



Federal Ministry for the
Environment, Nature Conservation,
Building and Nuclear Safety



Shaping Ecological Transformation

Integrated Environmental Programme 2030

Imprint

Published by

Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB)
Public Relations Division · 11055 Berlin · Germany
Email: service@bmub.bund.de · Website: www.bmub.bund.de/english

Edited by

BMUB, Division G I 1, Dr. Jörg Mayer-Ries and Florian Raecke

Text

BMUB

Design

design.ideo, Büro für Gestaltung, Erfurt

Printed by

Druck- und Verlagshaus Zarbock GmbH & Co. KG

Picture credits

Titelpage: Martin Barraud/GettyImages

Page 20: Paul Langrock/Zenit/laif

Page 24: Jürgen Fächle/Fotolia.com

Page 28: Daniel Schoenen/GettyImages

Page 31: farbkombinat/Fotolia.com

Page 34: Marcel Schauer/Fotolia.com

Date

August 2016

First Print

2,000 copies

Where to order this publication

Publikationsversand der Bundesregierung

Postfach 48 10 09 · 18132 Rostock · Germany

Tel.: +49 30 / 18 272 272 1 · Fax: +49 30 / 18 10 272 272 1

Email: publikationen@bundesregierung.de

Website: www.bmub.bund.de/en/service/publications

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Introduction

One thing is certain: in the year 2050, not even 35 years into the future, we will live life differently than we do today. On the one hand, this is obviously a truism. If we look back 35 years, we immediately notice all kinds of differences between life today and life back then. To name but a few, our communication, our working lives and our leisure pursuits have fundamentally changed since the early 1980s. On the other hand, this retrospective look also reveals that in some areas of life, little has changed. From our point of view: too little.

Our mobility, for instance, still relies upon driving around in high tonnage vehicles powered by fossil fuels, substantially impairing the quality of life and health – especially in our cities – with their exhaust emissions, noise and the space they take up. Equally, the dominant form of agriculture since the 1960s, which is no longer conducive to an intact natural environment nor to animal welfare or the livelihoods of farmers, has no future. Likewise the way in which we consume and make use of the world’s resources cannot be continued permanently and not even over the coming decades, because this leads to exceeding our planet’s ecological limits (or “planetary boundaries”) and thus puts economic prosperity and social peace at risk on a global scale.

Therefore we will live differently in the year 2050 – indeed, we will have to live differently. To become any better, our world has to change. Ambitious

environmental policy is an essential prerequisite for giving all people in our society access to nature, providing a healthy quality of life in our cities, and ensuring that our children and grandchildren also have the chance of a good life. And at the same time, an ambitious environmental policy also allows people in poorer countries to live in a sound environment.

“Transforming our world” – nothing less than this is the aim of the 2030 Agenda for Sustainable Development adopted by the United Nations in September 2015. This gives rise to a new challenge for environmental policymaking at national level: to further shape environmental transformation and hasten the pace of change. A simple policy of “business as usual” or progressing with sustainability at a snail’s pace is not an option. Any such path would not do justice to the aspirational sustainability targets of the 2030 Agenda for Sustainable Development.

This “Integrated Environmental Programme 2030” is the Federal Environment Ministry’s response to this policymaking challenge. The Integrated Environmental Programme is aligned with the guiding vision of sustainable development, with the principles of precaution, systemic thinking and innovativeness, with the recognition of the limits of ecological carrying capacity, and with social justice. Thus, in the 30th year of its existence, the Federal Environment Ministry is tackling these major challenges and drawing attention to the



wide range of environmental policy designs in the medium-term perspective.

For unlike in 1986, the year that the Federal Environment Ministry was founded, today the ambition of environmental policy can no longer be limited to alleviating the collateral damage of an economic model that has run out of control. Today, the emphasis is on attaining an economy that respects the limits of our natural basis of life, an economy that is successful because its focus is not on short-term profit for the few but on sustainable and lasting prosperity for all. If we want production, consumption and work to be anything close to climate-neutral by the middle of the century, we have to embark on a wide-ranging transformation of our economy and society. This was the resolution of the international community – including Germany – at the Climate Summit in Paris at the end of 2015. It is now our task, as one of the wealthiest industrialised countries, to lead the way.

Environmental protection is a great opportunity for us and for our country. We can counter the risks of our time with the well-founded hope that we are capable of changing our world for the better.

If we intend to strive for this change, the “transformation of our world”, this means that we have to change our own lifestyles, our economies, our social coexistence

and our politics in order to conserve our natural life-support base worldwide and for the long term.

It is time for a new awakening of the German environmental policy which decisively addresses the unsolved problems and which more firmly anchors environmental policy in our changing society once again. Environmental policy must become the engine of transformation, towards a social-ecological market economy and a sustainable society.

In 2050 we will live differently – but not worse than we do today. Of this we are convinced, and this Integrated Environmental Programme 2030 is intended to contribute to bringing it about.

The Integrated Environmental Programme 2030 consciously looks beyond the remit of the Federal Environment Ministry because ecological transformation can only be shaped in a broad alliance of politics, industry and society. With this document, the English synopsis of the environmental programme, we invite you to play a committed and constructive part in the debate about the future of German environmental policy¹.

We would also be glad if you – in your country, in your institution, at European or at international level – would endeavour to advance the debate about new environmental policy and perspectives on the “transformation of our world”.

1 The full-length version in German can be downloaded from: www.bmub.bund.de/N53499/. The long version contains a significantly more detailed presentation of the actions in Section 4 as well as a more comprehensive account of the successes and challenges of German environmental policy.



Living well in 2050: the vision

The United Nations' 2030 Agenda for Sustainable Development generated strong pressure for transformation towards a more equitable world and sustainable economic activity, and succeeded in delivering on its aspirations. People all over the world, societies at different stages of development, and economic, social, political and cultural institutions on all levels are in alignment with the guiding principle of sustainable development: they are realising gains in prosperity both locally and globally, within operating spaces that are socially and environmentally secure. They are conserving and developing the resources of the natural basis of life as a material and non-material foundation for a rising quality of life.

A modern, fair and up-to-date Climate Agreement, encompassing all of the countries in the world, has induced a global change of course towards a carbon-neutral and climate-resilient developmental pathway. On the basis of a legally binding regime the Climate Agreement acts as an effective steering instrument and transparency framework for all countries in their efforts to keep the global temperature rise below two centigrade relative to pre-industrial level while pursuing efforts to limit the temperature increase to 1.5 centigrade. In other areas too, international and European regulations have substantially improved the conservation and sustainable use of nature and the environment. The decline in biodiversity has successfully been halted by conserving and restoring valuable habitats, the global nitrogen cycle is no longer being overloaded. Ocean acidification has stopped rising because greenhouse gas emissions are falling drastically, thanks in part to the exit from fossil fuel use.

The citizens of Germany and the rest of Europe live well, within the limits of our Planet. Their prosperity and the good condition of the environment are the result of an innovative circular economy in which nothing is wasted, natural resources are managed sustainably, and biodiversity is protected, respected and restored. Europe with its low-carbon

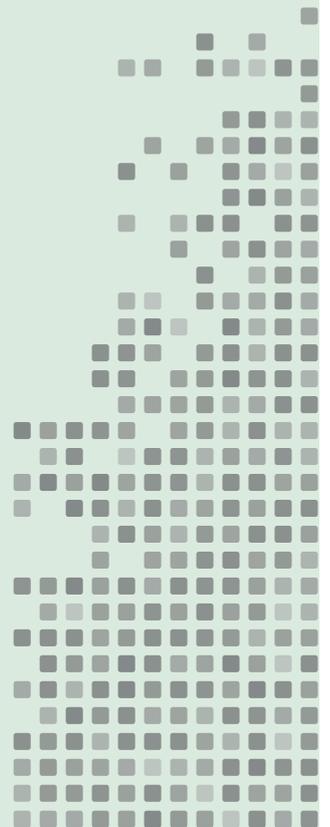


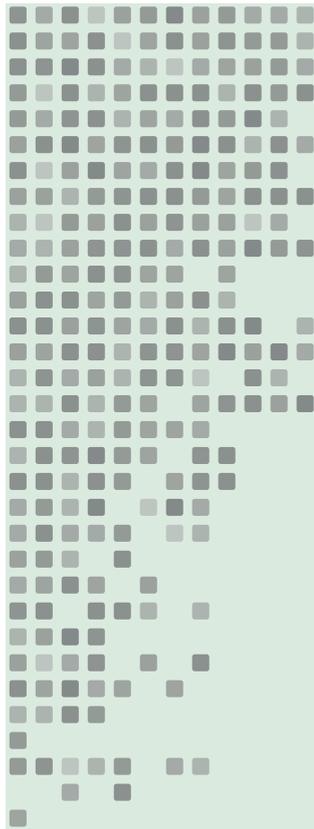
dioxide (CO₂) and low-resource economic growth is setting the pace for a sustainable global society, and is continually creating future-proof jobs. Europe's societies, citizens and institutions are helping to safeguard and enhance political and legal stability, lasting prosperity and quality of life, not just within Europe but also everywhere else. Peace and social cohesion in Europe provide the framework for an innovative and sustainable development of the individual countries and their bilateral and multilateral partnerships.

The institutions of school-based, non-school-based and vocational education teach knowledge and skills for actively shaping social transformation. They enable learners through appropriate methods to contribute ideas for sustainable development and to develop implementation strategies within their own lifeworlds.

In Germany, environmentally sound economic practices have been universally and permanently realised in all private and state sectors, across all stages of value creation and all markets for labour, commodities, products, services and finance. Sustainable management of basic natural resources and of Germany's economic, human and social capital; the precautionary principle; openness to innovations; and a market economy based on social-ecological principles provide the binding economic policy framework. All parties involved consider processes of ecological structural transformation as a chance.

Prices and information give a clear idea of the societal costs of using energy, resources and ecosystems and make these transparent for all economic actors in the value chain. Sustainable, environmentally sound and nature-friendly production and consumption is firmly embedded in the education and awareness of all Germany's citizens and is understood as a contribution to raising individual and societal prosperity.





Waste is raw material; 100 percent of waste are collected and almost completely recycled – without any accumulation of harmful substances in the resulting materials. New services, particularly in the areas of mobility, housing, education and food, make the ownership of many things superfluous. The energy market is more decentralised; the fact that it is not dependent on fossil fuels generates powerful impulses for a sustainable regional economy. Urban and close-to-town agriculture provide a local supply of foods and a renewable energy supply. The financial sector no longer gears its lending and investment policy to maximising short-term returns, but to criteria like sound business models, long-term capital preservation and innovations yielding social-ecological benefits.

Germany exhibits its own typical diversity of natural and anthropogenically influenced landscapes and ecosystems, habitats and biotic communities of wild species. The use of ecosystems – such as soils, forests, agroecosystems, inland waters, oceans – is in harmony with their protection and conservation. As a result the ecosystems have also become more resilient to the impacts of climate change. Land take is tending towards zero. Even in our densely populated country, people have many opportunities to encounter large areas of wild nature. All groundwater bodies, rivers, lakes and seas are in good condition and – wherever possible – there are near-natural and intact floodplains again; these can reduce the risk of flooding, retain nutrients, and are centres of biological diversity. Marine litter has been substantially reduced. The oceans as a whole have been declared part of human heritage and thereby precluded from sole appropriation by individual countries. The fishery that takes place is environmentally sound without exception.

Chemicals are produced and used without harming the environment or human health. Substances of high concern are substituted with sustainable alternatives; new risks are identified and eliminated at an early stage. Air quality is so high that significant negative impacts on human health and the environment no longer occur. Negative effects on health and the environment from noise, the consequences of climate change, ionising radiation and radioactive waste are minimised. People from all age-groups and social situations are thus effectively protected in line with the precautionary principle.



The goal of equivalent living conditions in all regions of Germany has been achieved. Germany's cities and municipalities are attractive places to live, work and do business: attractive for the people in the region, for migrants from within Germany and abroad, for tourists and for companies and workers.

Rural regions boast high environmental quality and quality of life, making them attractive as home regions for families and skilled workers and as business locations. Agriculture is practised throughout Germany in a way that protects biodiversity, human health and the climate. Live-stock farming is practiced environmentally sound and respects animal welfare. Jobs in an ecologically-oriented agricultural, energy and health sector, in low-impact tourism and regional value creation are complemented by opportunities associated with nationwide broadband provision for teleworking and IT-based communication in companies and municipalities.

Green spaces of high environmental quality exist in cities. They serve purposes such as supporting adaptation to climate change and providing diverse spaces for enjoying nature and recreation for people from all social classes. Cities are largely free of traffic noise thanks to the high proportion of journeys made on foot, by bicycle and on electrified urban public transport. Motorised individual transport has been dramatically reduced and likewise converted to electric vehicles for the most part. Ever fewer people own their own cars. Car-sharing and the flexible combination of means of transport are widespread. Local commercial transport has been made environmentally friendly thanks to intelligent urban logistics and alternative vehicle concepts.

Buildings, city-districts, cities and municipalities and the entire infrastructure are adapted to the challenges of climate change and the demographic trend, making use of the latest technologies. They are designed to be energy and resource efficient, contribute to biological diversity, and are in harmony with the conservation of architectural heritage. Many buildings are interconnected; energy surpluses are passed on from new buildings to old buildings, and likewise from buildings to electric cars; thermal energy is recovered from wastewater.

Germany's citizens live well, within a safe operating space that is being jointly shaped along environmentally, socially and economically sustainable lines by a modern, globally responsible environmental policy.



1

Time for a new environmental programme

1.1 Past achievements, present activities

German environmental policy² is a success story. Today, almost all of Germany's natural water bodies are clean enough to swim in again without any risk to health; winter and summer smogs are rare occurrences; the introduction of unleaded petrol means that the public health impact of exposure to lead is negligible; and lynx and wildcat have returned to our forests as native species. These and many other milestones attest to the success of Germany's environmental policy, achieved primarily through action in the following fields:

- **Air pollution control**, with substantial reductions in harmful emissions, primarily sulphur dioxide, particulate matter, carbon monoxide, chlorofluorocarbon (CFCs) and lead.
- **Water protection**, with advanced water treatment technologies; a substantial reduction in pollutant and nutrient inputs from domestic and industrial wastewater; minimisation of microbiological risks, with resulting improvements in bathing water quality; and lower domestic and industrial water consumption.
- **Nature conservation** with, currently, 16 national parks, 17 biosphere reserves, more than 8,600 statutory nature conservation areas (*Naturschutzgebiete*), and around 5,200 Natura 2000 sites. Natura 2000 is an EU-wide network of protected areas which aims to ensure the long-term survival of threatened or characteristic species and habitat types.
- **Soil conservation**, with substantially reduced heavy metal and persistent organic pollutant (POP) loads, for example; systematic surveying and clean-up of contaminated sites and mitigation of adverse changes in soil, especially in eastern Germany since 1989/1990.
- **Climate action**, with mandatory international, European and national targets to hold global warming below two centigrade compared with pre-industrial levels.

² In this document, the term "environmental policy" includes nature conservation.



- Improved **material and energy efficiency, waste disposal and recycling** through the adoption of legislation and regulations, the establishment of a circular economy and resource efficiency/waste prevention programmes.
- Restructuring of the **energy supply**, based largely on the phase-out of the commercial use of nuclear power and the rapid expansion of renewable energies, which has already resulted in significantly lower greenhouse gas emissions in Germany.
- Higher standards of **chemical safety**, with new regulations on chemical testing, particularly of substances of very high concern.

German environmental policy has continued to evolve, especially in recent years, as the following examples show:

- In December 2014, the German federal Cabinet adopted the **Climate Action Programme 2020** as the basis for intensified efforts by the German government to cut greenhouse gas emissions by at least 40 per cent by 2020 compared with 1990. This is the most comprehensive package of climate measures ever presented by a German government.
- At the **Paris Climate Change Conference** in late 2015, the international community adopted the first-ever global climate agreement that is legally binding on all countries, undertaking to hold the increase in the global average temperature to well below two centigrade and to pursue efforts to limit the temperature increase to 1.5 centigrade above pre-industrial levels. The Agreement also states that the world should achieve greenhouse gas emissions neutrality in the second half of the century. The Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) played a major role in the international preparatory process and in facilitating the conference.
- The BMUB's **first Progress Report on the German Strategy for Adaptation to Climate Change (DAS)** was adopted by the Cabinet in December 2015. In the report, the German government defines 140 measures to prepare Germany for climate change.
- The **National Flood Protection Programme** was adopted in 2014. For the first time, a set of priority flood protection measures, to take effect across all regions in Germany, has been identified, creating

a viable structure for flood defence across all the German states.

- In March 2016, the Cabinet adopted the **German Resource Efficiency Programme II (ProgRes II)**, an updated version of the original programme adopted in 2012. Measures include more advice for small and medium-sized enterprises (SMEs) in implementing resource efficiency, as well as promotion of environmental management systems, more public procurement of resource-efficient products and services, improved consumer information, and expansion of technology/knowledge transfer with developing and emerging countries.
- In February 2016, the German government adopted the **National Programme for Sustainable Consumption**, which sets out the government's plans for a sustainable consumption policy, along with concrete measures. The programme was drawn up by the BMUB and presented together with the Federal Ministry of Justice and Consumer Protection and the Federal Ministry of Food and Agriculture. Implementation of the programme has already begun.
- The **Waste Prevention Programme** adopted by the German government and the German states (*Länder*) in 2013 brings together, for the first time, a set of existing and potential waste prevention measures at federal government, *Länder* and local government level, as well as an assessment of these measures from an ecological, financial and social perspective. It focuses on public sector measures and instruments with general significance as waste prevention tools, and which can be applied to a variety of waste streams.
- The **Nature Conservation Campaign 2020** was launched in October 2015. With this action programme, which consists of 10 fields of action and 40 priority measures, the BMUB aims to intensify implementation, to 2020, of the National Strategy on Biological Diversity in areas where targets are unlikely to be met on schedule without additional support.
- In September 2015, the BMUB and the Federal Ministry of Transport and Digital Infrastructure launched the **Federal Blue Ribbon Programme**. It provides a framework for action to create a nationally significant network of biotopes in watercourses, with a focus on eco-connectivity, for the coming



years and decades, and identifies sections of river to be considered and prioritised for inclusion in this network. A Cabinet decision is expected in late 2016.

- Based on the federal government's amendment of several acts and regulations of April 2015, both chambers of the German Parliament (*Bundestag*, *Bundesrat*) adopted strict rules with regard to **fracking** in July 2016. In particular, these rules comprise a ban on so-called "unconventional fracking". The German *Länder* can only permit up to four test drills for scientific purposes nationwide. Commercial unconventional fracking is therefore not permitted until further notice. Moreover, strict requirements for conventional fracking have been adopted.
- The Law Concerning the Search and Selection of a Site for a Repository for Heat-Generating Radioactive Waste (**Repository Site Selection Act** – *Standortauswahlgesetz*) came into effect in July 2013. It governs the individual process steps for a science-based and transparent search with an open outcome, leading to a site decision and conclusion of the site selection procedure by 2031. The site is to guarantee the best possible safety over a period of one million years.
- In August 2015, the German government adopted the **National Radioactive Waste Management Programme**. This is a comprehensive strategy for the safe management of all types of radioactive waste.
- The German government played an important role in the drafting of the **2030 Agenda for Sustainable Development**, which was adopted at the United Nations Sustainable Development Summit of heads of state and government in September 2015. The Agenda will decisively shape international cooperation in key areas of policy over the coming decades. These goals, most of which are to be achieved by 2030, will give a powerful boost to the transformation of economies towards significantly more sustainable development worldwide.
- At the **G7 (Group of Seven) Summit in Elmau in June 2015**, hosted by the German Presidency, key decisions were adopted on a range of environmental policy issues. They include a commitment to the decarbonisation of the global economy over the course of this century, the establishment of the G7 Alliance on Resource Efficiency, and the agreement on a G7 Action Plan to Combat Marine Litter.

In addition to these policy initiatives, the BMUB works on a wide range of other issues.

Germany is a world leader in almost all segments of environmental technologies. Almost two million people are currently employed in the German environmental protection sector. Environmental technologies are predicted to generate turnover of around one trillion euros in Germany in 2030. These figures show that investment in energy and resource-efficient systems, technologies and products benefits the economy, and that prosperity in Germany has increased as a result of its well-crafted environmental policies.

1.2 The key challenge: keeping within planetary boundaries

Despite many successes, a number of environmental policy challenges still remain unresolved. For example, biodiversity loss has not been halted and the ecological status of Germany's inland and coastal waters has not significantly improved. Air and noise pollution are still too high, particularly in the major cities. There is an urgent need for action on resource consumption and land take, but also on the volume of waste, which has not been reduced to an adequate extent. As a result, Germany continues to exceed ecological limits.

Globally, too, the state of the environment gives cause for concern. In 2009, an international group of around 30 scientists led by Johan Rockström from the Stockholm Resilience Centre published a paper entitled "A safe operating space for humanity" in which they identified "planetary boundaries" for nine major natural systems and processes. Some of the authors then published a revised and updated paper in 2015. These publications have generated considerable interest, among experts, in the debate about Earth's ecological carrying capacity in recent years. The definition of planetary boundaries is based, on the one hand, on scientific evidence and, on the other, on the application of the precautionary principle.

The core messages of the concept in its current form are:

- As regards the change in biosphere integrity – resulting from the **decline in biological diversity** – and **interference with the nitrogen and phosphorus cycles** as an example of biogeochemical flows, humanity has moved far beyond a safe operating space and is thus exposed to a



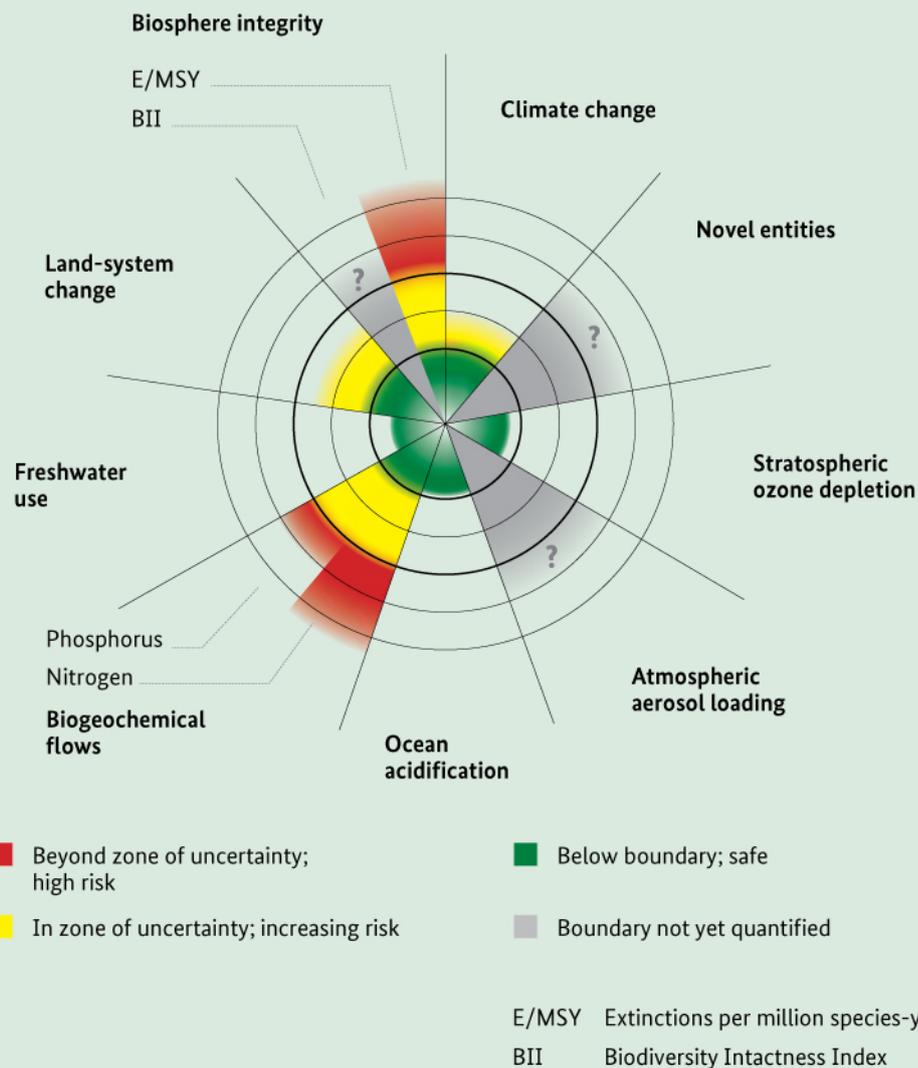
high risk of negative ecological, economic and social impacts.

- As regards **climate change and the reduction in forest cover** resulting from land-system change, humanity has already left the safe operating space and is exposed to an increased risk of intolerable ecological, economic and social impacts.
- As regards **freshwater use, stratospheric ozone depletion and ocean acidification**, viewed globally, humanity is still within the safe operating space at present. However, freshwater use is already transgressing carrying capacities in many localities and regions.

→ As regards **atmospheric aerosol loading** and the introduction of novel entities (such as new substances and modified life-forms), it is not possible to make a reliable assessment of the associated risks at present.

So rather than being the only major environmental change occurring worldwide, climate change is one of a series of interconnected and interacting risks within the Earth System. It is one of two boundaries – the other being the decline in biodiversity – which scientists identify as highly significant, in that these two developments alone have the potential to drive the Earth System into a new state. Indeed, the scientists propose that we are entering a new geological epoch,

Figure 1: Planetary boundaries



Source: Steffen et al. 2015



the Anthropocene. However, until now, the relatively stable, 11,000-year-long Holocene epoch since the last Ice Age has provided a support base for the whole history of human civilisation. A continuing trajectory away from this stable state could put sustainable development at risk. Ending poverty, creating healthy conditions of life, enabling social and economic development and stability, promoting peace and justice and maintaining quality of life and prosperity – none of these will be possible without the fundament, namely, stable functioning of the Earth System and intact nature.

Trends such as population growth, rising material prosperity in many of the world's regions or urbanisation will further intensify the demands on natural resources and continue to accelerate their depletion or the overstepping of planetary boundaries.

In other words, human-induced changes in the global environment threaten to transgress Earth's carrying capacity. Germany is partially responsible for this: through our lifestyles, consumption and globally interconnected economy, our society's consumption of the world's natural resources is excessive and cannot possibly serve as a model for the rest of the world. Strawberry growing in Andalusia depletes local water resources; garment manufacturing in Bangladesh can release toxic substances into the environment; the electronics industry in China produces greenhouse gas emissions – and all of this is related to our prosperity. This “relocation” of environmental impacts to other countries puts a question mark over the positive environmental progress achieved at the domestic level and has the potential to cause crises in the affected regions, whose impacts will rebound on Germany.

1.3 The Integrated Environmental Programme 2030

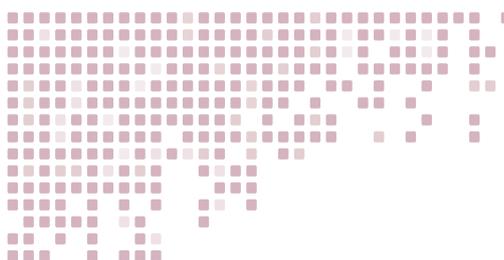
The 2030 Agenda for Sustainable Development, the outcomes of the Paris Climate Change Conference and the G7 Summit in 2015 provide a framework, at the international level, for generating more momentum in environmental policy. It is time for a new type of environmental policy – one which utilises this momentum and is committed to addressing the challenges that lie ahead. The Integrated Environmental Programme 2030 is therefore intended to provide guidance for the transition to a social and ecological market economy and a sustainable society.

The 2030 Agenda for Sustainable Development states: *“We are determined to take the bold and transformative steps which are urgently needed to shift the world onto a sustainable and resilient path. As we embark on this collective journey, we pledge that no one will be left behind. (...) We are determined to end poverty and hunger, in all their forms and dimensions, and to ensure that all human beings can fulfil their potential in dignity and equality and in a healthy environment. (...) We are determined to protect the planet from degradation, including through sustainable consumption and production, sustainably managing its natural resources and taking urgent action on climate change, so that it can support the needs of the present and future generations.”*

This is a political commitment to profound change, to a fundamental transformation towards sustainability as a means of combating global poverty, safeguarding peace and human rights, and meeting the needs and ensuring the long-term survival of humanity within ecological limits.

Technological solutions and “classic” environmental policy alone do not go far enough. Progress on this much-needed transition must happen now – also in Germany. The Integrated Environmental Programme 2030 aims to support this process.

The Integrated Environmental Programme 2030 continues a long line of programmatic steps by Germany: from the precautionary approach as the guiding principle for environmental policy (enshrined in the government's first Environmental Programme in 1971) to the vision of sustainable development (in the German Environment Ministry's 1998 draft Environmental Programme) and now the new leitmotiv of transformative environmental policy. This leitmotiv states that environmental policy must address processes of societal change and promote sustainable lifestyles and new approaches to our economic practices and way of working. It aims to facilitate the transition to a sustainable society and economy – and to expand the range of environmental policy tools available for this purpose.





2

The fundamental changes that are necessary

To meet the environmental policy challenges effectively, fundamental changes are essential in society, industry and agriculture, energy and resource use, transport and infrastructure.

How can a profound change, an accelerated transition – a transformation – towards a sustainable society be accomplished? Many of the answers to this question of “how?” have yet to be worked out. Nevertheless, the policy sector cannot and must not delay, particularly in view of the dramatic environmental changes taking place.

What is clear is this: economic and social objectives have to be realised within ecological limits in future, and stake out a safe political and societal operating space inside these limits. If these prerequisites are met, it will be possible to succeed in optimising societal welfare while adhering to all the environmental targets set. We want a social-ecological market economy which fosters sustainable consumption and lifestyles as well as innovative models of work and business.

Fundamental changes are required primarily in the following key areas:

- We want an energy transition (*Energiewende*) that ensures an almost emission-free energy supply in all sectors, that pursues a roadmap for phasing out fossil fuels developed in dialogue with all parties involved, and which adheres to clear criteria for environmentally sound and socially equitable implementation.
- We want a transport system that facilitates environmentally sound mobility and urban quality of life, that supports the energy transition and minimises noise and air pollution.
- We want an agricultural sector that conserves biodiversity, protects the climate, puts an end to intensive livestock farming and reduces its emissions and residues to a tolerable level.
- We want a form of resource use and consumption that respects ecological limits in Germany and worldwide.
- We want to drive forward the transformation towards sustainability in economy and society even more vigorously also at international level.



3

Overarching actions for transformation

For a strong federal environmental policy

- **Strengthening environmental policy:** The BMUB will strive to obtain a right to initiate legislation in other departments. The Federal Government's Rules of Procedure already permit the Federal Ministry for Family Affairs, Senior Citizens, Women and Youth and the Federal Ministry of Justice and Consumer Protection to launch such initiatives. A right for the BMUB to initiate legislation in matters significant for environmental policy would be commensurate with the dimension and causal structure of today's environmental problems.
- **Regulatory impact assessment:** Within the German government the BMUB will advocate to enhance the regulatory impact assessment with a comprehensive, mandatory documentation of the societal benefits of environmentally relevant interventions and the costs of environmentally harmful effects, including unquantifiable effects. The aim is to examine the impacts on the environment and nature and the resulting

effects on the welfare of society as a whole, not just for projects in the environmental sector but for all regulatory projects.

- **Shared responsibility:** The BMUB will ask the German Advisory Council on the Environment (SRU) to examine and evaluate progress of measures geared towards achieving the German government's environmental objectives at regular intervals. For this purpose a list of the most important environmental objectives will be compiled. The objectives in question are primarily those agreed by the German government as well as targets under international and European commitments.

For an environmentally sound economic and financial policy

- **Ecological tax reform:** The BMUB will work up a concept for further development of Germany's ecological tax reform which sets out the many options for internalisation and ties them into an overarching strategy. The aim is to combine ecological steering goals with justice and distribution goals as well as economic efficiency goals whilst giving due



regard to the higher-order objective of living within ecological limits.

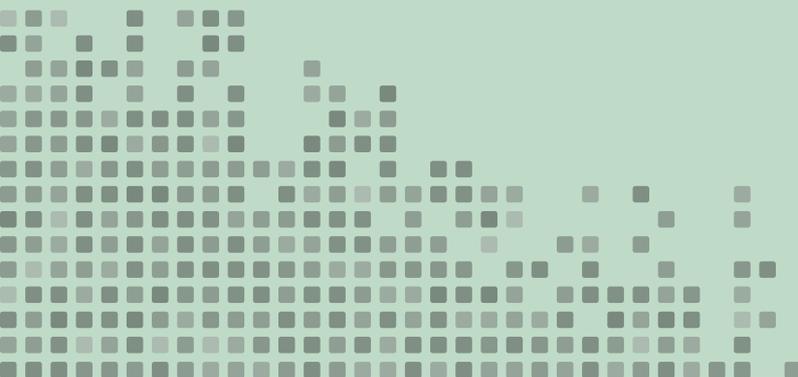
- **Subsidy reduction:** The BMUB will do its utmost at national, European and international level to have environmentally harmful subsidies reduced or redirected to investment in sustainable actions meeting social-ecological criteria.
- **Investments:** The BMUB wants to strengthen the role of the public sector as an important economic actor in environmental structural change, and hence as a driver of innovation, a pioneer and an

exemplary model. Investments must be steered much more vigorously into sustainable regional public services and sustainable infrastructures.

- **Divestment:** To support “divestment” we require a list of criteria for the environmentally sound investment of public money.

For the reduction of global environmental impacts emanating from Germany

- **Consumption-based environmental objectives:** The BMUB will commission research into the greenhouse gas and pollutant emissions caused worldwide by German consumption, the respective extent of water and land use and raw material consumption, and the extent of biodiversity loss, thus creating a data basis for reporting on the environmental impacts caused abroad.





→ **Supply chain management:** The BMUB will develop policy actions for better supply chain management in order to work towards reducing the global environmental impacts emanating from Germany to a globally acceptable level, one step at a time. Important elements will include corporate reporting obligations as well as environmental and social standards in the supply chains.

For a new understanding of welfare

- **Welfare measurement:** The BMUB will press for the “National Welfare Index” (NWI) to be displayed for comparison alongside gross domestic product (GDP), and for regular reporting on the development of the NWI to be established. The NWI is composed of 20 components of economic activity that are relevant to welfare. These record activities and structural features like social justice, unpaid societal work – such as housework, care work and voluntary work – environmental damage and resource consumption, and seek to evaluate them in monetary terms.
- **Policy measures related to time:** The BMUB will examine what a concept for environmentally aware lifestyles with high “time prosperity” might look like. For this purpose, a societal debate should first be initiated on the importance of time for individual quality of life, so that possible objectives and indicators, approaches,

strategies and instruments of “time policy” can subsequently be identified.

To support sustainable action by citizens and companies

- **Sustainable citizen action:** The BMUB will boost its previous level of support to initiatives that seek to drive forward social change in the direction of sustainability (known as “change agents”).
- **Innovation:** The BMUB will establish new, flexible and low-threshold support approaches in order to extend knowledge about transformation processes towards sustainability and, at the same time, to initiate such processes in practice. By creating a flexible innovation fund, BMUB funding can be used as untied resources for innovative actions.
- **Public participation:** The BMUB will continue to act as a pioneer within the government and develop and facilitate participatory culture, since societal transformation – and hence also the transformation towards a sustainable society – needs broad participation from all social groups with their different life situations, value systems and interests.
- **Education:** The BMUB will advocate that, for the purpose of education for sustainable development, knowledge and competencies for the active shaping of societal transformation are taught as part of school-based, non-school-based and vocational education. We want to enable people to contribute ideas for sustainable development and to develop implementation strategies.





4

Specific issues we intend to tackle: five priorities

In addition to the overarching actions (Section 3), the fundamental changes required from an environmental policy perspective are to be initiated primarily in five priority areas:

- 1** Environment- and climate-friendly economic practices, energy and resource transition
- 2** Sustainable agriculture, intact nature
- 3** Sustainable mobility, liveable cities
- 4** Healthy living conditions
- 5** The international dimension of environmental policy

In all the priority areas there are successful environmental policy outcomes and positive developments that can be built upon. On the other hand, in each of these areas, there are substantial challenges and new tasks, which are addressed by the objectives and actions of the Integrated Environmental Programme. From today's perspective, the enumerated actions are important steps on the path to achieving fundamental improvements. However, they do not represent a definitive list of actions but are to be updated and amended in the light of political, economic, social and environmental developments.



4.1 Environment and climate-friendly economic practices, energy and resource transition



Initial context

Germany's progressive environmental legislation and the promotion of green innovations enhances its quality as a business location. Material and energy efficiency as well as circular economy are increasingly becoming prerequisites for economic success. More and more companies are bringing their strategies and business models into alignment with environmental protection and sustainability. Germany is doing well with regard to climate change mitigation, and has initiated the necessary transformation of one of the key sectors of the German economy by embarking on the energy transition (Energiewende). At the same time the move towards environmentally sound economic practices is only just beginning in some sectors, and the digitalisation of the world of business and work is giving rise to new environmental policy opportunities and risks. The goal of a largely climate-neutral economy by 2050 will require changes in all areas. The use of natural resources in Germany continues to be very high, and also results in heavy pressure on the environment internationally. So far sustainable consumption has remained a niche issue.

Objectives and actions

Lead objective I: Establishing a social and ecological market economy

- **Sector-specific roadmaps for sustainable economic practices:** In dialogue with industry and the trade unions we want to initiate sector-specific roadmaps for sustainable economic practices in order to unlock innovation potential and competitive advantages.
- **Advancing sustainable business concepts in industry and the financial sector:** Initiatives and approaches for sustainable enterprise management and business concepts are to be promoted in cooperation with all relevant actors.
- **Enhancing the incentives for companies with environmental management systems:** Within the German government, the BMUB will press for an enhancement of the incentives for the introduction of environmental management systems. In addition, the BMUB will work towards greater integration of supply chains into the companies' management systems.

- **Green qualifications for Industry 4.0:** To be capable of making use of the economic opportunities in the green markets of the future in these times of digitalisation and the advent of "Industry 4.0", sufficient workers with relevant training must be available. With a view to meeting these requirements, the BMUB will continue to enlarge its range of offers with regards to sustainability in the occupational context.
- **Sustainably supporting structural change in regions of environmental modernisation:** The premise of environmental modernisation is that particular regions, for instance those strongly identified with coal mining, heavy industry or highly industrialised intensive livestock farming, undergo comprehensive regional structural change. An appropriate structural support fund is therefore required, and innovation strategies need to be developed in collaboration with local actors.

Lead objective II: Pursuing and further developing climate protection and the energy transition

- **Climate Action Plan 2050:** The Climate Action Plan 2050 will formulate and continuously update guiding principles and milestones for all action areas. In the light of the Paris Agreement, the guiding vision for German climate policy is to achieve extensive greenhouse gas neutrality by 2050.
- **Pursuing renewable energy expansion without risk to nature, advancing sector coupling:** The BMUB will press for more rapid expansion of renewable energies, working towards better coupling of energy consumption sectors and minimum impact on the natural environment.
- **Continuing to develop emissions trading:** In emissions trading, conditions that send a robust price signal based on scarcity need to be ensured for the upcoming trading period until 2030.
- **An ambitious energy efficiency strategy:** The BMUB will press for the German government to develop a comprehensive long-range strategic approach by 2020 so that energy efficiency is markedly advanced in all action areas.



- **Accelerating grid expansion, sharing burdens equitably, promoting the development of storage technologies:** The BMUB will make the case for a comprehensive German government initiative which identifies constraints on grid expansion and reconfiguration both on the transmission and the distribution level, and develops appropriate measures for accelerating such expansion.
- **Ceasing coal-based power generation, taking responsibility for social and regional economic impacts:** The BMUB will strive for the cessation of coal-based electricity generation well before the 2050 target date in a broad dialogue with all parties involved. In the gradual phase-out of coal-based power generation, social aspects and impacts on the regional economy must be taken into account and the dismantling of existing installations and rehabilitation of post-mining landscapes must be guaranteed.
- **Climate-friendly building and housing:** The aim is to exploit all potential for climate-neutral building and housing, with due regard to affordability and building culture.
- **Final storage of radioactive waste:** science-based and transparent site selection: The procedure for selecting a repository site for radioactive waste will be implemented.

Lead objective III: Initiating the transition to sustainable consumption and resource use

- **Extending the service life of electrical appliances:** The BMUB will develop a strategy employing a variety of different instruments aimed at extending service life. Approaches such as stipulating a minimum service life and setting standards for reparability and upgradability are conceivable in this context.
- **A second price tag showing products' social and environmental costs:** The BMUB will develop a strategy for a "second price tag" which is intended to communicate the environmental impacts of products and services of particular environmental relevance. The long-term goal is that the price of the greatest possible number of products and services reflects their actual costs to society. In addition to the internalisation of external environmental costs, social costs will be factored in as well.
- **Further mandatory sustainability criteria for public procurement:** The BMUB will press for mandatory sustainability criteria to be introduced at federal government level in the procurement areas of greatest environmental relevance.
- **A credible multimedia information base for sustainable consumption:** By creating and establishing a (multimedia) "standards portal" for sustainable consumption, operated by the German government, it will be made easy for consumers to locate and access credible information.



Implementation of global Sustainable Development Goals and priority objectives of the 7th EU Environment Action Programme

The objectives and actions of the Integrated Environmental Programme contribute to the implementation of global Sustainable Development Goals and priority objectives of the 7th EU Environment Action Programme (selection):

■ Sustainable Development Goals (SDGs)

SDG 7: Ensure access to affordable, reliable, sustainable and modern energy for all

SDG 8: Promote inclusive and sustainable economic growth, employment and decent work for all

SDG 9: Build resilient infrastructure, promote sustainable industrialisation and foster innovation

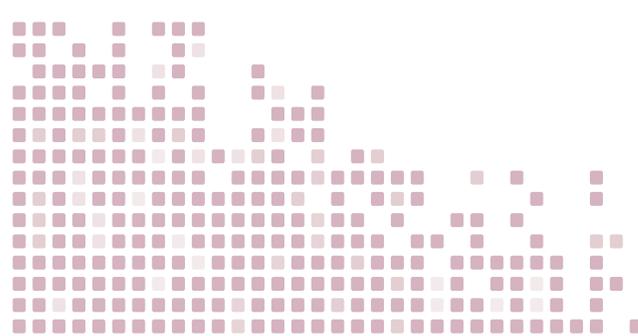
SDG 12: Ensure sustainable consumption and production patterns

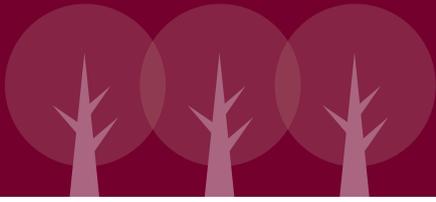
SDG 13: Take urgent action to combat climate change and its impacts

■ Priority objectives of the 7th EU Environment Action Programme (7th EAP)

Priority objective 2: To turn the Union into a resource-efficient, green, and competitive low-carbon economy

Priority objective 6: To secure investment for environment and climate policy and account for the environmental costs of any societal activities





4.2 Sustainable agriculture, intact nature





Initial context

For the conservation of biological diversity, ambitious strategies and target systems were developed on the national, European and international levels, as a result of which successes were achieved in the conservation of species and the designation of new protected areas. For the protection of water bodies and oceans, comprehensive regimes are in force and discharges of pollutants and nutrients into ecosystems have been reduced in recent years. At the same time, biodiversity is declining so rapidly in Germany and worldwide that there is a high risk of negative environmental, economic and social consequences globally. The vast majority of agricultural practice is not environmentally sound or in keeping with nature. On the global level this also applies in large part to fishery, soil use and forestry. Gaps in knowledge also exist concerning the development of biological diversity.

Objectives and actions

Lead objective I: Making agriculture sustainable

- **Public debate about a guiding vision for “sustainable agriculture”:** The very diverse ideas about the future and guiding visions for a sustainable and environmentally sound agricultural sector add to the difficulty of the necessary transformation process. A societal and political debate is therefore necessary concerning the question of what kind of agriculture is desirable in Germany in future.
- **EU (European Union) support for agriculture: strengthening greening efforts, gradually abolishing direct payments and converting them into incentives for services to society:** The BMUB will press for more funding to be reallocated from the first pillar of the Common Agricultural Policy to support for rural development as soon as possible. As a second step, the BMUB will work towards the gradual abolition of first pillar direct payments in the next EU financial period from 2021. The funding released should be dedicated to paying for specific services in environmental protection, and for sustainable agriculture.
- **Greater support for organic agriculture:** In order to achieve the German government’s target of extending organic agriculture to 20 percent of the agricultural land area, existing constraints on the growth of organic agriculture need to be identified and removed.
- **Ensuring the environmental compatibility of livestock farming:** The BMUB is endeavouring to improve the control of livestock facilities under planning law. Furthermore the environmental compatibility of livestock farming should be improved by concretising and continuously developing good agricultural practice.
- **National nitrogen strategy:** In addition to the amendment of fertiliser regulation the BMUB is working on a comprehensive nitrogen strategy aimed at focussing and integrating the diverse existing objectives and political measures for the reduction of nitrogen emissions from different sectors, supplementing them, if needed, with any further objectives, actions and instruments.
- **Plant protection products: reducing quantities used, limiting environmental impacts:** In order to reduce their use, the BMUB will advocate the introduction of a levy on plant protection products. In addition, the use of plant protection products which pose a high risk to biodiversity will only be permitted on agricultural holdings that have sufficient ecological compensation areas where the use of such products is excluded.
- **Secure income for farmers: fair producer prices:** Sustainable agriculture must also be lucrative for producers. In connection with this, the promotion of consumer-producer communities and initiatives for urban agriculture and urban gardening on brownfield sites is to be examined.





Lead objective II: Conserving biological diversity and using it sustainably

- **Implementing the Nature Conservation Campaign 2020:** The BMUB will press ahead with implementation of the Nature Conservation Campaign 2020 and will call upon other government departments, the *Länder* and other actors to back this endeavour.
- **Soil conservation: developing the legal framework, strengthening enforcement:** The BMUB will continue the ambitious development of the legal framework for soil conservation, particularly the Federal Soil Protection Act and the Federal Soil Protection and Contaminated Sites Ordinance. Added to this, the BMUB will put in place the legal preconditions for regulations to enforce the principles of good agricultural practice.
- **Formulating fishery policy to be compatible with nature, and regulating fisheries in marine protected areas:** The BMUB will champion the implementation of a nature-friendly EU Common Fisheries Policy. The BMUB will also work towards ensuring that commercial or leisure fisheries that are incompatible with the nature conservation goals no longer take place in marine protected areas.
- **Allowing more wild nature, managing forests ecologically on a broad scale:** Wild nature should be allowed to develop on two percent of Germany's land area. The BMUB will also advocate sustainable and near-natural management of forests in Germany, and measures for forest adaptation to climate change without risk to nature, and will urge regional administrations to offer more attractive and long-term contract-based nature conservation programmes in forests.
- **Biodiversity foreign policy of the German government:** The BMUB will work towards a new German government strategy for "biodiversity foreign policy". In particular, this process will involve maintaining and intensifying dialogue with states representing biodiversity hotspots and supporting these in their efforts to conserve biological diversity.
- **Convention on Biological Diversity: promoting international implementation of the Strategic Plan:** The BMUB will offer advisory inputs to support strategically significant Contracting Parties to the Convention on Biological Diversity in ambitiously implementing their National Biodiversity Strategies and Action Plans, and thereby significantly contributing to achieving the global targets set out in the Strategic Plan.

Lead objective III: Giving nature conservation policy more capacity to act

- **Comprehensive nationwide biodiversity monitoring:** The BMUB will strive towards a comprehensive system of biodiversity monitoring so that by 2030 a regularly updated, Germany-wide compilation of information is available on the condition and development of biodiversity.
- **Strengthening the BMUB's rights to participate in decision-making on EU agricultural and fishery policy:** The shaping of EU agricultural and fishery policy is of crucial importance for the conservation of biological diversity. It would therefore make sense to transfer a shared responsibility within the German government for these policy areas to the BMUB, in order to coordinate Germany's efforts jointly with the Federal Ministry for Agriculture and Food.



Implementation of global Sustainable Development Goals and priority objectives of the 7th EU Environment Action Programme

The objectives and actions of the Integrated Environmental Programme contribute to the implementation of global Sustainable Development Goals and priority objectives of the 7th EU Environment Action Programme (selection):

■ Sustainable Development Goals (SDGs)

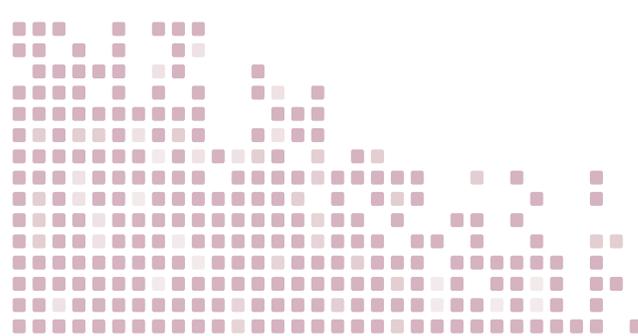
SDG 2: End hunger, achieve food security and improved nutrition, and promote sustainable agriculture

SDG 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development

SDG 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

■ Priority objectives of the 7th EU Environment Action Programme (7th EAP)

Priority objective 1: To protect, conserve and enhance the Union's natural capital





4.3 Sustainable mobility, liveable cities





Initial context

Sustainable urban development and sustainable building have been high on the political agenda for some years. Legislation and support programmes have improved the quality of life in cities and municipalities, and green space in the city is becoming an important theme of integrated urban development. Land take for settlements and transport is continuously decreasing, while cycling and car sharing are growing. At the same time, energy, resource and land consumption in cities remains as high as ever and an ecological overhaul of infrastructure is becoming urgent. The vision of a sustainable and, especially, an environmentally oriented “smart city” must be translated into reality. The environmental impacts of traffic are too high; the proportion of highly efficient vehicles and renewable fuels is very low.

Objectives and actions

Lead objective I: Creating sustainable mobility systems

- **Mobility strategy for the sustainable development of transport in its entirety:** The BMUB will draft a comprehensive mobility strategy so that the development of transportation is designed to be sustainable in its entirety. It will incorporate an action and priorities plan which will also contain a system for sustainable management and financing for transportation. Future Federal Transport Infrastructure Plans will be developed within the framework laid down by the mobility strategy.
- **Make climate-neutral technologies standard for all modes of transport:** The BMUB will strive at EU level for ambitious progression on the CO₂ limit values for cars and light commercial vehicles and the stipulation of strict CO₂ limit values for heavy commercial vehicles. Overall, the BMUB will work towards ambitious further development of the exhaust emissions legislation. In addition, the BMUB will make the case within the German government for underpinning the development targets for electric and emission-free vehicles with suitable measures. In the year 2030, newly purchased motorcars should be capable of being driven emission-free.

Lead objective II: Environmentally friendly development of cities, municipalities and infrastructures

- **Compact, mixed-use and green districts as well as green infrastructure:** The BMUB will support municipalities in developing compact, mixed-use and green urban districts, and will continue the public dialogue process initiated by the Green Paper “Grün in der Stadt” (“Green in the city”).
- **Ambitiously pursue land protection:** The BMUB will develop measures for land protection and for shaping the transition to circular flow land-use management. Land take will be lowered to 20 hectares per day by 2030.
- **Embed the life-cycle costs approach and sustainability standards within the building sector:** The BMUB will advance the development of operative guidelines, support incentives, pilot approaches, training and information measures on life-cycle costs and sustainability requirements in the building sector.
- **“Smart Cities” dialogue platform:** To support and shape the digital transformation of the cities, the BMUB will launch a socio-political debate, and will set up a “Smart Cities” dialogue platform for that purpose under the auspices of the interministerial working group on “Sustainable Urban Development from a National and International Perspective”.
- **Strategy for integrated, resource-efficient and resilient infrastructures:** The aim is to employ the functional coupling of infrastructures for the purposes of utilising environmental, economic and social synergy effects. Infrastructures should be expanded into a flexible, adaptable and fully integrated system and managed intelligently using the new capabilities of information and communications technologies (ICT).
- **Adaptation to climate change: intervention strategies and heat action plans:** Since primarily city residents will be affected by heat waves induced by climate change, the BMUB will develop principles for heat action plans as well as additional packages of interventions for extreme weather events and other consequences of climate change.



Lead objective III: Promoting participation in sustainable urban and mobility development

→ **Greater networking of actors in sustainable urban development:** Cities and mobility cannot be shaped sustainably by politics alone; robust and innovative solutions require the cooperation of many actors. This is the purpose of the German government's National Urban Development Policy. The inter-ministerial working group on "Sustainable Urban Development" will also be continued as an inter-departmental networking initiative.

→ **Experimental spaces for sustainable urban, regional and mobility development:** The potential in municipalities for participation and involvement should be unlocked by means of targeted additional training of the administration as well as private and civic initiatives. The BMUB will promote pilot programmes in which sustainable action and new participatory methods can be tested in real life. In experimental programmes, approaches will be developed for the environmentally sound integration of sustainable urban development with new forms of housing and mobility.

Implementation of global Sustainable Development Goals and priority objectives of the 7th EU Environment Action Programme

The objectives and actions of the Integrated Environmental Programme contribute to the implementation of global Sustainable Development Goals and priority objectives of the 7th EU Environment Action Programme (selection):

■ Sustainable Development Goals (SDGs)

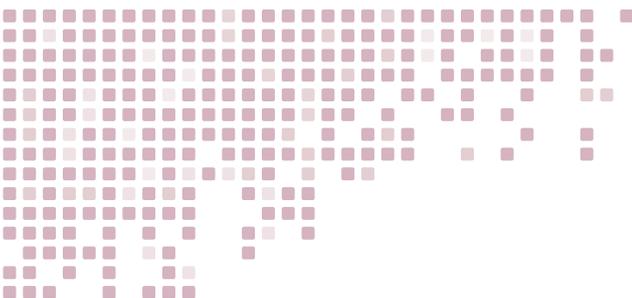
SDG 9: Build resilient infrastructure, promote sustainable industrialisation and foster innovation

SDG 11: Make cities and human settlements inclusive, safe, resilient and sustainable

SDG 13: Take urgent action to combat climate change and its impacts

■ Priority objectives of the 7th EU Environment Action Programme (7th EAP)

Priority objective 8: To make the Union's cities more sustainable





4.4 Healthy living conditions





Initial context

Many people think that an intact natural world and environment are intrinsic to a “good life”. Regulations to protect health from harmful environmental influences have been implemented on the national, European and international levels. At the same time, ambitious additional actions are required to reduce the remaining environmental harms to human health, such as air pollution and noise. Growth in traffic volumes, increasing use of technology, and climate change are often causes of environmental health impacts and are advancing relentlessly. Poorer people are often exposed to higher health impacts from the environment. There are still gaps in knowledge about correlations between the environment and health, and the macroeconomic benefit of health-related environmental protection is not yet universally recognised.

Objectives and actions

Lead objective I: Achieving a health-promoting environmental quality

- **Ambitious clean air programme:** For the implementation of the EU NERC Directive (National Emission Reduction Commitments) by 2030 and the additional source-specific measures therefore required, the BMUB will develop an ambitious clean air programme in conjunction with a comprehensive mobility strategy.
- **Integrated noise abatement strategy:** To substantially reduce traffic noise as well as noise from industrial and commercial plants in Germany, the BMUB will develop an integrated noise abatement strategy. It will aim particularly at relieving noise hotspots and preventing people from suffering noise-induced impairments to their health.

Lead objective II: Mitigating environmental health risks

- **Sustainable chemistry: guiding vision and concept for Germany and for international reference:** In order to expedite the transformation towards fully sustainable systems for chemical production and use, the BMUB will develop a guiding vision and concept for “Sustainable Chemistry” and underpin it with targets and indicators. A Competence Centre for “Sustainable Chemistry” will disseminate this concept internationally.
- **Non-ionising radiation:** Optimised protection standards regulating use on humans: exposure to radiation from electric, magnetic and electromagnetic fields as well as optical radiation needs to be minimised to the extent that is technically possible. The BMUB will propose protection standards going beyond those currently in force, particularly for equipment designed for medical and non-medical (especially cosmetic) use on humans.
- **Action plan on “Radon-Resistant Building and Homes”:** The BMUB will publish an action plan on “Radon-Resistant Construction and Renovation”, the aim of which is to significantly reduce radon exposure in Germany in the long term. The action plan will be combined with an information campaign addressed particularly to architects and structural engineers, but also to the general public in radon-affected areas.
- **Nuclear power plants in the EU: creating a stringent regime:** The BMUB will contribute intensively to advancing the European debate, initiated with the stress test, on improving nuclear safety and on harmonising safety requirements for all facilities operating with nuclear technology.



Lead objective III: Closing gaps in knowledge on health-related environmental protection

→ **Information on environmental health: fostering appreciation, risk sovereignty and self-efficacy in the population:** The BMUB will develop strategies for communicating the challenges and achievements of health-related environmental protection to citizens. In line with the “risk sovereignty” principle, these strategies should also make people better equipped to assess and reduce environmental health risks and to decide where active involvement

to bring about a more health-promoting environment is worthwhile.

→ **“Environment and Health” research programme:** The BMUB will make the case within the German government for a research programme that encompasses more intensive research into cause-effect correlations, continuation of the German Environmental Survey on health (GerES), further development of analysis methods in human bio-monitoring, studying of the impacts of environmental pollution on the ageing society, and the inclusion of “citizen science”.

Implementation of global Sustainable Development Goals and priority objectives of the 7th EU Environment Action Programme

The objectives and actions of the Integrated Environmental Programme contribute to the implementation of global Sustainable Development Goals and priority objectives of the 7th EU Environment Action Programme (selection):

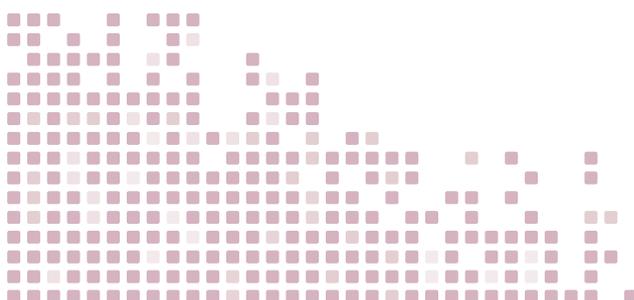
■ **Sustainable Development Goals (SDGs)**

SDG 3: Ensure healthy lives and promote well-being for all at all ages

SDG 13: Take urgent action to combat climate change and its impacts

■ **Priority objectives of the 7th EU Environment Action Programme (7th EAP)**

Priority objective 3: To safeguard the Union’s citizens from environment-related pressures and risks to health and well-being





4.5

The international dimension of environmental policy





Initial context

Environmental policy is a prime example of European cooperation. It has substantially improved the condition of the environment in all Member States and serves as a model worldwide. On the international level, efforts to further elaborate international environmental law have been successful. Through the adoption of the 2030 Agenda for Sustainable Development, the transformation towards globally sustainable development has been agreed, while the Paris Agreement created a binding framework for the climate-neutral transformation of the global economy. Germany ranks as one of the largest donors in the promotion of measures for environmental protection in developing and newly industrialising countries. At the same time, some serious regulatory gaps and deficiencies in ambition still remain in European and international environmental law. Many countries do not have the financial and administrative capacities to implement or enforce existing targets, international agreements and regulations. Also in EU policy, environmental protection should be given even higher priority and it should be financially secured as a trans-sectoral task.

Objectives and actions

Lead objective I: Close regulatory gaps, attain a higher level of ambition

- **Establishing and connecting protected areas on the high seas and in polar regions:** The BMUB will strive to make the designation of globally binding marine protected areas outside as well as within national territories possible.
- **Binding international environmental standards for priority action areas:** The general lack of binding international environmental standards is a particular concern in the areas of mining (including deep sea mining), soil conservation, transnational corporations, plastic and textile manufacturing and plastic waste. The BMUB will work towards relevant binding standards in these areas.
- **Making international environmental law more dynamic:** The BMUB will strive for the establishment of more flexible procedures in multilateral environmental treaty regimes without the need for renewed ratification, so that the level of ambition can be raised gradually over time.

- **Pioneers' alliances of countries, regions and municipalities:** The BMUB will expedite networking with pioneer countries, regions and municipalities. The BMUB will also step up its efforts for cities to have an active role in climate protection within the framework of international urban development policy. To this end the BMUB will also extend support to networks of cities.

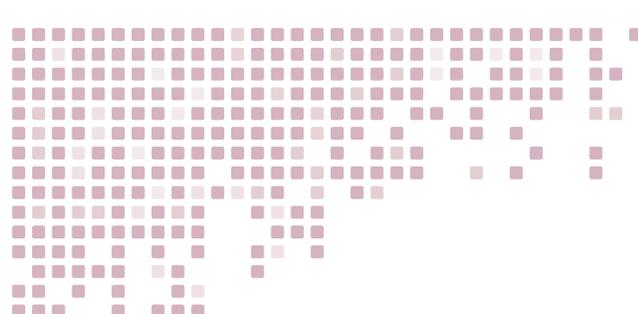
Lead objective II: Improve implementation and financial framework conditions

- **Strengthening EU environmental policy:** The BMUB will champion a strengthening of EU environmental policy, for example through improved implementation of law, an 8th Environment Action Programme, a new Sustainable Development Strategy, a higher environmental and climate quota in the allocation of funding, ambitious implementation of the Paris Agreement and strengthening of the Commission portfolios for Environment and for Climate Action.
- **Agenda 2030: taking the lead in implementation, supporting developing countries:** Germany will take the lead in implementing the 2030 Agenda for Sustainable Development, and the BMUB will advocate that Germany supports developing countries in their implementation.
- **Better financial framework conditions for international environmental protection:** The BMUB will make the case for additional budget resources to be allocated for the financing of international environmental protection measures, partly with a view to mobilising private investment on an even larger scale and unlocking innovative sources of financing.



Lead objective III: Give greater weight to environmental issues in all policy areas

- **High environmental and sustainability standards for economic treaties:** The BMUB will advocate that environmental and sustainability standards should be appropriately integrated and adhered to in bilateral and multilateral investment protection, free trade and other economically motivated agreements.
- **Strengthening United Nations Environment Programme (UNEP), institutional networking for multilateral environmental agreements:** The BMUB will work towards a substantial strengthening of international environmental institutions in order to ensure that environmental concerns are considered as part of all relevant planning and decision-making processes at all administrative levels. Further institutional reinforcement of UNEP as a global environmental authority, including by means of improved financing, will serve this objective. The BMUB will also make the case for closer cooperation between international environmental organisations and the secretariats of multilateral environmental agreements.
- **Strengthening international standards on anti-corruption and their implementation:** The BMUB will support the strengthening and better implementation of international standards on anticorruption as well as more intensive inter-country and multinational cooperation over the investigation and prosecution of transnational environmental crime. Furthermore, the BMUB will step up its work towards the establishment of compliance-support and control mechanisms for countries, transnational corporations and international institutions.
- **Climate foreign policy of the German government:** The BMUB will work towards a common strategy of the German government for a “climate foreign policy” on mitigation and adaptation to climate change, supporting projects via jointly coordinated programmes.
- **Promoting the energy transition in developing and newly industrialising countries:** The BMUB will step up its activities to support developing and newly industrialising countries in reforming their energy systems. On the basis of the lessons learned from implementing the German energy transition and from its opportunities, challenges, preconditions for success and constraints, the BMUB will put more advisors and political, organisational and technical know-how at these countries’ disposal.





Implementation of global Sustainable Development Goals and priority objectives of the 7th EU Environment Action Programme

The objectives and actions of the Integrated Environmental Programme contribute to the implementation of global Sustainable Development Goals and priority objectives of the 7th EU Environment Action Programme (selection):

■ Sustainable Development Goals (SDGs)

SDG 10: Reduce inequality within and among countries

SDG 13: Take urgent action to combat climate change and its impacts

SDG 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development

SDG 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

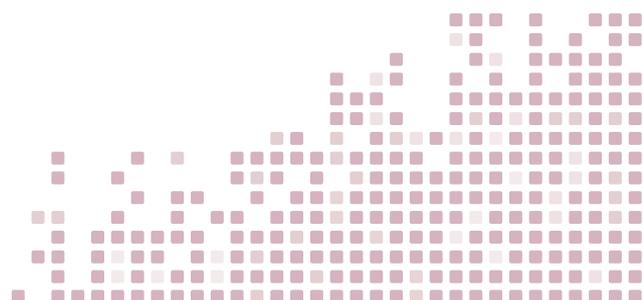
SDG 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

SDG 17: Strengthen the means of implementation and revitalise the global partnership for sustainable development

■ Priority objectives of the 7th EU Environment Action Programme (7th EAP)

Priority objective 4: To maximise the benefits of the Union's environment legislation by improving implementation

Priority objective 9: To help the Union address international environmental and climate challenges more effectively





5

Abbreviations

BMUB	Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety
CFCs	Chlorofluorocarbon
CO ₂	Carbon dioxide
DAS	German Strategy for Adaptation to Climate Change
EAP	EU Environment Action Programme
EU	European Union
G7	Group of Seven
GDP	Gross domestic product
GerES	German Environmental Survey on Health
ICT	Information and Communications Technologies
NERC	National Emission Reduction Commitments
NWI	National Welfare Index
POP	Persistent Organic Pollutant
ProgRes II	German Resource Efficiency Programme II
SDG	Sustainable Development Goals
SME	Small and medium-sized enterprises
SRU	German Advisory Council on the Environment
UNEP	United Nations Environment Programme

