

»» KfW Group's impact management

Understanding of impact, impact categories, indicators and data interplay

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Executive Summary

KfW Group investment in sustainable development in Germany and around the world. As a transformative promotional bank, KfW acknowledges its responsibility to systematically measure the economic, environmental and social impact of its promotional activities, make them transparent and develop the appropriate management impetus to achieve greater effectiveness.

Therefore, KfW has been gradually establishing a group-wide impact management system since 2020 within the framework of the strategic KfW projects 'Roadmap Sustainable Finance' and 'tranSForm'¹. It is based on international standards and the 2030 Agenda of the United Nations with its 17 Sustainable Development Goals.

The first step was to create a uniform understanding of impact among all business areas of KfW Group in the form of a 'theory of change' as a basis for group-wide impact management. It describes the correlations between KfW's promotional activities and their specific impact on the three dimensions of sustainability (economic, environmental, social). KfW has derived strategic impact categories from it and underpinned them with initial indicators that will be continuously developed and expanded in the coming years.

These clearly defined and measurable indicators result in a KfW-wide 'impact balance sheet', the centrepiece of KfW-wide impact management.

For this purpose, a group-wide data management system will be continuously developed to capture data automatically and efficiently and consolidate them with existing data from different systems of KfW's business areas in one data repository.

KfW's impact management system will strengthen the sustainability dialogue with customers, stakeholders and the general public as well as deliver specific findings that will be used to plan and further develop promotional instruments.

The strategic primary objective of KfW Group is to transform the economy and society with the aim of improving economic, environmental and social living conditions. In order to achieve this, KfW, as one of the world's largest promotional banks, promotes and finances investments by state governments, municipalities, the private sector (businesses), financial institutions and private individuals in Germany, Europe and around the world.

KfW-wide impact management makes contribution to sustainable development visible

It is a key concern for KfW to capture the contribution of its co-financed customers and partner activities to sustainable development even more systematically, make it measurable and present it transparently for the entire group.

For this reason KfW has been introducing a group-wide 'impact management' system within the framework of the strategic KfW projects 'Roadmap Sustainable Finance' and 'tranSForm'¹ since 2020. At the core of this impact management system are measurable and comparable impact indicators. After all, reliable parameters give transparent information to the public and stakeholders and provide KfW with important findings which it can apply to the continuous development of its promotional measures.

With its indicators, the impact management system covers all three dimensions of sustainability (economic, environmental and social) and is guided by the 2030 Agenda of the United Nations with its 17 Sustainable Development Goals (SDGs).

Box 1: Vision of KfW's Executive Board

KfW's ambition is to be a pioneer in the promotion of sustainability. This includes continuously developing the identification, measurement and presentation of the impacts of our promotion. In order to live up to this aspiration we have created the conceptual basis for a group-wide impact management system through agile, interdisciplinary cooperation. We are very proud of the result.

The new impact management system provides us with a viable and reliable toolkit that meets the demands of the management, project managers, customers, investors, shareholders and the general public. Individual interactive evaluations and graphic presentations will enable the management to analyse and steer the impact of our financing activities in all three dimensions of sustainability, support employees in optimising impacts in dialogue with customers and enable a targeted exchange with shareholders.

Dr Günther Bräunig, former Chief Executive Officer of KfW

Strategic basis: KfW's understanding of impact

KfW's understanding of impact with respect to sustainable development is derived from a theoretical impact model known

as 'theory of change'. The fundamental idea of a 'theory of change' is to describe the process of an intervention from the means deployed up to the intended change and from there to develop corresponding areas of impact and indicators.

Accordingly, the 'theory of change' established by KfW describes the correlations between the KfW funds deployed (input), the customer and partner activities co-financed with these funds (activity), their results (output) and the intended development effects (outcome) and, finally, the improvement to the economic, environmental and social living conditions (impact) including the impact indicators derived from them (see also Figure 1):

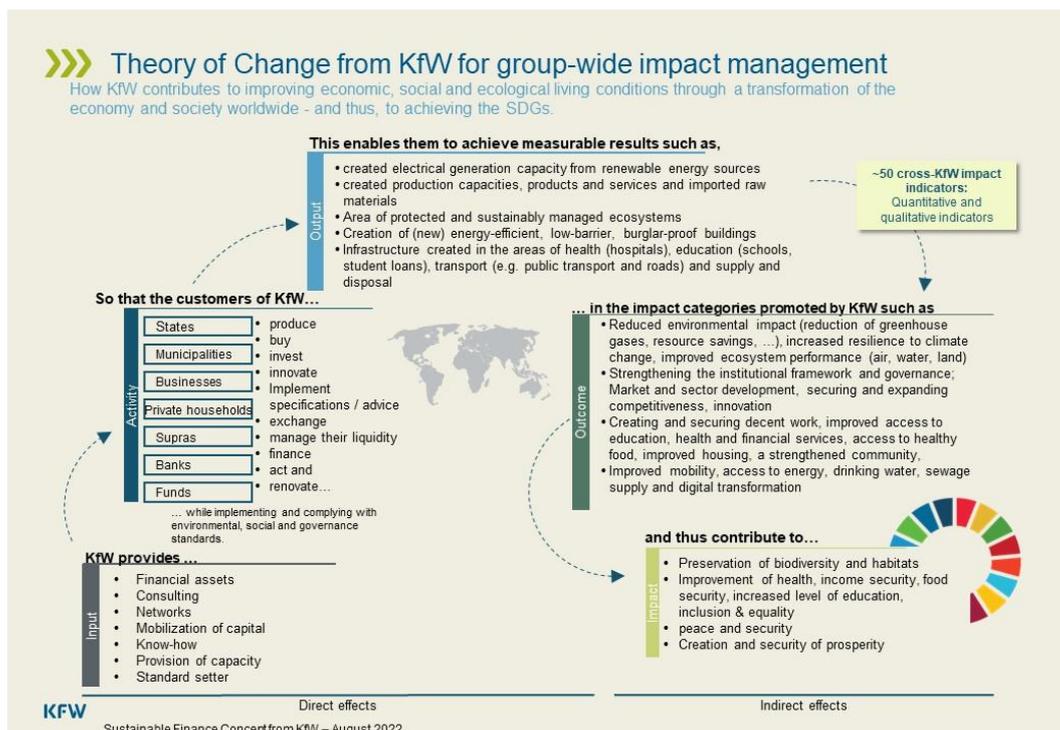
- **KfW's input:** At the heart of KfW's promotion is the provision of funds (e.g. loans, equity investments, guarantees and grants). In addition to direct financing, KfW's promotion also includes advisory services. For example, KfW Development Bank advises partner countries on structural reforms. Defining standards is also a promotional service in a broader sense (e.g. the 'KfW Efficiency House').
- **Customers'/partners' activity:** With these input tools, KfW promotes a wide range of customers and partners – private individuals, private sector enterprises, financial institutions, municipalities and states. KfW initiates and supports different activities of these customer groups in a targeted manner under specific promotional conditions in strict accordance and compliance with international environmental, social and governance standards². For example, a wind farm or a KfW Efficiency House is built, a study course is initiated or drinking water connections are installed.

- **Customers'/partners' output:** These activities generate measurable results at the customers and partners, such as a wind farm ready for operation, a completed KfW Efficiency House, a university degree or a functioning drinking water supply.
- **Outcome for society, nature or the economy:** The outcome refers to the development and transformation effects resulting from the customers'/partners' use of the output. These are, for example, access to renewable energy through electricity fed into the grid from a newly built wind farm, energy saved by the dwellers of a KfW Efficiency House, a more qualified job thanks to the university degree, or access to clean drinking water.

For the purpose of systematisation, KfW has allocated these results to around 20 impact categories such as reduction of greenhouse gas emissions, food security and access to renewable energy (see Figure 1 for an overview and Annex I; for a detailed description of the categories and the corresponding KfW-financed customer and partner activities see Annex I).

- **Impact on improving living conditions:** Finally, KfW's impact refers to the structural changes for society in terms of sustainable development, i.e. the improvement of economic, social and environmental living conditions achieved by the outcomes in Germany, Europe and around the world. Examples include habitat conservation as well as income and food security.

Figure 1: The KfW-wide 'theory of change' for sustainable development



Source: KfW projects 'Roadmap Sustainable Finance' and 'transForm'. The 'theory of change' was derived from the consolidation of the causal chains of each of KfW's business areas. For an explanation in accessible format see www.kfw.de/wirkungen.

Box 2: KfW Group's contribution to the SDGs

On the basis of the KfW-wide 'theory of change', KfW contributes to all 17 United Nations Sustainable Development Goals (SDGs). In 2019 KfW developed a method for assigning all KfW financing activities to the individual SDGs in order to make the positive expected SDG contribution of its new commitments transparent (see www.kfw.de/sdgs). KfW makes the greatest contributions to SDG 7 'Affordable and clean energy', SDG 8 'Decent work and economic growth', SDG 11 'Sustainable cities and communities' and SDG 13 'Climate action'. This SDG mapping was the first step towards a KfW-wide impact balance sheet.

Impact indicators for a KfW impact balance sheet

In order to quantify KfW's sustainable impact, an initial group-wide set of indicators was developed for all impact categories based on the KfW-wide 'theory of change', such as 'Number of people reached with improved education measures'. Annex III describes the current state of the set of indicators, which will be successively expanded and developed. The impact indicators are identified by the individual business areas of KfW in accordance with their relevance and combined into a group-wide KfW impact balance sheet.

Impact indicators are clearly measurable, defined key figures agreed throughout KfW. The indicators can be measured at output, outcome or impact level depending on data availability and are thus to be interpreted in part as estimates for particular impact goals. Where possible, KfW's impact indicators are based on internationally harmonised impact indicators IRIS+ (www.thegiin.org) or the Green Bond Principles (icmagroup.org) and can be assigned to the three dimensions of sustainability (environmental, economic, social) as well as the 17 SDGs.

Box 3: Greenhouse gas accounting

On the path to a carbon-neutral future, promotional institutions finance not just the avoidance of greenhouse gas emissions but also economic activities that emit greenhouse gas (GHG) emissions. In order to comprehensively measure and monitor its climate impact, KfW is developing a greenhouse gas accounting along with its impact management system. It encompasses (1) a uniform group-wide estimation methodology for capturing the carbon footprint of KfW's financing activities, and in the future it is to be expanded by (2) GHG mitigation effects and (3) sequestration. GHG accounting follows, among others, the methodology of the 'Partnership for Carbon Accounting Financials' (PCAF), a pioneer initiative for global standards of measuring and reporting on 'financed carbon emissions'. The GHG accounting will be integrated into the group-wide impact management as soon as it has been finalised.

Different business areas – aggregatable indicators and harmonised management processes

KfW Group is composed of several business areas with very different functions and promotional instruments – from loans and grants for private individuals, enterprises and municipalities in Germany through project support by KfW

Development Bank and DEG in emerging and developing economies to export finance by KfW IPEX-Bank and fund investments by KfW Capital (see Annex I more information about the business areas).

In order to fulfil its broad promotional mandate and reflect the different functions within KfW, its impact management system will be specific to each business area but coordinated across the group as a whole and can be aggregated across business areas.

To this end, there are three levels of impact indicators: at the top level are KfW-wide overarching indicators, e.g. 'number of people reached with improved education measures'. These include KfW-wide secondary indicators at intermediate level, e.g. "number of pupils reached", or "number of students reached". For each secondary indicator, there are several business area-specific indicators (BA indicators), e.g. "number of primary/secondary school pupils reached" by KfW Development Bank or the "number of recipients of Federal Upgrading Training Assistance" in domestic promotional business (see Annex II for a detailed explanation).

Group-wide guiding principles, which are based on international standards (see Box 4 and Appendix IV), provide a uniform framework for the Group and ensure the effective design of the impact management processes.

Box 4: Group-wide guiding principles

Aim of the KfW-wide guiding principles is to establish a uniform framework for impact management throughout the Group. The guiding principles define the various elements and processes of impact management at KfW, ranging from strategic objectives, data collection and quality assurance to reporting and the resulting strategic impulses. In order to account for the heterogeneous business areas, Group-wide 'meta' principles were first defined before being operationalized and individually specified by the business areas. Established standards, such as the Operating Principles for Impact Management (OPIM), serve as a frame of reference to ensure connectability to the international debate.

The nine KfW-wide guiding principles can be found in Annex IV of this methodology paper.

A common data repository – existing and new data collection pathways

A group-wide impact management system requires a common data repository. Given the diverse fields of activity of the various business areas of KfW, each of them has different data, data collection and data management systems (see Annex I). Creating a central data repository for the sustainability impacts of KfW's promotional activities that uniformly maps the data of its business areas is therefore an essential task. This data repository will build on the business areas' existing systems and on applications yet to be implemented:

- **Making use of existing impact management systems:** A differentiated impact monitoring system already exists in the business areas of German Financial Cooperation with developing countries and emerging economies. To this end,

KfW Development Bank has a project-specific impact monitoring system and ex-post evaluation studies as well as an overarching system ('Aggregated Outcome and Impact Reporting'). At the core is a set of clearly defined, quantitative impact indicators at output and outcome level that covers the key impact areas of Financial Cooperation. DEG uses a system that it has developed itself (Development Effectiveness Rating) for its entire portfolio. It assesses the development contributions of DEG's customers (private sector/funds) in five impact categories on the basis of quantitative and qualitative indicators (see Annex I).

- **New pathways of data collection:** From 2022, the data required for impact management in export and project finance, which is under the responsibility of KfW IPEX-Bank, and at KfW Capital will be collected primarily with a new 'impact app' developed internally by KfW. Initially, KfW's project managers will use the app to capture the relevant data for co-financed customer and partner activities. In the future, we want to expand this app so that it can also be used directly by customers, and partners can enter data themselves and send it to KfW. In domestic promotional business, data is mainly collected by using existing IT systems due to the extensive volume of data. In addition, more detailed app-based data collection is intended for individual customer groups.
- **IT implementation:** The modern, flexible and cloud-based IT system enables the integration of external data sources in addition to internal ones and thus makes them usable for impact management in the future. The system's modern architecture can be flexibly adapted and expanded to meet new requirements. With the help of the Power BI reporting tool, it is also possible to visualize impact data in a simple and comprehensible way. This visualization with convenient graphical overview pages on the most important impacts also provides the basis for the group-wide impact reporting.

Challenges and limitations of impact management

Developing a KfW-wide impact management comes with multiple challenges:

- **Database:** The informative value of empirical impact indicators – and hence the effectiveness of impact management – fundamentally depends on the scope and quality of the database. Besides creating a central data repository, the further development of the impact management system will increasingly focus on what data must be gathered additionally (or differently) and how quality assurance can be continuously ensured in order to successively enhance the informative value.
- **Measurability:** Theoretically, the informative value of indicators at impact level is particularly high, as this is where the intended improvement of living conditions is addressed. However, the result at impact level is often of a qualitative

nature and therefore difficult to measure objectively. Quantitative indicators can therefore often be defined only at the output or outcome level. They reflect important interim results in the 'theory of change' which directly correlate with the intended overarching effects.

- **Timelag:** In addition to measurability, the timelag between a promotional measure and the achieved results is a major challenge for any impact management. For one thing, empirical measurement over longer periods of time requires greater effort and is more prone to error. For another, the timelag conflicts with the general aspiration of using impact management to obtain insights as quickly as possible to guide the future design of promotion and inform interested members of the public and other stakeholders.
- **Comparability and informative value at group level:** The business areas with the various levels of financing (i.a. projects, corporate customers, investee) are very heterogeneous. Although, impact data can be reported in aggregate manner at group level and create transparency by using a transparent definition and following internationally harmonised standards, it has been noticed that comparability is only possible to a limited extent.

Outlook: Sustainable promotion means managing impacts, creating transparency and strengthening customer dialogue

By developing a KfW-wide impact management system, KfW set out in 2020 to capture in an even more stringent and transparent manner how its financing activities contribute to transitioning the economy and society towards sustainable development. From the year 2022, the essential impacts of the customer and partner activities financed by KfW are to be regularly reported internally for the whole group. Moreover, we are examining how to make the impact indicators available to the interested public. This is to provide KfW with management impetus in order to contribute even more strongly to the 2030 Agenda.

Results-oriented reporting requires a good database. This poses some challenges which KfW intends to tackle even better in the coming years (including in dialogue with its customers) in order to optimise them in a targeted manner and expand them efficiently. Furthermore, we are preparing for customers and partners to collect their own data and for us to be able to feed this back in contextualized form, for example, in order to identify potential for improvement in impact orientation. To achieve this, KfW will focus on a forward-looking IT solution for efficient internal and external data exchange.

New global and local challenges create new areas of impact and promotional needs. Accordingly, KfW will continue developing its impact management further in order to make its contribution to improving the economic, environmental and social living conditions as effective as possible in the future as well.

¹ KfW Group has been gradually introducing the impact management system with all operational business areas in the framework of the internal KfW project 'KfW Roadmap Sustainable Finance' and its implementation project 'tranSForm' since 2020. These projects aim to make KfW's financing activities even more sustainable, among other objectives. KfW's impact management system makes a direct contribution to this

because in future it will capture the sustainable development impacts of KfW Group's financings in all three dimensions of sustainability even more rigorously and publish them transparently, thereby delivering management options that provide impetus. Further information on the projects can be found at www.kfw.de/sustainability

² KfW subjects all planned projects in emerging and developing countries as well as export and project finance activities to an environmental and social impact assessment (ESIA). The purpose is to measure any risks or adverse effects a project to be financed may have on the physical, biological and social environment and to define measures that prevent, mitigate or compensate these undesired effects together with the project partner or financed enterprise. KfW's financial commitment is subject to compliance with relevant national laws and fulfilment of KfW's assessment criteria. They are based on environmental and social standards that are consistent with internationally recognised benchmarks. Concerns about the protection of human rights form an integral part of the ESIA. Projects that are likely to cause unacceptable environmental or social burdens that cannot be prevented or reduced by suitable mitigation measures are not eligible for funding. For more information, see www.kfw.de/sustainability.

KfW Sustainable Finance

Annex I (as at 31 December 2022 – continuous development)

KfW business areas and their existing and future impact management systems

KfW Group has several business areas with very different functions and funding instruments – from KfW's loan and grant promotion in Germany for private individuals, companies and municipalities to KfW Development Bank's and DEG's project support in emerging and developing countries to KfW IPEX-Bank's export financing and KfW Capital's fund investments. The heterogeneity of the business models with their different customers and partners results in different requirements for the development of impact management systems specific to the business areas, which in turn culminate in a group-wide impact management system with uniform guiding principles. All business areas share the goal of supporting economic and social transformation in order to contribute to improving economic, environmental and social living conditions.

KfW's **domestic promotional business** supports private individuals as well as commercial and municipal companies, cities, communities and non-profit and social organisations. One focus is financing for start-ups and SMEs. This comprises programmes to promote innovative business ideas, to increase energy efficiency and to foster the use of renewables. Support is also given to private individuals in shaping their future, for example, when it comes to the energy-efficient refurbishment, age-appropriate conversion or burglary protection for residential buildings, or when they want to invest in their own training and education. On a municipal level, domestic promotional business promotes investments in public and social infrastructure.

KfW's domestic promotional business has reported on its various activities in the areas of e.g. SMEs, municipal infrastructure and education in its portfolio to date. In the area of education, for example, the number of people reached by commitment is provided. In the medium term, domestic promotional business will pursue the goal of successively improving its ability to measure and manage its environmental, social and economic contributions to the SDGs through the KfW-wide impact management system. To this end, a suitable basis is to be established in the future based on assumptions and macro data coupled with programme-specific activity data that is already available.

KfW Capital is a wholly owned subsidiary of KfW and invests in German and European venture capital and venture debt funds with support from the ERP Special Fund (European Recovery Programme). KfW Capital aims to improve the supply of venture and growth capital for innovative technology companies in Germany by investing in funds. This is intended to strengthen Germany as a centre of innovation in the long term.

In 2020/2021, a concept for an impact management system was developed for KfW Capital, which was established in 2018. Measurable key performance indicators (KPIs) were assigned to the two strategically central Sustainable Development Goals for KfW Capital, "Growth" (SDG 8) and "Innovation" (SDG 9), as well as for the goal "Responsible consumption and production" (SDG 12). This methodology is currently being implemented so that systematic data collection and reporting can take place at the earliest from 2023. Data collection and management takes place in the transFORM IT environment and in-house developed impact app.

DEG (Deutsche Investitions- und Entwicklungsgesellschaft) finances, advises and supports private companies, financial institutions, funds and project financiers operating in developing countries and emerging economies.

Since 2017, DEG is using the Development Effectiveness Rating (DERa), which has been developed in-house and follows international best-practice approaches, to monitor the impact of its entire portfolio. This is done using quantitative and qualitative, mostly harmonised, indicators. The DERa is based on five outcome categories which are aligned with the SDGs to assess the development contribution of each customer. The five outcome categories are decent jobs, local income, market and sector development, environmental stewardship and community benefits. This is used as the basis to show the developmental impacts and contributions to the SDGs of DEG customers. In this context the assessment includes private-sector companies and investees of funds that DEG invests in. DERa enables DEG to report on the developmental impact of its financing, to manage the overall developmental quality of its portfolio and to provide stimuli for improvement. In addition, the DERa assessment is to jointly identified potential areas for improvement in direct exchange with DEG customers. See also www.deginvest.de/impact.

KfW Development Bank supports development projects around the world on behalf of the German Federal Government (mainly on behalf of the Federal Ministry for Economic Cooperation and Development (BMZ)) and the EU, and finances programmes and projects, primarily with public-sector stakeholders in developing countries and emerging economies – from conception and implementation to final review.

KfW Sustainable Finance

KfW Development Bank uses 4 different building blocks to monitor and report on the results and impacts of the activities it finances. (1) A central pillar is regular project-specific reporting to the BMZ based on an impact matrix with indicators to measure the achievement of key project objectives. (2) Around 50% of all projects are also reviewed for their developmental effectiveness a few years after completion as part of a (published) ex-post evaluation. This is intended to contribute to ensuring the quality of our work and to learn from experience how the impact of projects can be further improved. To complement this, FC is increasingly conducting accompanying rigorous evaluations (RIE = rigorous impact evaluation), i.e. experimental and quasi-experimental studies with a before-and-after comparison and a control group design, for more robust evidence of impact. (3) Another component of KfW Entwicklungsbank's impact management is the "aggregated outcome and impact reporting" based on standard indicators, which reports across projects on the ex-ante expected results and impacts of newly committed projects as well as on the achieved results of final reviewed projects. The basis for the aggregated results and impact reporting is a set of firmly defined standard indicators that cover the key impact areas of KfW Entwicklungsbank's portfolio. The standard indicators capture easily measurable, quantitative results at the output and short-term outcome levels. They are formulated in a general way so that they can be collected for different projects. In the future, the principle of dual control is to be applied to the digital capture of results figures in order to further improve data quality (plausibility check process in the impact app). The operating units are supported in this by internal consulting from the competence centers. (4) In order to additionally be able to make statements on the qualitative impacts of projects funded by financial collaboration, these impacts are prepared for individual projects in the form of storytelling.

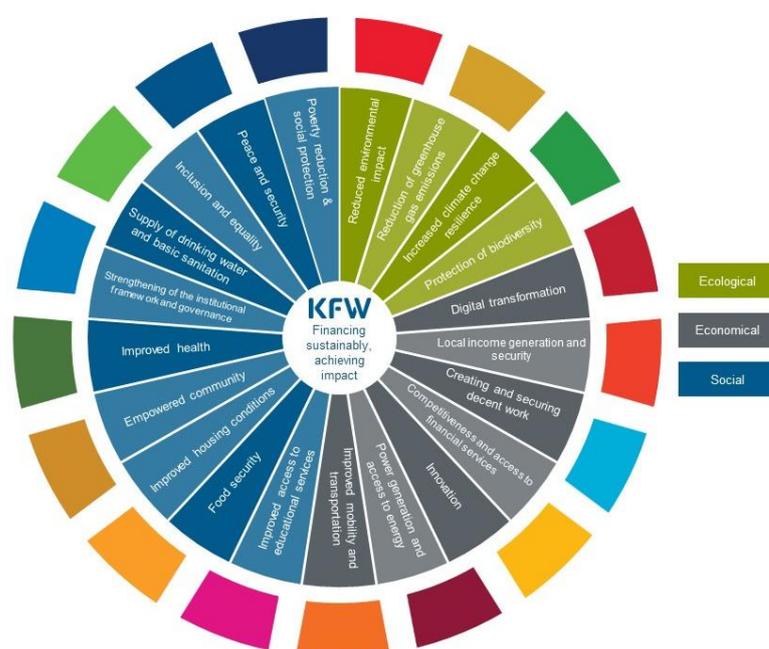
KfW IPEX-Bank is responsible for export and project finance within KfW Group. It supports German and European companies operating in key industrial sectors in global markets by structuring medium- and long-term financing for German and European exports, investing in infrastructure, securing raw materials and by financing environmental protection and climate change mitigation projects all over the world. KfW IPEX-Bank plays an active role in promoting the transition to sustainable economic and environmental development in Germany, Europe and around the world. It provides individual financing solutions to support this process of transformation, particularly for the technologies of the future.

KfW IPEX-Bank is establishing an impact management system in addition to the annual publication of its SDG mapping (www.kfw.de/sdgs). This system will link KfW IPEX-Bank's activities to various Sustainable Development Goals (SDGs) – including SDG 7 (Affordable and clean energy), SDG 8 (Decent work and economic growth), SDG 9 (Industry, innovation and infrastructure) and SDG 13 (Climate action), thereby creating measurable indicators. This methodology will be implemented step-by-step in 2021 with the aim of systematically recording and evaluating expected impact data from KfW IPEX-Bank financings captured in projects from 2022 onwards via an impact app.

KfW’s central impact categories and their contribution to the SDGs

As the basis for KfW-wide impact management, the operational business areas of KfW Group established a shared understanding of KfW’s sustainability impact in environmental, economic and social dimensions in a one-year consultation process. In the context of this “theory of change”, key strategic impact categories were also defined (see Figure 2) to which KfW contributes or would like to contribute to improve living conditions around the world. Defining the impact categories gives structure to KfW Group’s wide-ranging promotional activities, allowing them to be systematically recorded and efficiently managed. KfW’s impact categories cover (in line with KfW’s role as a transformative promotional bank) all 17 Sustainable Development Goals of the United Nations (for more information, see www.kfw.de/sdgs). The following overview of the impact categories shows the current status (30 December 2022) of the continuously developed impact categories including sample customer activities supported by KfW.

Figure 2: KfW’s cross-dimensional impact categories



Source: KfW project *Roadmap Sustainable Finance* and *tranSForm*. You can find an accessible explanation on our website www.kfw.de/impact.

- **Reduced environmental damage:** physical, chemical or biological interventions can have a direct negative impact on or change the natural environment (e.g. emissions in the form of exhaust air, chemicals, noise; compaction of soil; pollution of water and soil by waste, etc.). KfW promotes the direct reduction of these environmental damages (e.g. through technologies for pollution prevention or water treatment) as well as measures that reduce environmental damage through the sustainable and circular use of resources (circular economy) (e.g. through wastewater prevention, waste recycling, material efficiency or recyclable product designs).
- **Reduction of greenhouse gas emissions:** under the Paris Climate Agreement, it was agreed to limit global warming to well below 2°C. This requires greenhouse gas emissions (GHG) to be reduced to the point of greenhouse gas neutrality by the middle of this century. This is why KfW is increasingly supporting transformation processes and activities that lower the greenhouse gases emitted into the atmosphere. These cover a broad range and span the expansion of renewable energy generation capacities, technologies for the cross-sectoral use of renewable energies (such as heat pumps, electric cars, hydrogen electrolyzers, direct reduction plants, etc.) and measures to increase energy efficiency. At the same time, KfW promotes natural GHG sinks, such as forests and peatlands, which can sequester unavoidable residual emissions in the long term.
- **Increased resilience to climate change:** even with a limited increase in global warming, significant negative

KfW Sustainable Finance

impacts of climate change are likely. With its financing, KfW supports its partners and customers, especially in developing countries, in strengthening resilience to climate change through appropriate financing of climate change adaptation measures.

- **Biodiversity conservation:** biodiversity is more than just species conservation – ecosystems, species, and genetic diversity together form the foundations of human life on Earth. For example, they contribute to clean air and fertile soils and protect us from the effects of climate change. Unfortunately, biodiversity is now under enormous pressure from economic activities such as farming, resource overuse or chemical pollution. Biodiversity conservation is therefore a particular focus of KfW, especially protecting ecosystems from harmful human impacts, rebuilding destroyed ecosystems fairly at local level (e.g. reforestation, rewetting), and promoting integrative approaches to ecosystem use (e.g. through sustainable agriculture and forestry, locally sustainable fisheries or carefully planned infrastructure with nature-based elements).
- **Strengthening institutional frameworks and governance:** the institutional framework of a country and the quality of governance are key determinants of economic and social development. In international development finance, KfW supports the efficiency of public institutions, e-governance and decentralisation models, public financial management in partner countries and participatory processes for better public involvement. In addition, policy-based financing is used to specifically promote national reform developments in various sectors in order to improve the general conditions for sustainable development in the partner countries.
- **Creating and securing local income:** especially in developing countries, creating opportunities for monetary income for individuals and national institutions is an important building block for human development. Poverty, as an expression of a lack of basic opportunities for earning income, is directly reduced. An increase in a nation's disposable income (GDP/capita) has a clear positive correlation to most indicators of social development such as life expectancy, equality and education. As a result, KfW specifically promotes entrepreneurial activities in low-income countries and regions, for example, or advocates for more efficient tax collection at national level.
- **Creating and securing decent work:** creating and securing jobs is of paramount importance, as employment is one of the most important ways out of poverty. Jobs provide more than just financial income. They form the cornerstone of development by improving living standards, instilling identity, increasing productivity and strengthening social cohesion. However, it is not only the number of jobs that matters, it is equally important that employment is decent. This is why KfW helps to create and secure jobs while complying with national laws and international standards such as the ILO Core Labour Standards.
- **Competitiveness and access to financial services:** the ability of private sector companies to compete is a central component of economic growth. This, in turn, positively correlates with many indicators of human development. For this reason, KfW supports ensuring and increasing the competitiveness of companies in Germany, Europe as well as in developing countries and emerging economies. This includes, among other things, the promotion of start-ups, new businesses, business successions (especially in the SME sector), business growth, support in accessing international sales, labour and commodity markets, as well as the indirect financing of micro and small enterprises through financial intermediaries. In this regard, functioning financial systems are a prerequisite for investment, innovation, employment and growth. KfW's measures that aim to improve access to financial services target commercial customers, private individuals, municipalities and banks, among others, and are also often linked to a specific purpose.
- **Innovation:** innovations improve efficiency in companies, result in new and improved products, processes and services as well as business models. From a company perspective, innovations are the key levers for boosting competitiveness and growth. From a social perspective, they therefore guarantee increasing prosperity. In addition, innovations contribute to solving challenges in society, such as climate change, healthcare or demographic development. In this context, it is becoming increasingly important to systematically identify and take advantage of opportunities presented by digitalisation. Innovative start-ups have a special role to play here: they are the first to bring new technological developments and the resulting applications to the market. In this way, they are particularly strong drivers of technical progress. KfW therefore promotes innovation, as difficulties in financing innovation are among the most significant barriers to innovation.
- **Digital transformation:** the provision of and access to an efficient digital infrastructure is essential for technical innovation and for social, political and economic participation. The availability of high-speed broadband networks in cities and rural areas supports the process of digital transformation of the economy and society. The aim is to increase the resilience of the digital infrastructure in Germany, Europe and around the world and to sustainably improve it through the long-term and nationwide expansion of fibre-optic networks.

KfW Sustainable Finance

In addition to cable-based broadband networks, mobile technologies also enable access to fast Internet connections. KfW supports the expansion of the digital infrastructure through various promotional programmes. This also includes the transformation of the private and public sectors and social transformation (digital skills, overcoming the digital divide, etc.).

- **Improved health (Improved access to healthcare):** healthcare is a human right. But it is also a key element in the fight against poverty and one of the prerequisites for economic growth. KfW's promotion in the healthcare sector includes measures that are directly associated with healthcare (e.g. infrastructure such as hospitals, laboratories, but also that enables the use of healthcare services through vouchers, and which ensure minimum hygiene standards (or which enable the population to engage in activities to promote good health). In its international activities, KfW focuses on basic health care, improvements in reproductive health and the prevention of infectious diseases and pandemics. KfW also contributes to health promotion through its private sector involvement, for example by providing financial support for the research and market development of new medicines and vaccines.
- **Improved access to educational services:** education is a key function for the further development of a society and its economic systems, as well as the basis for production growth, competitiveness and prosperity. On the one hand, access to education is fundamental and on the other hand, it serves to constantly improve the level of education in general. Education can create equal opportunities and the chance to participate in the labour market. KfW focuses on promoting education infrastructure and providing financial support for schoolchildren and students.
- **Food security (access to healthy food):** having enough healthy food to eat is considered a basic requirement for a dignified life. With the help of various measures in the agricultural and food sector, KfW seeks to ensure the availability of and access to sufficient, diverse and nutritious food and to combat malnutrition through measures to improve food use and diet.
- **Improved living conditions:** buying housing makes an important contribution to avoiding poverty in old age. In addition, building burglar-proof, accessible, energy-efficient and resource-saving housing increases the quality of life for many people. This is why KfW finances appropriate conversion and upgrade measures.
- **Empowered communities (Corporate Social Responsibility):** entrepreneurs are often also active citizens who play an important role in society. However, companies should not only "do no harm", they can also "do good" and contribute to development by proactively engaging with local communities. Businesses encourage public acceptance and support for their activities locally, while communities benefit from an increase in facilities and opportunities that would not otherwise exist. KfW has already identified empowered communities as essential (see also KfW Stiftung⁷) and encourages its customers to assume social responsibility.
- **Improved mobility and transportation:** mobility is an important factor for the social and economic development of modern industrial and service-sector-oriented countries. Public transport can be designed to ensure good mobility options and urban and rural connections for the entire population (e.g. public transport, regional rail transport). There are also forward-looking options for ensuring mobility in freight transport while at the same time protecting the environment. In addition to measures for cycling and local public transport, KfW supports investments in climate-friendly railways and the expansion of alternative drive systems, including the associated charging and filling station infrastructure and the production of alternative fuels.
- **Energy production and access to energy:** access to modern energy services is one of the key factors for the development and improvement of living conditions, the expansion of economic systems as well as basic services, and is thus a core development goal of the 2030 Agenda in Germany, Europe and around the world. KfW promotes energy generation (e.g. wind and solar farms), the expansion and stabilisation of energy distribution (e.g. grid expansion and storage), energy-efficient use and initial or improved access to energy (e.g. mini-grid projects).
- **Supply of drinking water and basic sanitation:** a significant proportion of the world's population lacks access to safe drinking water (2.1 billion, 2020) and even more lack access to adequate and hygienic sanitary facilities (4.5 billion, 2020). This has enormous consequences for health, the economy and quality of life. KfW contributes to securing and improving the drinking water supply (access and treatment).
- **Inclusion and equality:** gender equality is an important human rights concern, and gender inequality or gender inequity is a key constraint to development. For this reason, the consideration of gender aspects and gender equality is a cross-cutting issue that is relevant to all of KfW's key impact categories and dimensions. KfW strives, among other things, to achieve equal rights for women, men and LGBTIQ* individuals with regard

KfW Sustainable Finance

to economic resources, including financial services, equal participation in political, social and economic decision-making processes and respect for their rights, as well as consideration of their environmental potential and needs.

- **Peace and security:** peace and security are key requirements for sustainable development. Armed conflict and war destroy economic and social infrastructure, weaken state institutions and drive poverty and inequality levels up. Other forms of violence – such as urban crime or violence against women and children – also cause high social costs and are far more widespread around the world. One of KfW's main priorities in developing countries is to promote the transition from crisis situations to long-term reconstruction and peacebuilding, as well as the prevention of violence, through short- to long-term measures.
- **Poverty reduction & Social protection:** poverty reduction is one of the greatest challenges of our time and a central goal of development cooperation. Poverty encompasses various forms of hardship related to the inability to meet basic human needs. Poverty is not only expressed through low per capita income, but also manifests itself in other dimensions, such as lack of access to essential services like education, healthcare, water or energy, food insecurity, vulnerability to climate change or lack of opportunities for social participation. In developing countries and emerging economies, KfW contributes to improving living conditions and alleviating poverty through a wide range of measures.

KfW-wide impact indicators

To quantify KfW's sustainable impact, an initial group-wide set of indicators was developed for all impact categories based on the KfW-wide 'theory of change'. These will be successively expanded and developed. The impact indicators are identified by the individual business areas of KfW in accordance with their relevance and combined into a group-wide KfW impact balance sheet. The impact balance sheet is initially intended for internal reporting but will also be published from 2022.

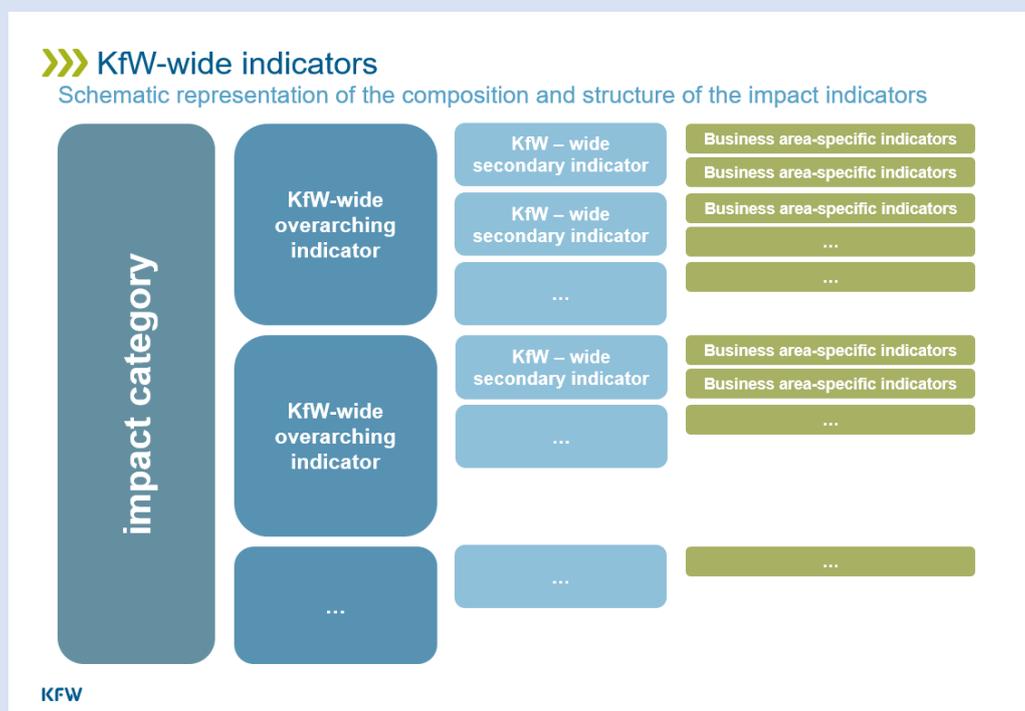
Impact indicators are clearly measurable, defined key figures agreed throughout KfW. These can be quantitative (e.g. number of jobs secured) or qualitative/quantitative (e.g. SME rate based on local/internal SME definition). The indicators can be measured at output, outcome or impact level depending on data availability and are thus to be interpreted in part as estimates for particular impact goals. Where possible, KfW's impact indicators are based on internationally harmonised impact indicators IRIS+ (www.thegiin.org) or the Green Bond Principles (icmagroup.org) and can be assigned to the three dimensions of sustainability (environmental, economic, social) as well as the 17 SDGs.

KfW-wide indicators based on business area-specific indicators

The KfW-wide impact indicators are made up of three different levels: at the top level are KfW-wide overarching indicators, e.g. the "number of people reached with improved educational measures". These include KfW-wide secondary indicators at intermediate level, e.g. "number of pupils reached", or "number of students reached". For each secondary indicator, there are several business area-specific indicators (BA indicators), e.g. "number of primary/secondary school pupils reached" by KfW Development Bank or the "number of recipients of Federal Upgrading Training Assistance" in domestic promotional business.

These can be under both levels (KfW overarching indicator and KfW secondary indicator). The relationship between the secondary indicator and BA indicator can be 1:n, i.e. there can also be 2 BA indicators from one business area under one secondary indicator (e.g. 2x IPEX for the same secondary indicator). This level of detail is necessary to be able to define uniform impact indicators despite the heterogeneity of KfW's operational business areas and their different reporting obligations.

Figure 3: Composition and structure of the impact indicators



In general, data is recorded taking into account the specifics of the business area, which means that the impact indicators are measured at different levels (customer, financing, project, investment, etc.).

KfW Sustainable Finance

The first indicators that KfW has developed for the entire group and will incorporate into a common data repository are the following. However, they are neither complete nor are they surveyed by all business areas.

Impact category: reduced environmental damage

- KfW-wide overarching indicator: quantities of waste avoided, disposed of and/or recovered
 - KfW-wide secondary indicator: reduced waste quantities
 - KfW-wide secondary indicator: quantities of waste disposed
 - KfW-wide secondary indicator: recycled waste quantities
- KfW-wide overarching indicator: Treated and avoided quantities of wastewater
 - KfW-wide secondary indicator: treated quantities of wastewater
 - KfW-wide secondary indicator: reduced wastewater quantities
 - KfW-wide secondary indicator: reused wastewater quantities
- KfW-wide overarching indicator: number of resource-efficiency projects and circular economy
 - KfW-wide secondary indicator: number of resource-efficiency projects
 - KfW-wide secondary indicator: number of circular economy projects
- KfW-wide overarching indicator: reduction of air pollutants
 - KfW-wide secondary indicator: reduction of particulate matter (PM)
 - KfW-wide secondary indicator: reduction of sulfur oxides (SO_x)
 - KfW-wide secondary indicator: reduction of nitrogen oxides (NO_x)
 - KfW-wide secondary indicator: reduction of carbon monoxide (CO)
 - KfW-wide secondary indicator: reduction of non-methane volatile organic compounds (NMVOCs)

Impact category: reduction of greenhouse gas emissions

- KfW-wide overarching indicator: carbon footprint p.a.
- KfW-wide overarching indicator: saved GHG emissions/reduced GHGs
- KfW-wide overarching indicator: GHG capture (sinks, storage, use)
- KfW-wide overarching indicator: installed electricity generation capacity with renewable energy sources
- KfW-wide overarching indicator: installed hydrogen generation capacity
 - KfW-wide secondary indicator: installed green hydrogen generation capacity
 - KfW-wide secondary indicator: installed generation capacity of non-green hydrogen
- KfW-wide overarching indicator: number of projects with energy-efficiency measures
- KfW-wide overarching indicator: energy saved through efficiency measures
- KfW-wide overarching indicator: number of charging points for electric cars
- KfW-wide overarching indicator: number of projects related to low-carbon technologies
- KfW-wide overarching indicator: volume of climate finance (mitigation)
- KfW-wide overarching indicator: power generation from renewable energies
- KfW-wide overarching indicator: installed heating/cooling capacity with renewables energies
- KfW-wide overarching indicator: primary energy saved through efficiency measures on buildings
 - KfW-wide secondary indicator: primary energy saved through efficiency measures on buildings – new building
 - KfW-wide secondary indicator: primary energy saved through efficiency measures on buildings – renovation
- KfW-wide overarching indicator: heat/cold generated from renewable energies

Impact category: increased resilience to climate change

- KfW-wide overarching indicator: number of people who benefit from climate change adaptation measures
- KfW-wide overarching indicator: number of climate change adaptation projects
- KfW-wide overarching indicator: desalinated water quantities

Impact category: biodiversity conservation

- KfW-wide overarching indicator: protection, sustainable management and restoration of forest land
 - KfW-wide secondary indicator: sustainably managed forest
 - KfW-wide secondary indicator: area afforested or reforested through rehabilitation measures
- KfW-wide overarching indicator: number of people who benefit from forestry measures
- KfW-wide overarching indicator: area under protected and/or sustainable resource management
 - KfW-wide secondary indicator: secondary indicator: area of protected, terrestrial ecosystems

KfW Sustainable Finance

- KfW-wide secondary indicator: secondary indicator: area of protected, marine ecosystems
- KfW-wide overarching indicator: number of financed projects in the municipal and operational area that serve to conserve biodiversity

Impact category: strengthening institutional frameworks and governance

- *Indicators still being developed*

Impact category: creating/securing local income

- KfW-wide overarching indicator: local income generation

Impact category: creating and securing decent work

- *Indicators still being developed*

Impact category: competitiveness and access to financial services

- KfW-wide overarching indicator: value of imported raw materials
- KfW-wide overarching indicator: number of supported small, medium-sized and large medium-sized companies
 - KfW-wide secondary indicator: number of SMEs funded
 - KfW-wide secondary indicator: number of supported large medium-sized companies
 - KfW-wide secondary indicator: number of supported small, medium-sized and large medium-sized companies
- KfW-wide overarching indicator: number of start-ups supported
- KfW-wide overarching indicator: SME ratio
- KfW-wide overarching indicator: number of people with improved access to financial services

Impact category: innovation

- KfW-wide overarching indicator: number of projects and companies financed or supported that are related to an innovation
 - KfW-wide secondary indicator: number of projects and companies financed or supported that are related to incremental innovation
 - KfW-wide secondary indicator: number of projects and companies financed or supported that are related to radical innovation

Impact category: digital transformation

- KfW-wide overarching indicator: number of new end users connected to a telecommunications network (households, businesses, other users, e.g., public institutions, data centers)
 - KfW-wide secondary indicator: number of end users (households, businesses, other users) benefiting from high-capacity data transmission through the construction and expansion of broadband infrastructure (everything except fibre optics)
 - KfW-wide secondary indicator: number of end users (households, businesses, other users) who gain access to very high-speed data transmission through a fibre-optic connection
 - KfW-wide secondary indicator: number of newly connected end users who benefit from a mobile tower connection (everything except 5G)
 - KfW-wide secondary indicator: number of newly connected end users who benefit from a 5G tower connection
- KfW-wide overarching indicator: number of projects financed with a focus on digitalisation

Impact category: improved health

- KfW-wide overarching indicator: number of people receiving healthcare services
 - KfW-wide secondary indicator: number of people who benefit from vaccines, diagnostics, medicines, (digital) therapies, innovations in care & medical devices
 - KfW-wide secondary indicator: number of people who use sexual and reproductive health services
- KfW-wide overarching indicator: number of supported research and development projects (R&D projects) and/or companies in the healthcare & life science sector that contribute to improved health
- KfW-wide overarching indicator: number of health care facilities constructed, expanded, or improved

Impact category: improved access to educational services

KfW Sustainable Finance

- KfW-wide overarching indicator: number of people reached with improved educational measures
 - KfW-wide secondary indicator: number of primary and secondary school pupils who receive support
 - KfW-wide secondary indicator: number of people in vocational training who receive support
 - KfW-wide secondary indicator: number of people in higher education who receive support

Impact category: food security (access to healthy nutrition)

- KfW-wide overarching indicator: number of people who benefit from a contribution to overcoming hunger and malnutrition
- KfW-wide overarching indicator: number of people benefiting from nutrition-related healthcare services or gaining access to healthy, regional and sustainably produced food products
- KfW-wide overarching indicator: number of projects/companies in the Agri-Food-Tech sector
 - KfW-wide secondary indicator: number of projects/companies in the field of Agri-Food-Tech with focus on social aspects
 - KfW-wide secondary indicator: number of projects/companies in the field of Agri-Food-Tech with focus on ecological aspects

Impact category: improved living conditions

- KfW-wide overarching indicator: number of residential units supported
 - Number of (affordable) residential units supported by general housing finance (access to housing finance)
 - KfW-wide secondary indicator: number of energy-efficient residential units renovated or newly built (energy-efficient/resource-efficient housing)
 - KfW-wide secondary indicator: number of low-barrier residential units (inclusive housing)
 - KfW-wide secondary indicator: number of burglary-proof residential units (secure housing)

Impact category: empowered communities (Corporate Social Responsibility)

- *Indicators still being developed*

Impact category: improved mobility and transportation

- KfW-wide overarching indicator: number of users of climate- and environmentally friendly transportation systems
- KfW-wide overarching indicator: transportation capacities in climate and environmentally friendly traffic systems
- KfW-wide overarching indicator: number of projects for the expansion, modernization or new construction of mobility and transportation infrastructure
- KfW-wide overarching indicator: number of climate- and environmentally friendly vehicles
 - KfW-wide secondary indicator: number of climate- and environmentally friendly road and rail-based forms of transportation
 - KfW-wide secondary indicator: number of new or upgraded climate- and environmentally friendly ships
 - KfW-wide secondary indicator: number of airplanes that (partially) run on alternative fuels (e.g., biofuels, hydrogen)
- KfW-wide overarching indicator: length of new, improved or electrified traffic routes
 - KfW-wide secondary indicator: length of new, rehabilitated, or improved long-distance routes.
 - KfW-wide secondary indicator: length of new, improved or electrified local and suburban traffic routes
- KfW-wide overarching indicator: number of vehicles with transitory propulsion technologies
 - KfW-wide secondary indicator: number of road and rail-based means of transport with transitory propulsion technologies
 - KfW-wide secondary indicator: number of ships with transitory propulsion technologies
 - KfW-wide secondary indicator: number of airplanes with transitory propulsion technologies

Impact category: energy generation and access to energy

- KfW-wide overarching indicator: installed power generation capacity from conventional energy sources
- KfW-wide overarching indicator: installed heating/cooling capacity from conventional energy sources

KfW Sustainable Finance

Impact category: supply of drinking water and basic sanitation

- KfW-wide overarching indicator: number of people who benefit from new/improved water supply
- KfW-wide overarching indicator: installed water treatment capacity for drinking water
- KfW-wide overarching indicator: number of people with new or improved basic sanitation or wastewater services

Impact category: inclusion and equality

- *Indicators still being developed*

Impact category: peace and security

- KfW-wide overarching indicator: number of people who receive support as part of peacebuilding
- KfW-wide overarching indicator: number of reached refugees, nationally displaced people, returnees and the residents of host communities

Impact category: poverty reduction & social protection

- KfW-wide overarching indicator: number of people who have been provided with social security or whose social security has been improved

In addition, the following input indicators are collected for reporting and calculation purposes:

Impact category: reduction of greenhouse gas emissions

- KfW-wide overarching indicator: volume of climate finance (reduction)

Impact category: increased resilience to climate change

- KfW-wide overarching indicator: volume of climate finance (adaptation)

Guiding principles of KfW's impact management

- (1) KfW's primary strategic objective is to transform the economy and society in order to improve economic, ecological and social living conditions. The impacts achieved worldwide are being made transparent by KfW's Group-wide impact management.
- (2) KfW uses a set of clearly defined indicators derived from a Group-wide understanding of impact ('Theory of Change') to measure the intended and achieved impacts of its financing and promotional activities and those of its customers and partners. These indicators are based on international standards. The methodology and data basis are continuously being refined.
- (3) KfW addresses the risk of negative impacts of its financing and promotional activities within the framework of the respective sustainability guidelines of the business areas.
- (4) KfW regularly reports internally and externally on its contribution to sustainable development on the basis of quantitative and qualitative impact indicators, for instance in the form of an annual "KfW Impact Statement". In this context, the methodology and the data basis shall be made transparent.
- (5) The impact indicators as well as the reporting serve as an internal stimulus, transparent information of the public and policymakers, and the benefit of customers, partners and investors.
- (6) The data required for impact management shall be collected efficiently by the individual business areas of KfW in their financing and promotional activities and, in the target state, as automated as possible. The quality of the data is ensured by means of suitable functional and technical mechanisms.
- (7) The continuous documentation, maintenance as well as further development of the methodology and processes of Group-wide impact management is the task of a central corporate unit. An independent audit of the processes is pursued.
- (8) The insights gained from impact management provide KfW and its business areas with strategic steering impulses and enable the targeted further development of financing and promotional activities in dialog with customers and partners as well as refinancing on the liabilities side.
- (9) KfW uses the experience gained from Group-wide impact management to ensure that its support for the transformation of the economy and society remains effective and ambitious.