



Climate policy sector guidelines of the Federal Government for the investment guarantee scheme

1) Federal Government sector guidelines for the energy sector^a

A) Climate-friendly energy

Climate category	New & existing projects
Preferential coverage ("green category")	<p><i>In accordance with the OECD Climate Change Sector Understanding (CCSU Appendix I)¹ electricity and/or thermal power generation projects based on:</i></p> <ul style="list-style-type: none"> ➤ Wind energy² ➤ Geothermal energy² ➤ Wave energy, tidal power, ocean thermal energy, osmotic power ➤ Solar photovoltaic power, solar thermal energy² ➤ Bioenergy² ➤ Hydropower² ➤ Green hydrogen <p><i>Projects in the following areas which meet the relevant requirements of the EU Taxonomy²:</i></p> <ul style="list-style-type: none"> ➤ Storage of electricity including pumped hydropower storage OR thermal energy including Underground Thermal Energy Storage (UTES) or Aquifer Thermal Energy Storage (ATES) OR green hydrogen.³ ➤ Transmission and distribution networks for low-emission gases⁴ OR low-emission electricity⁵ ➤ District heating and cooling networks ➤ Production of biogas and biofuels OR green hydrogen⁶ and green hydrogen-based synthetic fuels

1. The CCSU of 17 July 2023 lists these forms of energy production in Appendix I, Project Class A, Type 1 and Type 2.

2. Requirements according to the Substantial Contribution Criteria for Climate Change Mitigation of the EU Taxonomy according to Annexes I and II of the European Commission's Delegated Regulation (EU) 2021/2139 of the EU Commission of 4 June 2021 and according to the European Commission's Delegated Regulation (EU) 2022/1214 of the EU Commission of 9 March 2022, except for the activities in sections 4.26, 4.27 and 4.28 (activities related to nuclear energy).

3. Green and, where necessary in the market ramp-up phase, low-carbon blue, turquoise and orange hydrogen, the production of which meets the relevant requirements of the EU Taxonomy and the National Hydrogen Strategy.

4. Ideally renewable gases, otherwise low-emission gases - or also low-carbon gases according to the EU Taxonomy - i.e. gases that generate at least 70% fewer greenhouse gas emissions than fossil natural gas across their full life-cycle.

5. Ideally electricity from renewable sources, otherwise low-emission electricity according to the EU Taxonomy, i.e. electricity that is below the emissions threshold of 100g CO₂-e/kWh measured on a life-cycle basis and not generated from nuclear energy.

6. According to the National Hydrogen Strategy.

^a The definitions in the area of CCS / CCUS will be adapted in accordance with the Carbon Management Strategy.

B) Fossil fuels: Coal and crude oil

Climate category	Coal (and tar/derivatives) - <u>new & existing projects</u>	Crude oil (and derivatives) - <u>new & existing projects</u>
Unchanged cover conditions ("white category")	<ul style="list-style-type: none"> ➤ Fossil energy infrastructure projects¹, for which there is a plan to decommission or convert to non-fossil energy use. 	<ul style="list-style-type: none"> ➤ Fossil energy infrastructure projects¹, for which a plan exists that provides for decommissioning or conversion to non-fossil energy use. <p>Exploration/Extraction/Processing</p> <ul style="list-style-type: none"> ➤ Projects¹, in which the investment/extension of the guarantee period to be secured also contributes particularly to closing methane leaks OR to ending Routine Venting & Flaring (RVF) <p>Power plant operated with crude oil or its derivatives</p> <ul style="list-style-type: none"> ➤ Projects for the production and operation, leasing or similar of emergency power generators in the civil and industrial sector, as well as oil-based power generation plants in humanitarian emergencies and as backup for mini-/hybrid grid systems.
Excluded from cover ("red category")	<ul style="list-style-type: none"> ➤ Coal-fired power plants ➤ Projects related to the exploration, extraction, processing, transport, storage or conversion into electricity of coal, tar and their derivatives which do not meet any of the white category exceptions 	<ul style="list-style-type: none"> ➤ Oil production projects using Routine Venting & Flaring (RVF) ➤ Projects related to the exploration, extraction, processing, transportation, storage or conversion into electricity of crude oil and its derivatives that do not meet any of the "white" category exceptions

¹. Existing projects only.

C) Fossil fuels: Natural gas

Climate category	Natural gas - <u>new & existing projects</u>
Unchanged cover conditions ("white category")	<ul style="list-style-type: none"> ➤ Projects¹, where the investment/extension of the guarantee period to be secured also leads to the closure of methane leakages OR projects for which a plan exists that provides for the decommissioning of fossil infrastructure or its conversion to use for non-fossil energy sources. <p>Exploration/Extraction/Processing</p> <ul style="list-style-type: none"> ➤ <u>Until the end of 2025 for industrialised countries, until the end of 2029 for emerging economies and developing countries:</u> Existing conventional gas production projects without expansion of production capacity or duration, where the investment/extension of the guarantee period also contributes in particular to the improvement of environmental, labour or other safety aspects. ➤ <u>Until end of 2025:</u> Exceptions for projects with fields already developed or planned in 2021 exclusively for the production of turquoise / blue hydrogen ² ➤ <u>In special individual cases until the end of 2025:</u> Projects for the development of new gas proposals, provided these are necessary for <ul style="list-style-type: none"> - national security (e.g. to avert any serious disruption to security of supply) or - geostrategic security of supply interests (e.g. to avert a food crisis). <p>AND</p> <ul style="list-style-type: none"> - conformity with the 1.5°C target and avoidance of lock-in effects is ensured. Assessments will be evidence-based. <p>Transport or storage</p> <ul style="list-style-type: none"> ➤ <u>Until end of 2025 for industrialised countries, until end of 2029 for emerging economies and developing:</u> projects with existing facilities or means of transport whose capacities are not significantly expanded, whose service life is not significantly extended, which are not directly associated to non-conventional natural gas production and for which the opportunities available for preventing methane leakage within the investor's sphere of influence are exhausted. ➤ <u>In special individual cases until the end of 2025:</u> Transport and storage projects that are essential for the implementation of a new gas project (see above exploration/extraction/processing) or an existing gas project. The prerequisites apply accordingly. Assessments will be evidence-based. ➤ Projects involving conversion to sustainable or low-carbon hydrogen² OR connecting new sources of renewable gases OR gas networks for the transport of renewable gases, including renovation and adaptation of existing gas infrastructure, where these activities contribute to this objective OR projects for the production, operation, leasing, or similar of smart meters to reduce gas consumption. <p>Natural gas-fired power plant</p> <ul style="list-style-type: none"> ➤ Retrofitting of existing power plants with CCS/CCUS having carbon capture according to the best available technology (BAT) and evidence of the permanent fate of the captured CO₂. ➤ <u>Until 2030:</u> existing power plants with the technical prerequisite that the power plants are technically designed to be converted to the use of up to 50% H₂ with little effort and by 2035 with the prerequisite that the power plants are technically designed (H₂ -readiness) to be converted to the use of up to 100% H₂ with little effort, without significantly expanding capacity or extending the operating life. ➤ New power plants or significantly expanded power plants with CCS/CCUS having carbon capture according to the best available technology (BAT) and evidence of the permanent fate of the captured CO₂ OR if the expected life-cycle GHG emissions of the power plants are below a limit value set by the end of 2025 based on the EU Taxonomy and takes into account the market ramp-up of low-emission hydrogen AND under the technical prerequisite that the power plants are 50% H₂ -ready by 2030 (date of submission to the Interministerial Committee) and 100% H₂ -ready from 2030. For H₂-readiness, it is sufficient to be able to convert to H₂ use with little effort. ➤ Projects for the production and operation, leasing, or similar of emergency power generators in the civil and industrial sector as well as natural gas-based power generation plants used in humanitarian emergencies and as back-up for mini-/hybrid grid systems and reserve boilers for unscheduled emergency operation for renewable energy plants. ➤ In developing countries: Projects for the production, marketing, renting or similar of commodities and consumer goods in connection with the use of natural gas for cooking if no renewable alternatives are available.
Excluded from coverage ("red category")	<ul style="list-style-type: none"> ➤ Natural gas-fired power plants that do not meet any of the white category exceptions ➤ Other projects which are related to the exploration, extraction, processing, transport, storage or conversion into electricity of natural gas and its derivatives which do not meet any of the "white" category exceptions.

1. Existing projects only.

2 This exception is to be applied and adjusted consistently with the import strategy for hydrogen, which is still to be coordinated within the Federal Ministries.

2) Sector guidelines for the transport sector¹

<u>Climate category</u>	<u>New projects for the production of passenger cars and vans</u>	<u>Existing projects for the production of passenger cars and vans</u>
Preferential coverage ("green category")	<ul style="list-style-type: none"> ➤ Low-emission and zero-emission vehicles in accordance with the relevant requirements of the EU Taxonomy² ⌚ <i>From 2026, only vehicles whose CO₂ emissions are zero³</i> 	<ul style="list-style-type: none"> ➤ see left
Unchanged cover conditions ("white category")	<ul style="list-style-type: none"> ➤ Projects that do not fall into the category "green" or "red" and comply with the energy efficiency benchmarks of the EHS Guidelines⁴ 	<ul style="list-style-type: none"> ➤ see left
Excluded from coverage ("red category")	<ul style="list-style-type: none"> ⌚ <i>From 2026 vehicles powered exclusively by internal combustion engines⁵</i> 	<ul style="list-style-type: none"> ⌚ <i>From 2030 vehicles powered exclusively by combustion engines⁵</i>

1. Scope: Projects for the production of passenger cars and light commercial vehicles (vans) according to the EU classification (passenger vehicles with ≤ 3.5 t technically permissible maximum mass and with ≤ 8 passenger seats as well as vehicles for the transport of goods with ≤ 3.5 t technically permissible maximum mass). Subcontracting projects clearly related to propulsion technology and related research and development projects are also within the scope.

2. "[...] specific emissions of CO₂, as defined in Article 3(1), point (h), of Regulation (EU) 2019/631 [are] lower than 50 g CO₂/km [...]"

3. "[...] from January 2026: specific emissions of CO₂, as defined in Article 3(1), point (h), of Regulation (EU) 2019/631, are zero"

4. For the automotive sector, no industry-specific ETS guideline is available from the World Bank Group. However, for the energy-intensive processes of metal processing, the benchmarks from the EHS Guideline for Metal, Plastic and Rubber Manufacturing are applicable.

5. The NZE scenario foresees a complete decline in sales of new passenger cars powered exclusively by internal combustion engines by 2035. In order to prevent possible lock-in effects, a coverage exclusion for new production sites is already foreseen for 2026 and for existing projects from 2030. In addition, guarantee periods are set so that they do not exceed 2035. The exclusion does not apply if companies can submit a transformation plan for the specific project according to which only low-emission (as defined in footnote 2) and zero-emission vehicles will be produced from 2035 onwards.

3) Federal Government sector guidelines for the industry sector^b

A) Production of ammonia

Climate category	New projects for the production of ammonia	Existing projects for the production of ammonia
Preferential coverage ("green category")	<ul style="list-style-type: none"> ➤ Projects with processes based on sustainable and low-carbon hydrogen¹ ➤ Projects with processes based on the recovery of ammonia from wastewater⁵ ➤ Projects with processes based on bio-based feedstocks and use of renewable energies for heat generation⁵ 	<ul style="list-style-type: none"> ➤ Projects that meet one of the three requirements for new projects from the "green" category ➤ Projects that have carried out CCUS retrofits² with a capture rate of at least 85%³ or will do so within 5 years⁴ ➤ Projects that will carry out other retrofits within 5 years⁴ that lead to an emission reduction of at least 85%³ ➤ For extensions of the guarantee period: Projects that have carried out other retrofits since the initial coverage that lead to a reduction of emissions of at least 85%³
Unchanged cover conditions ("white category")	<ul style="list-style-type: none"> ➤ Projects that comply with the relevant energy efficiency requirements of the IFC EHS Guidelines ⌘ <i>Once a standard international definition of "green readiness" has been established, a further requirement will be added to the "white" category during the next periodic review specifying that projects must already be equipped or technically retrofittable for low-emission operation</i> ⌘ <i>From 2030, only projects that do not use fossil-based feedstocks or energy (subject to proof of the economic viability of sustainable production processes)</i> 	<ul style="list-style-type: none"> ➤ Projects that meet the requirements for new projects from the "white" category ➤ Projects for which the GHG emissions are not increased during the requested guarantee period and the guarantee does not extend the life of the project
Excluded from coverage ("red category")	<ul style="list-style-type: none"> ➤ Projects that do not meet the requirements of the "white" category ➤ Projects which uses coal as feedstock or energy source 	<ul style="list-style-type: none"> ➤ Projects that do not meet the requirements of the "white" category ➤ Projects which uses coal as feedstock or energy source

1. Green and, where necessary in the market ramp-up phase, low-carbon blue, turquoise and orange hydrogen, the production of which meets the relevant requirements of the EU Taxonomy and the National Hydrogen Strategy.

2. Carbon Capture Utilisation & Storage – the storage of CO₂ must comply with the relevant requirements of the EU taxonomy.

3. Capture/reduction rate meets the requirements of the OECD CCSU and must be adjusted during the periodic reviews of the sector guidelines with reference to the EU Taxonomy and best available technology. These reviews will also examine whether the availability and economic viability of zero-emission energy sources are sufficient to shift the use of CCUS for emissions from fossil fuel combustion from the "green" to the "white" category;

4. 5 years was applied here, as this corresponds to the regular guarantee period after extension of the guarantee period.

5. In accordance with the relevant requirements of the EU taxonomy.

^b These sector guidelines will be adapted with regard to CCS / CCUS in line with the Carbon Management Strategy.

B) Production of methanol

Climate category	New projects for the production of methanol	Inventory projects for the production of methanol
Preferential coverage ("green category")	<ul style="list-style-type: none"> ➤ Projects that use processes based on sustainable and low-carbon hydrogen¹ and CO₂ extracted using Carbon Capture or Direct Air Capture ➤ Projects with processes based on bio-based feedstocks and use of renewable energies for heat generation 	<ul style="list-style-type: none"> ➤ Projects that meet one of the two requirements for new projects from the "green" category ➤ Projects that have carried out CCUS retrofits² with a capture rate of at least 85%³ or will do so within 5 years⁴ ➤ Projects that will carry out other retrofits within 5 years⁴ leading to an emission reduction of at least 85%³ ➤ For extensions of the guarantee period: Projects that have carried out other retrofits since the initial coverage that lead to a reduction of emissions of at least 85%³
Unchanged cover conditions ("white category")	<ul style="list-style-type: none"> ➤ Projects that comply with the relevant energy efficiency requirements of the IFC EHS Guidelines ⌘ <i>Once a standard international definition of "green readiness" has been established, a further requirement will be added to the "white" category at the next periodic review specifying that projects must already be equipped or technically retrofittable for low-emission operation.</i> ⌘ <i>From 2030, only projects that do not use fossil-based feedstocks or energy (subject to proof of the economic viability of sustainable production processes)</i> 	<ul style="list-style-type: none"> ➤ Projects that meet the requirements for new projects from the "white" category ➤ Projects for which the GHG emissions are not increased during the requested guarantee period and the guarantee does not extend the life of the project
Excluded from coverage ("red category")	<ul style="list-style-type: none"> ➤ Projects that do not meet the requirements of the "white" category ➤ Projects which uses coal as feedstock or energy source 	<ul style="list-style-type: none"> ➤ Projects that do not meet the requirements from the "white" category ➤ Projects which uses coal as feedstock or energy source

1. Green and, where necessary in the market ramp-up phase, low-carbon blue, turquoise and orange hydrogen, the production of which meets the relevant requirements of the EU Taxonomy and the National Hydrogen Strategy.

2. Carbon Capture Utilisation & Storage – the storage of CO₂ must comply with the relevant requirements of the EU Taxonomy.

3. Capture/reduction rate meets the requirements of the OECD CCSU and must be adjusted during the periodic reviews of the sector guidelines with reference to the EU Taxonomy and best available technology. These reviews will also examine whether the availability and economic viability of zero-emission energy sources are sufficient to shift the use of CCUS for emissions from fossil fuel combustion from the 'green' to the 'white' category.

4. 5 years was used here, as this corresponds to the standard guarantee period after extension of the guarantee period.

C) Production of "high value" chemicals

Climate category	New projects for the production of "high value" chemicals	Existing projects for the production of "high value" chemicals
Preferential coverage („green category“)	<ul style="list-style-type: none"> ➤ Projects for the production of light olefins whose life cycle emissions do not exceed 0.693 tCO₂e/t¹ ➤ Projects for the production of aromatic hydrocarbons whose life cycle emissions do not exceed 0.0072 tCO₂e/t¹ 	<ul style="list-style-type: none"> ➤ Projects for the production of light olefins and aromatic hydrocarbons that meet one of the two requirements for new projects from the "green" category ➤ Projects that will carry out other retrofits within 5 years³ leading to a reduction in emissions of at least 85%² ➤ For extensions of the guarantee period: Projects that have carried out other retrofits since the initial coverage that lead to a reduction in emissions of at least 85%²
Unchanged cover conditions („white category“)	<ul style="list-style-type: none"> ➤ Projects for the production of light olefins and aromatic hydrocarbons that comply with the relevant energy efficiency requirements of the IFC EHS Guidelines. ⌘ <i>Once a standard international definition of "green readiness" has been established, a further requirement will be added to the "white" category during the next periodic review specifying that projects must already be equipped or technically retrofittable for low-emission operation.</i> ⌘ <i>From 2030, only projects that do not use fossil-based feedstocks or energies (subject to proof of the economic viability of sustainable production processes)</i> 	<ul style="list-style-type: none"> ➤ Project for the production of light olefins and aromatic hydrocarbons that meet the requirements for new projects from the "white" category ➤ Projects for the production of light olefins and aromatic hydrocarbons where the GHG emissions are not increased during the requested guarantee period and the guarantee does not extend the life of the project
Excluded from coverage („red category“)	<ul style="list-style-type: none"> ➤ Projects for the production of light olefins and aromatic hydrocarbons that do not meet the requirements of the "white" category 	<ul style="list-style-type: none"> ➤ Projects for the production of light olefins and aromatic hydrocarbons that do not meet the requirements of the "white" category

1. In accordance with relevant EU Taxonomy requirements.

2. Capture/reduction rate is in line with OECD CCSU requirements and must be adjusted during the periodic reviews of the sector guidelines with reference to the EU Taxonomy and best available technology. These reviews will also examine whether the availability and economic viability of zero-emission energy sources is sufficient to shift the use of CCUS for emissions from fossil fuel combustion from the "green" to the "white" category.

3. 5 years was used here, as this corresponds to the regular guarantee period after extension of the guarantee period.

D) Production of other chemicals

Climate category	New projects for the production of other chemicals	Existing projects for the production of other chemicals
Preferential coverage ("green category")	<ul style="list-style-type: none"> ➤ Projects that comply with the relevant emission guideline values from the EU Taxonomy 	<ul style="list-style-type: none"> ➤ Projects that meet the requirement for new projects from the "green" category ➤ [Projects that have carried out CCUS retrofits¹ with a capture rate of at least 85%² or will do so within 5 years³ ➤ Projects that will carry out other retrofits within 5 years³ that lead to a reduction in emissions of at least 85%² ➤ For extensions of the guarantee period: Projects that have carried out other retrofits since the initial coverage that lead to a reduction in emissions of at least 85%²
Unchanged cover conditions ("white category")	<ul style="list-style-type: none"> ➤ Projects that comply with the relevant energy efficiency requirements of the IFC EHS Guidelines ⌚ <i>Once a standard international definition of "green readiness" has been established, a further requirement will be added to the "white" category during the next periodic review specifying that projects must already be equipped or technically retrofittable for low-emission operation.</i> ⌚ <i>From 2030, only projects that do not use fossil-based feedstocks or energy (subject to proof of the economic viability of sustainable production processes).</i> 	<ul style="list-style-type: none"> ➤ Projects that meet the requirements for new projects from the "white" category ➤ Projects for which the GHG emissions are not increased during the requested guarantee period and the guarantee does not extend the life of the project
Excluded from coverage ("red category")	<ul style="list-style-type: none"> ➤ Projects that do not meet the requirements from the "white" category ➤ Projects with production processes based on coal 	<ul style="list-style-type: none"> ➤ Projects that do not meet the requirements from the "white" category ➤ Projects with production processes based on coal

1. Carbon Capture Utilisation & Storage - the storage of CO₂ must comply with the relevant requirements of the EU Taxonomy.

2. Capture/reduction rate meets the requirements of the OECD CCSU and must be adjusted during the periodic reviews of the sector guidelines with reference to the EU Taxonomy and best available technology. These reviews will also examine whether availability and economic viability of zero-emission energy sources is sufficient to shift the use of CCUS for emissions from fossil fuel combustion from the "green" to the "white" category.

3. 5 years was used here, as this corresponds to the regular guarantee period after lifetime extensions.