A Public Eye Report – November 2022

# Switzerland and its mountain of coal

**The biggest climate criminal is back. And the crime is being committed right in your neighbourhood.**

Public Eye

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# Coal trading: the hidden aspect of Switzerland's climate policy

The war in Ukraine has exposed our dependence on fossil fuels and its geopolitical implications. With the energy crisis looming, Europe is confronted with big challenges. The issues that were already clear since the Paris Agreement are now affecting us directly: we must reduce our consumption of energy as quickly as possible. Since mid-August, the "voluntary" measures advising showering in tepid water or stocking up with candles have been widely mocked. With the Russian invasion on 24th February, the security of the energy supply became top of the agenda. Will we freeze this Winter? That's the burning question.

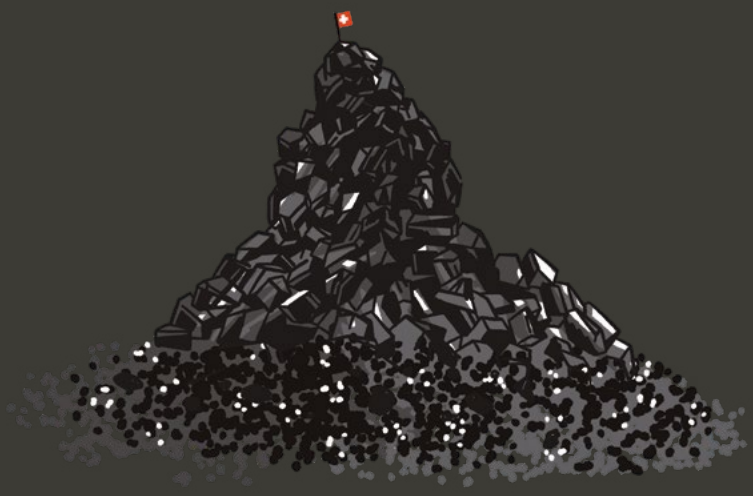
Already in March, concern was being expressed about the proposed embargo on Russian gas. Today, we have to be prepared for some hard times. Because of the increase in the price of gas, coal is becoming popular again. The return of coal is a disaster for the climate – miles away from the commitments made a year ago. At the 2021 United Nations conference on climate change in Glasgow, the attending countries agreed upon phasing down coal worldwide. Switzerland also supported this demand and co-signed several public appeals in favour of an even more ambitious global phase-out. These promises must now be followed by acts, because climate change will not go away, as the extreme weather events of Summer 2022 have shown. It's therefore essential that the plans to move away from fossil fuels, and the objectives concerning the reduction in emissions, be implemented at the Climate Change Conference being held this Autumn at Sharm el-Sheikh in Egypt, and that they be enshrined in a strict framework. Climate change isn't an elevator topic, but a global threat that concerns us all.

Our report reveals the leading role played by Switzerland in coal trading worldwide. No less than 245 Swiss companies are active in the trading and the extraction of this raw material that is so damaging to the climate. Together, they represent 40 percent of the global trade and extract over 500 million tonnes of coal per year. The indirect emissions of $CO_2$ generated in a single year by the coal extracted by these companies are higher than that of the United States. This is the hidden aspect of Swiss climate policy.

The dominant position of Switzerland in coal trading should enable it to influence climate policy. It also implies a level of responsibility that it has not so far accepted. This inaction must now cease. Instead of limiting their activities to giving advice on showering or candles, the political authorities must take measures that reconcile energy and climate-related objectives. The goal should be a change of our energy paradigm. In this report, Public Eye puts forward concrete proposals to achieve this objective.

I wish you an enjoyable read!

*Angela Mattli*
*Joint Managing Director – Commodities, Trade & Finance*



# Executive Summary

Coal is the cheapest fossil fuel and the most abundant on earth for electricity production. A promise of development for a quarter of humanity. However, it's also the most polluting substance on earth, being responsible for 40 percent of the increase in carbon dioxide emissions ($CO_2$) – with a dramatic environmental and social impact.

Yet, in spite of the commitments made in the Paris Agreement – signed in 2015 by 196 countries, including Switzerland – coal has come back strongly, driven by the end of the pandemic, the war in Ukraine and disruption on the energy markets.

Worldwide, coal represents a quarter of the energy mix. The mineral that fuelled the industrial revolution has never been extracted, transported and consumed as much as in 2022. This year, production is set to exceed the symbolic threshold of 8 billion tonnes – 72 percent more than at the turn of the century, leading French science historian Jean-Baptiste Fressoz to say, during his presentation "A political history of $CO_2$", that “there has never been an energy transition”.

## SWITZERLAND – THE HUB OF COAL TRADING

This re-birth of coal directly benefits Switzerland, as revealed in the report by Public Eye, which took a year of investigation into this discreet and disreputable sector. By financialising and internationalising its market, Switzerland has once again played the game cleverly – welcoming the headquarters of large mining companies since the start of the 2000s and giving rise to a veritable ecosystem of soot, from Zug to Geneva and Lugano. Public Eye counted 245 companies currently registered in Switzerland's commercial registers with the aim of producing or trading coal - 54 in Zug; 78 in Geneva and 55 in Ticino.

Switzerland closed its last coal mine after the end of the Second World War. Seventy-five years later, some 40 percent of global coal is brokered through Switzerland, according to Public Eye's estimates. These mining companies, most of which recently settled in Switzerland, extract in total 536 million tonnes of coal a year. Once the emissions associated with the extraction, transport and transformation into electricity are accounted for, that equates to nearly 5.4 billion tonnes of $CO_2$ released into the atmosphere. That's more than the annual emissions of the largest global power, the United States. This reveals a hidden aspect of Switzerland's climate policy.

The attraction of the Swiss Confederation for these companies isn't simply being in a time-zone that facilitates trading across continents. Among the main advantages of our country, we can mention the advantageous tax system, the proximity to Swiss and European banks – ready to invest capital – the stability of Switzerland and its currency, logistical ease and a somewhat laissez-faire culture in terms of economic and regulatory policy.

## GLENCORE – THE KING OF COAL

In Switzerland, it's impossible to talk about coal without mentioning Glencore. This giant, based in Baar, today owns 26 mines and dominates the market – although it prefers to emphasise its investments in cobalt and copper, substances essential to the ecological transition. Its success story, which began in 1980 in the name of Marc Rich & Co., the name of its illustrious founder, laid in Zug the foundations for Switzerland to become an important player in raw materials.

Under the impetus of Ivan Glasenberg, who would later take over as CEO, Glencore invested heavily in coal from the end of the 1990s. Thanks to its merger with mining giant Xstrata in 2013, the company has become the uncontested leader in coal. Its power is such that it attracted other companies into its slipstream and led smaller traders to follow a calling in a market that had appeared dead and (nearly) buried.

## ZUG – A PARADISE FOR RUSSIAN MINING COMPANIES

This movement towards Switzerland was driven by Russian mining groups, following the collapse of the USSR. They took advantage of their new economic freedom to get a foothold in the heart of Europe – in Switzerland. SUEK, Sibanthracite, Evraz and SDS: these companies have in common that they were founded during the wave of privatisation that followed the implosion of the USSR, they produce their coal in Siberia, and are managed by "self-made men" with close ties to the Kremlin.

The SDS group was the first to establish its presence in the canton of Appenzell Ausserrhoden in 2000, via its commercial arm MIR Trade AG. The other companies preferred the canton of Zug. Among those who set up in Zug's Baarerstrasse was the Société d'énergie et du charbon de Sibérie (SUEK), the biggest producer in Russia, whose trading branch had been present in the city since 2004. In March 2022, its founder – the Russian billionaire Andrey Melnichenko – wasted no time in naming his wife as the beneficiary of the trust that owned SUEK, before she herself was subject to sanctions against Russia. Since then, the company has transferred its commercial operation to Dubai.

These Zug-based companies form the first angle of the Swiss coal triangle, which is a boon for the canton. Discreet and generously philanthropic, they don't generate negative externalities because the coal is only traded here. Until the advent of sanctions, 75 percent of the 212 million tonnes of Russian coal exported in 2021 worldwide were marketed from Switzerland. Now there is uncertainty concerning the future of these companies in the Zug region.

## GENEVA FOLLOWS THE COAL TRAIN

These companies specialising in coal are joined by other groups seeking to diversify their energy mix. They are based near Geneva, the second angle of the Swiss coal triangle. This is the case for Mercuria, which although often viewed as a pure trader, actually owns two coal mines (on the island of Borneo and in South Africa).

In Geneva, we also find the "new wave" of mining companies. That's where the Indian group Adani set up its commercial subsidiary in April 2020, registered at a local fiduciary. India, where nearly half of households lack access to electricity, is hungry for coal. According to the International Energy Agency's figures, the country is set to add 130 million tonnes to global annual consumption between now and 2024.

## LUGANO – A STEEL BRIDGE FOR COAL

After Geneva and Zug, Ticino is the third angle of the Swiss coal triangle. One company dominates the landscape: Duferco SA. This steel trader was set up in Lugano in the 1980s by Bruno Bolfo, an Italian entrepreneur responsible for creating the town's raw-materials trading presence. He managed to form alliances with the main Russian and Ukrainian steel producers. The development of Duferco has led to the emergence of energy companies in the region, which benefit in particular from the proximity of banks such as UBS, Credit Suisse, Banca dello Stato and Banca Zarattini. The advantageous tax system has also made it possible to attract the commercial branches of Italian companies to Ticino.

Alongside the steel traders, a significant network of companies active in marketing coal formed. These companies are called Flame, Bulk, Spark Energy Resources, Genesis Trade and Lyra Commodities. Specialised in trading coal and all its derivatives, these companies buy coal in different parts of the world, to resell primarily to large steel and cement works, increasingly frequently found in Asia.

## THE HYPOCRISY OF SWISS BANKS

Public Eye's investigation, drawing on data from the Dutch research agency Profundo, shows: since the 2015 Paris Agreement, aiming to reduce greenhouse gas emissions, Swiss banks have lent almost USD 3.15 billion to the Swiss coal industry. Between 2016 and 2020, the annual sums raised by coal producers and traders increased by 72 percent.

Swiss banks occupy tenth place globally in the funding of coal trade: In the time between the Paris Agreement and September 2022, the Swiss coal industry raised a total of USD 72.9 billion from banks in France, Japan, the US, Russia and other countries. On its own, Credit Suisse provided more than half of Swiss funds allocated to this market. Among its best clients are Trafigura and Glencore, but also the Russian mining companies Sibanthracite and Suek. It's important to mention the involvement of the cantonal banks (Zurich, Vaud and Geneva), which being publicly owned should respect the political commitments made by Switzerland in Paris.

The exclusion criteria drawn up by the banks are drafted in such a way that large diversified groups of companies slip through the net of climate-related promises. None of the commitments made by Swiss banks analysed by Public Eye would exclude, for example, the financing of Glencore's coal business. Faced with environmental pressure, financing is conducted with increasing discretion. According to the French NGO Reclaim Finance, 90 percent of financing granted to companies active in coal trade is conducted using non-constraining credit lines related to their use (corporate loans) or underwriting of loans. Thanks to this instrument, based on the issuing of bonds by companies, financial institutions are not obliged to include coal in their accounting.

## OUR DEMANDS

Climate change and the energy crisis caused by the war in Ukraine show how urgent it is to move away from fossil fuels. At the United Nations conference on climate change in Glasgow, a year ago, the participating states agreed upon phasing down coal worldwide. Switzerland also supported this demand and co-signed several public appeals in favour of an even more ambitious global phase-out. These commitments must be followed by acts. It's essential that the plans to move away from fossil fuels and the objective of reducing $CO_2$ emissions be substantiated at the Climate Change Conference to be held this Autumn at Sharm el-Sheikh in Egypt, and that they be enshrined in a strict framework.

The dominant position of Switzerland in coal-trading should enable it to influence world climate policy. This factor also implies a sense of responsibility that it has not so far accepted. This inaction must cease, giving way to a paradigm change to which all the parties must contribute.

Read our demands for a world without coal on page 45.

*“An army was springing up from the depths of the pits, a harvest of citizens whose seed would germinate and burst through the earth some sunny day.”*

**Germinal, Émile Zola, 1885**

← Around 1900, the United States, a big coal producer, also resorted to child-labour for the mining of this raw material: shown here are young workers in the Woodward Coal Mines, in Kingston, Pennsylvania. | © Pictorial Press/Alamy

A miner holds pieces of coal at a site in Cucunuba, Colombia. The country is one of the biggest exporters worldwide, and continues to bet on coal. | © Nicolo Filippo Rosso/Bloomberg via Getty Images

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# Its name is coal

The most polluting of all fossil fuels is making a big comeback in the 21st century. The overcoming of the Covid pandemic, the war in Ukraine and the resulting disorder in the energy markets – everything seems to benefit coal. The year 2022 has seen more coal extracted, traded and consumed than ever before. It's a boon for Switzerland's economy, as the country is involved in about 40 percent of the global trade, with 245 companies present. Six years of hypocrisy have passed since Switzerland made commitments on climate as part of the Paris Agreement. During this time, Swiss banks lent USD 3.15 billion to the domestic coal sector.

*A piece of coal wrapped up like a present with someone's name written on it. In some households, receiving it is a threat hanging over children around Christmas-time. In Spain, the day after the Cavalcade of the Magi, the naughtiest children find a piece of this sedimentary rock next to – or even instead of – their present, cut to fit the scale of their mischief. It's a rite of passage that the adults in the Carbó family – my family – indulge in all the more animatedly because our family name literally means "coal". That's my personal anecdote. On a more educational note, coal is often associated (at least in some parts of the world) with the misperception that it makes your hands dirty. A reward for a year of indiscipline – a punishment.*

Adrià Budry Carbó, Co-Author and Coordinator of this report

## COAL, THE UNLOVED STEPCHILD

Within the fossil-fuel family, coal is indeed the poor relation. In contrast to its cousin, oil, coal seems devoid of any glamour. It evokes neither images of great petro-dollar wealth nor geopolitical intrigue, but rather the powerhouse of the industrial revolution and images of "coal miners covered in soot leaving mines in a pitiful state, desperately making a living for their families in small, grim towns built by their employers" recalls Barbara Freese in her remarkable work[1] *Coal, A Human History*. Coming from a sector that learnt to be discreet and constantly on the defensive, one coal trader puts the situation in more prosaic terms: "oil simply has better communicators".

However, coal has neither been relegated to personal anecdotes nor to the history books. The mineral that ushered in the industrial revolution has returned, stronger than ever. It has never been extracted, transported and consumed as much as in 2022.[2] This year, production is set to exceed the symbolic threshold of 8 billion tonnes – 72 percent more than at the turn of the century, leading French science historian Jean-Baptiste Fressoz to say that "there has never been an energy transition"[3] during his conference "A political history of $CO_2$".

Demographic growth, increasing electrification and the disruptions in energy markets mean King Coal has a bright future. By financialising and internationalising its market, Switzerland has once again played the game cleverly – welcoming the headquarters of large mining companies since the start of the 2000s and giving rise to a veritable ecosystem of soot, from Zug to Geneva and Lugano. This coal triangle – our Swiss coal "industry" – numbers no fewer than 245 companies active in producing and marketing this primeval rock.

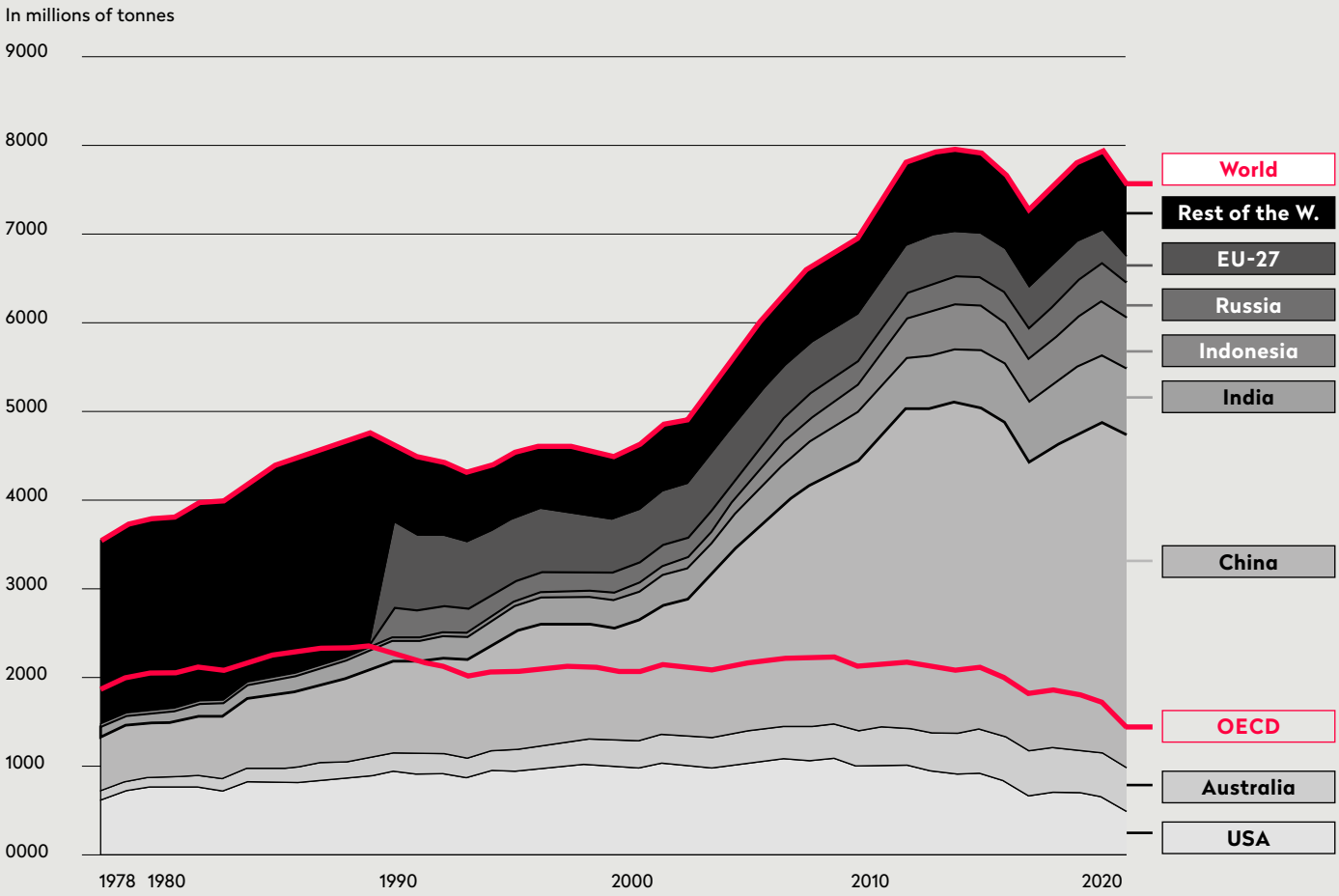
"Why would we deprive ourselves of it? Coal is the cheapest fossil fuel and the most abundant on earth; it's essential if we are to lift a quarter of humanity out of energy poverty" says a trader. He agreed to discuss his profession with Public Eye for this report – which took a year to research – and continues: "If coal has enabled Europe, followed by the United States, to attain the status of superpowers, why would we deprive former colonised countries of it?"

This development-centric argument repeatedly comes up in the sector. It cannot be dismissed out of hand. The challenge of electrifying part of the African continent and the countries of South Asia remains a fundamental aspect of the fight against economic stagnation. However, one must face the facts – today, coal remains the commodity with the worst pollution-to-energy produced ratio. It's responsible for 40 percent of the increase in carbon dioxide emissions ($CO_2$)[4], and is the most polluting substance on earth.

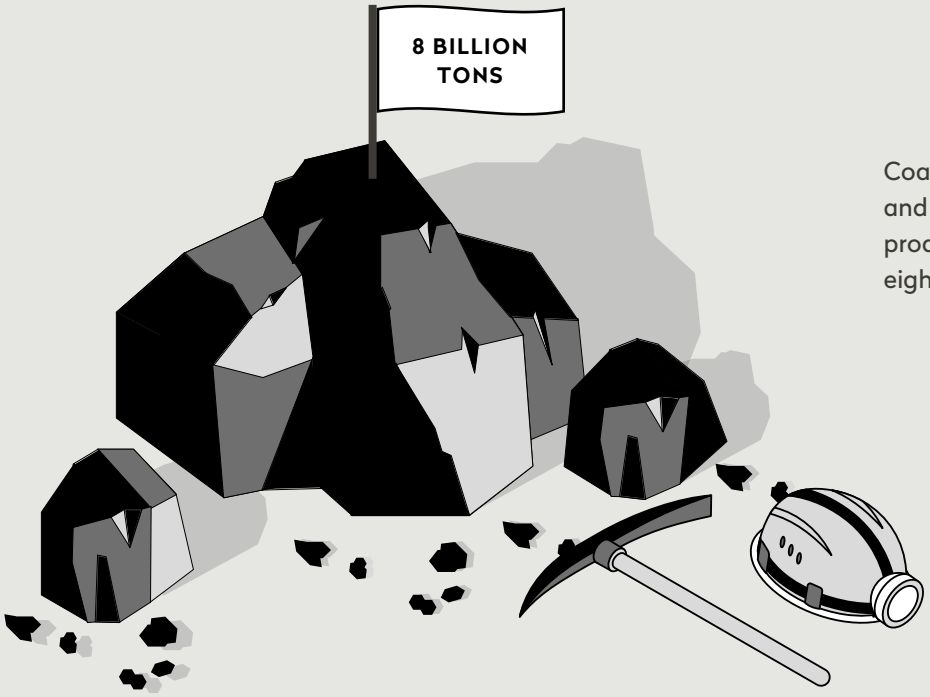
It's up to low- and middle-income countries to avoid falling into the same traps as Europe did in linking their long-term prospects to soot by investing in new coal-fired power stations. It may be easy to extract and relatively cheap, but the negative aspects are unquantifiable and, most of the time, ignored by the coal proponents. States like Switzerland, which have advocated for a global coal phase-out at the 2021 climate change conference in Glasgow, have their share of responsibility too. They must support economically disadvantaged countries during this energy transition, starting with a reduction of their own $CO_2$ emissions, in particular those generated by their financial and commodity trade sectors. This is the only way to ensure a reliable supply of renewable energy worldwide.

The following pages seek to give credit where it's due in relation to the use of coal. This report is tempered by a degree of respect for a material that shaped our era, but without concessions in relation to its social and environmental ramifications – in a bid to make presents that blacken your hands no more than a distant memory.

## GRAPHIC 1 – **GLOBAL COAL PRODUCTION FROM 1978 TO 2020**




In spite of the decline caused by the COVID-19 pandemic, today we consume more coal than ever. Out of a worldwide production of 7517 million tonnes in 2020, most of it is in Asia, where China is again, and by far, the biggest producer of coal, followed by India and Indonesia.




Coal has never been extracted, transported, and consumed as much as in 2022. This year, production should exceed the symbolic eight billion tonnes threshold.

Source: www.iea.org

Aerial view of the Mount Owen open-cast mine in New South Wales in Australia. It is owned by Glencore, which is the biggest producer of coal in the country, with 15 mining operations active in 2022. | © Brendon Thorne/Bloomberg via Getty Image

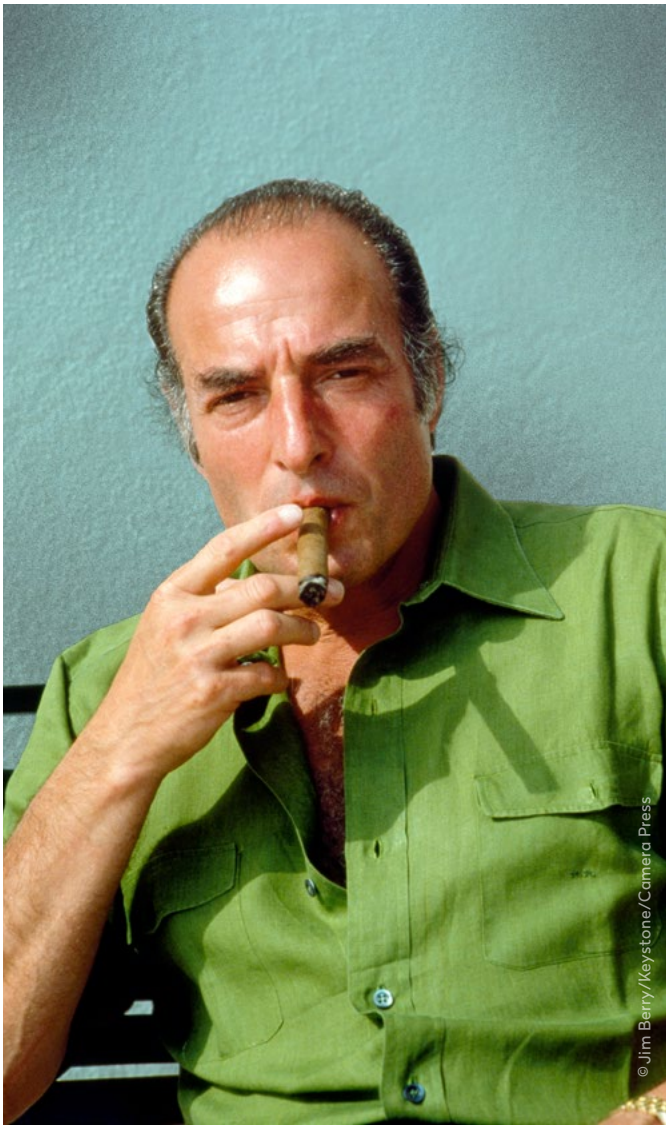
2

# The Swiss coal map

The duo that made the multinational firm Glencore what it is today set the first milestones for the Swiss coal “hub” in Zug in the 1990s. The attraction of the world’s largest exporter drew in mining companies and traders, who also subsequently set up shop in the financial centres of Lugano and Geneva. Switzerland now has 245 companies active in the coal sector.

Switzerland closed its last coal mine 75 years ago, at the end of the Second World War. Nevertheless, in the 2000s it became a heavyweight in the international coal trade. It was no coincidence that the largest mining companies on the planet – be they Russian, US or Indian – lost no time in establishing a presence in Zug, Geneva and Ticino.

Two individuals well known to the trading world and the US Department of Justice are to be found at the genesis of the Swiss coal hub: Marc Rich and Ivan Glasenberg. Marc Rich was nicknamed the "godfather of oil" by the journalists at the financial news outlet Bloomberg – Javier Blas and Jack Farchy in their book *The World for Sale*.[5] He "shaped" the Swiss commodities hub by setting up in Zug in 1983, after fleeing the US judiciary, which was accusing him of tax evasion and of exploiting the Iranian oil embargo. So it was in Zug that the cigar-lover chose to set up the Marc Rich & Co. company. In April 1984[6], he hired a young but hardened South African trader with a clear idea in mind: coal had a brilliant future ahead of it. Together, Marc Rich and Ivan Glasenberg laid the first foundations of the future Swiss coal "hub".




Marc Rich, the founder of the Zug-based giant of raw materials Glencore, having a good time in one of his properties in Spain.

## THE "RIGHT GUY" FOR THE NEXT STAGE

When Marc Rich & Co. acquired a stake in the company Xstrata in 1990, the latter was still called Südelektra and specialised in funding large electricity infrastructure projects in Latin America. Under the direction of its new majority shareholder, it used its listing on the stock market to raise funds on behalf of Marc Rich & Co., thus initiating its diversification into the mining sector.[7]

At the same time, Ivan Glasenberg was appointed as the head of the coal division at Marc Rich & Co. – which was renamed Glencore in 1994. For Marc Rich, there was no doubt that Ivan was "the guy who will basically take Glencore to its next stage".[8] From 1998, he drove the company to take on debt to acquire coal mines. Commodity prices were extremely low at the time, but this preceded a super-cycle, a sustained period of growing demand exceeding supply, that delighted the sector. The bet paid off. Up to this point, Glencore had been a pure trader. It then obtained secure access to tens of millions of tons of coal as well as the possibility to influence the price by adjusting production. In 2000, Glencore was already the world's largest exporter of thermal coal; accounting for a sixth of global trade.[9]

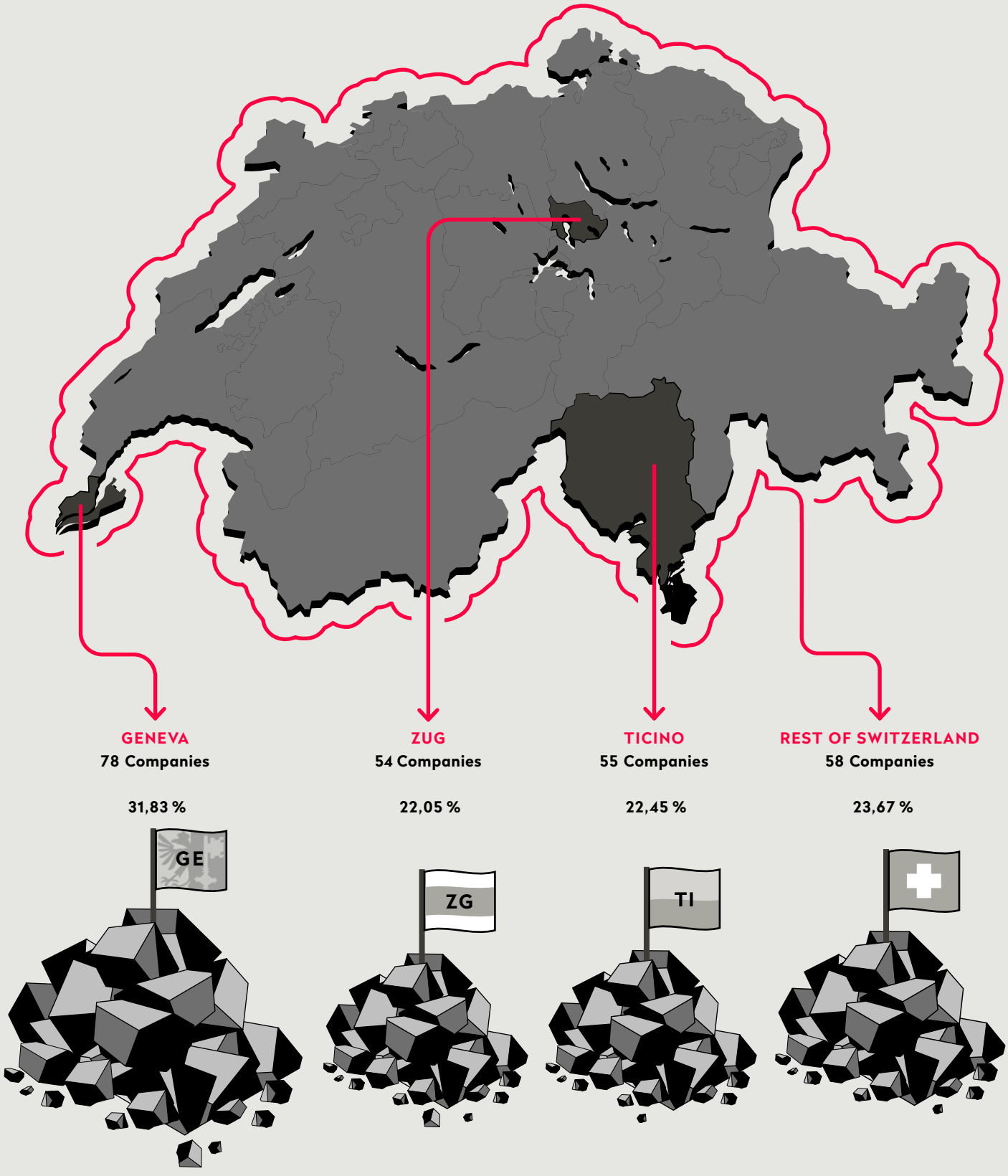
But these companies' fortunes were not always plain sailing. In 2002, when Glencore urgently needed liquidity, management devised a plan to set up two coal giants in Zug in the blink of an eye. Listed in London and Zurich, Xstrata sold USD 1.4 billion worth of shares to acquire Glencore's Australian and South African coal mines. Marc Rich's former company once again specialised in coal trading, now with production assured by Xstrata – of which he is also the main shareholder, with a 39 percent stake. Glencore retained its empire; Zug its coal hub.

Xstrata was finally absorbed by Glencore in 2013. The latter financed the operation by floating on the London Stock Exchange two years earlier. The company run by Ivan Glasenberg became the uncontested leader in coal. Its power was such that it attracted other companies into its slipstream and led smaller traders to follow a calling to a market that had appeared dead and (nearly) buried. At the start of the 2000s, most international mining companies set up their commercial department and/or headquarters in Zug, Lugano or Geneva. Dozens of traders, specialised in selling a commodity that had suddenly become global, swarmed around them. Switzerland became a hub for the international coal trade.

Public Eye counted 245 companies currently registered in Switzerland's commercial register with the aim to market coal extracted from mines that they own, or have bought on the markets, or in Over-the-counter agreements; or providing financial services associated with coal or one of its derivatives. Their number in Zug is 54; in Ticino it is 55 and in Geneva it is 78.

## GRAPHIC 2 – 245 COMPANIES IN SWITZERLAND ARE CLOSELY LINKED TO COAL

According to the calculations of Public Eye, today Switzerland has 245 companies listed in the commercial register, with the goal of trading in coal extracted in their own mines, bought on the markets, or in over-the-counter transactions. Others provide financial services connected with coal or one of its derivatives.



Wood engraving representing London around 1890. The city is badly affected by pollution due to coal-burning. Its combustion gives rise to a variety of pulmonary diseases. | © Ann Ronan/Alamy

3

# Prometheus, glamour and the market

Converted to heat, used for transport or to fuel industrial blast-furnaces – coal offered humankind the power of a thousand suns, buried over the centuries. In exchange, its human and environmental cost has left an enduring mark on our planet. It may no longer get good press, but coal is – discreetly – making a big comeback.

Coal doesn't actually exist in a single form. From wood briquettes used for Sunday barbecues and (mineral) coke used in blast-furnaces, to peat, popular language uses terms that are so diverse that it's hard to see what they have in common. This is the paradox of the matter. Coal is both the world's oldest fossil fuel and at the same time a social and economic construct for which there is neither a strict scientific definition[10], nor commercial standardisation in relation to its form and quality.

Created from the decomposition of tropical plants that populate the world's hot and humid regions, during the Industrial Revolution in Great Britain (1760 – 1913) coal attracted the nickname "buried sunshine", or "sun concentrate". It was laid down in seams over tens of millions of years and contained enough energy to transform our planet permanently. The first wave of globalisation, European colonisation and the Anthropocene Era arose from the effort to harness this radiant energy. It was the period in which humans became a key actor, able to exert a lasting impact on their environment.

For the purpose of this study, we will refer to the concept of coal as a family of sedimentary, combustible rock that is formed from compressed plant debris. From lignite to anthracite, there are infinite varieties of coal, depending on carbon content (its calorific value) and level of volatile matter ($CO_2$, methane and other hydrocarbons) liberated at the moment of combustion. The basic principle is as follows: the older and more deeply buried the coal is, the higher its calorific value.[11] Anthracite's carbon content (90%) is for example far higher than that of lignite, the low-end manifestation of this rock on the market.

There are two main categories of mineral coal that are distinct from one another in their use:

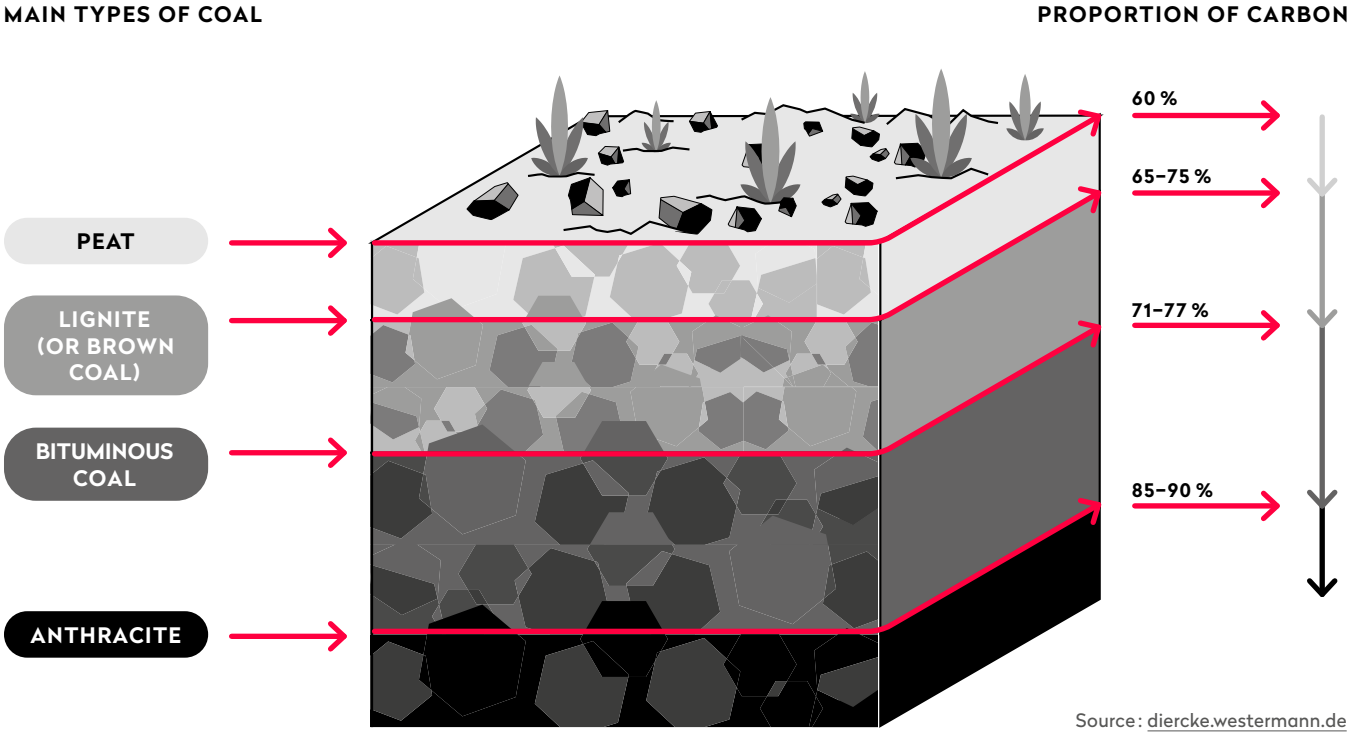
1. **Thermal coal** used in coal plants to generate electricity. This represents some 70 percent of its use.

2. **Metallurgical coal** used to heat blast-furnaces, primarily steelworks (some 15 percent). The remaining part is distributed between the cement, paper and ceramics industries.

## A MANIFEST DESTINY

Coal comes from the Earth's crust and has a far higher calorific value than charcoal, so it burns better and for longer. Coal brings tropical sun to the North, melts iron ore, and transforms

### GRAPHIC 3 – HOW COAL IS FORMED: A LONG PROCESS




Coal was formed over millions of years from dead vegetation. After being covered by layers of earth, it was subjected to high pressure and heat. This was how peat, lignite, bituminous coal and anthracite were formed. Anthracite is the most combustible form, owing to its high level of carbon.

heat into movement via steam. It offered Great Britain the ability to master both steel production and the oceans, giving it at least a half-century head start in the Industrial Revolution. This was more than enough to strengthen the belief that the nation had a manifest destiny to be a global power.[12] The territories endowed with large coal reserves saw in this a marvellous gift from Providence. It offered a group of hand-picked companies the power of a million years of sunshine, stored in anticipation of their future needs. From that point, this concentrated energy became closely associated with the concept of civilisation – but the power it provided came at a price.

In 1860, England alone produced more coal than the rest of humankind. With its three million inhabitants, London was the largest city on earth, at the heart of the empire and a crossroads of cultures. The soot regularly plunged the capital's streets into darkness for whole days[13] – "a darkness you can touch", to cite an expression then used by the *Times* newspaper – and caused many health problems, particularly among children.

In 1886 in the United States, which had since become the new coal power, it's estimated that 31 percent of deaths in the mining region of Cincinnati were linked to pulmonary diseases such as tuberculosis, pneumonia and bronchitis.[14] Coal releases more carbon dioxide than other fossil fuels when consumed – twice as much as natural gas, and a third more than petrol.[15] This is the cost of the soot.

Over the decades, in the collective imagination, coal has become associated with Dickensian images of children in rags and covered in soot, begging for a scrap of bread or loitering on platforms in search of a piece of coal falling off a wagon. It takes you back to the torments of the 19th century and to the social cost of the industrial revolution.

## NOT A "SEXY" PRODUCT

Two centuries later, Ivan Glasenberg claimed that "everybody is horny as hell for coal".[16] The former CEO of Glencore deserves credit for having always believed in the revival of Coal as King. This is what pushed the Zug-based giant to enter a race to acquire coal mines in the 1990s. He was proved right – in 2022 the price of coal has tripled compared to the previous year. With its 26 coal mines[17] and its market strength, this summer Glencore signed a record annual contract with a coal plant in Japan. The price was USD 375 per tonne.[18] The negotiations between the Zug-based multinational – whose production increased by 14 percent in the first half of 2022 – and its Japanese clients were followed closely by the whole sector, as it considered the tariffs it obtained as a reference for the year to come.

It was certainly something to brag about in Zug, and Ivan Glasenberg did not shy away from doing so. He took every opportunity to extoll the virtues of the sedimentary rock to the media and his firm's shareholders. In February 2019, under pressure from a coalition of investors driven by environmental considerations[19], Glencore was forced to announce a freezing of its coal production (of 150 million tonnes a year). Since then, coal has no longer featured in Glencore's active communications. It prefers to crow – in Swiss bus and railway stations and trains – about its cobalt and copper assets; minerals that both play a core role in the energy transition.

Even at the FT Global Commodities Summit in Lausanne, coal traders seem to occupy a marginal spot on the sidelines. "Coal isn't sexy – it gets your hands dirty. It's a product that requires little added value", says Lars Schernikau. Established in Switzerland over the last 20 years, this East German is unique in that he wrote one of the few academic works on the coal market.[20] He himself has been involved in marketing it since he became a shareholder of his family business. "Thirty years ago, even I was asking myself who would still need coal", he admits. "No one was paying attention to this form of energy any longer." It has now very much regained our attention.

In the Kotinskaya mine in Western Siberia, owned by SUEK. The Russian company established itself in Switzerland in 2004.

4

# The extractors – Switzerland returns to mining

Following the example set by companies from Russia, since the start of the century the world's largest coal miners have chosen to base themselves in Switzerland. In total, they extract no less than 536 million tonnes of coal, which over its full production cycle generates the equivalent of the $CO_2$ emissions of the United States. The trend has been continued by the recent decision of the Indian company Adani to take up residence in Geneva.

In the wake of Glencore, the world's largest mining companies decided to base their headquarters in Switzerland. The movement was initiated following the collapse of the USSR by Russian companies taking advantage of their new economic freedom to get a foot in the door in the heart of Europe. Whether to benefit from our cantons' generous fiscal policies, the largesse of banks that fund the commodities trade – or quite simply because they don't trust their national currency – one by one, the largest coal producers from the ex-Soviet bloc set up shop in Switzerland.

These companies are called Suek, Sibanthracite, Evraz and SDS. They were all born during the wave of privatisations that followed the collapse of the USSR, they all produce their coal in the middle of Siberia (or more recently in the Far East), and above all they are managed by businessmen who "came from nothing" – as they like to say – but who enjoy a certain proximity to the Kremlin.[21]

The SDS group (the Russian acronym for Siberian Business Union) was the first to set up in the canton of Appenzell Innerrhoden in 2000 with its trading unit[22] MIR Trade AG. Other companies preferred the canton of Zug and particularly its trendy Baarerstrasse, where they are at times separated by nothing more than a row of glass facades. Together, they form the first apex of the Swiss coal triangle.

After stagnating for decades, coal prices skyrocketed at the start of the 2000s.[23] In Russia, corporate empires were built on a foundation of wide-spread corruption and mafia-like practices. The sector saw stupendous rises and equally brutal falls. After the fall of the Soviet Union, the least profitable mines closed; the country shifted towards export and production progressively became concentrated within some ten companies. It was at this time that the future billionaire and Swiss resident Andrey Melnichenko invested heavily – through the MDM bank that he co-founded – taking stakes in the largest coal companies in the country, grouped under SUEK, also based in Zug.

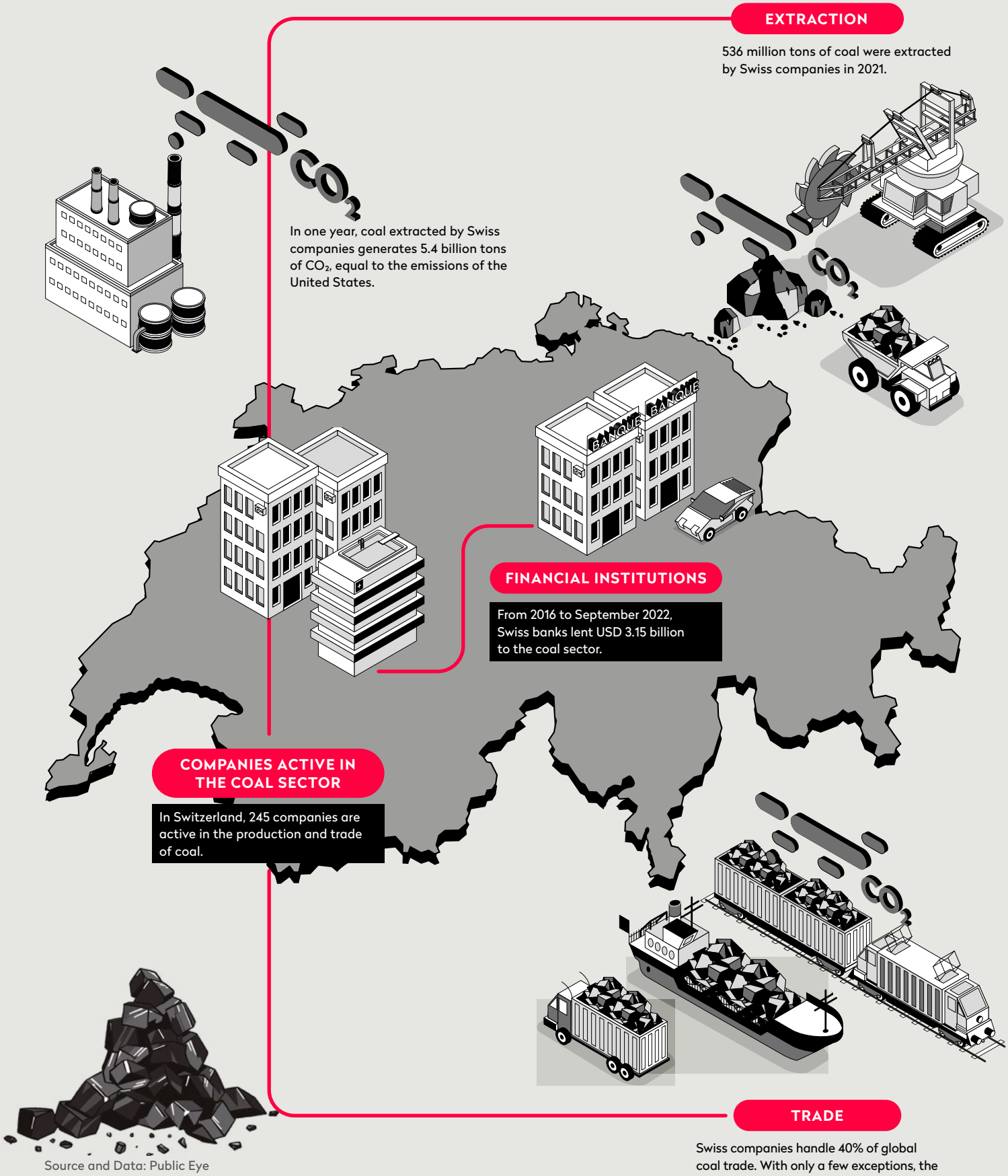
## SOOT FROM RUSSIA

Vladimir Putin himself swiftly became aware of the sector's potential. In January 2012, while he was prime minister, he signed off on a vast programme to develop the industry to the tune of USD 119 billion – of which 8.5 billion were public funds – aimed at improving infrastructure (above all rail and maritime transport) and to boost the production of coal up to 2030. Since 2019, the Kremlin has had no qualms about providing its active support to large coal-extraction projects in the Arctic.

It was a boon for Switzerland and in particular the canton of Zug. The new taxpayers generated nearly no negative externalities, as the coal only passed through the country in the form of accounts. The companies were discreet in occupying simple offices and their owners invested extensively in real-estate and patronage projects. This is the virtuous circle of coal. Until sanctions were imposed after Russia invaded Ukraine in 2022, 75 percent of the 212 tonnes of Russian coal exported at the global level were marketed from Switzerland. Since then, there has been significant uncertainty around the future of these Zug-


Coal mine belonging to SUEK in Bureinsky, Russia.

## GRAPHIC 4 –SWITZERLAND, A GLOBAL COAL HUB




Source and Data: Public Eye
Source Graphic: Fastenaktion

based companies. SUEK, for one, has moved its trading unit to Dubai, under a new name.[24]

## GENEVA FOLLOWS THE COAL TRAIN

These companies specialising in coal are also joined by other companies seeking to diversify their energy mix. This is the case for Mercuria. The Geneva-based group, often viewed as a pure trader, actually owns two coal mines (one of which is a joint venture).[25] The first, located on the Island of Borneo, is an investment that was defined as "strategic" in 2010.[26] It aims to develop Mercuria's Asian and global coal assets. The second mine, Canyon Coal, was opened in South Africa in November 2018, in partnership with a local company.[27] A Mercuria representative stated: "Coal is part of the energy landscape. It remains essential. Through modest holdings, we obtain a small flow, but primarily it helps us to understand price dynamics on the energy market. Otherwise, we're flying blind."

A stone's throw from Geneva, there are undoubtedly also fears of commercial blindness. The Brazilian mining giant Vale, which set up its holding and commercial branch next to St-Prex (VD), inaugurated its first coal mine in May 2011 at Moatize in Mozambique. The approximately 8 million tonnes of production were sold from the company's premises in St-Prex.[28] After displacing nearly 3,400 families and facing opposition from numerous communities, in late 2021 Vale announced that it wanted to divest itself from coal in order to become a "leader in low-carbon mining".[29] A sale agreement was concluded with the Canadian firm Vulcan Minerals for USD 270 million.

However, the last coal-extraction arrivals seem to be heading for Geneva again. That is where the Indian group Adani set up its commercial subsidiary in April 2020. It remains registered at a local fiduciary.[30] India, where nearly half of households lack access to electricity, is hungry for coal. According to the International Energy Agency's figures, the country is set to add 130 million tonnes to global annual consumption from now to 2024.

This is a boon for the conglomerate from Gujarat (in western India), which already produces 17.5 million tonnes of Indian and Indonesian coal and which, in late 2021[31], started production at its controversial Carmichael mine in north-eastern Australia. After local and Aboriginal people from the Wangan and Jagalingou groups mobilised to demand that their land rights be respected, Adani was forced to reduce the scale of its project, going from a predicted annual production of 60 million tonnes to 10 million tonnes.[32]

18 mining companies, most of which recently settled in Switzerland, extract in total over 536 million tonnes of coal a year. Once the emissions associated with the extraction, transport and transformation into electricity are accounted for, that equates to nearly 5.4 billion tonnes of $CO_2$ released into the atmosphere. That's more than the emissions of the largest global power, the United States (read methodology below).

## METHODOLOGY OF THE $CO_2$ EMISSIONS ESTIMATES

Total $CO_2$ emissions attributable to Switzerland's coal hub have been estimated using data obtained in the financial reports of the various mining companies in question.
On this basis, there remain numerous ways to calculate the environmental impact of a commodity. For the purpose of this research, we focused on the coal's journey, from the mine to the point at which it is transformed into electricity in a power plant. The combustion of coal in blast-furnaces of metallurgical factories generates more or less the same $CO_2$ emissions, confirms Niels Jungbluth, director of ESU Services, a sustainability consultancy based in Schaffhausen. In contrast, the quality of coal extracted and the technological capacity of the power plants can cause the level of emissions to vary. For the purposes of our study, we estimated these as consistent, using the basis of average data for a power plant from a study of the Federal Coordination Unit on energy environmental reports.[33] According to this source, a kilowatt hour (Kw/h) of electricity releases on average the equivalent of 1.23 kilos of $CO_2$ into the atmosphere (against 1.36 for lignite, the most polluting form of coal). "Coal is a commodity that is not very efficient, like oil" concludes Stéphane Genoud, professor of energy management at HES-SO Valais, a university of applied sciences in the canton of Valais. "Only 30 percent will serve to produce electricity, the rest goes up in smoke at the point of combustion." In a pilot study on the impact of the business on the climate from 2018[34], the consultancy ESU Services had estimated that the carbon output of the commodities trade in Switzerland had to be multiplied by 11 times against the $CO_2$ emissions of domestic consumption (coal is the second source of pollution, behind crude oil). However, this study did not account for the combustion of commodities "which represents 80–90 percent of the climate impact" according to Niels Jungbluth, one of its authors.

TABLE 1 – **PRODUCTION AND TRADING OF COAL OF 18 MINING GROUPS IN SWITZERLAND**

| Company | Production 2021, in million tonnes<br>Trade 2021, in million tonnes | Incorporation in Switzerland (year) | Form |
|---|---|---|---|
| **Glencore** | • 103.3<br>• 67.7 | Glencore AG and ten other subsidiaries (1978), Baar (ZG) | Headquarters<br>Commercial and operational branches |
| **SUEK** | • 102.5<br>• 54.5 (exports) | SUEK AG, SUEK Assets Holding AG and SUEK Logistics GmbH (2004), Zug | Commercial branch + holding covering assets + logistics |
| **EPH (Energeticky a Prumyslovy Holding)** | • 79<br>• 79 | EP Resources(2019)<br>Baar (ZG) | Commercial branch |
| **BHP** | • 60 (Year end result for March 21 to March 22)<br>• 60 | BHP Billiton Marketing AG (1988)<br>Baar (ZG) | Commercial branch |
| **Drummond** | • 31.5<br>• 31.5 (produced and exported) | Drummond Coal Sales International LLC, Birmingham, Paradiso Branch (2012), Paradiso (TI) | Commercial branch for Europe and the Middle East |
| **SDS** | • 27<br>• 26.2 | MIR Trade AG (2000)<br>Teufen (AI) | Commercial branch |
| **Evraz** | • 23.27<br>• 19.1 (82 % of mine production) | East Metals AG (2002)<br>Zug | Commercial branch |
| **Sibanthracite Group** | • 22.6<br>• 22.3 | Sibanthrancite Overseas AG (2009)<br>Zug | Commercial branch |
| **Elga Coal (A-Property)** | • 18<br>• 15 | Elga Coal Overseas AG (2020)<br>Zug | Commercial branch |
| **Adani** | • 17.5<br>• approx. 11.04<br>Increase due in 2022 with the Carmichael mine | Adani Global (Switzerland) Sàrl (2020)<br>Geneva | Commercial branch (domicile company in c/o) |
| **Kolmar LLC** | • 12<br>• 5.4 (calculated on the basis of projections) | KSL AG (2016)<br>Zug | Commercial branch |
| **Mechel** | • 11.3<br>• 9.7 | Mechel International Holdings AG, Mechel Trading AG, Mechel Carbon AG (2005)<br>Baar (ZG) | Commercial branch + holding |
| **KTK (Safmar group)** | • 9.53<br>• 6.52 (2020 figures) | KTK Overseas AG (2015)<br>Risch-Rotkreuz (ZG) | Commercial branch |
| **Vale** | • 8.07<br>• 8.07<br>The mine is in the process of being sold to Vulcan Minerals | Vale Switzerland SA (2013)<br>Vale International (2006)<br>St-Prex (VD) | Commercial Holding branch |
| **Karakan Invest** | • 4.5<br>• 2.3 (2020 figures) | Karakan Trade (2022)<br>Paradiso (TI) | Commercial |
| **IMR Resources** | • 2.3 (scheduled output in 2019)<br>• 2.3 | IMR Metallurgical Resources AG (2004)<br>IMR Holding (2005)<br>IMR STEEL AG (2017)<br>Zug | Commercial branch<br>Holding<br>Financial branch |
| **Mercuria** | • <2<br>• 13 | Mercuria Energy and subsidiaries (2004)<br>Geneva | Holding, Headquarters<br>Commercial and operational branch |
| **Coeclerici** | • 1.7<br>• 9.4 | Coeclerici Commodities SA (2003), Paradiso (TI) | Commercial branch |
| **TOTAL** | **Production: 536.07 million tonnes**<br>**Trade: 525.93 million tonnes** | | |

Source: Annual Reports 2021, Public Eye


Coal barges are pictured as they queue to be pulled along Mahakam river in Indonesia, in 2019. | © Willy Kurniawan/ Reuters

5

# Traders – the ecosystem of coal

The financialisation of the sector and the internationalisation of exchanges enabled Switzerland to become a coal hub. Together with extractors and financiers, the traders form a network that handles 40 percent of the international coal trade.

It was challenging for Switzerland – a country that no longer has a single coal mine on its territory – to become one of the global capitals of the business. For the coal trader Lars Schernikau, the sudden attraction of Switzerland "is due to a combination of factors, of which the fiscal dimension is an important element". Among the others, the proximity to Swiss and European banks (read following chapter), the stability of Switzerland and its currency, logistical ease and a somewhat *laissez-faire* culture in terms of economic and regulatory policy all warrant a mention.

This framework is tailored to the hardcore – the "to the bitter end-ists" of fossil fuels. "Coal is an old-school market. Only recently contracts were exclusively negotiated face-to-face and at the mine entrance. This puts off lots of investors", says another trader, who wished to remain anonymous, because "in coal, people know how to bear a grudge".

In reality, until the 1970s, coal was an extremely regional market, with coal being consumed close to the production site. International exchanges primarily took place with neighbouring countries and very rarely, like today, via bulk carriers travelling halfway across the world. When large oil shocks caused the oil price to skyrocket, Europe started to diversify its energy mix at a rapid pace. From 150 million tonnes of thermal coal traded internationally in 1980, trade increased to 900 million tonnes in 2005[35] to reach some 1.2 billion tonnes today.[36] The approximately 6.5 billion remaining tonnes are produced and consumed at a more local level, largely in China, which accounts for half of global production, or in India and the United States. Supported by Asian markets, the consumption of coal is due to continue increasing until at least 2024, according to the International Energy Agency's predictions.[37] Clearly, coal is unlikely to peak tomorrow!

## COAL AND ITS FINANCIAL PRODUCTS

The sector became internationalised and its flagship product – coal – became commoditised. Nowadays it's traded around the world, to the great satisfaction and benefit of Switzerland, which is able to play on its status as a coal hub. "All you need is a telephone and an internet connection. Sitting in Geneva, you can speak to Asia in the morning and the Americas in the afternoon" the representatives of the large trading houses like to recall.

Until the start of the 2000s, there were no financial products backed by coal. Indexing – that is, the setting of reference prices for different markets by specialised agencies like Argus Media – arose during this period of financialisation of the sector. "It's a *sine qua non* condition for the traders" insists a Mercuria representative. "Without derivatives you cannot cover yourself against price fluctuations. As soon as you can manage financial risks efficiently, new opportunities open up." Lars Schernikau agrees, stating that "derivatives and elevated prices attracted a whole series of financial intermediaries, like banks and hedge funds. These financial products generally end up inflating coal prices, which has repercussions for the end-consumer".

The coal boom of the 2000s triggered new vocations among the traders. Displacing in part the contracts concluded at the mine entrance, many of these new intermediaries set up around the large Swiss trading centres. Or in the case of those that already had a presence in Switzerland, like Trafigura or Vitol, they diversified their business to include the coal sector. Just like Swiss electricity producer Axpo, which trades coal but does not disclose the volumes.[38]

Despite the approximately 60 million tonnes it marketed in 2021, Trafigura did not think to mention coal in its Sustainability Report.[39] Vitol entered the market in 2006. Eight years later, it was celebrating having traded over "30 million tonnes of physical coal". The Geneva-based trader, better known as an oil specialist, thus became "one of the world's top five coal traders".[40] Since then, all reference to coal has disappeared from Vitol's website and even from its brief financial reports.[41] When contacted, the company's representative asserted that the volumes have dropped from 60 percent, and that the company only held a minority shareholding (0.6%) in the South African mining company[42] that "Vitol will look to exit [from] as soon as it [is] practicable".

Despite the declarations of intent and grand announcements making claims like "Net Zero" (zero $CO_2$ emissions), "Switzerland remains one of the most influential actors on the coal market", confirms Alex Thackrah, analyst of the European coal market for Argus Media. It has a range of pure traders, the overwhelming majority of the 245 companies active in coal, but also the largest extractors of coal in the world. For example, Glencore – with its 15 coal mines in Australia[43] – exerts a significant impact on the Newcastle pricing benchmark, the reference for Asian markets. "Three quarters of Australian volumes are controlled by Switzerland. As a trader, the first question I have to answer when I bet on the coal price increasing is – am I on the wrong side of Glencore?", explains an independent trader.

## IN LUGANO, A STEEL BRIDGE FOR COAL

After Geneva and Zug, Ticino is the third angle of the Swiss coal triangle. In addition to gold, two commodities have a particular place at the heart of the Lugano trade – steel and coal. The two are closely linked. The origin of the coal hub cannot in fact be traced without taking account of the clout of the steel industry, and certainly not without reference to two names that have left their mark on the banks of Lake Lugano:

1. **Duferco SA,** a steel trader operating from Lugano, controlled by the Luxembourg company Duferco International Trading Holding (DITH). The company is now majority owned by the Chinese giant Hesteel Group, the second largest steel producer in the world.

2. **Bruno Bolfo,** founder of Duferco[44], who retains a minority stake and control, via a Lichtenstein trust, of other companies involved in the energy trade and maritime transport.[45]

It is probably this entrepreneur, originally from Liguria, who founded the Lugano commodities hub. After working for the Italian state steel group Italsider (that no longer exists), Bruno

Bolfo mastered his trade in the United States and Brazil, before installing Duferco in Lugano in the 1980s. When the Berlin Wall came down, he and his men headed East to get involved in the wild privatisations. He managed to forge alliances with the big Russian and Ukrainian steel producers. They included the Industrial Union of the Donbass (ISD), a giant based in Donetsk that at the time produced around a fifth of Ukrainian steel and for which Duferco would become exclusive reseller. In Russia, Duferco also collaborated with big industry names – In 2006, Bruno Bolfo joined the board of directors of Roman Abramovich's company Evraz and left it again a few months later, to form a strategic partnership with Novolipetsk Steel (NLMK), owned by the oligarch Vladimir Lisin.[46]

The arrival of Duferco in Lugano had different consequences. Firstly, it attracted to Ticino numerous commercial branches of Russian steel producers: NLMK, but also Alexey Mordashov's Severstal and Viktor Rashnikov's MMK – two oligarchs currently on the European Union and Switzerland's sanctions list. Even Roman Abramovich and his company Evraz chose Lugano as an entry point for Switzerland, before setting up in Zug with East Metals AG. Numerous Ukrainian producers also set up their commercial divisions in Ticino, such as Interpipe, belonging to the billionaire Viktor Pinchuk, the son-in-law of former president Leonid Kuchma.

The development of Duferco in Lugano also started a trend. Like for the "Rich Boys" of executives gravitating around Glencore's founder Marc Rich, the "Bolfo Boys" caused energy companies to spring up in the region, supported by their network and the proximity to their bankers at UBS, Credit Suisse, the Ticino Cantonal Bank or Banca Zarattini. The advantageous fiscal regime also managed to attract to Ticino commercial subsidiaries of Italian companies, thus making Lugano into a bridge between steel produced notably in Russia and Ukraine, and the peninsula's industrial sector.

Finally, alongside the steel traders formed an important network of companies active in marketing coal. The companies are called Flame, Bulk, Spark Energy Resources, Genesis Trade or Lyra Commodities. Specialised in trading coal and all its derivatives, these companies buy coal in different parts of the world – from South America to Indonesia and Russia – to resell primarily to large steel and cement works, increasingly frequently found in Asia.

In the field of commodities in Lugano, one still remembers the arrival in 2004 of Carbofer, a company linked to the Russian oligarch Alexander Katunin. After headhunting executives mainly from Duferco, Carbofer managed to break into the steel and coal trade. In a short time, the company achieved revenues of USD 4 billion, before it went bankrupt in 2012.[47]
Lugano has also welcomed the commercial subsidiary of the "first and only westerner" to have bought a coal mine in Russia. The company in question is Coeclerici, an Italian company founded over 120 years ago in Genoa to import coal from the United Kingdom. The parent company may now be based in Milan, but Lugano remains the headquarters of the group's commercial and mining activities. It was precisely its Ticino branch that had invested in Russia in 2003. At the time, Coeclerici Trading funded – to the order of USD 18 million – the development of a mine in the region of Kemerovo in Russia, thus acquiring exclusive sales rights over the two million tonnes of commodities produced annually by the mine. In 2008, the group also acquired 100 percent of Korchakol, a mine located close to the city of Novokuznetsk in the same region.[48] Following the invasion of Ukraine, the Coeclerici group confirmed that it had ceased all management, coordination and exploitation activities related to the Russian company that operated the mine.[49]

## COMPANIES WITH HIGH LEVEL OF DISCRETION

It is also important to note the presence in Lugano of the mysterious Telf AG. Initially based in Zug[50], the trading company is allegedly part of the network of Stanislav Kondrashov, a discreet Russian businessman who owns a villa in Agra, in Ticino as well as the Zug branch of Telf B&T.[51] Unknown to the general public, in recent years Telf AG has played a primary role in marketing coal produced by the Russian and Kazakh subsidiaries of the Eurasian Resources Group (ERG).[52] This company was born out of the infamous ENRC, which was wound down after an investigation by the British Serious Fraud Office (SFO).[53] In early 2021, Telf also hit the headlines by obtaining the marketing rights for the cobalt extracted by ERG in the Democratic Republic of the Congo. According to Reuters[54], this represented 18,000 tonnes of cobalt at an estimated USD 657 million, up to 2023. This is the contract that had aroused suspicions at the SFO, which accused ENRC of having paid the controversial Israeli businessman Dan Gertler – who is very close to former president Joseph Kabila – to obtain its exploitation licenses.[55]

According to the investigative media outlet *Africa Intelligence*[56], Telf AG essentially acted as a commercial subsidiary of ERG[57], a group 40 percent controlled by the Kazakh state, along with a trio of local oligarchs who all officially reside in Switzerland.[58] By going through Telf AG as an intermediary, a Swiss company with no reputation problems, ERG would avoid problems in relation to banking compliance.

Regardless of whether they are domiciled in Lugano, Zug or Geneva, these coal companies increasingly offer their owners a high level of discretion. According to Public Eye's estimates, some 40 percent of global coal is brokered through Switzerland. However, due to the opacity that surrounds the commodities sector, there are no official statistics in relation to its flows.

Aerial view of the port terminal in Newcastle, Australia, which is the most active coal-exporting facility in the world. A rainbow forms in a jet of water being sprayed over stockpiles of coal belonging to Glencore and other companies.

6

# Swiss banks – six years of hypocrisy

Since Switzerland signed the Paris climate agreements in 2015 to reduce greenhouse gas emissions, Swiss banks have loaned nearly USD 3.15 billion to the coal sector. The banks' climate engagements have more holes than a Swiss cheese. They allow to continue financing companies such as Glencore, under a veil of discretion.

"I look at the room; I see that the reaction is positive; I do not hear any objections. The Paris Agreement on climate is accepted."[59] It is 12 December 2015. These are the words that the president of COP 21, Laurent Fabius, used to seal the adoption of the first global climate agreement. Some 196 states committed[60] to reduce their greenhouse gas emissions, with the aim of limiting global warming to a maximum of 2°C by the end of the century, compared to pre-industrial levels, and even to continue the effort to limit the increase to 1.5°C.

Among the signatories, the United States (that later broke ranks under the presidency of Donald Trump) and Switzerland committed, upon ratification of the agreement in October 2017[61], to reduce their $CO_2$ emissions by half by 2030, compared to 1990 levels. "Switzerland is on the right track to implement the Paris Agreement", boasted the Federal Office for the Environment on its website.[62] The Swiss population (and most of the cantons) nevertheless dismissed the revision of the law on $CO_2$, which was due to validate the reduction commitments made in Paris. And its banks continue to operate as if nothing had happened, despite their grand commitments to becoming carbon neutral.

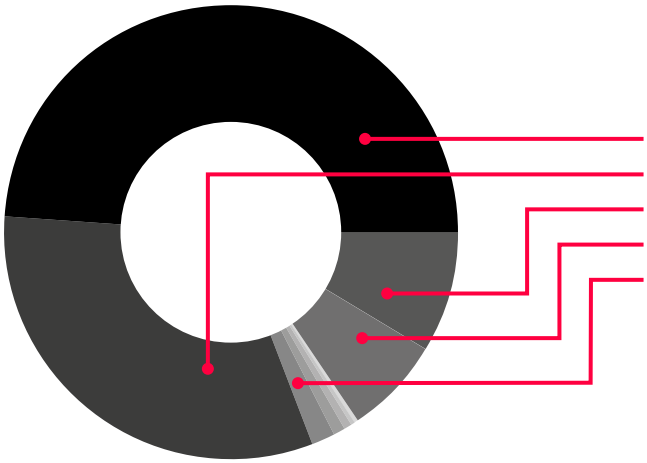
According to Public Eye's investigation, drawing on data from the Dutch research agency Profundo: since the Paris Agreement, Swiss banks have lent nearly USD 3.15 billion to the Swiss coal industry. Financing of the coal trade has even accelerated since 2016, if 2021 is omitted in light of the slowdown in growth caused by the Covid-19 pandemic. From 2016 to 2020, the annual sums raised by coal producers and traders increased by 72 percent. None of the banks in question wished to comment on the figures provided by third parties.

Swiss banks occupy tenth place globally as creditors of coal: In the time between the Paris Agreement and September 2022, the Swiss coal industry raised a total of USD 72.9 billion from banks in France, Japan, the US, Russia and other countries (see the table on page 35 at the top). Despite its commitments to reduce its financing for coal, Credit Suisse is by far the leading Swiss entity. On its own, the second largest bank in the country provided over half of Swiss funding that went to the coal market. Among its best clients are Trafigura and Glencore, as well as the Russian extractors Sibanthracite and Suek. The involvement of cantonal banks should also be noted, despite the fact that their public shareholding should cause them to exert increased diligence in relation to climate issues – and above all Switzerland's political commitments made in Paris – when they grant loans.

Public Eye contacted all major banks regarding their exclusion criteria. Every institution responded (see table below), except for the Geneva Cantonal Bank. When challenged, the bank did state that it "does not communicate on its policy of distributing international trade financing according to category of commodity".

The exclusion criteria developed by the banks (see table, page 37) are formulated in such a way that large, diversified groups slip through the net of climate commitments. Founder of the NGO Reclaim Finance, Lucie Pinson highlights Glencore as a prime example, the largest private coal exporter in the world – but coal only makes up a small portion of its revenues. "If we don't touch the largest producers, we know there is a problem", she says. None of the commitments made by the Swiss banks analysed by Public Eye would actually exclude financing of Glencore's business linked to coal. Reclaim Finance estimates that 90 percent of financing granted to companies active in the coal sector passes through credit lines that are non-binding in relation to their utilisation (corporate loans) or underwritings (bond issuance to raise funds from third party investors).[63]

## CHART 5 – THE MAIN COMPANIES FINANCED BY SWISS BANKS



| Group | Loans | Underwriting | Total |
|---|---|---|---|
| 1. Trafigura | 1429 | 117 | **1546** |
| 2. Glencore | 575 | 424 | **999** |
| 3. Sibanthracite Group | 272 | – | **272** |
| 4. Suek Group | 222 | – | **222** |
| 5. Mercuria | 53 | – | **53** |
| 6. Adani Group | – | 27 | **27** |
| 7. Vitol | 16 | – | **16** |
| 8. Gunvor | 11 | – | **11** |
| 9. EPH | 2 | – | **2** |
| **Total** | **2580** | **568** | **3148** |

Source: Profundo

Credit from Swiss banks (or branches of foreign banks in Switzerland) received by Swiss companies in the coal sector (2016 - September 2022, in millions of US dollars).

## TABLE 2 – SWITZERLAND AMONG THE TEN BIGGEST LENDERS IN THE COAL SECTOR

| Investor Parent Country | Type short Loans | Underwriting | Total |
|---|---|---|---|
| **1. France** | 6561 | 1435 | 7996 |
| **2. Japan** | 6521 | 933 | 7454 |
| **3. United States** | 3783 | 3026 | 6809 |
| **4. Germany** | 5166 | 1639 | 6805 |
| **5. China** | 4842 | 298 | 5140 |
| **6. Italy** | 4342 | 771 | 5113 |
| **7. Russia** | 2636 | 2422 | 5058 |
| **8. United Kingdom** | 2989 | 2022 | 5011 |
| **9. Netherlands** | 4387 | 404 | 4791 |
| **10. Switzerland** | 2977 | 604 | 3581 |
| **11. Australia** | 2524 | 32 | 2556 |
| **12. Canada** | 1987 | 431 | 2418 |
| **13. Spain** | 1800 | 508 | 2308 |
| **14. Singapore** | 1830 | 152 | 1982 |
| **15. Austria** | 1209 | 138 | 1347 |
| **16. United Arab Emirates** | 856 | 93 | 949 |
| **17. Other countries** | 3016 | 520 | 3536 |
| **Total** | **57 426** | **15 428** | **72 854** |

Source : Profundo

Credit provided by banks of different countries to Swiss companies in the coal sector (2016 - September 2022, in millions of US dollars). This can be provided either by the parent company or subsidiaries abroad.

## TABLE 3 – MAIN SWISS BANKS FINANCING COAL

| Financial institute | Headquarters | Loans | Underwriting | Total |
|---|---|---|---|---|
| **Credit Suisse** | Zurich | 1661 | 380 | 2041 |
| **UBS** | Zurich | 594 | 224 | 818 |
| **Zürcher Kantonalbank** | Zurich | 339 | – | 339 |
| **Borak (main shareholder of bank BCP in Geneva)** | Geneva | 135 | – | 135 |
| **Waadtländer Kantonalbank** | Lausanne | 92 | – | 92 |
| **Aga Khan Fund for Economic Development (AKFED)** | Geneva | 80 | – | 80 |
| **Genfer Kantonalbank** | Geneva | 49 | – | 49 |
| **Habib Bank** | Zurich | 25 | – | 25 |
| **Chubb** | Zurich | 1 | – | 1 |
| **Vontobel** | Zurich | 1 | – | 1 |
| **Total** | | **2977** | **604** | **3581** |

Source : Profundo

Credit provided by Swiss banks to Swiss companies in the coal sector (2016 - September 2022, in millions of US dollars). This can be provided either by the parent company or subsidiaries abroad.

## INVISIBLE FINANCE

In another trend, financing is increasingly being provided through bond issuance organised by these same banks. It's an instrument that enables companies to borrow money from investors without the investors acquiring a share of the company, as is the case with share purchases. This practice is known as "underwriting" and enables financial institutions to avoid including coal in their accounting statements, as they would be obliged to do in the case of a bank loan.[64] "The bond only passes through the portfolio of the bank that will place it with investors. This dilutes the link between the financial institution and the mining company, and makes it possible to obtain remuneration following the issuance" confirms Lucie Pinson.

Faced with pressure from environmentalists, the finance sector is reorganising to become more discreet. "The higher the reputational risk posed by a project, the more it becomes practical to finance the company rather than the mining project", maintains the founder of Reclaim Finance. "No bank is crazy enough to associate its logo with the inauguration of a coal-fired power plant". From 2016 to 2021, underwriting grew by nearly 246 percent.

During this period, on 15 November 2021 at COP 26[65] in Glasgow, Switzerland – represented by its Minister for Environment and Energy Simonetta Sommaruga – denounced China and India's move to torpedo a departure from coal. For OECD countries, the UN conference on climate change has just set objectives for 2030. 2030, that's tomorrow – and nothing indicates any reversal of the trend.

## RIGHT TO THE LAST PIECE OF COAL

The sector thought it had found the solution to fend off divestment by large European banks – code name "Coal to Zero". Specifically, the idea is to create a fund to continue financing mining projects, under the guise of undertaking "responsible extraction" of coal up to 2040 or 2045, dates at which the industry promises to pull the plug. The project was initiated by the Geneva-based trading house Trafigura and the financial institution Citigroup, which has a branch in Geneva. It sought financiers prepared to continue with the adventure of this sedimentary rock, according to documents intended for London-based investors consulted by the *Bloomberg* news agency, which revealed the affair in May 2021.[66] Part of the funds would be spent on local communities, with no further specification provided. The rest was dedicated to the acquisition of coal mines in Australia, the United States or South Africa.

In reality, the initiative is an old idea that comes up time and again. "I support the idea of a 'bad bank' that invests in the production of fossil fuels, coal and gas-fired plants", states the trader Lars Schernikau. "Western companies are forced by investors to divest. For the environment, it is better that someone other than the Chinese are in charge of extraction. The direct consequence is that coal will become even dirtier and energy efficiency will be lost. The restrictions on coal will end up benefitting the small number that continue to profit from the trade."

According to the *Wall Street Journal,* the two companies abandoned the idea in December 2021.[67] Contacted by Public Eye, Trafigura's representative cited "positive feedback" from investors and certain affected communities. However, the representative confirmed that the idea had been rejected "given the uncertainties of a rapidly evolving regulatory environment and the varying priorities of key stakeholders".

### METHODOLOGY OF THE COAL FINANCING ESTIMATES

At our request, Profundo estimated the sum allocated to coal by Swiss banks that finance producers and traders based in Switzerland. To do so, the Dutch not-for-profit research agency drew on figures from the Global Coal Exit List (GCEL), published by the NGO Urgewald. The information is not public, due to the veil of opacity created by the distribution of investments and, without doubt, the taboo that surrounds the coal trade.

In most cases, the companies analysed also undertook other commercial activities. In cases where financing allocated to coal is not disclosed, Profundo calculated estimates. The analysis is primarily based on capex (capital expenditure), namely a company's total investment expenditure. Where this is publicly disclosed, the figure can be used to estimate the percentage of investments made that went to coal. The same percentage can then be used to assess the total sum invested in financing the trade or production of coal.

When this data was not available, Profundo used other proxies as a basis, for example the revenues from coal or mining products, as compared to the company's total revenues.

## TABLE 4 – EXCLUSION CRITERIA ESTABLISHED BY THE BANKS

| Bank | Climate commitment | Loans to coal sector in US dollars (2016 - September 2022) |
|---|---|---|
| **Credit Suisse** | Halt to lending to any company deriving more than 15% of revenues from thermal coal extraction or from coal power generation by 2025 "unless supporting energy transition"<br>The threshold will be reduced to 5% in 2030.<br>No financing for new greenfield thermal coal mines or new coal-fired power plants. | 1.7 billion |
| **UBS** | Since 2021, halt on loans to companies operating existing coal plants if the company makes over 20% of its revenues from coal. Unless the company has a strategy aligned with the Paris Agreement or "if the transaction is related to renewable energy or clean technology."<br>Halt to financing for thermal coal miners generating over 20% of their revenues from the sedimentary rock. Unless the company has a strategy aligned with the Paris Agreement or "if the transaction is related to renewable energy or clean technology."<br>No financing for new thermal coal mines and new coal-fired power plants. | 594 million |
| **Zürcher Kantonalbank (ZKB)** | Does not finance coal extraction, but does not have strict exclusion criteria for banking clients.<br>Does not finance the thermal coal trade. "Metallurgical coal is still needed for example for steel production, but we are hopeful that this will phase out", states a spokesperson in contrast. | 339 million |
| **Banque Cantonale Vaudoise (BCV)** | From 2020, 4.5% per year reduction of coal exposure in trade finance business (transaction activities). From 2022, this target has been revised to 6.5% per year.<br>BCV does not finance nuclear power plants, thermal coal-fired power plants or coal mines. | 92 million |
| **Banque Cantonale de Genève (BCGe)** | The bank does not communicate on any commitments linked to financing of mining companies, transaction financing for the coal trade or for coal-fired power plants.<br>BCGe states that it "rigorously applies the regulations it is subject to, including in relation to all sanctions enacted by the competent authorities". | 49 million |
| **Swiss National Bank (SNB)** | Since 2021, SNB excludes investments in "companies, whose main activity is the mining of coal for energy production".<br>However, the Swiss Central Bank did not want to specify how it defines the criteria 'main activity'. It also did not provide us with the name of the external service provider, which conducts this analysis on behalf of the bank.<br>Coal trade as such is not an exclusion criterion. | SNB does not comment its exposure to the coal sector |

Coal-fired power station at Mehrum, belonging to EPH, in Lower Saxony, Germany.
It had been mothballed at the end of 2021. Since the beginning of August 2022, operations have been re-launched.
EPH has trade offices in Zug since 2019. | © Scholz/Alamy

7

# Mourning for the sun

No pre-emptive statement can exclude energy realities. Coal is the cheapest and most-used energy for the production of electricity in the world. Coal provides a promise of development for a quarter of humanity. Nevertheless, we need to avoid getting hitched for life to the most polluting substance of the Anthropocene era. Swiss companies are indirectly responsible for the emission of nearly 5.4 billion tonnes of $CO_2$ per year.

In another age coal comprised the vast majority of the energy consumed by Victorian Britain. On the global level, King Coal retains his crown because he continues to represent a quarter of the energy mix[68] and remains the most-used resource for producing electricity (over 35 percent according to the International Energy Agency[69]). As a result, hoping for the possibility of an immediate ban on coal is simply wishful thinking. "We're not talking about tobacco", warns Lars Schernikau. "Coal is everywhere, all countries have used it at one point or another. Its energy is in a third of everything that we consume globally. It's no solution unless we want to return to being cavemen".

It also seems that everything is going in coal's favour. When the European Union (followed by Switzerland) declared an embargo on Russian coal, its price skyrocketed – to the delight of mining companies. When Russia shuts off the gas, it will once again be coal – its direct substitute – that will benefit.

## THE PERFECT STORM

"Recent months have been completely crazy. The European electricity plants are buying as much non-Russian coal as possible and are prepared to pay a very high price to outbid the Asians", underlines Alex Thackrah of Argus Media, the reference agency that sets the indices for the spot markets. In April, the data provided to Public Eye by Argus Media showed an increase of over 71 percent of coal imports to Europe to reduce to nearly zero the level of Russian imports. From January to August 2022, Europe imported some 63 million tonnes of thermal coal against 45.2 million tonnes for the same period in the previous year, according to maritime data collected by Argus Media. The main winners are producers in Colombia, South Africa and the United States – and Australia, which even opened a new export route to Europe.

Despite the currently sky-high prices, the sedimentary rock remains the most accessible energy in the world. This is the great advantage of coal as a resource. "The substance brings heat, fridges and connectivity to disadvantaged populations. There is no better development lever", states a trader who has worked in the sector for around 15 years.

Europe made no mistake in that regard. Everywhere, strenuous efforts are being made to accumulate coal stocks for a winter that is set to be long and of strategic importance for the containment policy towards Russia. "Over the past six months, the focus has been on energy security. The deadline to decommission European plants will probably be postponed", Alex Thackrah was already predicting in March. And since then, Germany has done just that.[70] Faced with challenges, Berlin – which had predicted that it would fully phase out coal by 2030 – decided in June to reactivate its coal-fired power plants. "Uncertainty reigns" concludes Alex Thackrah. The trend is set to continue at least for two winters. The planning horizon has become limited to just the coming season.

The beneficiaries will be EPH group, which owns two lignite mines in eastern Germany, and numerous coal-fired power plants that were previously due to be decommissioned.[71] The tax authorities in Zug, the canton where EPH set up its commercial division EP Resources in 2019[72], also stand to benefit. As was confirmed in early August[73], operations will be relaunched in two coal-fired power plants. The first, Mehrum, situated in Germany's Lower Saxony, had been decommissioned in late 2021.[74] The second, Emile-Huchet, in the French Great East region, was due to be reconverted, in part to produce hydrogen. "Luckily these assets still exist", responded Tomáš Novotný, head of EPH's dry bulk division and member of the Board. "If Putin had attacked Ukraine three years later, we would have been, in energy terms, practically slaves of Russia. These are the arms the German gas lobby pushed us into."

In the hands of the billionaire Daniel Křetínský, the Czech group EPH once specialised in re-purchasing at low prices east European and French power plants, including Émile-Huchet. This attracted significant criticism from both NGOs and the energy sector. Tomáš Novotný savours the revenge: "We retook these assets that no one wanted to transform them into modern power plants. We were asked to decommission them in the next two to three years, but the authorities came back to us to ask us to ensure energy security." However, EPH did not wish to confirm its level of lignite production or communicate its portion of coal negotiated on behalf of third parties.

The United Kingdom, France, Italy, Austria and the Netherlands also took measures aimed at reactivating their coal-fired power plants or increase output. The list is not exhaustive.

## REMEMBERING OUR PROMISES

Despite international pressure, the coal sector continues to enjoy its greatest hour. Glencore is among the 'to the bitter end-ists'. In June 2022, the multinational announced that its profits were set to exceed predictions by a billion USD – to reach USD 3.7 billion in a single semester – due to the excellent performance of its coal business.[75] The extraction of coal alone will generate more than all the other departments in the group, namely USD 8.9 billion.[76] In an average year, Glencore makes 10–15 percent of its profits from the sedimentary rock. When global prices skyrocket, as they did in 2022, this can increase to over 50 percent. A *Financial Times* editorialist called this "Glencore's deadly addiction".[77]

Despite the discontent of some of its investors, the group has always refused to separate from its mining assets – quite the opposite. In January 2022, it bought the shares of its associates BHP and Anglo American in the Colombian Cerrejón mine, the largest mine in Latin America, for USD 588 million.[78] Shortly before his departure, Ivan Glasenberg had declared that the new boss of Glencore should resemble himself. He got what he wanted. Like him, Gary Nagle is a white South African who built his career on coal. He is sometimes nicknamed "mini-Ivan" and came from the ranks of Glencore, where from 2000 he was responsible for the company's mining assets – like Ivan before him.

"What do you think about your plans to shrink the output of the coal business? What would it take for you to delay the ramp-down and, ultimately, make investments to give the world the energy it needs in the short term?" asked an analyst at Glencore's

half-year results presentation in early August.[79] Faced with the world's energy needs and the financial boon they represent, energy and social concerns appear to have been relegated to a secondary order of importance. Or, as the *Bloomberg* specialist Javier Blas puts it, "ESG is so, so, so yesterday" (i.e. environmental, social and governance procedures are outdated).

For COP 26 negotiators who said they wanted to "consign coal to history", the task appears harder than expected. The war in Ukraine and threats of blackouts that once again weigh over western economies have awoken old demons. "No one is prepared to lower their standard of living. And who will go and tell the Indians or Vietnamese, who aspire to live like us, that they shouldn't bet on what created our prosperity?" a representative of the trading house was already telling in 2019. The problem is that renewable energies are still far from picking up the baton. Everyone has their own idea: liquified natural gas, hydrogen and even nuclear – taboos are about to be broken across continental Europe. "Coal is the cheapest option in economic terms, but it is politically onerous", summarises a coal trader.

## LOW-COST POWER PLANTS

Power plants have been reactivated in a Europe that (practically) no longer knows what coal mining is. What's more, new power plants are being built, bolstered by foreign capital. Thus, within the framework of its large Belt and Road Initiative, China – through its development banks – is funding the construction of "low cost" coal power plants in Bangladesh, Pakistan and Vietnam, countries where coal is set to have a bright future.[80] Bangladesh, for example, plans to increase the share of coal in the country's energy mix from 8% to 17% in the coming months.[81]

(continued on page 44) →

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Initially shut down on March 31, 2022, the Emile-Huchet power-generation plant is temporarily relaunching its activity to meet France's energy demands. The country faces an energy crisis with several of its nuclear power plants under repair and the ongoing conflict in Ukraine.

## CHART 6 – **MAIN COAL-PRODUCING COUNTRIES AND COMMERCIAL FLOWS OF THERMAL COAL** (FIGURES FOR 2019, PRE-COVID-19)

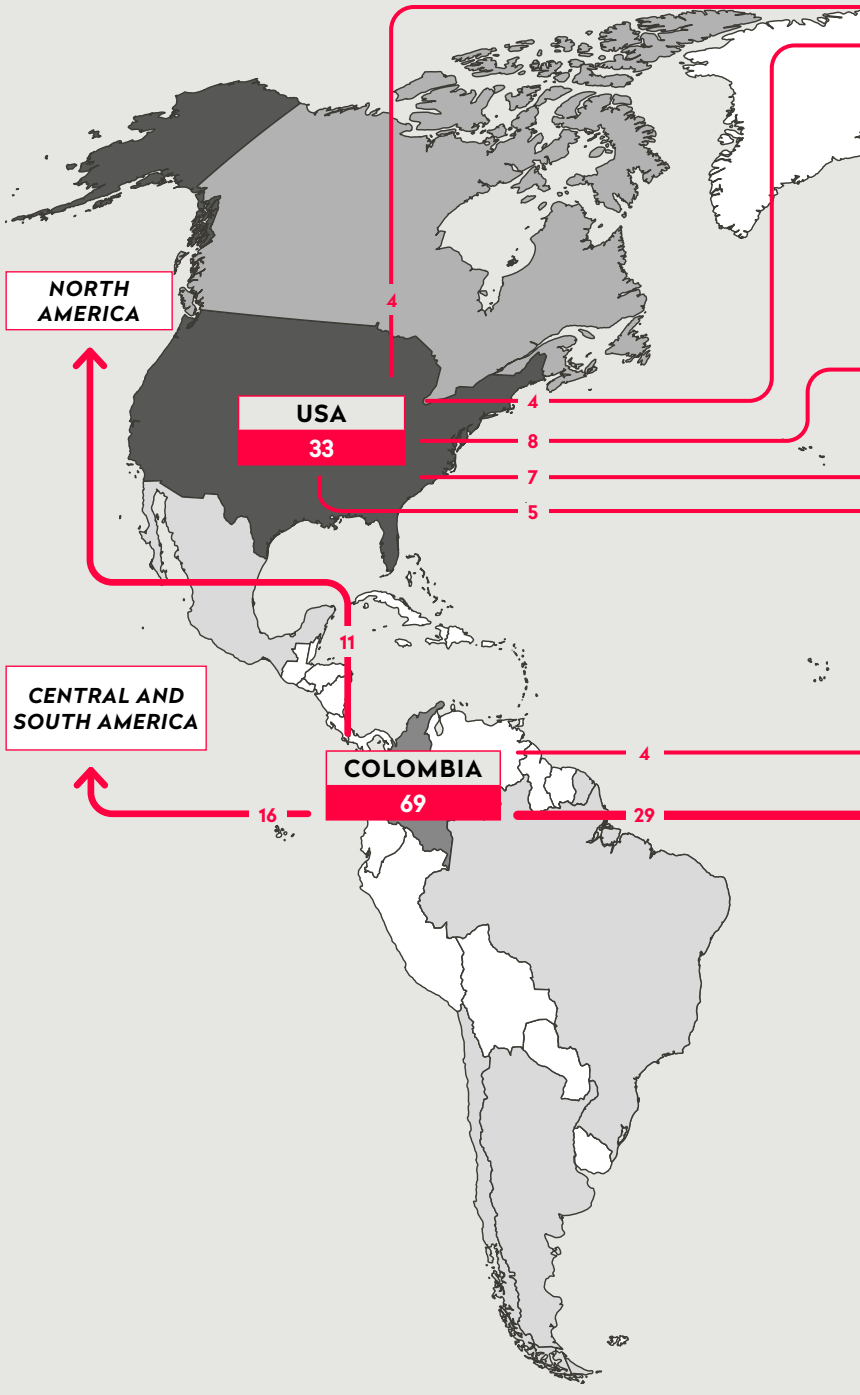
In 2019, 7885 million tonnes of coal and lignite were extracted worldwide. China alone produced 3724 million tonnes (see the table below).

### MAIN COAL- AND LIGNITE-MINING COUNTRIES, IN MILLIONS OF TONNES IN (2019)

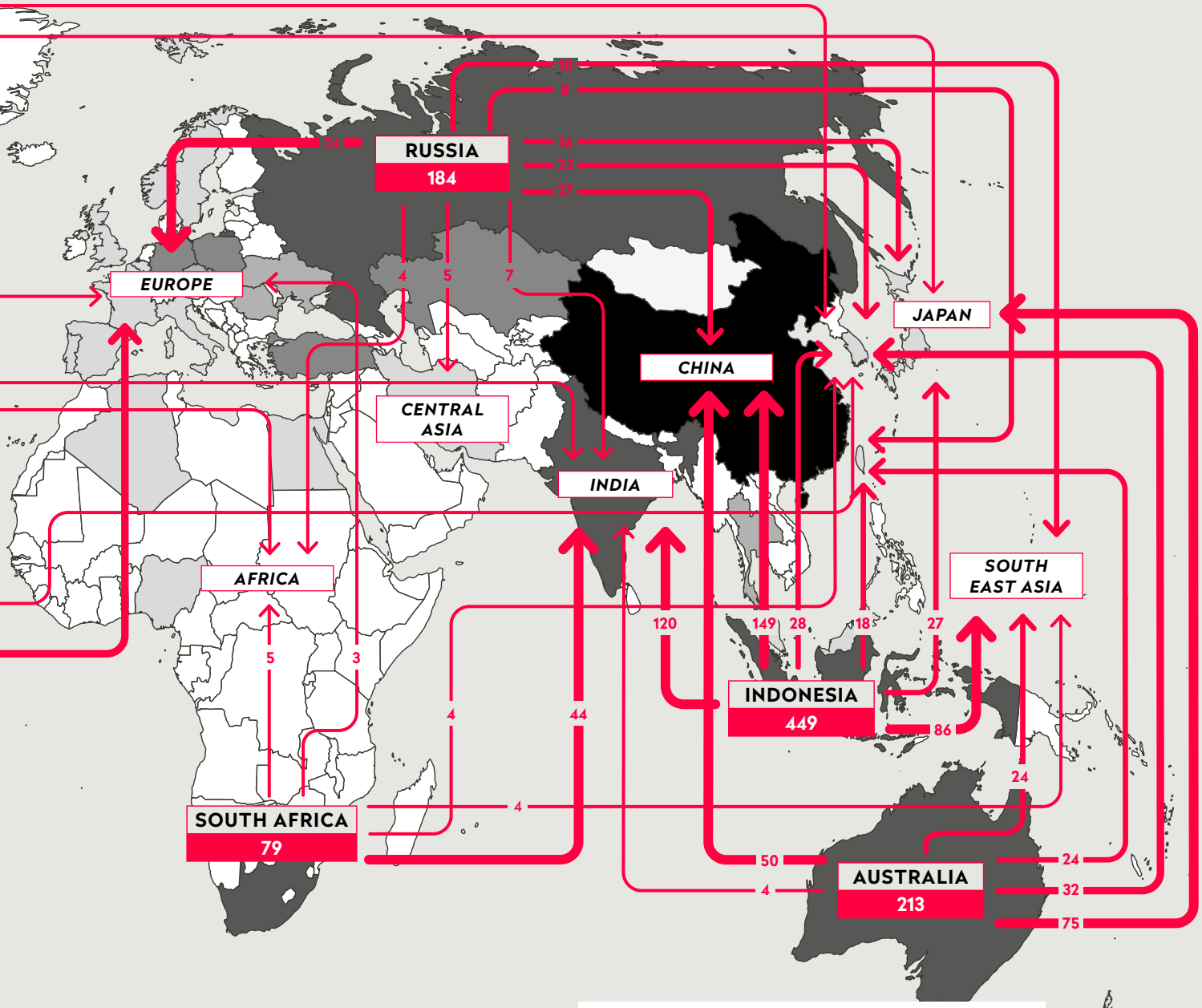
| | |
|---|---|
| China | 3724 |
| India | 775 |
| United States | 641 |
| Indonesia | 601 |
| Australia | 504 |
| Russia | 441 |
| South Africa | 258 |
| Germany | 131 |
| Poland | 112 |
| Kazakhstan | 105 |
| Turkey | 87 |
| Colombia | 84 |

The countries are coloured differently according to the volumes extracted.

- more than 3000 million tonnes
- 200 to 3000
- 50 to 200
- 10 to 50
- less than 10




Sources: energiestatistik.enerdata.net and iea.org




In 2019, 1093 million tonnes of thermal coal were traded at international level. Although China itself produces large quantities of coal, it is also the biggest importer of thermal coal, with 21%, followed by India (17%) and Japan (13%).

"It saddens me, but it's the lowest common denominator that rules in this market" notes a former trader. "The safety standards are set by those who charge the lowest prices. We're looking to produce energy at the lowest cost, which will have the greatest impact on our environment."

These "soot roads" as they are nicknamed by the journalist Mickaël Correia in his book *Climate Criminals*[82] promise to imprison economies in a carbon-intensive environment for decades to come, while causing the marginal cost of alternatives to increase. "In Europe or the United States, power plants have on average a life of 40 years. In Asia, there are power plants of over 1400GW *[Ed.: The equivalent of the power of 1000 nuclear power plants like that of the Swiss city Leibstadt or 700 times the power of the Grande-Dixence hydro-electric dam in the Valais]* which are on average 11 years old. They are far from going into retirement. It's the Achilles Heel of the battle for the climate" summarises Fatih Birol, the Executive Director of the International Energy Agency in the same book.[83]

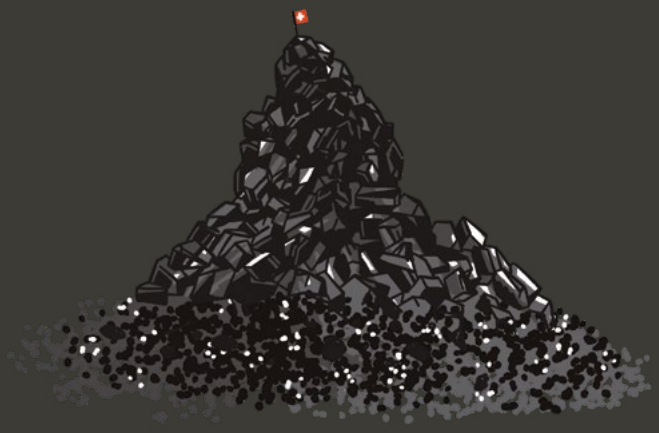
On the Old Continent, one could also cite the great authors of the 19th century to recall the negative externalities associated with the production and combustion of coal. Charles Dickens tackled the subject in his novel *The Old Curiosity Shop:*[84] "On mounds of ashes by the wayside, sheltered only by a few rough boards, or rotten pent-house roofs, strange engines spun and writhed like tortured creatures; clanking their iron chains, shrieking in their rapid whirl from time to time as though in torment unendurable, and making the ground tremble with their agonies."

In Switzerland alone, "indirect" emissions generated by the production, transport and combustion of coal from companies registered in the country represent nearly 5.4 billion tonnes of $CO_2$ per year – enough to turn Switzerland into a giant mountain of burning coal. Once again, Charles Dickens provides the best description of the soot exported from Switzerland's financial hub: "Smoke lowering down from chimney-pots, making a soft black drizzle, with flakes of soot [...] as big as full-grown snowflakes [...] one might imagine, for the death of the sun".[85]

Nevertheless, Lars Schernikau insists "If we were to leave behind fossil fuels that provide over 80 percent of our total energy, humanity wouldn't die. However, the world would look very different." On this point, environmentalists would probably agree with him.


El Cerrejón, the biggest open-cast coal mine in Latin America, situated in the north-east of Colombia. In January 2022, Glencore bought back – for 588 million dollars – the shares of its associates BHP and Anglo American.

# For a world without coal



**Coal is a source of energy that belongs in the past. It's the most polluting substance on the planet and its significant negative externalities are rarely accounted for in its price per tonne. The construction of new power plants threatens to imprison emerging countries in a vicious circle for the long term. This observation, as well as measures that need to be put in place to finally decarbonise Switzerland's financial hub, should not detract from efforts seeking to reduce the import and consumption of fossil fuels in Switzerland.**

## THE COAL INDUSTRY

- It should immediately cease extraction of the most polluting forms of coal, such as lignite.
- Companies active in the extraction and trade of coal should present credible measures that are verifiable by independent parties, to achieve a complete exit from coal by 2030.

## THE FEDERAL COUNCIL AND PARLIAMENT

- They should take action to end the trade with coal, the most polluting of fossile fuels, by 2030
- Switzerland should integrate, in the meantime, the indirect $CO_2$ emissions generated by coal traders registered in the country in its climate objectives and policies.
- They should introduce into Swiss law a requirement for transparency around contracts and payments to governments for coal trade, and for the rest of the commodities trade. The origin of commodities should be traceable.
- Switzerland should set up an oversight body for the commodities sector that has the power to control companies, and sanction those breaking the law.

## THE WORLD OF FINANCE

- Financial institutions should stop loans to companies active in the coal sector that have not implemented a credible plan to exit coal by 2030, accompanied by appropriate measures that are verifiable by independent parties.
- No new coal-fired power plants should be financed.
- The Swiss National Bank should cease investments in all companies that produce or trade in coal.
- Cantonal banks should commit to no longer providing funds to companies active in the coal sector, whether through transaction financing or corporate loans.

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In the western collective imagination, coal remains associated with the shortcomings of the Industrial Revolution, and with a raggedly clothed proletariat, brooding with a sense of revolt. Devoid of the glamour and geopolitical intrigue of its cousin oil, coal continues to be perceived as an energy source belonging to the last century. It's time to wise up! This "sunshine bundle", buried and compressed over millions of years, has in fact never been extracted, transported and consumed in such volumes as in 2022, exceeding the historic limit of eight billion tonnes. Coal alone is responsible for almost half of the increase in carbon dioxide ($CO_2$) emissions.

Switzerland – with its mining groups, traders and banks – plays a central role in the global coal trade. This is revealed in this report, the result of a year of research and privileged contacts with a sector that is by nature mistrustful, because it is banished from society. However, the war in Ukraine, and the subsequent disruption in the energy markets, has reminded us of our dependence on the most polluting of fossil fuels. It's now up to our generation to act to consign coal to the history books. This can't happen without some sacrifices by the Swiss commodities market.

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