

»»» Paris-compatible sector guidelines of KfW Group

1. Paris-compatible sector guidelines of KfW Group

The following sector guidelines aim at supporting the global transformation process towards greenhouse gas neutrality. They apply to KfW Group's new financing activities in the sectors addressed on the following pages and thereby define concrete requirements for the respective investments' climate-friendliness.

The sector guidelines involve minimum requirements that are aligned with the Paris Climate Agreement and are gradually incorporated into KfW's established financing modalities.

For new KfW financing activities, the sector guidelines apply from the date they enter into force. In KfW's domestic promotional business the respective programme's specific requirements (e.g. as defined in the programme's information sheet) remain decisive. These requirements will gradually be reviewed for compatibility with the sector guidelines and, if necessary, will be adapted accordingly (particularly when introducing new programmes or extending existing programmes). Based on superior considerations, Paris-incompatible programmes can be commissioned by the Federal Government of Germany.

Detailed information regarding the science-based derivation of the Paris-compatible sector guidelines will be published in a background paper (forthcoming).

2. Requirements on greenhouse gas intensive sectors

2.1 Shipping (entry into force on 1st of July 2021)

For new financing activities in the shipping sector (NACE 50.1 und 50.2), the Paris-compatible sector guideline defines individual efficiency requirements based on the Energy Efficiency Design Index (EEDI) for ship types and sizes. The energy efficiency requirements are aligned with the efficiency requirements defined in the International Maritime Organisation's (IMO's) GHG-Strategy reduction targets (-40%/-70% relative by 2030/2050; -50% absolute CO₂-emissions by 2050).

KfW financing can be provided if the reduction factor, specified by ship type in the table below in relation to the reference EEDI, is adhered to at the date of order placement. The EEDI is calculated in accordance with the IMO-Regulation (i.a. Resolution MEPC.203(62)).

Reduction factor (in percent) for the EEDI in relation to the reference-EEDI

Ship Type	Size	Reduktionsfaktor 01/01/2013 – 31/12/2014	Reduktionsfaktor 01/01/2015 – 31/12/2019	Reduktionsfaktor 01/01/2020 - 31/12/2021	Reduktionsfaktor 01/01/2022 - 31/12/2029
Bulk carrier	20,000 DWT and above	0	10	20	30
	10,000 - 20,000 DWT	n/a	0 – 10*	0 – 20*	0 – 30*
Gas carrier	10,000 DWT and above	0	10	20	30
	2,000 - 10,000 DWT	n/a	0 – 10*	0 – 20*	0 – 30*
Tanker	20,000 DWT and above	0	10	20	30
	4,000 - 20,000 DWT	n/a	0 – 10*	0 – 20*	0 – 30*
Container ship	200,000 DWT and above	0	10	20	50
	120,000 - 200,000 DWT	0	10	20	45
	80,000 - 120,000 DWT	0	10	20	40
	40,000 - 80,000 DWT	0	10	20	35
	15,000 - 40,000 DWT	0	10	20	30
	10,000 - 15,000 DWT	n/a	0 – 10*	0 – 20*	0 – 30*
General cargo ships	15,000 DWT and above	0	10	15	30
	3,000 - 15,000 DWT	n/a	0 – 10*	0 – 15*	0 – 30*
Refrigerated cargo carrier	5,000 DWT and above	0	10	15	30
	3,000 - 5,000 DWT	n/a	0 – 10*	0 – 15*	0 – 30*
Combination carrier	20,000 DWT and above	0	10	20	30
	4,000 - 20,000 DWT	n/a	0 – 10*	0 – 20*	0 – 30*
LNG carrier***	10,000 DWT and above	n/a	10**	20	30
Ro-ro cargo ship (vehicle carrier)***	10,000 DWT and above	n/a	5**	15	30
Ro-ro cargo ship***	2,000 DWT and above	n/a	5**	20	30
	1,000 - 2,000 DWT	n/a	0 – 5**,***	0 – 20*	0 – 30*
Ro-ro passenger ship***	1000 DWT and above	n/a	5**	20	30
	250 - 1,000 DWT	n/a	0 – 5**,***	0 – 20*	0 – 30*
Cruise passenger ship (having non-conventional propulsion)***	85,000 GT and above	n/a	5**	20	30
	25,000 - 85,000 GT	n/a	0 – 5**,***	0 – 20*	0 – 30*

*) Linear interpolation of the value based on the size of the ship. The small value applies to the smaller ship.

**) Phase 2 has started for these ship types on 1st of September 2015.

***) This is valid for cruise passenger ships with an unconventional propulsion, including diesel-electric propulsion, turbine propulsion and hybrid propulsion system.

Scope of application:

The following types of financing activities are Paris-compatibly steered by the sector guidelines and must adhere to the requirements stated in the table:

- New financing to purchase or lease new ships in the above listed “Ship Type” category (including structurally strengthened ship types, e.g. ice class with corresponding EEDI-deductions for the IMO-requirements).
- New financing for ships that are not subjected to IMO-Regulations and therefore have not been issued with an International Energy Efficiency Certificate (IEEC with notice of the EEDI) are excluded from the sector guidelines for shipping.
- Retrofits (adjustments in the existing ship), provided that they prolong the ship’s technical lifetime, retrofits are treated like new ships (see scope of application for “new ship” and for “major conversion” according to resolution MEPC.203(62), ANNEX 19).

The following types of financing activities are not steered by the sector guidelines:

- New financing for the purchase and lease of new ships that are not listed in the above mentioned “Ship Type” categories.
- Retrofits, which do not prolong the technical lifetime of the corresponding ship (e.g. exhaust gas purification).
- Financing of individual ship components.
- Corporate Financing and other financing activities where the specific technologies are non-delimitable (e.g. intermediary-financing via financial institutions).

2.2 Automotive sector (entry into force on 1st of July 2021)

The Paris-compatible sector guideline for the automotive sector refers to production and research and development (R&D) of passenger cars and light commercial vehicles (< 3.5t) as well as suppliers and infrastructure (NACE Code 29.1, 29.2 (only relevant for factor financing activities, for which the powertrain cannot be separated from other technologies) and 29.3)¹. With focus on propulsion technologies, the sector guideline differentiates as followed:

(i) Transformative propulsion technologies directly contribute to the greenhouse gas neutrality target. These include battery electric vehicles (BEV) and fuel cell electric vehicles (FCEV), as well as plug-in hybrid electric vehicles (PHEV) until the end of 2024 (classified as transitional propulsion technology from 2025 on).

(ii) Transitional propulsion technologies are relevant but of steadily decreasing importance in driving the transition towards greenhouse gas neutrality. These include internal combustion engines (ICE) and hybrid electric vehicles (HEV, i.e. full hybrids that enable purely electric driving, but whose batteries cannot be charged via the power grid).

The Paris-compatible sector guideline increases the proportion of KfW financing activities in transformative propulsion technologies and limits the financing activities in transitional propulsion technologies. From 1st of July 2021 to 31st of December 2024, new financing activities for the mentioned propulsion technologies will be monitored and controlled by KfW to ensure that the transformative proportion of financing activities reaches at least 52 percent and the transitional proportion is limited to 48 percent.²

KfW Group controls the quota for the transitional proportion of total financing volume, ensuring that it will be met.

Scope of application:

The following types of financing activities are Paris-compatibly steered by the sector guidelines:

- New financing activities for propulsion-relevant parts of the automotive production (limiting quota for transitional drive technologies).
- New financing activities for production factories.

The following types of financing activities are not steered by the sector guidelines:

- New financing for purchase of vehicles or fleets (as well as leasing).
- Production and research and development in the vehicle segment > 3.5t.
- Process steps unrelated to propulsion technology, i.a. pressing plant, shell construction, axles, supplier of automotive parts that are not propulsion-related (i.a. floors, seats, bumpers, mirrors), enameling lines, assembly lines, tests and quality checks, deliveries.
- Financing, unrelated to NACE Codes 29.1, 29.2 and 29.3, is not steered by the sector guideline for automotives and therefore is not considered in the quota for transitional/ transformative technologies (i.e. charging infrastructure, production of synthetic fuels and biofuels).
- Corporate Financing and other financing activities where the specific technologies are non-delimitable (e.g. intermediary-financing via financial institutions).

¹ As the Paris-compatible sector guideline's requirements are focused on the powertrain, NACE Code 29.2 is only relevant for steering in case of a factory financing activity where the powertrain cannot be delineated.

² In regards to the time period from 2025 to 2029, the proportion of transformative financing activities must be at least 67% of the financing volume, the proportion for transitional activities is therefore limited to 33%.

2.3 Iron and steel production (entry into force on 1st of July 2021)

The Paris-compatible sector guideline for iron and steel production (NACE 24.10, partly 19.10) focuses primarily on the 'hot phase' of this sector. The guideline distinguishes between (i) transformative technologies, that directly contribute to greenhouse gas neutrality and (ii) transitional technologies, which are relevant for progress towards greenhouse gas neutrality but are of continuously declining importance. Therefore, the Paris-compatible sector guideline will increase the proportion of KfW financing activities in transformative technologies and limit the financing activities in transitional technologies. Technologies not listed in the Paris-compatible sector guideline can also be classified as transitional, if they meet the high thresholds in regard to emissions (t CO₂) per t steel (crude steel).

KfW Group controls the quota for the transitional proportion of total financing volume, ensuring that it will be met.

Technologies	New financing activities in the period from 01.01.2020 to 31.12.2024	New financing activities in the period from 01.01.2025 to 31.12.2029						
Further promoting transformative technologies	<p><u>New constructions:</u></p> <ul style="list-style-type: none"> ▪ EAF, scrap iron based ▪ BOF/DRI with CCU/CCUS/CCS ▪ Hydrogen direct reduction ▪ Electrolysis of Iron <p><u>Stock:</u></p> <ul style="list-style-type: none"> ▪ GHG-mitigation measures incl. CCUS/CCS ▪ Relining EAF <p><u>or alternatively:</u> $< 0.3 \text{ t CO}_2/\text{t crude steel}$</p>	<p><u>New constructions:</u></p> <ul style="list-style-type: none"> ▪ EAF, scrap iron based ▪ BOF/DRI with CCU/CCUS/CCS ▪ Hydrogen direct reduction ▪ Electrolysis of Iron <p><u>Stock:</u></p> <ul style="list-style-type: none"> ▪ GHG-mitigation measures incl. CCUS/CCS ▪ Relining EAF <p><u>or alternatively:</u> $< 0.2 \text{ t CO}_2/\text{t crude steel}$</p>						
Limiting transitional technologies	<p>Max. 50% of new commitment amounts for investment in the hot phase of steel production, per business unit respectively</p> <p><u>New construction:</u></p> <ul style="list-style-type: none"> ▪ BOF ▪ DRI ▪ Coking plants only with dry coke cooling processes <p><u>Stock:</u></p> <ul style="list-style-type: none"> ▪ Relining BOF ▪ Relining DRI <p><u>or alternatively:</u> $0.3 \leq x < 1.6 \text{ t CO}_2/\text{t crude steel}$</p>	<p>Max 39% of new commitment amounts for investment in the hot phase of steel production, per business unit respectively</p> <p><u>New construction:</u></p> <ul style="list-style-type: none"> ▪ BOF ▪ DRI ▪ Coking plants only with dry coke cooling processes <p><u>Stock:</u></p> <ul style="list-style-type: none"> ▪ Relining BOF ▪ Relining DRI <p><u>or alternatively:</u> $0.2 \leq x < 1.5 \text{ t CO}_2/\text{t crude steel}$</p>						
<p>KfW's financing activities for casters and rolling mills remain possible. As casters and rolling mills are not part of the 'hot phase' of the steel production, new commitment amounts for casters and rolling mills are excluded from the quota calculation described above.</p>								
<p>Abbreviations:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">BOF: Basic oxygen furnace</td> <td style="width: 50%;">CCUS: Carbon capture, utilisation and storage</td> </tr> <tr> <td>DRI: Direct reduced iron</td> <td>CCU: Carbon capture and utilisation</td> </tr> <tr> <td>EAF: Electric arc furnace</td> <td>CCS: Carbon capture and storage</td> </tr> </table>			BOF: Basic oxygen furnace	CCUS: Carbon capture, utilisation and storage	DRI: Direct reduced iron	CCU: Carbon capture and utilisation	EAF: Electric arc furnace	CCS: Carbon capture and storage
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DRI: Direct reduced iron	CCU: Carbon capture and utilisation							
EAF: Electric arc furnace	CCS: Carbon capture and storage							

Scope of application:

The following types of financing activities are Paris-compatibly steered by the sector guidelines and must adhere to the requirements stated in the table:

- New financing for the "hot phase" of the iron and steel production.

The following types of financing activities are not steered by the sector guidelines:

- Corporate Financing and other financing activities where the specific iron and steel technologies are non-delimitable (e.g. intermediary-financing via financial institutions).

2.4 Building sector (entry into force on 1st of September 2021)

The Paris-compatible sector guideline for the building sector is applicable for new construction, modernisation and the purchase of buildings located within the EU. It includes all building types that are heated or cooled according to their intended purpose (e.g. residential buildings, administrative buildings, schools and hospitals). The minimum requirements for buildings in Germany are defined according to the established KfW Efficiency House and Efficiency Building standards. For buildings located in the other EU countries, the sector guideline purposely offers several possibilities to meet the Paris-compatible minimum requirements and thus takes into consideration the heterogeneous climate conditions and national differences in building standards.

For buildings located in Germany, the following minimum requirements apply for financing activities in the time period from 1st September 2021 until 31st December 2029:

Purpose of financing activity	Minimum requirements
New constructions	At least KfW Efficiency House ³ and Efficiency Building standard ⁴ 55
Purchase of buildings that since being built have not been occupied (upcoming first-time occupancy)	
Purchase of buildings that since being built have been occupied at least once	At least KfW Efficiency House ³ and Efficiency Building standard ⁴ 100 (For modernisations dependent on the financed modernisation work) ⁵
modernisation of buildings	
Individual measures	Individual measures according to the following positive list: <ul style="list-style-type: none"> ▪ Insulation of building envelope (incl. windows/doors) ▪ Ventilation (with heat recovery) ▪ Renewable electricity generation: Photovoltaics (also in connection with batteries), biomass/biogas combined heat and power plants ▪ Heating: electric heat pumps, solar thermal energy, natural gas heating incl. combined heat and power plants (optimization of existing devices), local and remote district heating, biomass in accordance with the requirements of the federal funding program for efficient buildings (BEG), see below ▪ All other individual measures in accordance with the technical minimum requirements of the (BEG)⁵

³ Link:

<https://www.bundesanzeiger.de/pub/publication/ViyuABRC4rb8sQWems/content/ViyuABRC4rb8sQWems/BAnz%20AT%2007.06.2021%20B3.pdf?inline#page=15>

⁴ Link:

<https://www.bundesanzeiger.de/pub/publication/2fIQclFB3pM98KEQpfD/content/2fIQclFB3pM98KEQpfD/BAnz%20AT%2007.06.2021%20B4.pdf?inline#page=14>

⁵ Link:

<https://www.bundesanzeiger.de/pub/publication/WvQ8k3f3hl7npi5nNo9/content/WvQ8k3f3hl7npi5nNo9/BAnz%20AT%2007.06.2021%20B2.pdf?inline%23page=19>

For buildings located within the EU but outside of Germany, the following minimum requirements apply for financing activities in the time period from 1st September 2021 until 31st December 2029:

Purpose of financing activity	Minimum requirements
New constructions	The building must at least: <ul style="list-style-type: none"> ▪ meet EPC-classification „B“ (energy certificate), or ▪ meet the national requirements for “nearly zero-energy buildings” (NZEB)
Purchase of buildings that since being built have not been occupied (upcoming first-time occupancy)	
Purchase of buildings that since being built have been occupied at least once	The building (where necessary after completion of the financed modernisation) must at least: <ul style="list-style-type: none"> ▪ meet EPC-classification “B” (energy certificate), or ▪ be in accordance with the minimum standards for the implementation of the “Energy Performance of Buildings Directive” (EPBD), or ▪ as a result of the financed modernisations prove to have saved at least 30 percent of non-renewable primary energy
Modernisation of buildings	
Individual measures	See positive list for buildings located in Germany

Scope of application:

The following types of financing activities are Paris-compatibly steered by the sector guidelines:

- New constructions, modernisations and purchase of residential and non-residential buildings located within the EU, including financing activities for individual building parts or building technology (installation and setup of heating, cooling, ventilation and lighting technology as well as hot water supply).

The following types of financing activities are not steered by the sector guidelines:

- Buildings not located within the EU.
- Listed buildings, industrial and production buildings, warehouse and shipping buildings, data centers as well as all building types that are not in the included in the scope of the German Building Energy Act (GEG §2 (2)).
- Financing activities for the operation of buildings or technical facilities for the production process in buildings.
- General corporate financing and financing activities that cannot be technologically delimited over financial intermediaries in home ownership companies and construction companies.

2.5 Power generation sector (entry into force on 1st of September 2021)

The Paris-compatible sector guideline for power generation supports the expansion of renewable energies which can be financed as transformative technologies (e.g. wind, photovoltaic, solar thermal power plant, power generation with sustainable biomass without any limitations). At the same time, the sector guideline also considers the role of natural gas power plants in successfully shaping the transition phase towards greenhouse gas neutrality.

Thereby, KfW Group consistently relies on the best locally available and usable technologies and secures Paris-compatibility of its new financing activities by relying on a quota control: Based on the annual commitment volume for natural gas power plants and renewable energies, the annual commitment volume for natural gas power plants (new construction and modernization) is limited to one third. This quota applies for the period up to the end of 2029 and in individual cases may also include oil and diesel power plants.

The quota is controlled by KfW Group. The applied method is made transparent by KfW Group in its background paper⁶ on the Paris-compatible sector guidelines.

2.6 Aviation sector (entry into force on 1st of September 2021)

The Paris-compatible sector guidelines for aviation applies to the financing of aircrafts for the transport of humans and goods (NACE-Codes 51.1 and 51.21) as well as for financing to aircraft lessors (NACE-Code 77.35). KfW Group continuously relies on the best technologies available. As for the aviation sector, there are currently no marketable transformative technologies available to promote a greenhouse gas neutral future, the sector guideline ensures Paris-compatibility by systematically limiting emissions of KfW Group's financed aircrafts. In accordance with the underlying decarbonization path published by the International Energy Agency (IEA) it defines a CO₂-Budget for new financing activities in the aviation sector, which year for year is reduced by 2,06 percent compared to the previous year.

KfW Group steers new financing activities within its CO₂-Budget. The applied method is made transparent by KfW Group in its background paper⁶ on Paris-compatible sector guidelines.

⁶ Link to the background paper (forthcoming).

Appendix: Classification of economic activities

Sector Guideline	Nace Code	Economic activity
Shipping	50.1	Sea and coastal passenger water transport
	50.2	Sea and coastal freight water transport
Automotive	29.1	Manufacture of motor vehicles
	29.2	Manufacture of bodies (coachwork) for motor vehicles; manufacture of trailers and semi-trailers
	29.3	Manufacture of parts and accessories for motor vehicles
Iron- and steel production	19.10	Manufacture of coke oven products
	24.10	Manufacture of basic iron and steel and of ferro-alloys
Building	n/a	Management does not depend on NACE-Codes
Power generation	35.11	Production of electricity
Aviation	51.1	Passenger air transport
	51.21	Freight air transport
	77.35	Renting and leasing of air transport equipment

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