

Immediate climate action programme for 2022

On 12 May 2021, the German cabinet adopted a draft of the First Act Amending the Federal Climate Action Act. The new legislation sets higher national reduction targets for 2030 (at least 65%) and 2040 (at least 88%) and the goal of achieving net greenhouse gas neutrality by 2045. Over the last two years, more than €80bn have already been earmarked for climate action investment under the Climate Action Programme and the economic stimulus package. Totalling approximately €8bn, the present immediate action programme will finance additional measures to further reduce greenhouse gas emissions.

Based on the same rationale that underlies the Climate Action Programme 2030, initial financial support for the transition to climate-friendly technologies will gradually be replaced by incentives and rules.

The programme also represents a bridge between the current legislative term, which is nearing its end, and the next legislative term.

I. Measures in the industrial sector

1. Additional funds for the decarbonisation of industry programme (carbon contracts for difference)

As part of the decarbonisation of industry programme, the Federal Government will expand the pilot scheme for carbon contracts for difference. Carbon contracts help mitigate the higher operating costs of low- and zero-emission processes. The Chemistry4Climate platform will also be set up as part of the programme.

2. Investment funding programme for the steel industry

To promote investments into the transition from the blast furnace route to direct reduction using green hydrogen, funds will be provided in 2022 to supplement and increase investment funding as part of the IPCEI on Hydrogen. To be able to reduce emissions quickly, the steel industry needs assistance measures for the transition to hydrogen-based production processes.

3. Energy efficiency in industry / waste heat

Under the “Federal Funding for Energy Efficiency in Industry” scheme, the Federal Government currently covers 30% of eligible investment costs for the development of industrial waste heat sources. The rate for SMEs is 40%. The funding rate for the use of off-site waste heat (district heating) will be increased to 40% (SMEs: 50%) in order to leverage the potential of industrial waste heat.

4. Lead markets for green steel

Creating “green lead markets” will contribute to reaching climate targets and support the transformation of relevant basic industries such as the steel industry (Steel Action Strategy). During a test and demonstration phase, a pilot scheme for the use of “green steel” will be set up, e.g. in the automotive industry. This will produce insights that can be used to expand green lead markets. A two-pronged approach should be pursued, consisting of the introduction of product quotas for carbon-efficient products and funding to cover the additional costs. Initially, regulatory steps should be taken in the form of quotas based on carbon benchmarks

for certain products. Funding towards the related extra costs should be provided for a transitional period.

5. Investment funding programme for the chemical industry

Funding will be provided towards investment costs for projects (including facilities) aimed at achieving carbon-neutral chemical production (electrifying production processes, closing carbon cycles, substituting fossil raw materials with renewable resources). The call for proposals is based on project ideas developed by the Chemistry4Climate platform.

6. Carbon footprint certification system for certain materials

Information about the carbon footprint of products and materials is important for companies and consumers, but also for future climate action instruments. In cooperation with industrial companies, researchers and civil society, the Federal Government will develop a database-supported system for labelling the carbon footprints of certain frequently used materials.

II. Measures in the energy sector

1. Federal funding for efficient heating networks

Federal funding for efficient heating networks is provided for (a) the construction of new heating networks that draw large parts of their heat from sustainable renewable energy sources or unavoidable waste heat and (b) the expansion and decarbonisation of existing heating networks. This funding will be increased, thus enhancing the scheme's reach and incentivising and accelerating further carbon-saving transformation measures.

2. Funding for green hydrogen production (offshore electrolysers)

A new funding programme will support the development of national structures for the additional production of hydrogen from offshore wind. The funding will cover offshore hydrogen production, the necessary infrastructure at sea and on land, and the use of hydrogen in German centres of consumption.

3. Hydrogen Global (H2Global)

The H2Global funding instrument is a purchasing scheme for hydrogen and hydrogen derivatives that has been developed in order to kick-start the international hydrogen market for the import of green hydrogen. Additional funding for H2Global will be provided in order to help German technologies position themselves in global supply chains.

4. Renewable energy expansion

The new climate targets will speed up sector coupling, which in turn will lead to higher electricity requirements overall. Wind and solar power will have to be expanded in line with this process, while maintaining current levels of biomass power. In light of pending EU-level decisions on the implementation of the Green Deal, the Federal Government will adjust the expansion trajectories for renewable energies in the next legislative term. At the same time, planning, authorisation and implementation processes for climate-friendly infrastructure need to be accelerated at all government levels. The Federal Government and the *Länder* (states) face the joint challenge of making sufficient land available for the expansion of onshore wind farms in particular. To this end, the Renewable Energy Sources Act 2021 introduces a cooperation mechanism in which the *Länder* must report on the status of renewable energy expansion, their own energy generation targets, and surface area for onshore wind farms.

These targets must then be reviewed quickly and fine-tuned based on the updated targets at the federal level.

III. Measures in the buildings sector

1. Federal funding for energy-efficient buildings

Existing buildings are the greatest climate policy challenge in the buildings sector. Budget funds for 2022 and 2023 will be increased to ensure sufficient federal funding for energy-efficient buildings. From 2023 onwards, no federal funds will be provided for heating systems that can only be operated using fossil fuels.

2. Climate-friendly social housing

The Federal Government is increasing the financial resources it provides to the *Länder* for social housing. The additional funds will be used for the construction of new energy-efficient social housing and for energy efficiency retrofits of existing social housing. This will help ensure that climate action is compatible with affordable housing, which is a basic prerequisite for maintaining social cohesion.

3. Review of the Building Energy Act

The planned review of the Building Energy Act will be brought forward to 2022. As part of this review, the Act will undergo more far-reaching amendments. This will also include a review of whether the requirements stipulated in the Act need to be updated. The standards for new buildings will be raised.

IV. Measures in the transport sector

1. Cycling infrastructure expansion

Cycling is an important key to achieving climate targets in the transport sector. Under the special programme for urban and rural areas, the Federal Government provides funding to the *Länder* and local authorities for the expansion of a safe and comprehensive bike lane network. The special programme for urban and rural areas will be expanded to include two new priority areas: (a) "Vision Zero" – upgrading and renovation of cycling infrastructure and (b) bicycle and pedelec parking spaces with charging infrastructure at public transport nodes (bus and train).

2. Innovative model projects for cycling

The Federal Government supports innovative model projects that promote cycling as a form of travel. It will increase funds for the programme supporting innovative projects to improve cycling in Germany.

3. Investments in shipping

Funding will be provided to (a) move the transport of bulky and heavy cargo from roads to waterways, (b) develop and operate emission-free ships and (c) build emission-free surveying and wreck search vessels used by the Federal Maritime and Hydrographic Agency.

4. Investments in waterways

Waterways are an eco-friendly form of transport. The Federal Government will improve the policy framework and the existing transport infrastructure in this area. In addition, it will provide funding for the new task of expanding water resource management, thus also ensuring ecological passability.

5. Investments in railways

The Federal Government will provide additional funds for the expansion of rail infrastructure to increase the shift to rail transport. Specifically, this encompasses (a) the ongoing conversion of the GSM-R radio system, (b) the introduction of digital capacity management, (c) the testing of digital interlocking, (d) a continuation of the existing model project on ETCS equipment for vehicles in greater Stuttgart and (e) the testing of automated driving in rail freight.

6. Fast charging points in neighbourhoods

To bring charging infrastructure to neighbourhoods, the Federal Government is supporting the construction of fast charging points in city centres. This funding supplements the tender process that is currently being prepared for 1,000 fast charging points for medium- and long-distance traffic.

7. Hybrid electric aviation

The Federal Government will intensify and expand funding for hybrid electric aviation and for R&D into hydrogen-based systems aimed at emission-free (carbon-neutral) aviation (pilot/demonstration projects).

8. Zero-emission ships

The Federal Government will provide funding for the development and scaling up of green drive technologies for new ships and retrofits, independent of ship type, that meet high standards in terms of performance, lifespan and reliability.

9. CO₂ emission standards for passenger cars and light commercial vehicles

CO₂ emission standards for passenger cars and light commercial vehicles will play a key role in meeting climate targets in the transport sector, since such limits have a direct impact on the specific carbon emissions (per km) of new vehicles. In EU negotiations, the Federal Government will therefore support a continuation of fleet-wide emission limits, subject to certain conditions. An ambitious continuation of these limits must be accompanied by an EU-wide acceleration of charging infrastructure expansion. At the EU level, the Federal Government is in favour of agreeing on and regularly monitoring the necessary expansion targets and other conditions, for example in the context of a revised Directive on the deployment of an alternative fuels infrastructure.

10. Differentiation of CO₂ emissions-based motor vehicle tax

The motor vehicle tax should be linked more closely to emissions in coming years.

V. Measures in the agricultural sector

1. Federal programme for energy efficiency in the agricultural sector

The federal programme to enhance energy efficiency and reduce carbon emissions in agriculture and horticulture is primarily an investment funding programme. The aim is to reduce and ultimately avoid carbon emissions in stationary and mobile energy use in the agricultural sector. To achieve this, funding under the federal programme will be increased.

2. Support for the construction of low-emission storage facilities for liquid manure, the retrofitting of storage facility covers and the construction of low-emission livestock stables as part of the joint Federal/Länder programme for the improvement of agricultural structures and coastal protection (GAK)

A sharp reduction in livestock ammonia emissions can make an important contribution to climate action. To achieve this, the Federal Government will increase federal GAK funding to support structural and technical modifications to livestock stables in order to achieve a significant reduction in the size of ammonia-emitting areas. These modifications will take both climate and animal welfare targets into account. In addition, the Federal Government will provide funding for the construction of low-emission storage facilities for liquid manure and the retrofitting of covers for these facilities.

3. Research initiative to help achieve the 2030 climate targets

The increased demands on agriculture and especially the LULUCF sector can only be met by boosting research activities in this area. To this end, the Federal Government is now launching a research initiative. Special challenges include climate reporting, scientific impact assessments, the scientific evaluation and further development of ongoing measures, and socio-economic research alongside ongoing projects.

VI. Measures in the LULUCF sector

1. Peatland conservation programme

Drained peatlands used for agricultural purposes are a major source of greenhouse gas emissions in Germany. This programme will take targeted measures to support the agricultural and forestry sectors and the affected regions. This will be done on the basis of a funding guideline issued by the Federal Government.

2. Humus conservation and formation

To conserve and build humus, there are a variety of measures that require government funding. These include: the conversion of arable land on mineral soils into grassland; permanent adjustments to crop rotation systems; and agroforestry. By reinforcing measures that have sustained positive effects on the climate, the Federal Government will underscore the importance of these approaches.

3. GAK: continued support for sustainable forest management, climate-compatible forest conversion, and the elimination of forest damage caused by extreme weather events

Federal funding for the GAK programme will be topped up to strengthen necessary measures for the continued reforestation of damaged areas and for converting existing forests into climate-compatible mixed forests.

4. Rewarding the role that forests play in sustaining the ecosystem

Existing GAK funding instruments can be used to support individual aspects of forest adaptation, thus also promoting the reduction of greenhouse gas emissions. However, these instruments do not provide funding for forest management measures in forests that are over 15 years old. For this reason, a programme will be introduced to reward the important role that

forests play in mitigating the climate change. This will provide forest owners with the incentive to retain and expand the greenhouse gas sink in forests and durable wood products that are not yet covered by GAK.

VII. Horizontal measures

1. Climate-neutral federal administration

Specifications for reducing the use-phase energy needs of Federal Government buildings are based on the “building efficiency decree” and the “energy efficiency rules for the climate-neutral construction, expansion and renovation of Federal Government buildings (Federal Government buildings as a model for energy efficiency)”. The supreme federal authorities and their executive agencies will also gradually replace their fleets of fossil fuel vehicles with electric vehicles. By 2025, at least 50% of these vehicles will have electric or hybrid drives.

Special-purpose vehicles that have been designed, built or adapted specifically for the Federal Armed Forces, civil protection and disaster risk reduction, rescue and emergency medical services, fire brigades, police authorities and customs authorities are exempt from this measure. They will be gradually replaced, in a technology-neutral manner, with electric vehicles as defined in section 2 of the Electric Mobility Act or with alternatively fuelled vehicles. This will be done once such replacement becomes technically feasible and such vehicles are proven to be suitable for daily use.

The supreme federal authorities and their executive agencies will set up charging stations at suitable fleet locations.

2. Carbon pricing

Carbon pricing is a key instrument in the fight against climate change. Putting a price on carbon creates incentives for investing in climate-friendly technology and reducing emissions that harm the climate. As a complement to the EU emissions trading system, Germany introduced a national emissions trading scheme for the heating and transport sectors on 1 January 2021. In line with the Fuel Emissions Trading Act, the national carbon price on fossil fuels for heating and transport will increase in a way that allows people to plan ahead. This will give businesses and consumers a reliable incentive to switch to climate-friendly products, technologies and behaviours when they make purchasing decisions in the future. Further carbon price increases within the national emissions trading scheme may be implemented only if they are accompanied by additional measures to mitigate the social effects and to effectively prevent carbon leakage.

Within the context of the European Green Deal, the Federal Government is committed to building a much stronger EU emissions trading system with a moderate minimum price. At the same time, it is essential to safeguard the competitiveness of the European economy and to ensure the effective prevention of carbon leakage. The Federal Government supports the European Commission’s deliberations on introducing EU-wide carbon prices in the heating and transport sectors as well.

3. Reform of fees, surcharges, levies and taxes throughout the entire energy system

Investments in climate action require a consistent policy framework. A consistent policy framework provides clear incentives for efficient energy use, greater demand flexibility and sector coupling. This in turn means that, in the medium term, it will no longer be necessary to

provide substantial funding to counteract incentive structures that are detrimental to the climate.

The Federal Government is developing a proposal for the comprehensive reform of fees, surcharges, levies and taxes in the energy system. This includes plans to further reduce the “EEG surcharge” that electricity consumers pay for the purpose of promoting renewable energy. In addition, the Federal Government is an advocate at the European and international level for consistent, climate-friendly taxation in the energy system.

4. Review of climate-related funding practices

Government funding must be deployed in an efficient, targeted manner. In recent years, the funding landscape for climate-related measures has become increasingly complex. As a result, some of the available budget funds have not been disbursed. The Federal Government will conduct a review of climate-related funding programmes and disbursements, and will make adjustments if necessary. In addition, all government ministries will make electronic applications (submission, processing and approval) the standard procedure for new funding programmes.

5. Circular economy

A well-functioning circular economy has a key role to play in the fulfilment of climate targets. The term “circular economy” refers to the optimised use of material cycles that, to a far-reaching extent, function as closed loops. This approach goes far beyond the traditional recycling economy. A circular economy reduces resource use, waste generation and greenhouse gas emissions. It can also reduce an economy’s dependence on imports of raw materials while simultaneously facilitating the creation of new value chains.

To leverage the potential of the circular economy, the Federal Government will provide constructive support for the EU-level measures adopted by the European Commission as part of the new Circular Economy Action Plan. If appropriate, the Federal Government will formulate a “circular economy master plan”, based on the model of its “charging infrastructure master plan”. The circular economy also takes the carbon cycle into account.

6. Reducing tax expenditures

The tax expenditures that were found in the Federal Government’s 27th Subsidy Report to have detrimental effects on the environment and climate will be reviewed on the basis of available evaluation results, and a decision will be taken as to whether such tax expenditures will be continued.

7. Reinforced support for local-level climate action

Cities, districts and local authorities are indispensable partners in Germany’s efforts to meet its climate targets. The National Climate Initiative’s funding portfolio provides local decision-makers with comprehensive support for making investments and taking strategic measures in their communities. The Local Authorities Guideline, which is the initiative’s main funding instrument for local climate measures, will be revised by summer 2021. The stimulus package adopted temporarily by the Federal Government to combat the coronavirus crisis improved the conditions for obtaining funding under the National Climate Initiative (including funding from the Local Authorities Guideline, funding for local-level pilot projects, and funding to promote cycling). These improved conditions, originally set to expire at the end of 2021, have been extended into 2022.

VIII. Financial planning

		Funding increase in €m				
		2022	2023	2024	2025	>2025
Industrial sector	Budget					
I. 1. Additional funds for the decarbonisation of industry programme (carbon contracts for difference)	Energy and climate fund	650.2				
I. 2. Investment funding programme for the steel industry / hydrogen	Energy and climate fund	100.0				
I.3. Energy efficiency in industry / waste heat	Energy and climate fund	30.0				
I.4. Lead markets for green steel	Energy and climate fund	28.8				
I. 5. Investment funding programme for the chemical industry	Energy and climate fund	50.0				
Energy sector						
II.1. Federal funding for efficient heating networks	Energy and climate fund	30.0				
II.2. Funding for green hydrogen production (offshore electrolysers)	Energy and climate fund	50.0				
II.3. Hydrogen Global (H2Global)	Departmental budget 09	15.0				
Buildings sector						
III.1 Federal funding for energy-efficient buildings	Energy and climate fund	2,500.0	2,000.0			
III.2. Climate-friendly social housing	Departmental budget 06	150.0	250.0	200.0	200.0	200.0

	Budget	Funding increase in €m				
		2022	2023	2024	2025	>2025
Transport sector						
IV.1 Cycling infrastructure expansion (expansion of the Transport Ministry's special programme for urban and rural areas; bike lanes and bicycle parking)	Departmental budget 12	301.5				
IV.2. Safe city cycling, innovative model projects for cycling	Departmental budget 12	15.5	25.0	18.0	6.0	4.0
IV.3. Investments in shipping	Departmental budget 12	130.0				
IV.4. Investments in waterways	Departmental budget 12	300.0				
IV.5. Investments in railways (for GSM-R: €54m)	Departmental budget 12	200.0				
IV.6. Fast charging points in neighbourhoods (budget-neutral, from energy and climate fund budget item 893 02, therefore not included in total)	Energy and climate fund	(200)				
IV.7. Hybrid electric aviation	Energy and climate fund	40.0				
IV.8. Zero-emission ships	Energy and climate fund	30.0				
Agricultural sector						
V.1 Federal programme for energy efficiency in the agricultural sector	Energy and climate fund	12.4				
V.2. Support for the construction of low-emission storage facilities for liquid manure, the retrofitting of storage facility covers and the construction of low-emission livestock stables as part of the joint Federal/Länder programme for the improvement of agricultural structures and coastal protection (GAK)	Departmental budget 10	90.0				
V.3 Research initiative to help achieve the new 2030 targets	Departmental budget 10	50.0				

LULUCF						
VI.1 Peatland conservation programme	Energy and climate fund	60.0				
VI.2. Humus conservation and formation	Energy and climate fund	21.1				
VI.3. GAK: continued support for sustainable forest management, climate-compatible forest conversion, and the elimination of forest damage caused by extreme weather events	Departmental budget 10	50.0				
VI.4. Rewarding the role that forests play in sustaining the ecosystem	Energy and climate fund	200.0				
Horizontal measures						
VII.1. Construction of charging stations at Federal Government buildings and further costs for a climate-neutral federal administration	Departmental budget 60	50.0				
	Total	5,154.5	2,275.0	218.0	206.0	204.0