used to secure world peace.



Numerical strength of the armed forces by country, 2009

Source: Wikimedia Commons

https://commons.wikimedia.org/wiki/File:Number_of_active_troops_world_map,_2009.png

On the map with the numerical information on the number of soldiers, four nations appear in the first places:

- United States of America
- Russia
- China
- India

The Chinese „People's Liberation Army“ is the largest army in the world with 2.2 million soldiers and 1.4 million reservists. NATO, the North Atlantic Treaty Organization, has 3.58 million soldiers and Russia 3.345 million. There are 2.5 million reservists in the Russian army³. The United States itself has approximately 1.28 million soldiers.⁴⁵

NATO was founded in 1949 as a territorial alliance against the Soviet Union. In return, the "Warsaw Pact" was created in 1955. The so-called "Cold War" arose. After the Warsaw Pact was dissolved in 1991, NATO looked for new tasks. The old ones had become superfluous.

³ <https://de.statista.com/statistik/daten/studie/379080/umfrage/vergleich-des-militaers-der-nato-und-russlands/#professional>

⁴ Headquarters, Department of the Army, Deputy Chief of Staff of Personnel, G-1 Dr. Betty D. Maxfield, Chief Office of Army Demographic
<https://www.armyg1.army.mil/hr/docs/demographics/FinalFY12ArmyProfileReport.pdf>

⁵ <https://de.statista.com/statistik/daten/studie/1086471/umfrage/militaerische-staerke-der-usa/#:~:text=Kennzahlen%20zur%20milit%C3%A4rischen%20St%C3%A4rke%20der%20USA%20im%20Jahr,%20%206.287%20%209%20more%20rows%20>

New areas were found outside in Afghanistan and the Balkans. Many members were dissatisfied with this and it was only after the occupation of Crimea that Russia became an old and new enemy again.

There are two wings within NATO:

- States such as Poland, Germany and the Baltic States, which see Russia as the greatest threat.
- States that take part in the geopolitical conflict with China.

For the US, this means two fronts:

- USA / NATO versus China
And
- USA / NATO versus Russia.

This led to the closure of the Russia office at NATO in 2021. The front against China is about an "alliance of democracies against China". The USA does not apply any standards to the value system "democracy". The alliance therefore also includes autocratically governed countries such as Poland, Turkey and Hungary, which the EU Commission continually admonishes for their lack of European values. This creates a difference of opinion between NATO and the EU. That is why a wing within the EU is campaigning to set up its own army.

A key factor in the strength of a military facility is its technical equipment. If you make a comparison here, the situation shifts:⁶

Country	Air Force	Tank	Missile Systems
NATO	21,433	18,741	3,437
USA	13,077 ⁷	6,287	
Russia	3,082	15,500	3,781
China	2,500 ⁸	6,300 ⁹	250 ¹⁰

Military information is generally difficult. In the course of these considerations, an up-to-date information is not important. It is only meant to represent an order of magnitude.

In general, it can be stated that the "traditional" military leadership nations - Russia and the USA - are withdrawing their military engagement.

The USA is increasingly withdrawing from the role of "world police" and is bringing its troops back from crisis areas such as Afghanistan. At the same time, China is constantly expanding its armed forces. But China's main goal is economic leadership. The military is there to protect its own interests. This also includes bringing back the breakaway province of Taiwan. A problem area that Russia also had with the Crimea.

⁶ Statista 2021

<https://de.statista.com/statistik/daten/studie/379080/umfrage/vergleich-des-militaers-der-nato-und-ruslands/#professional>

⁷ 2,362 fighters, 2,831 combat aircraft, 1,153 transport aircraft, 971 attack helicopters, 5,769 helicopters

⁸ Wikipedia „Luftstreitkräfte der Volksrepublik China“

https://de.wikipedia.org/wiki/Luftstreitkr%C3%A4fte_der_Volksrepublik_China#:~:text=Zusammen%20mit%20den%20Fliegern%20der%20Marine%20verf%C3%BCgte%20Die,von%20denen%20rund%202000%20Kampfsysteme%20gewesen%20sein%20d%C3%BCrften

⁹ https://de.wikipedia.org/wiki/Heer_der_Volksrepublik_China

¹⁰ <https://www.atomwaffena-z.info/heute/atomwaffenstaaten/china.html>

China refuses to interfere in the political affairs of other countries. The interest is primarily an economic cooperation. Each country should decide and determine for itself the form of political orientation. In this sense, China also rejects the interference of other states in their internal affairs. This policy is contrary to that of Europe.

Europe puts "European law" above the national law of its member states. For some member countries this poses a problem. Examples such as Poland and Hungary show this discrepancy.

For a secure world peace, however, the commitment to securing world peace is important. There is an increased commitment on the part of Russia here. Is there a shift here? Russia is increasingly playing a peacemaking role.

At the regional level, the activities of Turkey should also be mentioned, which on the one hand is a NATO member, but goes its own way in the region (see Syrian war and deployment in Libya). Turkey with its army became a regional geopolitical factor. Turkey originally wanted to become a member of the European Union. After this failed for various reasons, the country positions itself in the shadow of the great powers in Central Asia. After the American military withdrew from Afghanistan, Turkey tried to fill the power vacuum that had developed. The Ottoman Empire was once a world empire and the current President of the country thinks in similar dimensions and wants to unite all "Turkic peoples" under his leadership. "The legitimation of Turkish military operations in Libya, Syria and Azerbaijan derives more from history than from international law. One invokes the preservation of influence in earlier territories of the Ottoman Empire. The Turkmen minorities in Afghanistan, which make up one sixth of the total population, are a factor that should not be underestimated."¹¹

With a population of 85 million, Turkey is the twenty largest countries in the world. Its army consists of 895 thousand soldiers and the US have 40 to 50 atomic bombs in Turkey. Turkish soldiers are deployed in Libya, Sudan, Somalia, Syria, Northern Cyprus, Iraq and Qatar. Refugees from Syria and Afghanistan are used by Turkey as a blackmail factor against Europe and are currently financially compensated.

Europe is certainly not a main player in the military sector. The interests of the individual countries are too different. There is also a lack of a common military strategy and organization. To defend the external borders of the European Union, a joint approach was created with the „Frontex“ reaction force. Frontex, the European Border and Coast Guard Agency, is an essential part of Europe's efforts to safeguard the area of freedom, security and justice. Frontex's support at the external borders helps guarantee free movement without internal borders checks that many of us take for granted. The mission of FRONTEX is "Together with the Member States, we ensure safe and well-functioning external borders providing security."¹²

Frontex has a pure border security function, which is primarily directed against illegal entry by migrants. No military border security against attacking troops. With a staff of 1500 this would not be manageable either. The soldiers are sent from the individual member countries. The organization and its responsibilities are not accepted by all member states. Poland refuses to intervene on the border between Poland and Belarus.

¹¹ MARZ, Rasim: „Vom Außenseiter zum Machtfaktor“ (From outsider to power factor), in „Der Pragmaticus“, 02/2021, Schaan, Liechtenstein, page 58

¹² <https://frontex.europa.eu/about-frontex/our-mission/>

From a military point of view, Europe and the European Union are not present in the military field and do not have a world market leadership initiative in their program. Smaller units such as Turkey are superior to this.

Only Russia, China and the USA remain in the military field. America is gradually withdrawing from world military affairs and China is increasing its military engagement. Russia remains one of the three leaders in this area because leadership in other areas is currently out of reach for the country.

Economic leadership

Due to globalization, “economy” is becoming more and more important as a world leading factor. Dependence on other countries is a strategic asset for world supremacy.

In the past, trade was only small-scale. It only became more international due to three factors:

- Globalization
- Telecommunications
- Transportation

The initial factor was and is telecommunication, which allows quick reactions and enables virtual contacts. This was followed by the expansion of the transport system, which allowed a quick exchange of goods over long distances. The economy became global. Some countries have achieved world market leadership in certain areas and thus made other countries dependent. The COVID19 pandemic clearly demonstrated this interdependence.



United States of America

Source: <https://www.laenderdaten.info/Amerika/USA/index.php>

The gross domestic product is a parameter of the economic performance of a country. GDP includes all goods and services sold in the country. In 2020, the global average of GDP per inhabitant of the world was around 9562 Euros. In the USA, on the other hand, it was 55,633 Euros per inhabitant.

According to this parameter, the United States of America is the world's largest economy. In terms of the country's purchasing power, the United States ranks seventh on the list of the richest countries. The United States have 330 million people. In terms of size, the US is the third largest country in the world after Russia and Canada.¹³

¹³ <https://www.laenderdaten.info/Amerika/USA/index.php>

Historically, the country was created on the basis of immigrants from different countries and cultures, but today it is uniformly represented with one national language (English). 82 percent of the population speaks English and around 10 percent - due to immigration from the south - Spanish.

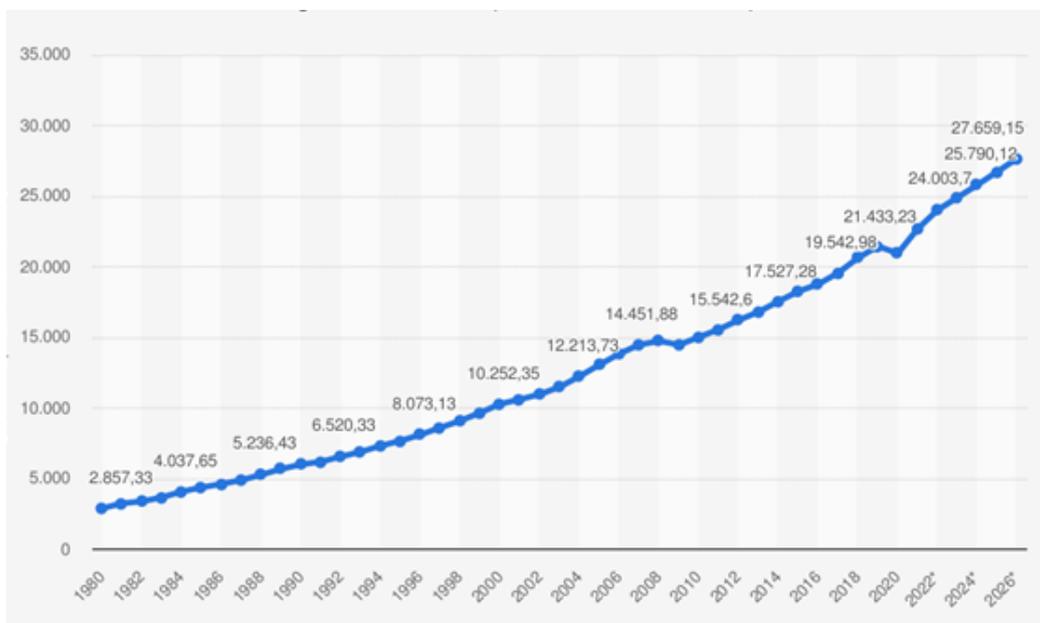
In 1785 the US\$ was established as the official currency of the United States. The US \$ became the official currency in 16 countries. It had established itself internationally as the key currency. The dollar has always been tied to the gold price and is therefore very stable. Almost all countries have leaned against the dollar in the exchange rate.

Nixon ended the peg of the dollar to the gold price in 1972. There was no longer any gold in storage to the value of the money in circulation. The dollar itself was no longer tied to the price of gold. Nixon has thus triggered a fluctuation in monetary currencies. As with many innovations, it took the European Union a long time to give an answer with the introduction of the Euro.

The USA belongs to two major trading communities:

- NAFTA with 3 member states in North America and Central America. The community comprises around 500 million people with an annual economic output of 24 trillion US dollars. That means 28 percent of the world economy.
- The APEC with 21 member states are located in Southeast Asia and in Far East Asia. This community comprises around 3 billion people and an economic output of 52 trillion US dollars. That corresponds to 61% of the world economy.

The United States of America has a gross domestic product of 18,330.06 billion Euros.



USA: Gross domestic product (GDP) at current prices from 1980 to 2020 and forecasts up to 2026 (in billion US dollars)

Source: IMZ, Statista 2021,

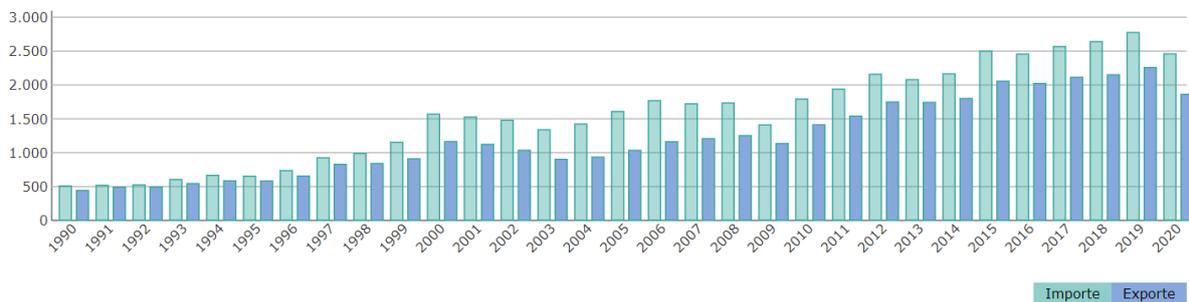
<https://de.statista.com/statistik/daten/studie/14418/umfrage/bruttoinlandsprodukt-in-den-usa/#:~:text=USA%3A%20Bruttoinlandsprodukt%20%28BIP%29%20in%20jeweiligen%20Preisen%20von%201980,%20%2024.892%2C61%20%209%20more%20rows%20>

As the development curve shows, the decline during the COVID19 pandemic has been overcome and the economy is on the rise again.

In international trade, the country had

- Goods to the value of € 1,862.41 billion exported and
- Imported goods worth € 2,459.25 billion.¹⁴

The USA have a negative trade balance, which in recent years has led to trade wars and tariffs, especially with China, but also with Europe.



Imports and Exports 2020 USA

Source: <https://www.laenderdaten.info/Amerika/USA/wirtschaft.php>

The imbalance between imports and exports also has to do with the country's own contribution. The exported trade volume declined. In some cases, the technological market leader role was lost.

This aspect must be understood as the “America first” policy of President Donald Trump, which from an economic point of view will be continued by his successor Joe Biden.

China



People's Republic of China

Source: <https://www.laenderdaten.info/Asien/China/index.php>

¹⁴ <https://www.laenderdaten.info/Amerika/USA/wirtschaft.php>

The path to world power was based on a radical transformation after Mao's victory in the civil war and the founding of the People's Republic of China on October 1, 1949. The nationalists around Chiang Kai-shek had withdrawn to the island of Taiwan. Mao covered all sectors with communist systems. In 1958, Mao optimistically announced that China would "overtake all capitalist countries in a short time and become one of the richest, most progressive and most powerful countries on earth".

In addition to this economic "great leap forward", there was also a great famine. After 27 years of communism, the majority of the Chinese still lived in dire poverty. The change brought Deng Xiaoping, who was never officially head of state. He acted from secondary positions. He was recognized as the unofficial "head of the country" and achieved the unthinkable by letting farmers work for their own account, setting up economic zones for foreign entrepreneurs and reaching an agreement with Great Britain to take back Hong Kong. It was he who founded a "country with two systems"; Communism and capitalism side by side in harmony. From now on the country went up and many areas were monopolistically occupied internationally.

An American professor tried to live without Chinese products. She failed. The simplest things are almost exclusively made in China.

China is now in second place behind the USA, but wants more and the USA is defending itself with punitive tariffs.

China is the largest country in Asia in terms of area and the fourth largest in the world. There are big differences geographically. The highest mountain (Mount Everest) is 8848 meters above sea level. With 1.4 billion inhabitants, it is the most populous country. 92 percent of the population speak Chinese. In the big cities, many things are written in two languages - English and Chinese.

China's gross domestic product (GDP) was \$ 14,343 billion in 2019. That means US \$ 10,262 per capita. Subdivided into individual economic sectors:

- Agriculture 8.2%
- Industry 39.5%
- Service 52.2% (2017)

With an inflation rate of 2.9% (2019), growth was 6.1%.

China's GDP has been growing steadily for many years. The country achieved its annual percentage growth record in 2007 with an increase of 13 percent. From 1978, the year of the first reforms, to 2014 total GDP increased 48-fold. The productivity per employee increased ninefold from 1980 to 2012.

For the year 2021, growth in real gross domestic product in China is forecast to be around 8.4 percent compared to the previous year. The statistic shows the growth of the real gross domestic product (GDP) in China from 1980 to 2020 and forecasts up to 2026.

China's economy has quickly recovered from the slump caused by the COVID19 pandemic through strict measures.



China: Real gross domestic product (GDP) growth from 1980 to 2020 and forecasts to 2026 (compared to the previous year), source: Statista 2021¹⁵

Many Western countries used China as a workbench to manufacture their products. In the meantime, the Chinese have appropriated the technologies themselves and have also developed them further. Many international standards are specified by China today. Based on its strong export orientation, China has a trade surplus of over 300 million euros.

The key figures:

Gross domestic product	€ 12,889.80 billion
Exports	€ 2,392.19 billion
Imports	€ 2,068.55 billion

Regardless of the strong international trade network, the country is a leader in two organizations:

- The APEC (Asia Pacific Economic Community) is a trade agreement with 21 member states - encompassing nearly 3 billion people - in Southeast Asia and Far East Asia. The annual economic output of this association is 51.81 trillion US dollars, which corresponds to 61 percent of the world economy.
- The RCEP (Regional Comprehensive Economic Partnership) was founded in 2020 as a free trade area in Eastern Asia and Australia. The initiator was the People's Republic of China. This association represents a third of the world's economic output. The participants in this trade agreement are 15 countries with 2.3 billion inhabitants.

China has developed from a developing country into an economic power that wants to claim world leadership for itself within a few decades on its own.

China has gone its own way politically and has developed from pure communism to capitalist communism with an (almost) free market economy.

¹⁵ <https://de.statista.com/statistik/daten/studie/14560/umfrage/wachstum-des-bruttoinlandsprodukts-in-china/#:~:text=Wirtschaftswachstum%20in%20China%20anhand%20des%20BIP%20%28Bruttoinlandsprodukt%29%20bis,auf%20rund%208%2C2%20Prozent%20gegen%C3%BCber%20dem%20Vorjahr%20prognostiziert.>

Europe



Europe

Source: Länderdaten.info

Europe's biggest problem is its structure. The continent consists of 52 countries with 735 million inhabitants¹⁶, which is a little less than ten percent of the world's population.

Russia is geographically counted among the European states, but in these considerations it should be considered separately. Turkey, on the other hand, is assigned to Asia.

Over a dozen languages are spoken in Europe. Different cultures lead to different approaches to problems. Although the European Union defines a common procedure for a large part of the countries, all states insist on their own considerations, which are often culturally justified.

- There are 450 million inhabitants in the European Union; that is 60% of the European population.
- There is also a common currency union to which 19 states with 340 million inhabitants belong.
- They have the common currency "Euro". The amount of money put into circulation is 12 trillion and the euro is therefore one of the world's leading currencies.
- In order to simplify trade between the individual member states of the EU, the so-called "Schengen Agreement" came into force in 1990, to which 32 countries have joined. This allows 530 million Europeans to trade without border controls.

As these figures show, there is no uniform approach within Europe or within the European Union. National interests are represented in sub-groups such as the Visegrad states. Discussions trigger national interests, for example when it comes to legislation. Poland wants to subordinate European law to national law. Politically, there are standards within the EU that not all member states want to recognize. Disagreement reduces the clout. The economy would be much stronger with a united Europe.

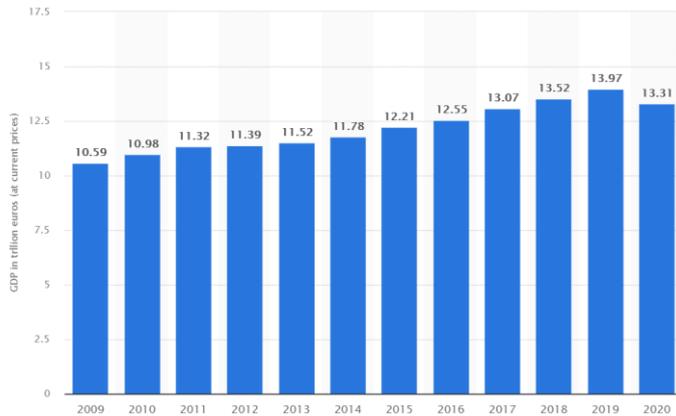
In the commercial sector, too, sub-groups have emerged:¹⁷

- The CEFTA is a trade agreement with currently 7 member states in southern Europe and in eastern Europe, to which 20 million people belong.
- The EFTA is a trade agreement with currently 4 member states in Northern Europe and in Western Europe. This association has 14 million inhabitants. In relation to the world economy, this represents 1 percent, so of little importance.

A division of the EU into the economically strong countries of the north opposite those of the south is often discussed.

¹⁶ <https://www.laenderdaten.info/Europa/index.php>

¹⁷ <https://www.laenderdaten.info/Europa/index.php>



Gross domestic product of the European Union from 2009 to 2020(in trillion euros)

Statista 2021

<https://www.statista.com/statistics/279447/gross-domestic-product-gdp-in-the-european-union-eu/>

Data on the gross domestic product (GDP) in the European Union from 2009 to 2020 shows that in 2020 the GDP in the EU amounted to around 13.3 trillion euros.

The majority of European countries felt the aftermath of the 2008 global financial crisis. This had effected the European economy. Successful members had to support countries with deep crisis like Greece.

When it comes to the continent of Europe, a distinction has to be made between

- the EU with 27 participating states,
- the euro zone and
- Europe with all countries.

In 2020, the gross domestic product of the EU-27 was 13.35 trillion euros and that of the euro zone 11.36 trillion euros. Germany has the highest GDP with 3,332.23 billion euros.

Russia

Russia is the largest country in the world and has 144 million inhabitants. As in the USA, there is a nationally uniform language - Russian - which is spoken by over 80% of the population. Russia is the 11th largest economy in the world. The strength lies in raw materials. Due to its size - it is the largest country in the world - its natural resources are enormous. The most important export goods in 2020 were mineral oil and gas. That made up 50% of the total export. Due to COVID 19, this proportion had decreased.

In an international comparison, Russia is the third largest producer of crude oil and the second largest oil exporter. Five of the ten largest Russian companies do their business in this field.

Russia also leads the world in the field of precious metals:

- diamonds (1)
- gold (3)
- silver (4)
- aluminum (2)

But coal is (still) very important. Russia is the third largest coal exporter in the world.

The main export goods of Russia by export value

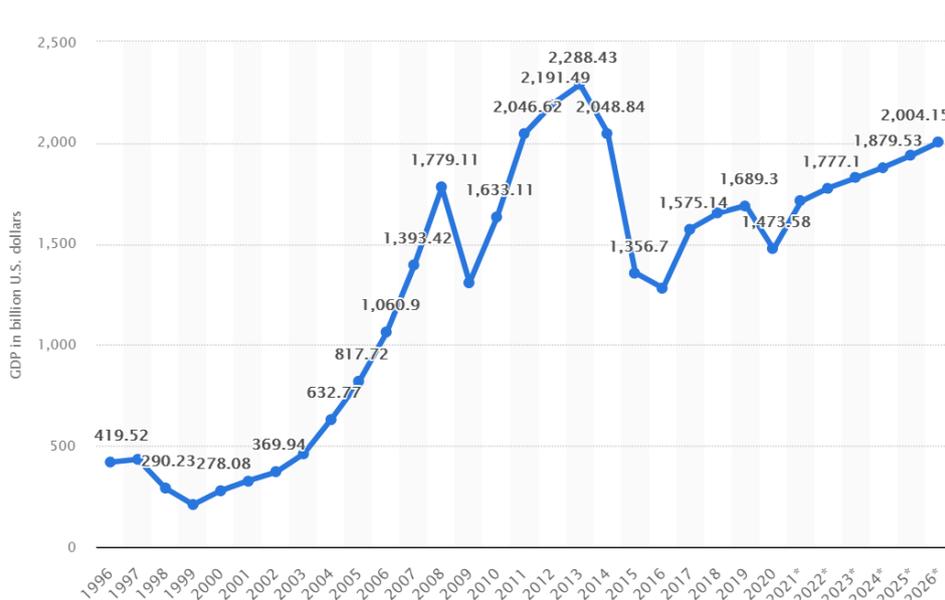
product category	Export (in billion euros)	Share of total exports
mineral oil	103,35	35,0%
Other raw material (especially natural gas)	45.3	35.0%
Gemstones and Metals	26.6	9.0%
Iron and steel	14.0	4.7%
Coal	10.9	3.7%
Grain	8.2	2.8%
Machines	7.3	2.5%
Wood	7.2	2.4%
Fertilizers	6.1	2.1%
Copper and copper articles	4.9	1.7%
Total exports	295.4	

Sources: International Trade Center (ITC) - export data¹⁸

The economic facts:

- Gross domestic product 1,298.81 billion euros
- Exports € 331.92 billion
- Imports € 266.75 billion

Thanks to the export of raw materials, the country has a positive export / import balance. When looking at the development of the gross domestic product, the effects of the sanctions are clearly visible:



Russia: Gross domestic product (GDP) in current prices from 1996 to 2026 (in billion U.S. dollars)
Statista 2021

<https://www.statista.com/statistics/263772/gross-domestic-product-gdp-in-russia/>

¹⁸ Wikipedia - Ranking of the largest economies

<https://www.weltexporte.de/exportprodukte-russland/#russlandexportprodukte2>

The Federal Republic of Russia belongs to two trade organizations:

- The APEC (Asia-Pacific Economic Community) with 21 member states in Southeast Asia and Far East Asia and almost 3 billion inhabitants. The annual economic output is 52 trillion US dollars, which corresponds to 61% of the world economy.
- The EAEU - Eurasian Economic Union - is a trade agreement with five countries in Central Asia and Eastern Europe. This community has 181 million inhabitants and an annual economic output of 1,733.97 billion US dollars, which corresponds to about 2 percent of the world economy.

Trade is increasingly becoming a strategic "instrument of war". China and the US impose punitive tariffs on each other. The USA against Europe and vice versa. America is not satisfied with Europe's excessive exports and, following the motto of American President Trump "America first", import duties have been imposed on various products from Europe. The backlash was inevitable.

In the case of Russia, they are politically based bans. The European Union saw the occupation of Crimea by Russia as a violation of international law and imposed sanctions in 2014. In return, Russia banned the import of food from Europe. However, this action led to Russia's self-sufficiency in agricultural products.¹⁹ There are even plans to become a major exporter in this sector.

A similar situation occurred in the auto industry. The Russian government forced importers to produce their cars in the country. In 2021, a large proportion of car production will come from own production.²⁰

Russia's economic power is a leading one, but not in future fields. The energy industry is changing and a problem to be solved for the country.

The strength in the military sector shown in the chapter on the military could cause the economic sector to catch up. Technological innovations always come in steps:

- first in the military field,
- then in the professional and ultimately also
- with the consumer, with the normal citizen.

Research in the military usually has the best financial resources.

One example of this is the traffic control system. It was first used in World War II to control the hundreds of aircraft. An aviation system that was then used in civil, professional aviation after the war. An aircraft only takes off when its route has been predetermined and calculated. With the high-speed trains, this technology, satellite-controlled steering, was also used in the railway sector. Experts expect it in private transport in the next few years. There would be a chance of profiling here.

¹⁹ Plekhanov University of Economics, Moscow, "Made in Russia", Moscow 2021

²⁰ STEINER, Eduard: "The clear winner of the sanctions", "Die Presse", Vienna October 13, 2021, page 18

Leadership in Overcoming the Climate Crisis

The climate crisis is an ecological, political and social task. It is caused by our world society and can only be solved by this in a joint approach. What is needed in this area is a leadership that could soon take on a greater role than that of the military and the economy.

The four leaders developed in the previous categories should be used in this consideration: China, USA, Europe and Russia.

One of the measurable factors is the biocapacity deficit in the form of the ecological footprint. This number expresses how much larger our globe would have to be in order to balance the energy and environmental impact budget.

Countries with biocapacity deficit

Percentage that ecological footprint exceeds biocapacity²¹

- Cyprus 1,540%
- Luxembourg 955%
- Malta 884%
- Netherlands 517%
- Italy 404%
- Switzerland 340%
- **China 302%**
- Portugal 243%
- Spain 235%
- Germany 204%
- Greece 196%
- Poland 139%
- **United States of America 133%**
- Czech Republic 132%
- Slovenia 125%
- Austria 121%
- Republic of North Macedonia 111%
- Albania 106%
- Serbia 106%
- Bosnia and Herzegovina 98%
- France 82%
- Denmark 64%
- Slovakia 64%
- Ireland 50%
- Hungary 46%
- Montenegro 36%
- Croatia 24%
- Lithuania 14%
- Romania 10%
- Bulgaria 10%

²¹ Source: https://data.footprintnetwork.org/?_ga=2.3656569.874867779.1633707997-309238703.1633707997#/

This list shows European countries, China and United States of America.

Among those countries that have biological reserves, the Russian Federation appears:

Countries with biocapacity reserve

Percentage that biocapacity exceeds ecological footprint

- Russian Federation 27%²²

A decisive factor in this question is how large the biocapacity of the individual countries is in absolute terms. Here, too, the 4 leading nations should be discussed:

Countries ranked by total biocapacity (in global hectares)

o 1 Brazil	1,800,000,000
o 2 China	1,330,000,000
o 3 United States of America	1,120,000,000
o 4 Russian Federation	1,000,000,000
o Europe	1,011,977,000

Biodiversity is an important factor in this problem area.

A United Nations organization is dealing with it.

"Biodiversity refers to the variety of living species on Earth, including plants, animals, bacteria, and fungi. While Earth's biodiversity is so rich that many species have yet to be discovered, many species are being threatened with extinction due to human activities, putting the Earth's magnificent biodiversity at risk."²³

International climate agreement

As early as 1979, the World Meteorological Organization (WMO) pointed out at a conference in Geneva that climate change was looming that required global countermeasures.

Several climate conferences followed.

The international society and its representatives struggled to find a common approach. Compromises were forged. Countries dropped out and did not participate, as happened with the Paris climate agreement and the United States did not participate.

This was of great importance because the USA would have to make a large contribution in terms of its size and economic output.

²² Source: https://data.footprintnetwork.org/?_ga=2.3656569.874867779.1633707997-309238703.1633707997#/

²³ <https://www.nationalgeographic.org/encyclopedia/biodiversity/>

COUNTRIES THAT JOINED THE PARIS CLIMATE AGREEMENT



SOURCE: UNFCCC NOTE: Denmark's agreement excludes Greenland. Map is updated as of May 31, 2017.

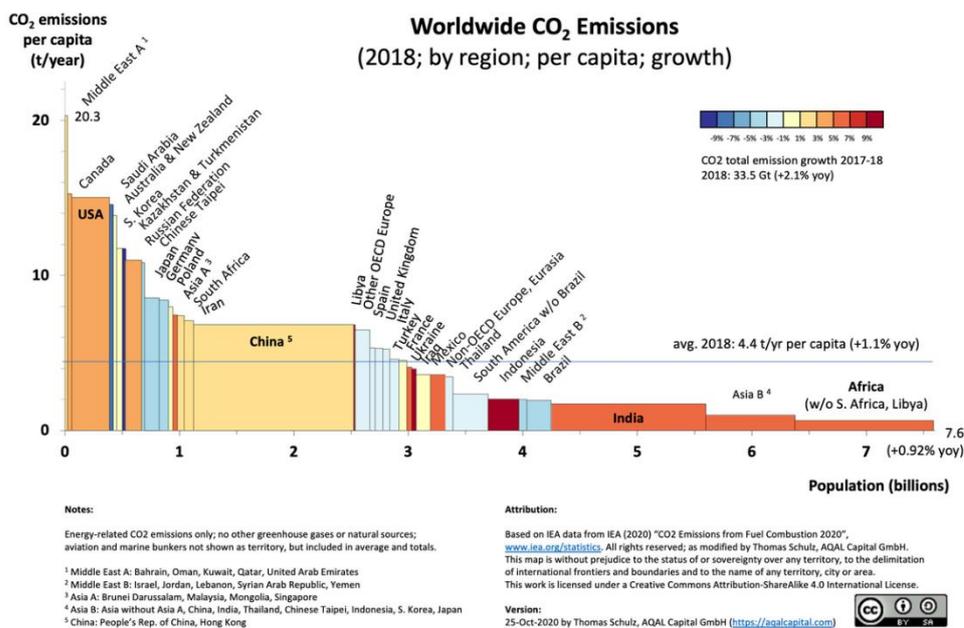
BUSINESS INSIDER

This Paris conference was organized by the United Nations in 2015 and 197 countries agreed on a global climate agreement. 180 countries have now ratified it.

The agreement has three objectives:

- Global warming should - in relation to the pre-industrial era - be limited to below two degrees Celsius.
- Reducing greenhouse gas emissions.
- The flow of funds should be in line with the climate goals.

The active organizer on this issue is the UN. Similar conferences with agreements were held in Rio de Janeiro in 1992 and in Kyoto in 1997. Poland followed suit with a conference in 2021.



Source: Tom Schulz – Own Work, CC BY-SA 4.0,
<https://commons.wikimedia.org/w/index.php?curid=95602687>

United States of America

The USA is the second largest emitter of greenhouse gases in the world after China and has the highest greenhouse gas emissions per capita in the world. The country has emitted over 400 billion tons of greenhouse gases.²⁴

There has been a strong polarization in American politics in recent years. So also in environmental protection. The Democratic Party advocates an active climate protection policy. The Republican Party tends to inaction and to reverse existing climate change policies. Many companies publicly oppose a reduction in CO₂ emissions.

The „United States Environmental Protection Agency“ was founded as early as 1970. It is an independent agency of the United States government for the protection of the environment and human health. Efforts in this area have been regressive under Donald Trump's presidency. There is also little understanding of environmental protection among the population. There are even demonstrations against climate protection.

The recycling of garbage has been done in part by China. China has stopped accepting American rubbish since 2018.

President Trump has withdrawn from the Paris climate agreement. President Joe Biden must make up for this setback and build appropriate organizations and activities. He has ambitious goals and wants to produce electricity without coal, oil and gas by 2035. America should be climate neutral by 2050. Around two trillion dollars are planned for renewable energies to deal with this. Biden also sees an opportunity with it to create hundreds of thousands of new jobs. Many climate change measures, such as stopping oil and gas leases on public land, have been taken.

Research into climate change is becoming an important factor for all main players in the world, in which the Biden government wants to play a major role and has set 35 billion US dollars for research and development.

America was an important car maker and has lost ground internationally. Biden wants to reversal this trend and is supporting this sector. The state is making 174 billion US dollars available for electric cars.

At a meeting of the UN General Assembly in September 2021, President Biden promised to double spending on environmental protection and a climate protection policy to help developing countries.

Europe

The European Union - representatives of the EU states and the EU Parliament - agreed on a climate target for 2030 in April 2021. By then, greenhouse gases are to be reduced by 55 percent below the 1990 level. A goal that one side described as too little and another as epochal.

The main goals for 2030 are:

- Reduction of greenhouse gas emissions by at least 40% (compared to 1990)
- Share of energy from renewable sources of at least 32%
- Increase in energy efficiency by at least 32.5%

²⁴ https://de.wikipedia.org/wiki/Liste_der_L%C3%A4nder_nach_CO2-Emission_pro_Kopf

The target of reducing greenhouse gas emissions by 40% is implemented through the EU emissions trading system, the burden sharing regulation with the targets for the emission reductions of the member states and the regulation on land use, land use change and forestry. In this way, all sectors contribute to the 40% target by both reducing emissions and increasing mining.

The EU Commission President welcomed this agreement: „I warmly welcome the agreement on the Climate Law. Our political commitment to becoming the 1st climate neutral continent by 2050 is now also a legal one.

The Climate Law sets the EU on a green path for a generation. It is our binding pledge to our children and grandchildren.“²⁵

Russia

Russia was not very active on the subject of “climate change”. That changed from 2019. During his term in office until 2024, President Putin wants to implement twelve priorities. Ecology is one of them. A corresponding action plan was presented in 2019.

Measures are set in the following subroutines:

- Clean land (removal of contaminated sites)
- Complex municipal waste management system
- Infrastructure for handling waste of hazard classes I and II
- Clean Air
- Clean water
- Recovery of the Volga
- Protection of Lake Baikal
- Protection of unique water objects
- Preservation of biodiversity and development of ecotourism
- Preservation of the forest
- Best available techniques (BAT, introduction to companies with particularly high emissions)

"The main goals are the establishment of an efficient waste management system, the elimination of illegal landfills, the increase of the drinking water quality, cleaner rivers and lakes through less discharge of dirty water, better air in the metropolitan areas, the preservation of biological diversity (biodiversity) and reforestation."²⁶ 5 trillion euros are budgeted for implementation by 2024.

A CO2 law was passed in July 2021. Companies are obliged to prepare emissions reports on a regular basis and to create framework conditions for trading emissions certificates. A plan has been drawn up to reduce CO2 emissions by 2050.

The rethinking of the Russian government got its impetus from the CO2 levy that will be levied in the EU from 2026. Russia exports goods to Europe, the manufacture of which emits high greenhouse gas emissions. Russia would then have to pay a high CO2 tax for products from

²⁵ Ursula von der Leyen (@vonderleyen) 21. April 2021

²⁶ <https://www.gtai.de/gtai-de/trade/branchen/branchenbericht/russland/russland-macht-den-umweltschutz-zur-prioritaet-21764#:~:text=Umweltschutz%20ist%20in%20Russland%20neuerdings%20Chefsache.%20Das%20Nationale,Pr>

the steel and aluminum industry, fertilizers and cement, and power generation. If the Russian market did not react to this change, many exports would cease and tax payments in the amount of 1.5 to 5 billion euros would be incurred.²⁷

China

Despite its bad image, China is trying to catch up internationally in this sector too.

In October 2021, a "Biodiversity Conference"²⁸ took place in Kunming, in which 200 countries took part. The purpose of this meeting was to develop strategies against species extinction. One species dies every 10 minutes.

A million plants and animals are affected from extinction.

According to the experts, 30% of the landscape should be protected. Over 100 countries signed a joint declaration.

"The Kunming Declaration calls for "urgent and integrated action" to reflect biodiversity considerations in all sectors of the global economy but crucial issues - like funding conservation in poorer countries and committing to biodiversity-friendly supply chains - have been left to discuss later ."²⁹

With its economic strength, China wants to bring technologies to reduce CO2 emissions onto the international market. This is already the case in some areas. They have achieved market leadership with solar energy facilities. In the automotive industry, China is making use of the well-developed battery technology.

China was the world's biggest polluter, but is on the way to improving this situation. The Paris Climate Agreement has been ratified. By the year 2030, CO2 emissions are to be reduced by 65%. The market for green bonds is growing rapidly.

Who is now the world's number 1 power?

From a traditional perspective, the United States is ahead. „The establishment of a world order with the USA as the world's leading power has been an idea that has deeply rooted in American political culture since Woodrow Wilson at the latest. But it was only after the Second World War that the United States was able to exercise this claim to leadership - albeit because of the conflict the Soviet Union only to a limited extent - "partial world" prevail. With the collapse of the former adversary was the goal of the American Containment politics had been achieved, but at the same time the global political compass had to be developed America's being realigned. President George Bush attempted to redefine the goals of what is now the only superpower with the slogan "New World Order ", which in the long term should lead to a "Pax universalis"³⁰.

But right now a scientific and political debate about a new world order is starting. Although some experts advocate a continuation of the American role, new solutions are necessary after the end of the East-West conflict.

²⁷ Boston Consulting Group calculations

²⁸ <https://www.unep.org/events/conference/un-biodiversity-conference-cop-15>

²⁹ <https://asia.nikkei.com/Spotlight/Environment/Countries-adopt-Kunming-Declaration-to-protect-biodiversity>

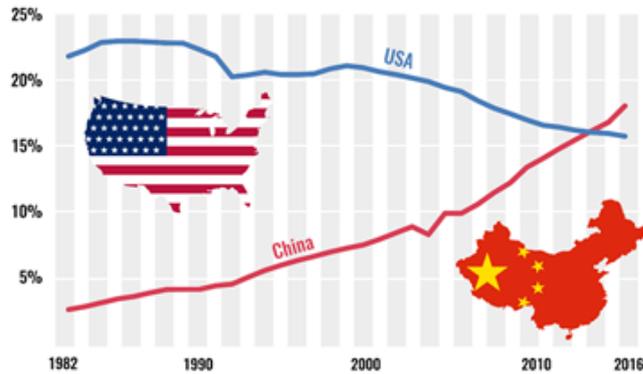
³⁰ FEINER, Sabine: „Weltordnung durch US-Leadership?“, Wiesbaden 2000, Page 11

https://doi.org/10.1007/978-3-322-92495-7_1

It is different in the military and economic fields.

Militarily there is a shift. The US is reducing its sphere of influence and China is investing in the military. Russia uses the military to stabilize in crisis areas. No common approach can be seen in the European Union.

China and the USA are fighting for supremacy in the world economy.



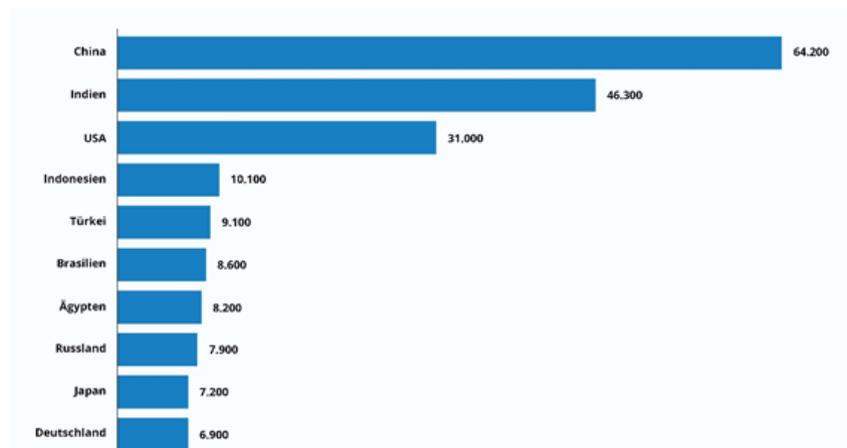
*Share of global gross domestic product
(price adjusted)*

www.Katapult-Magazin.de

Greifswald, Germany

China has achieved supremacy from the position of a developing country and is now trying to gain importance in this sector through military armament.

If you look at the development of the gross domestic product, China is increasingly taking on the pioneering role:



*The largest economies by nominal GDP (gross domestic product) in 2030
In billions of US dollars*

If the effect shown in this graphic occurs, India is a new player in the top field. Turkey - it was described as a regional actor in this report - also appears in 5th place in the international GDP ranking.

Positioning in the fight against climate change will have an impact on the market economy of all countries. Therefore, measures in this area are an investment in the future trading business.

The politics of all regions and countries see climate protection as an opportunity to develop new products and technologies with which they can expand their position on the world market.

The feasibility of political goals depends on the respective power system in the country. Authoritarian states can implement things more directly than democratically organized states. In an international study, the British historian, Professor of Global History at Oxford University, Peter Frankopan³¹ came to the conclusion that the younger generations in western democratic states have more confidence in authoritarian leadership. Conversely, in communist countries like China we are faced with the desire for democratic leadership. As in monetary policy, a pole reversal is looming on the political level.

Johann GÜNTHER
IAFeS (International Association for eScience)

Vienna, December 3th 2021

³¹ <https://www.peterfrankopan.com/>

Literature

Federal Ministry for Economic Affairs and Energy (Germany): "Paris Agreement", Berlin 2021

<https://www.bmwi.de/Redaktion/DE/Artikel/Industrie/klimaschutz-abkommen-von-paris.html#:~:text=Bei%20der%20UN%20-Klimakonferenz%20in%20Paris%20%28Frankreich%29%20im,55%20Prozent%20der%20globalen%20Treibhausgase%20emittieren%2C%20ratifiziert%20wurde>

CLARK, D.: „GDP of the European Union 2009-2020“, statista, Jul 7, 2021

<https://www.statista.com/statistics/279447/gross-domestic-product-gdp-in-the-european-union-eu/>

Das Investment: "How China wants to solve its environmental problems", Hamburg October 29, 2019

<https://www.dasinvestment.com/nachhaltigkeit-wie-china-seine-umweltprobleme-loesen-will/>

FEINER, Sabine: „Weltordnung durch US-Leadership?“, Wiesbaden 2000

https://doi.org/10.1007/978-3-322-92495-7_1

GÄRTNER, Heinz: „Der Großmachtkonflikt verschärft sich“ (The great power conflict is intensifying), in "Wiener Zeitung", October 30, 2021, page 16

KIREEV, Maxim: "Why President Putin suddenly finds environmental protection sexy", in "MITTELDEUTSCHER RUNDFUNK", Leipzig, August 19, 2021

<https://www.mdr.de/nachrichten/welt/osteuropa/politik/russland-putin-umwelt-klimaschutz-100.html>

MAXFIELD, Dr. Betty D.: „Army Demographics, FY12 Army Profil“,

<https://www.armyg1.army.mil/hr/docs/demographics/FinalFY12ArmyProfileReport.pdf>

National Geographic: „Biodiversity“, <https://www.nationalgeographic.org/encyclopedia/biodiversity/>

NN: "List of countries according to CO2 emissions per capita"

https://de.wikipedia.org/wiki/Liste_der_L%C3%A4nder_nach_CO2-Emission_pro_Kopf

NN: "Climate change policy of the United States - Climate change policy of the United States"

https://de.abcdef.wiki/wiki/Climate_change_policy_of_the_United_States

NN: US environmental policy https://www.wigi.wiki/wiki/de/Environmental_policy_of_the_United_States

O'NEILL, Aaron: „Gross domestic product (GDP) in Russia 2026“, statista, May 19, 2021

<https://www.statista.com/statistics/263772/gross-domestic-product-gdp-in-russia/>

Reuters: „Countries adopt 'Kunming Declaration' to protect biodiversity“, Kunming October 2021

<https://asia.nikkei.com/Spotlight/Environment/Countries-adopt-Kunming-Declaration-to-protect-biodiversity>

SCHULZE Gerit: "Russia makes environmental protection a priority", GTAI - German Trade and Invest, Berlin

<https://www.gtai.de/gtai-de/trade/branchen/branchenbericht/russland/russland-macht-den-umweltschutz-zur-prioritaet-21764#:~:text=Umweltschutz%20ist%20in%20Russland%20neuerdings%20Chefsache.%20Das%20Nationale,Pr%C3%A4sidium%20den%20Aktionsplan%20zur%20Umsetzung%20des%20Programms%20ver%C3%B6ffentlicht.>

The Magazine: „10 größten Volkswirtschaften der Welt bis 2030“ ("10 largest economies in the world by 2030")

<https://li.efuc.org/1651-10-largest-economies-in-the-world-by-2030.html>

WAGNER, Christopher: „Made in Russia“ („Made in Russia“), Weltexporte – Das Fachmagazin“, 17. Juni 2021,

<https://www.weltexporte.de/exportprodukte-russland/#russlandexportprodukte2>

United Nation: „Environment Programme“, <https://www.unep.org/>