Raiffeisen Capital Management
Member of RBI Group

Policy adopted by Raiffeisen KAG and Raiffeisen Salzburg Invest

COAL Sector

IN COOPERATION WITH THE UNIVERSITY OF NATURAL RESOURCES AND LIFE SCIENCES, VIENNA | Competence Center for Climate Change

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Raiffeisen Capital Management stands for Raiffeisen Kapitalanlage GmbH or Raiffeisen KAG in short | www.rcm.at
and Raiffeisen Salzburg Invest GmbH or RSI in short | www.raiffeisen-salzburg-invest.at

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1. Objectives of the Raiffeisen KAG Coal Policy

Raiffeisen Kapitalanlage-Gesellschaft m.b.H. (hereinafter referred to as Raiffeisen KAG) is pursuing the systematic phase-out of all coal industry financing by 2030. The Coal Policy adopted by Raiffeisen KAG includes all investible enterprises active in the field of coal mining, coal processing, coal power (production of electrical or thermal energy), coal transport and other infrastructure. The phase-out target Raiffeisen KAG has set itself is closely linked to the international 1.5°C targets under the Paris Climate Agreement which aims to limit global warming to below two degrees centigrade [1].

Given that few investable enterprises (stock corporations, large-scale companies) are exclusively active in coal production or coal power, but mostly operate as conglomerates or, for instance, (major) power producers, strict criteria were selected for the Policy which even exclude any planned future expansion of coal activities and successively reduce the maximum coal-based revenue share of the invested companies. This will guarantee a comprehensive exclusion of coal financing as early as 2025.

This document begins with a description of Raiffeisen KAG's activities in the field of operational climate protection based on its carbon footprint (Chapter 2), followed by an illustration of the significance of product-related climate protection (Chapter 3). Chapter 4 takes a close look at the coal industry. This is followed by a description of the coal exit criteria developed by Raiffeisen KAG (Chapter 5) and a summary in Chapter 6. This Policy thus goes beyond the mere presentation of the Coal Policy by putting it into the context of Raiffeisen KAG's overall operational climate-relevant activities.

As regards Raiffeisen Salzburg Invest GmbH, Section 5 applies analogously to its asset management activities.

[1] Source: United Nations Treaty Collections, https://treaties.un.org/Pages/ViewDetails.aspx?src=IND&mtdsg_no=XXVII-7-d&chapter=27&clang=_en

2. Responsibilities in the operational climate protection context

Raiffeisen KAG has been measuring its operational carbon footprint on the basis of the GHG Protocol Standard since 2018[2]. The respective analysis comprises scope 1 (direct emissions), scope 2 (energy-related emissions) and scope 3 (other indirect emissions arising from business travel, employee commuting, paper consumption and waste). The carbon footprint represents an important tool for mapping and consistently reducing greenhouse gas emissions at Raiffeisen KAG.

Carbon footprint items	**Year 2018 [t CO2e]**	**Year 2019 [t CO2e]**	**Increase/decrease in %**
SCOPE 1, 2, 3	1,327 tons	1,186 tons	–141 tons, i.e. 11 %

Table 1: **Greenhouse gas emissions** produced by Raiffeisen KAG in the years 2018 and 2019
Source: Raiffeisen KAG, internal measurement and calculation of greenhouse gas emissions

At approx. 1,200 tons a year, operational scope 1, scope 2 and scope 3 emissions are in line with the SBTI targets of minus 2.5 to 4.2 %. Raiffeisen KAG thus makes a significant contribution to the avoidance and reduction of harmful greenhouse gases. On top of this, unavoidable scope 1 and scope 2 emissions are compensated via top-class climate protection projects run by the University of Natural Resources and Life Sciences in Vienna[3]. Hence, office operations at Raiffeisen KAG can be classified as 'climate-neutral'.

[2] Greenhouse Gas Protocol Standard: https://ghgprotocol.org/
[3] For information and descriptions of the climate protection projects, see: klimaneutralität.boku.ac.at

3. Contribution to product-related climate protection

The majority of the scope 3 emissions produced by Raiffeisen KAG arise from its investments (category 15 of scope 3 of the GHG Protocol Standard). Typically, the respective carbon intensity ranges between 1,150 g and 1,850 g of carbon per invested euro[4]. The investments made by Raiffeisen KAG in the amount of EUR 1 billion translate into carbon emissions of 1.15 million to 1.85 million tons[5]. Thus, the significance of product-related climate protection at Raiffeisen KAG by far outstrips the importance of operational climate protection.

A strict Coal Policy can result in a significant reduction of greenhouse gas emissions in the product portfolio. Due to insufficient availability of data in scope 3 (indirect emissions of the invested companies), a more in-depth calculation of scope 3 category 15 emissions currently poses a challenge. Raiffeisen KAG has therefore adopted the additional aim of improving data quality in regard of the scope 1, scope 2 and especially scope 3 emissions of the invested companies over the coming years. Aside from the consultation of relevant databases and ratings, active engagement processes of the invested companies also play an important role. The requirement to produce binding and complete carbon figures substantially raises transparency levels in corporate climate protection – not only in the financial industry but also far beyond the sector.

In respect of sustainable financial products, Raiffeisen KAG is already working towards a continuous expansion of carbon reporting for its clients. The aim is to ensure a comprehensive valuation of the greenhouse gas emissions associated with sustainable financial products (including scope 3) and to continuously improve the carbon intensity level.

[4] Adelphi (2010): Der Carbon Footprint von Kapitalanlagen (The Carbon Footprint of Capital Investments). Retrievable at: https://www.adelphi.de/de/system/files/mediathek/bilder/der_carbon_footprint_von_kapitalanlagen_1.pdf

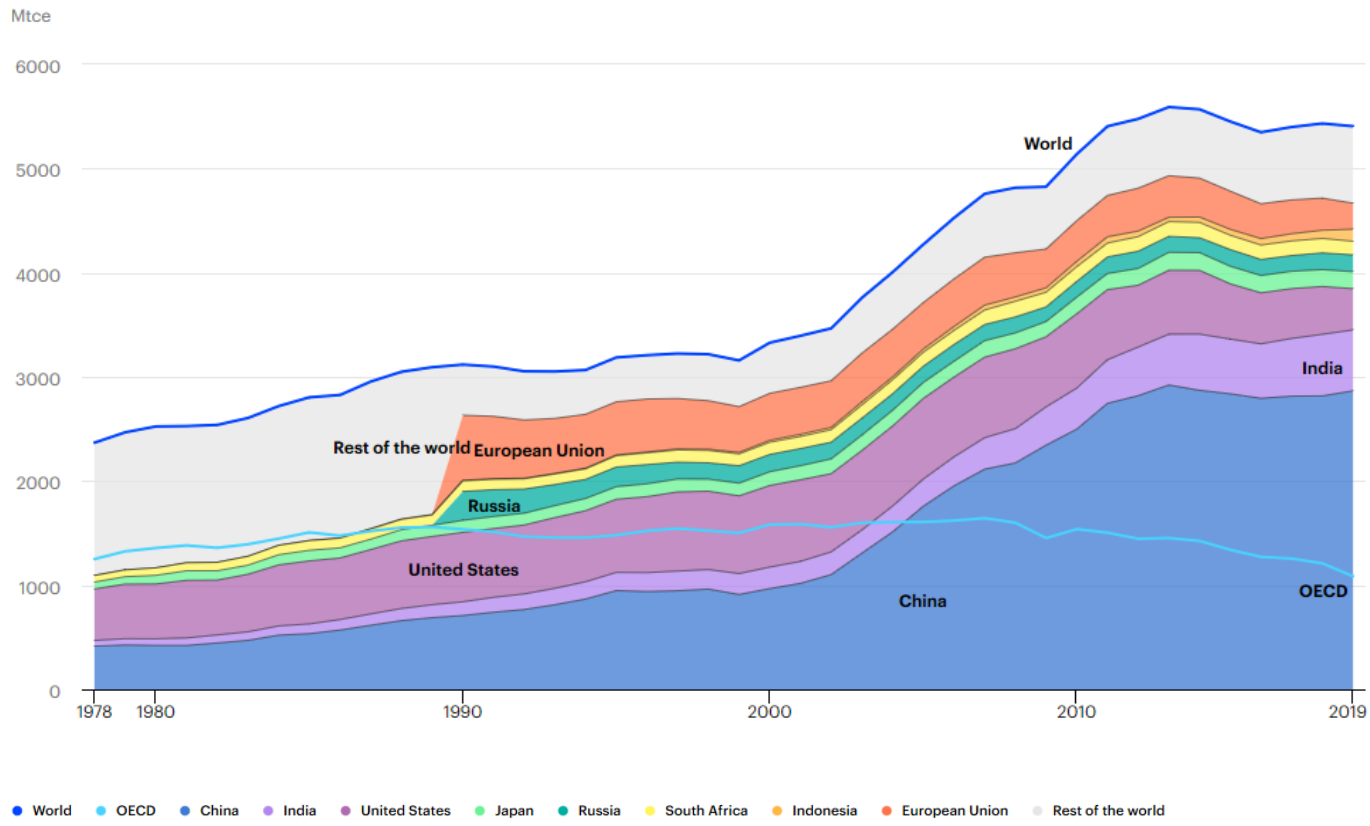
[5] This analysis includes not only the scope -- and scope 2 emissions of the invested securities but also all relevant scope 3 categories, where possible.

4. Overview of the coal industry

4.1 Coal at a glance

Worldwide, an estimated 1.1 trillion tons of coal deposits have been identified. At the rate of coal production, there is sufficient coal to ensure our supply for another 150 years. The largest deposits are located in the USA (22 %), followed by Russia (15 %), Australia (14 %), China (13 %) and India (10 %). Five countries thus account for three quarters of all global coal deposits.

Graph 1:
Global coal consumption, 1978 to 2019, in mtce
(mega tons of coal equivalent)



Source: https://www.iea.org/data-and-statistics/charts/world-coal-consumption-1978-2019

Coal consumption declined in 2019 due to a slowdown in global economic activity and the common goal to work towards less carbon-intensive power generation in view of increasing levels of environmental pollution and environmental problems. With the depth and combination of these dynamics varying in different economies around the world, the coal market's response also varied: While large Asian economies, such as China and Indonesia, increased coal usage, the United States, the European Union and India reduced their consumption.

At 2,866 mt, or 53.0 % of global consumption, China remains the biggest user of coal worldwide. India ranks second with 585 mt, 0.4 % less than in the preceding year. The USA and the European Union are leading the way in phasing out coal. In 2019, both regions reported historically low consumption although, at 397 mt and 253 mt respectively, they still rank third and fourth in terms of global coal consumption. The above four markets account for three quarters of coal consumption worldwide. In 2019, Indonesia's use of coal reached a record high at 115 mt.

4.2 Types and use of coal, value chain

From a climate impact perspective, the various types of coal are not significantly different. Hence, the question arises whether a detailed description is actually required.

Among the different types of coal, two main varieties dominate which are named according to their use:

- Steam coal, or thermal coal, is primarily used to generate power.
- Coking coal, or metallurgical grade coal, is predominantly used in steel production.

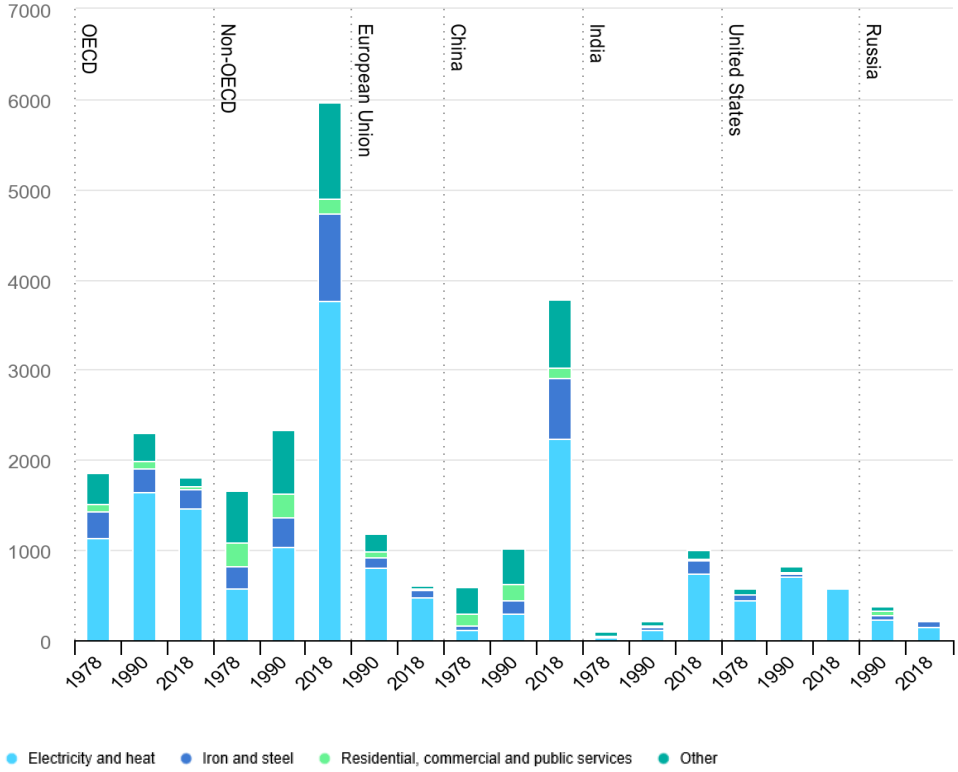
Further important users of coal include alumina refineries and paper producers as well as the chemical and pharmaceutical industry. Various chemical products are manufactured from coal byproducts. Refined coal tar, for instance, is used to produce creosote, naphthalene, phenol and benzene. Ammonia salts, nitric acid and agricultural fertilizers can be made from the gaseous ammonia recovered from coke ovens. Thousands of different products, such as soap, aspirin, solvents, dyes, plastics and fibers including rayon and nylon, contain coal or coal byproducts.

Moreover, coal is a main component in the manufacture of special products:

- Active coal is used in filters for water and air purification and in kidney dialysis equipment.
- Carbon fiber, an extremely firm but light reinforcing material, is used in the building industry, in vehicle and aircraft construction and for sports articles.
- Silicon metal is used to produce silicones and silanes which, in turn, are utilized in the manufacture of lubricants, water repellents, resins, cosmetics, hair shampoo and toothpaste.

The predominant use of coal continues to be energy generation which, in 2017, accounted for 66.5 % of primary coal use globally and 82.3 % of primary coal use in the OECD countries. In 2018, the proportion of energy generated from primary coal as fuel declined to a new record low of 25.2 % in the OECD countries, compared to 26.7 % in 2017 and 44.4 % in 1985. Coal-fired power and heat generation, on the other hand, rose by 3.3 %, or 166 mt, between 2017 and 2018. By contrast, the industrial sector as a whole consumed less coal year-on-year, especially the iron and steel industries. The share of the household, commercial and public sectors in total consumption remained relatively low at 2.5 %.

Graph 2: Uses of coal by country



Source: https://www.iea.org/data-and-statistics/charts/primary-coal-s-breakdown-by-activity-for-selected-economies-1978-2018

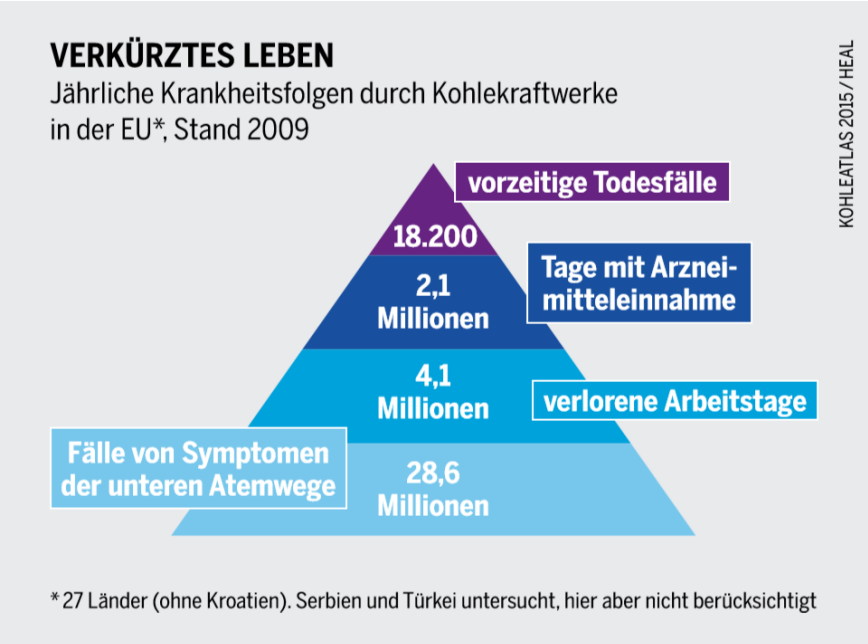
All of these aspects indicate that global coal consumption focusses primarily on energy. Combined with the climate and health impacts associated with coal power, this means that coal can be described as a defunct model of energy production. Raiffeisen KAG will therefore switch from the coal industry to sustainable energy generation methods with low greenhouse gas emissions by 2030.

4.3 Impact on sustainability and climate protection

The production and use of coal directly and indirectly impacts the health of all living creatures. According to the European Pollutant Release and Transfer Register, coal-fired power stations emit a total of 53 pollutants into air, water and soil. Hard coal releases more pollutants during combustion than lignite. However, three times more lignite is required to generate the same amount of energy, which is why lignite is considered to be the dirtier coal.

Pursuant to the World Health Organization (WHO), air pollution is one of the world's biggest health hazards. In 2012, approx. 3.7 million people under the age of 60 died of air pollution-related diseases according to WHO estimates. Traffic and coal firing are the main contributors to high levels of smog pollution in Asian cities.

Graph 3: Health impact of coal



Source: https://www.global2000.at/sites/global/files/Kohleatlas2015.pdf

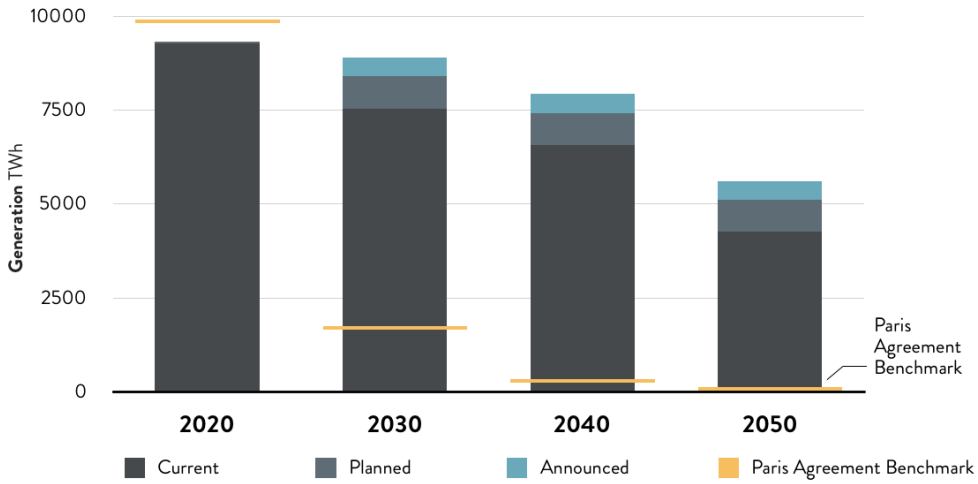
Estimates of the global number of victims vary significantly. Australia's Climate Council puts the number of people dying worldwide as a result of air pollution caused by coal-fired power plants at 200,000. A study conducted by the University of Illinois specifies 250,000 deaths a year in China alone. Detailed figures for Europe are provided by the Health and Environment Alliance (HEAL), an association of 65 European non-governmental organizations focusing on the environment and health. According to these figures, coal-fired power stations account for 18,200 deaths in the EU every year, while 8,500 people contract chronic bronchitis due to exposure to pollutants from coal-fired power stations. If power plants in Croatia, Serbia and Turkey are included, the number of deaths in Europe rises to over 23,000. HEAL estimates that the EU incurs related expenditure of just under EUR 43 billion a year. Given the significance of the expenditure associated with coal-related diseases, such costs should be included in price comparisons of different energy sources.

Children are particularly affected by heavy metal emissions. Lungs which are damaged at an early age remain weak in adulthood. Where children are exposed to increased lead or mercury concentrations in the womb, there is an increased risk of developing cognitive disorders, i.e. losing mental capacity, at a later age. Children in the womb can also suffer irreversible organ damage.

Climate change is among the indirect threats to human health that are caused by coal usage. Environmental medicine cautions against heat stress in affected regions and the spread of diseases like malaria or dengue fever, which have so far only affected the southern hemisphere. Studies show that power plants emitting particularly high volumes of carbon dioxide also emit exceptionally high numbers of toxic pollutants. Where less carbon is released, emissions of sulfur dioxide, nitrogen and particulate matter, etc., also drop.

In addition to coal power, coal mining is also associated with health risks. People living near opencast lignite mines are exposed to substantial particulate matter emissions that can lead to respiratory diseases and allergies. Heavy metals and other toxins, which collect in the spoil heaps of the mines, are released into the groundwater and the air. Radioactivity is another problem: lignite naturally contains uranium, thorium and potassium-40. According to Friends of the Earth Germany (BUND), the annual 100 million tons of lignite and 460 million tons of excavation material produced at the opencast mines in Rhineland alone contain 388 tons of uranium. Radioactive substances accumulate in the particulate matter and enter the human body. The consequences for human health are beyond calculation.

Graph 4:
Global coal power generation capacity compared to the volumes conforming with Paris (COP21)



Source: Climate Analytics 2019. Retrievable at: https://climateanalytics.org/briefings/coal-phase-out/

On top of the numerous health risks associated with the use of coal, its catastrophic impact on climate change also plays a particularly important role. Graph 4 provides an illustration of the target roadmap for the coal sector. The graph clearly shows the extent to which coal extraction for power generation must be reduced in order to reach the Paris climate targets. In other words, the world must scale down current coal-related emissions by approx. 75 % by 2030. This means a drastic cut in coal sector expansion and preservation. To achieve this turnaround, Raiffeisen KAG has introduced a range of measures which will be described below.

5. New Climate Policy guidelines in the coal sector

The previous chapter clearly illustrated the importance and urgency of the coal exit. In this context, banks play a significant role in terms of financing and capitalization. Raiffeisen KAG aims to fully phase out all coal mining and coal power companies by 2030. To ensure ongoing progress monitoring along the path towards this aim, a number of milestones have been set until the year 2025. On top of this, Raiffeisen KAG aims to phase out all other infrastructure guarantors in the coal sector by 2030.

To achieve the above targets, Raiffeisen KAG's Coal Policy relies on two main aspects: quantitative exclusion criteria (revenue share) and qualitative criteria. Together, these two aspects constitute Raiffeisen's coal exit pathway. For instance, this involves analysis of the coal share of revenue at the invested companies (see Chapter 5.2). The classification of maximum revenue shares requires precise definitions for the various coal industry stakeholders in order to draw relevant conclusions based on their position along the value chain (see 5.1 Definitions).

Moreover, Raiffeisen KAG intends to phase out all future projected coal activities and is considering adding further criteria in the future to eliminate coal-based economies from the investment portfolio (see Appendix I).

5.1 Definitions

Raiffeisen KAG's Coal Policy relates to the following specific stakeholders:

Companies with direct involvement:
– Coal mining
– Coal-fired power stations
– Coal combustion

Companies with indirect involvement:

– Transport infrastructure
– Companies pursuing activities (revenue share) which are carried out to a significant extent in the coal sector (e.g. construction companies which build coal-fired power stations)

5.2 Raiffeisen KAG's coal exit pathway based on the "coal share of revenue"

The coal share of revenue of the invested companies is a suitable indicator for the successive exclusion of coal mining companies.

The table below illustrates the coal investment exit pathway adopted by Raiffeisen KAG for the period 2021 to 2030. The pathway defines three stages and includes the following breakdown:

– by integration into the Raiffeisen KAG product portfolio (all funds and sustainable funds) and
– by position of the invested company along the coal value chain

Portfolio	**Invested companies**	**Current (as of 03/2021)**	**2021**	**2025**	**2030**
Sustainable funds	Mining	0 %	0 %	0 %	0 %
	Energy generation	5 %	5 %	0 %	0 %
	Transport / services	30 %	20 %	5 %	0 %
All funds[6]	Mining	50 %	10 %	0 % (5 %)[7]	0 %
	Energy generation	50 %	20 %	0 % (5 %)[7]	0 %
	Transport / services	50 %	20 %	5 % (5 %)[7]	0 %

Table 2: Maximum **revenue shares of the invested companies**, 2020 to 2030

[6] Exceptions in cases of positive engagement success (mandatory exit scenario) by 2030
[7] Exceptions: Raiffeisen Russia Equities and Raiffeisen Eastern European Equities (table above in brackets)

An innovative aspect of Raiffeisen KAG's Coal Policy consists of the introduction of minimum criteria for investments in nation states (for instance government bonds). Since a revenue share cannot be calculated in this case, Raiffeisen KAG has found a different integration option: The coal exposure of the nation states is integrated into the investment process via various ecological factors which are summarized in one dedicated indicator developed by Raiffeisen KAG ("RCM indicator").

6. Outlook and summary

Raiffeisen KAG's updated Coal Policy lays the groundwork for an ambitious phase-out of coal sector financing. As well as direct coal mining, production and combustion, the Policy also includes the highly diversified coal industry. Moreover, criteria are also applied to governments in order to combat the trend towards continued coal-fired power generation. The Policy will have a significant positive impact on the carbon footprint of Raiffeisen KAG products.

Furthermore, in 2021, Raiffeisen KAG's Coal Policy will be supplemented with an Oil and Gas Policy to guarantee a comprehensive approach to phasing out the fossil sector.

Appendix

I. Further exclusion criteria under discussion

Expansion plans for future coal-fired power generation
As stated in Chapter 4, the current Paris climate targets are in stark contrast to the planned global expansion of coal-fired power stations. Raiffeisen KAG is therefore considering making no further investments in companies (and states) which are creating future, additional capacities in this area (both direct and indirect). To this end, Raiffeisen could refer to the Coal Exit List database (2020) which details all global companies that are associated with the coal industry (and related industry sectors)[8].

Exclusion of the top ten companies in the sectors coal mining and coal power
In addition to the adopted criteria, Raiffeisen KAG is considering excluding all top coal industry supporters from its investment universe. This exclusion would relate to two of the main coal industry sectors, namely coal mining and coal power (see list in Appendix). On this basis, a total of 20 securities could be excluded.

Exclusion of the ten financial institutions with the biggest involvement in coal
Due to the central role the financial industry plays in regard of the coal phase-out, Raiffeisen KAG could also disinvest from the top coal-intensive financial institutions. An updated list of potential candidates is included in the Appendix.

[8] Global Coal Exit List 2020: Retrievable at https://coalexit.org/

II. Sample data relating to primary energy supply in different countries

Graph 5:
Share of various energy sources as a percentage of primary energy supply

	Anteile der Energieträger, in Prozent [1]				Primärenergie-Versorgung [6], in Tsd. Tonnen Öläquivalent
	Öl [2]	Gas	Kohle [3]	Kern-energie	
EU-28	32,9	23,9	14,9	13,7	1.598.593
Europa (46 Staaten/ Gebiete)	29,3	31,8	16,2	11,0	2.700.198
Welt	31,9	22,1	27,1	4,9	13.761.449
Russland	23,7	50,7	15,5	7,0	732.356
Deutschland	32,7	22,7	24,9	7,1	310.121
Frankreich	28,5	15,7	3,5	43,0	244.265
Vereinigtes Königreich	33,9	38,8	6,6	10,4	178.892
Italien	34,1	38,5	7,3	0,0	150.978
Türkei	30,8	28,0	28,0	0,0	136.718
Spanien	42,3	20,9	8,8	12,7	119.846
Polen	26,0	14,7	49,5	0,0	99.307
Ukraine	11,9	27,1	34,4	22,5	94.383
Niederlande	37,8	40,3	13,7	1,4	74.545
Belgien	39,9	25,3	5,3	20,1	56.523
Schweden	23,8	1,7	4,2	33,4	49.226
Tschechien	19,2	16,9	39,9	15,2	41.550
Finnland	25,5	6,1	13,3	17,8	34.017
Österreich	35,1	21,6	8,9	0,0	33.319
Rumänien	27,3	28,4	16,7	9,3	31.739
Norwegen	29,8	20,3	2,8	0,0	27.237

Source: IEA, edited by the Federal Agency for Civic Education (Bundesamt für Politische Bildung), Germany (2016), retrievable at: https://www.bpb.de/nachschlagen/zahlen-und-fakten/europa/75140/themengrafike

III. Exclusion list - top coal companies (2020)

Graph 6:
Top coal mining companies[9]

TOP COAL MINING COMPANIES

RANK	COMPANY	ANNUAL COAL PRODUCTION (MILLION METRIC TONS)	EXPANSION PLANS?	RANK	COMPANY	ANNUAL COAL PRODUCTION (MILLION METRIC TONS)	EXPANSION PLANS?
1	COAL INDIA	534	YES	19	HENAN ENERGY AND CHEMICAL INDUSTRY	66	YES
2	CHINA ENERGY INVESTMENT CORPORATION	510	YES		GROUP		
	(CHN ENERGY)			20	YANGQUAN COAL INDUSTRY GROUP	66	YES
3	PEABODY ENERGY	157		21	SINGARENI COLLIERIES COMPANY LIMITED	64	
4	SHANDONG ENERGY GROUP	141	YES		(SCCL)		
5	SHAANXI COAL AND CHEMICAL INDUSTRY	140	YES	22	INNER MONGOLIA YITAI GROUP	64	YES
6	YANKUANG GROUP	135	YES	23	MURRAY ENERGY	61	
7	DATONG COAL MINE GROUP	127	YES	24	SHANXI JINCHENG ANTHRACITE MINING	59	YES
8	GLENCORE	118	YES		GROUP		
9	SIBERIAN COAL ENERGY COMPANY (SUEK)	110	YES	25	HUAINAN MINING INDUSTRY GROUP	57	YES
10	CHINA NATIONAL COAL GROUP	105	YES	26	ADARO ENERGY	53	YES
11	SHANXI COKING COAL GROUP	92	YES	27	JIZHONG ENERGY GROUP	53	YES
12	RWE	86		28	CLOUD PEAK ENERGY	52	YES
13	BUMI RESOURCES	83	YES	29	PGE SA (POLSKA GRUPA ENERGETYCZNA SA)	51	YES
14	ARCH COAL INC	80		30	ENERGETICKÝ A PRUMYSLOVÝ HOLDING (EPH)	50	
15	STATE POWER INVESTMENT CORPORATION	75	YES				
16	JINNENG GROUP	74	YES				
17	SHANXI LU'AN MINING INDUSTRY GROUP	73	YES				
18	CHINA HUANENG GROUP	71	YES				

[9] https://www.greenpeace.ch/de/publikation/42294/banking-on-climate-change-2020/

Graph 7:
Top coal power companies[10]

TOP COAL POWER COMPANIES

RANK	COMPANY	INSTALLED COAL POWER CAPACITY (ATTRIBUTABLE MEGAWATTS)	COAL POWER EXPANSION PLANS (ATTRIBUTABLE MEGAWATTS)	RANK	COMPANY	INSTALLED COAL POWER CAPACITY (ATTRIBUTABLE MEGAWATTS)	COAL POWER EXPANSION PLANS (ATTRIBUTABLE MEGAWATTS)
1	CHINA ENERGY INVESTMENT CORPORATION (CHN ENERGY)	175,000	25,153	12	PERUSAHAAN LISTRIK NEGARA (PLN)	20,192	9,573
				13	GUANGDONG ENERGY GROUP	24,494	2,986
2	CHINA HUANENG GROUP	104,717	13,573	14	HEBEI CONSTRUCTION & INVESTMENT GROUP	19,116	2,512
3	CHINA DATANG	94,705	21,485				
4	CHINA HUADIAN	104,054	9,138	15	DATONG COAL MINE GROUP	15,460	5,050
5	STATE POWER INVESTMENT CORPORATION	69,191	12,975	16	STATE DEVELOPMENT AND INVESTMENT CORPORATION (SDIC)	13,756	4,194
6	NTPC	48,074	30,541	17	RELIANCE POWER	5,760	11,880
7	SHAANXI COAL AND CHEMICAL INDUSTRY	45,941	6,275	18	RWE	17,475	-
				19	DUKE ENERGY	17,032	-
8	ESKOM	36,479	9,600	20	PGE SA (POLSKA GRUPA ENERGETYCZNA SA)	12,656	4,360
9	KOREA ELECTRIC POWER CORPORATION (KEPCO)	34,218	6,621				
				21	DTEK BV GROUP	16,314	-
10	CHINA RESOURCES POWER HOLDINGS	29,815	7,607	22	ENEL	15,828	-
11	ZHEJIANG PROVINCIAL ENERGY GROUP	28,211	3,913	23	BEIJING ENERGY HOLDING	11,808	3,911

[10] https://www.greenpeace.ch/de/publikation/42294/banking-on-climate-change-2020/

IV. Exclusion of ten financial institutions with the biggest involvement in coal (2020)

Graph 8:
Top banks involved in coal mining[11]

LEAGUE TABLE - *Banking on Coal Mining*

Bank financing for 30 top coal mining companies

RANK	BANK	2016	2017	2018	2019	TOTAL
1	CHINA CONSTRUCTION BANK	$3.460 B	$3.428 B	$3.109 B	$3.203 B	$13.200 B
2	BANK OF CHINA	$3.834 B	$1.694 B	$3.275 B	$2.733 B	$11.535 B
3	ICBC	$2.675 B	$1.648 B	$1.661 B	$1.296 B	$7.281 B
4	AGRICULTURAL BANK OF CHINA	$1.403 B	$1.072 B	$1.034 B	$670 M	$4.178 B
5	CREDIT SUISSE	$69 M	$1.476 B	$426 M	$210 M	$2.181 B
6	JPMORGAN CHASE	$43 M	$1.325 B	$155 M	$318 M	$1.842 B
7	DEUTSCHE BANK	$35 M	$698 M	$642 M	$289 M	$1.664 B
8	CITI	$838 M	$148 M	$133 M	$340 M	$1.459 B
9	GOLDMAN SACHS	$175 M	$918 M	$215 M	$72 M	$1.380 B
10	MORGAN STANLEY	$35 M	$439 M	$156 M	$154 M	$785 M
11	UBS	$60 M	$46 M	$67 M	$541 M	$714 M
12	COMMERZBANK	$121 M	$152 M	$282 M	$158 M	$713 M
13	UNICREDIT	$219 M	$152 M	$82 M	$151 M	$604 M
14	BANK OF MONTREAL	$35 M	$171 M	$179 M	$204 M	$589 M
15	SOCIÉTÉ GÉNÉRALE	$104 M	$261 M	$60 M	$152 M	$578 M
16	MUFG	$35 M	$41 M	$115 M	$345 M	$536 M
17	INTESA SANPAOLO	$124 M	-	$285 M	$27 M	$436 M
18	BANK OF AMERICA	$45 M	$76 M	$75 M	$231 M	$426 M

[11] https://www.greenpeace.ch/de/publikation/42294/banking-on-climate-change-2020/

Graph 9:
Top banks involved in coal mining[12]

RANK	BANK	2016	2017	2018	2019	TOTAL
19	SANTANDER	$35 M	$76 M	$115 M	$157 M	$384 M
20	ING	$154 M	$42 M	$58 M	$123 M	$377 M
21	BNP PARIBAS	$75 M	$41 M	$86 M	$151 M	$354 M
22	HSBC	$83 M	$45 M	$81 M	$139 M	$349 M
23	BARCLAYS	$35 M	$76 M	$75 M	$157 M	$343 M
24	STANDARD CHARTERED	$35 M	$81 M	$89 M	$123 M	$328 M
25	RBS	$40 M	$41 M	$56 M	$182 M	$319 M
26	RBC	$35 M	$41 M	$56 M	$182 M	$314 M
27	CRÉDIT AGRICOLE	$35 M	$41 M	$56 M	$168 M	$301 M
28	MIZUHO	$35 M	$76 M	$56 M	$123 M	$291 M
29	BBVA	$35 M	$41 M	$56 M	$146 M	$278 M
30	SMBC GROUP	-	$42 M	$58 M	$129 M	$229 M
31	TD	$35 M	$41 M	$56 M	$96 M	$228 M
31	SCOTIABANK	$35 M	$41 M	$56 M	$96 M	$228 M
33	CIBC	$35 M	-	-	-	$35 M
34	BPCE/NATIXIS	-	-	-	-	-
34	WELLS FARGO	-	-	-	-	-
	GRAND TOTAL	**$14.018 B**	**$14.469 B**	**$12.907 B**	**$13.068 B**	**$54.462 B**

[12] https://www.greenpeace.ch/de/publikation/42294/banking-on-climate-change-2020/

Graph 10:
Top banks involved in coal power[13]

LEAGUE TABLE - *Banking on Coal Power*

Bank financing for 30 top coal power companies

RANK	BANK	2016	2017	2018	2019	TOTAL
1	ICBC	$5.732 B	$5.754 B	$5.435 B	$4.548 B	$21.469 B
2	BANK OF CHINA	$4.966 B	$5.015 B	$6.438 B	$4.037 B	$20.456 B
3	CHINA CONSTRUCTION BANK	$6.103 B	$3.297 B	$2.739 B	$2.171 B	$14.310 B
4	AGRICULTURAL BANK OF CHINA	$4.563 B	$2.864 B	$2.478 B	$3.822 B	$13.727 B
5	CITI	$1.125 B	$2.253 B	$1.943 B	$1.405 B	$6.727 B
6	BARCLAYS	$1.487 B	$1.470 B	$1.311 B	$1.599 B	$5.867 B
7	MUFG	$1.604 B	$1.094 B	$1.057 B	$1.293 B	$5.048 B
8	BANK OF AMERICA	$912 M	$880 M	$873 M	$1.668 B	$4.333 B
9	JPMORGAN CHASE	$964 M	$1.040 B	$1.119 B	$1.175 B	$4.298 B
10	MIZUHO	$1.008 B	$823 M	$1.082 B	$1.330 B	$4.244 B
11	CREDIT SUISSE	$1.077 B	$1.135 B	$772 M	$1.105 B	$4.090 B
12	WELLS FARGO	$706 M	$1.289 B	$862 M	$842 M	$3.699 B
13	UBS	$1.523 B	$877 M	$594 M	$208 M	$3.201 B
14	RBC	$1.291 B	$966 M	$329 M	$530 M	$3.116 B
15	HSBC	$240 M	$1.086 B	$840 M	$845 M	$3.011 B
16	GOLDMAN SACHS	$556 M	$957 M	$736 M	$735 M	$2.984 B
17	BNP PARIBAS	$398 M	$649 M	$512 M	$1.053 B	$2.613 B
18	MORGAN STANLEY	$815 M	$421 M	$731 M	$619 M	$2.587 B

[13] https://www.greenpeace.ch/de/publikation/42294/banking-on-climate-change-2020/

Graph 11:
Top banks involved in coal power[14]

RANK	BANK	2016	2017	2018	2019	TOTAL
19	DEUTSCHE BANK	$731 M	$579 M	$368 M	$297 M	$1.975 B
20	SCOTIABANK	$357 M	$477 M	$596 M	$525 M	$1.956 B
21	CRÉDIT AGRICOLE	$157 M	$422 M	$250 M	$596 M	$1.425 B
22	STANDARD CHARTERED	$64 M	$323 M	$670 M	$279 M	$1.336 B
23	BPCE/NATIXIS	$337 M	$312 M	$307 M	$194 M	$1.150 B
24	SMBC GROUP	-	$236 M	$359 M	$519 M	$1.114 B
25	TD	$251 M	$170 M	$67 M	$236 M	$725 M
26	SANTANDER	$207 M	$185 M	$228 M	$101 M	$721 M
27	SOCIÉTÉ GÉNÉRALE	$30 M	$217 M	$107 M	$133 M	$487 M
28	INTESA SANPAOLO	-	$146 M	$210 M	$100 M	$456 M
29	BBVA	$27 M	$170 M	$21 M	$210 M	$428 M
30	UNICREDIT	$30 M	$146 M	$45 M	$100 M	$321 M
31	ING	$30 M	$123 M	$45 M	$24 M	$222 M
32	RBS	$30 M	$47 M	$84 M	$37 M	$198 M
33	BANK OF MONTREAL	-	-	-	$132 M	$132 M
34	COMMERZBANK	-	-	$22 M	$79 M	$101 M
35	CIBC	-	-	-	-	-
	GRAND TOTAL	**$37.325 B**	**$35.423 B**	**$33.230 B**	**$32.546 B**	**$138.524 B**

[14] https://www.greenpeace.ch/de/publikation/42294/banking-on-climate-change-2020/

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