#VisionSustainability2030

Our path to a sustainable Bildungscampus



#### **Our Vision**

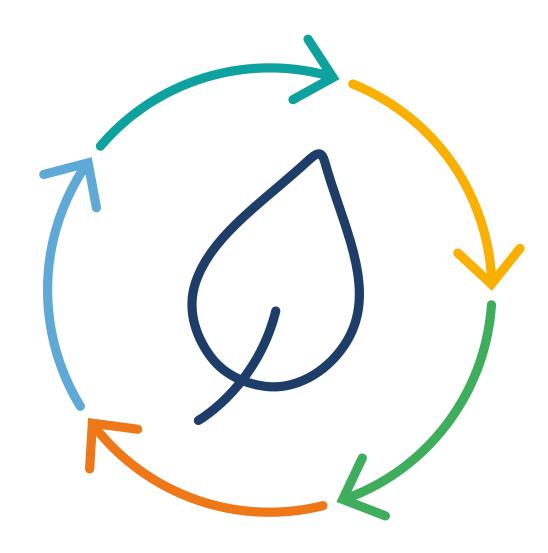
→ We are developing the sustainable, future-proof and innovative campus of tomorrow with the aim of becoming carbon neutral by 2030.

"Every feasible idea for ways that we can reduce our carbon emissions brings us one step closer to achieving our goal of a climate-neutral Bildungscampus by 2030."



- Silke Lohmiller, Executive Managing Director at the Dieter Schwarz Foundation –

To achieve our goal of a sustainable Bildungscampus by 2030, we have defined five Fields of Action that are based on the Sustainable Development Goals (SDGs) of the United Nations. Each action area includes specific measures, which together provide the framework for our sustainable development.



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# → The Bildungscampus



# A Location for lifelong learning

The Bildungscampus of the Dieter Schwarz Foundation is a unique location for lifelong learning and academic research. Located in the heart of Heilbronn, it houses a wide variety of educational and scientific institutions offering study and further education programs that complement each other perfectly – for students, teachers and researchers.

The portfolio ranges from classic full-time study programs to vocational training courses and support for start-ups. The portfolio also includes (further) training courses for teachers and educators, as well as for children and young people. The spectrum is rounded off by forums, conferences and lectures for specialist audiences and for the public.

You can find an overview of all the institutions housed on the Bildungscampus on our website:

→ bildungscampus.hn/en/institutions

## A Location that is expanding

Standing in the middle of the impressive, modern architecture of the Bildungscampus today, you would never know that the groundbreaking ceremony for the first construction phase of this site took place as recently as 2010. Within just a few years, the Dieter Schwarz Foundation has created a inspiring and unique location.

Today, the Bildungscampus – which was built on what was previously an industrial site – already covers an area of around 65,000 square meters:

With a range of modern buildings housing the various institutions, a library, a canteen and various event locations, the Bildungscampus is an impressive place for learning and research. And the site continues to grow – with Bildungscampus West, which is set to be built on the industrial site directly opposite the current campus. After this expansion, the entire Bildungscampus site will span 145,000 square meters. In addition to providing extra space for teaching and research, the expansion aims to further connect the Bildungscampus with the city, to provide space for retail stores, businesses and restaurants and to create spacious green spaces and outdoor areas.

This will ultimately result in an academic district that seamlessly connects education and learning with recreation.

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# Our Mission: A sustainable Bildungscampus

As an innovative location that is actively shaping the future, the Bildungscampus also wants to act as a pioneer in the area of sustainability in addition to its core focus areas of education and research.

Achieving this goal will require an overarching strategy and a clear roadmap. We developed these under the tagline #VisionSustainability2030.

As part of this vision, in addition to setting ambitious goals for ourselves, we have also created clear guidelines that set out how the sustainability strategy will be implemented at the Bildungscampus. In this way, we hope to provide an impetus towards more sustainable practices and to encourage the institutions housed on the Bildungscampus to actively shape the transformation process with us.

After all, we know that our major goal of creating a sustainable Bildungscampus can only be achieved if we work together.

> "We are creating a climate-friendly and urban campus with an experimental character that is characterized by sustainability, diversity, start-up spirit







In keeping with the tagline #VisionSustainability2030, our mission maps out all the factors that must be considered in order to make the Bildungscampus a truly sustainable site

# -> Our Fields of Action

# We are setting clear goals and guidelines for the implementation of our sustainability strategy.

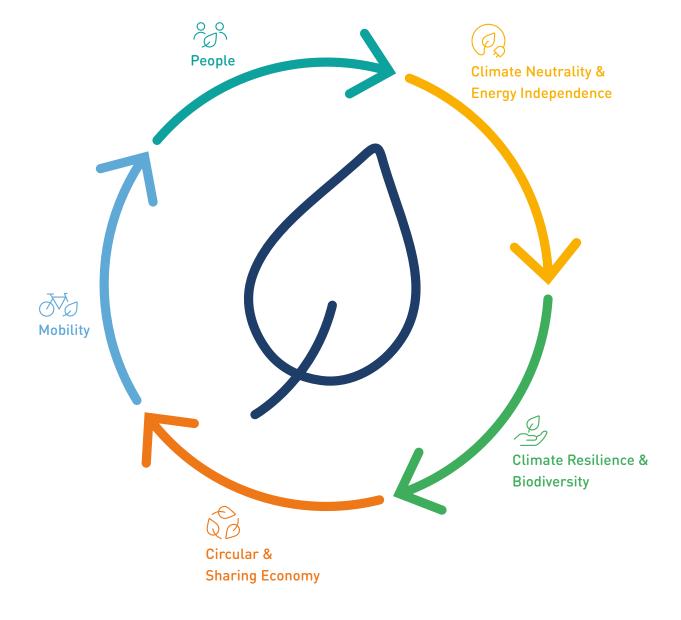
Our sustainability strategy is built on five Fields of Action that are based on the Sustainable Development Goals (SDGs) of the United Nations (UN). In this way, we can ensure a holistic understanding of the concept of sustainability and that all dimensions of sustainability are covered.



From the UN's 17 Sustainable Development Goals, we selected eight goals that we felt we could make a substantial contribution toward. We then compiled these goals to create five strategic Fields of Action that will help us to systematically formulate our own goals and implement appropriate measures using an effective, needs-based approach.

This strategy represents our long-term commitment to sustainability and climate protection and provides a holistic and reliable outlook for the entire Bildungscampus, its institutions and the local community.







Climate Neutrality & Energy Independence

#VisionZeroEmission

Promoting the climate-neutral and largely energy independence operation of the Bildungscampus.



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# Climate change is one of the biggest challenges of our time

We are committed to the goal of the Paris Agreement on climate change to limit global warming to well below 2°C. We are contributing to the global efforts to meet this goal by continuously reducing our greenhouse gas emissions.

The Bildungscampus has always been a future-oriented campus, and therefore, it also wants to play an active role in the fight against climate change. To this end, we have established a climate protection and energy management system across the entire campus, which enables the measurable implementation of various measures to reduce greenhouse gas emissions.

With this system, we are aiming to continuously reduce scope 1 and scope 2 emissions, and ultimately, to achieve our goal of a fully climate-neutral and largely energy independence Bildungscampus by 2030. An integral part of our climate protection measures is that the Bildungscampus itself generates a percentage of its electricity and heating energy demands in the form of renewable energy.

To ensure that we can monitor and verify our progress in reducing our greenhouse gas emissions, from 2024 onward, the Bildungscampus will publish an annual greenhouse gas balance sheet.







By 2028, the Bildungscampus aims to reduce its	<ul> <li>Scope 1 and 2 greenhouse</li> </ul>

greenhouse gas emissions (scope 1 and scope 2) by 70% compared to those in 2021. The Bildungscampus aims to be fully climate-neutral (in terms of scope 1 and scope 2 emissions) by the end of 2030.

Goal

gas emissions

KPI

In progress

Status

 Current status: 32 % → Goal: 70 %

**Progress** 

The Bildungscampus aims to increase the percentage of self-generated, renewable energy. By 2025, 10 % of the electricity and 30 % of the heating energy should be generated on the campus. And by 2030, these numbers should increase to 40 % of the electricity and 80 % of the heating energy.

• Share of self-generated energy in total energy consumption



- Current status: 0% → Goal: 40 %
- Current status: 0% → Goal: 80 %







## The Foundation has been laid

The Bildungscampus has already started to implement the measures required to achieve climate neutrality.

As part of the first step on this journey, we are fitting photovoltaic systems on the roofs of the Ost, Mitte and Nord sections of the campus. In this way, from 2025 onward, we can cover part of our electricity consumption with self-generated solar energy. We have also already started to implement measures to save energy by optimizing heating and cooling curves and the use of lighting in our buildings.

In order to ensure complete and transparent documentation of these and any upcoming measures, from 2025 onward, we will prepare an annual sustainability report in line with the European Sustainability Reporting Standards (ESRS).

This will ensure that our commitment to protecting the climate is quantifiable and that our climate protection goals are implemented systematically.





We want to make the Bildungscampus a climate-neutral site by using selfgenerated energy and further reducing our energy consumption



Climate Resilience & Biodiversity

#VisionNaturalHabitat

Being prepared for meteorological changes and making a contribution to preserving and promoting native animal and plant species.



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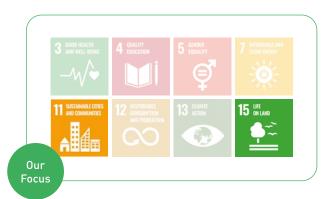
# Shaping Change - Maintaining Diversity

The Earth's average temperature has increased significantly as a result of climate change, which has had an impact on the weather, on humans and on animals and plants. The Bildungscampus is taking on this challenge.

Acting in a sustainable and responsible manner also means preparing for climate change and the impact it will have in the coming years. Due to the trend toward warmer and warmer summers, we are planning measures to limit the physiological equivalent temperature - commonly known as the "feels like" temperature – in our outdoor areas to below 35°C on average.

An increase in the frequency of heavy rainfall events is also projected for the coming years. In order to counteract this trend, the resilience of our outdoor areas and buildings will be assessed from 2025 onward. This should also provide protection against floods in the future.

Last but not least, we are planning to gradually create more green spaces in the outdoor areas of Bildungscampus by 2030. By doing this, we are aiming to create appropriate habitats for our native animal and plant species, some of which are endangered, while also creating a more pleasant environment on our campus grounds.







Goal	KPI	Status	Progress
We are endeavoring to achieve a <b>physiological equivalent temperature (PET)</b> of ≤ 35 °C on average for the outdoor areas of the Bildungscampus in summer by 2030.	Physiological equivalent temperature (PET) for outdoors (Klima-Michel model)	( ) To do	Not yet recorded
Heavy rainfall events (> 40 l/m² in 1 hour or > 60 l/m² in 6 hours) will increase in the future. That is why we are planning to check our outdoor areas and buildings with regard to resilience to such events as of 2025.	Number of checked areas and buildings with regard to heavy rainfall events	( ) To do	Not yet recorded
In order to make a contribution to the conservation of native plant and animal species, we would like to create outdoor areas around our buildings and quarters that promote biodiversity by 2030. We are aiming for a Biotope Area Factor (BAF) of 0.4.	Biotope Area Factor (BAF) of the Berlin Landscape & Species Protection Program	To do	Not yet recorded





### Habitats for Bees and Insects

The first projects to be implemented in the field of climate resilience and biodiversity involve the transformation of the outdoor areas and providing habitats for colonies of bees.

At the end of 2021, eight colonies of bees found a new home on the roofs of Baden-Wuerttemberg Cooperative State University in Heilbronn (DHBW Heilbronn). Students enrolled in the Food Management course at DHBW look after the bees with the help of a resident beekeeper. The knowledge that the students acquire about the production of honey is just as valuable as the business knowledge they gain as a result of marketing and selling products in the campus stores.

However, it is not just honeybees that benefit from our commitment to sustainability. In order to provide native insects with an adequate supply of food, the outdoor areas on Campus Mitte were also transformed: Across six wildflower meadows covering a total area of 1,570 square meters, a wide range of insects and butterflies can now find a semi-natural habitat from spring to fall. The wildflower meadows also provide a habitat for other (soil) organisms and plants.

Further restructuring work is planned. The criteria set laid out by the German Sustainable Building Council (DGNB - Deutsche Gesellschaft für Nachhaltiges Bauen) is used as a basis for this work.





Eight colonies of bees have found a new home on the roofs of Baden-Wuerttemberg Cooperative State University. These bees, along with other plant and animal species, use the flower meadows as a semi-natural habitat and as a source of food.

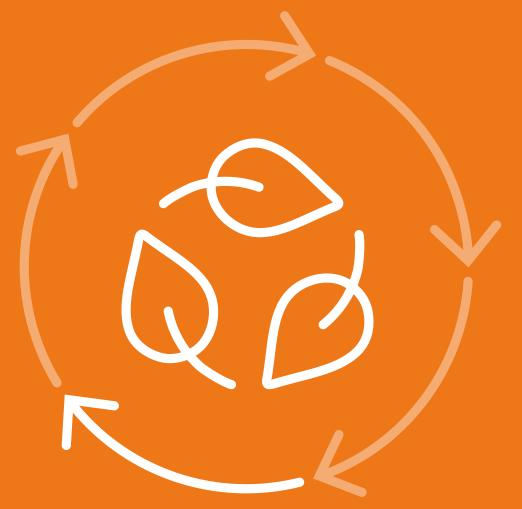
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# Circular & Sharing Economy

**#VisionCircularEconomy** 

Promoting the circular economy of the Bildungscampus to reduce the consumption of resources to a minimum.



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### There is no Planet B

Since the 1970s, humanity has been constantly over-exploiting the resources that the Earth can provide. The Bildungscampus does not want to be part of the problem, but rather part of the solution.

That is why we are actively promoting the circular economy of Bildungscampus with a wide range of measures: A key focus in this context is reducing our consumption of resources, significantly increasing our recycling rate, and thus, also significantly reducing the proportion of residual waste we produce.

There are also plans to create a library of things in the future to enable communal use of the resources available on Bildungscampus and subsequently reduce the consumption of these resources.

In the future, we will also increasingly focus on renewable raw materials and the sustainable use of resources with regard to the construction of new buildings. Cradle to Cradle is a particularly promising approach in this context. The introduction of a Circularity Passport for new buildings will ensure that the results of this approach are measurable.







Goal	KPI	Status	Progress
The share of <b>residual waste</b> generated is to be reduced significantly by 2030.	Share of residual waste in total waste generated	In progress	• Current status: 54%  → Goal: under 30%
We want to promote approaches focusing on the <b>shared use of resources</b> (such as the library of things). We are planning to establish 10 corresponding offers on the Bildungscampus site by 2030.	<ul> <li>Number of sharing and repair services on the Bildungscampus</li> </ul>	To do	Not yet recorded
By using rainwater instead of drinking water, we are aiming to reduce the <b>consumption of drinking water</b> by 25% per m <sup>2</sup> of gross floor area (GFA) by 2030.	<ul> <li>Drinking water consumption in m<sup>3</sup> per m<sup>2</sup> of GFA</li> </ul>	In progress	• Current status: 0 %  → Goal: 25 %
In order to design our new buildings even more in accordance with the Cradle to Cradle principle, we plan to introduce a Circularity Passport for all new buildings as of 2025.	Number of new buildings with a Circularity Passport	To do	Not yet recorded





# Using water intelligently

Reducing our water consumption is one of the first issues that the Bildungscampus is tackling in the context of the Recyclability and Sharing Economy action area.

The first measure aimed at reducing the consumption of drinking water was introduced back in 2022 and involved the installation of a fully automatic drip irrigation system for the wildflower meadows on Campus Mitte. The operation of this irrigation system is supported by the Fraunhofer IAO as part of a research project that aims to scientifically investigate how much drinking water can be saved using this system.

Furthermore, in the future, the wildflower meadows will not be irrigated using tap water, but instead using stored rainwater. In this way, we are aiming to reduce our drinking water consumption by around a quarter by 2030. Further concepts - such as the reuse of wastewater - are currently being developed.



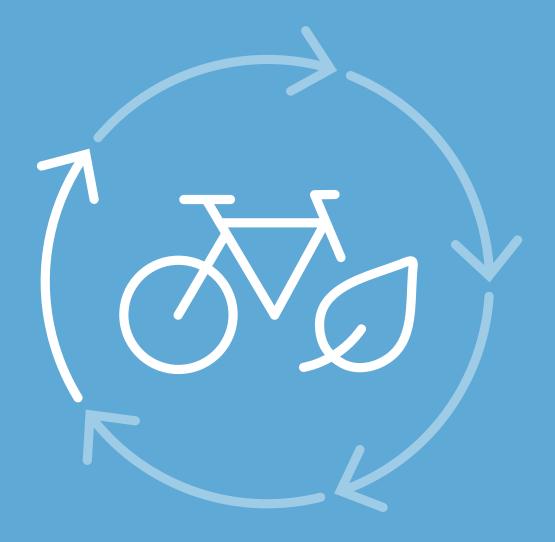


A fully automatic drip irrigation system was installed to water the plants on the wildflower meadows. This reduces the use of drinking water.

# **Mobility**

**#VisionGreenMobility** 

Promoting sustainable and innovative mobility solutions.



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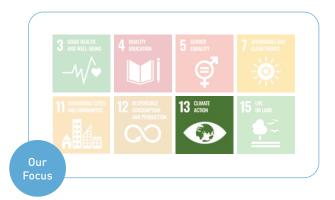
## Good for us - and good for the climate

In 2023, the mobility sector was responsible for 19.4 percent of greenhouse gas emissions in Germany. The Bildungscampus wants to lead by example and ensure health-promoting and climate-friendly mobility on the campus and beyond.

In order to achieve this, we are investing substantially in developing the cycling infrastructure. This includes bicycle sharing services as well as sufficient bicycle parking spaces and service stations directly on the Bildungscampus. The use of a sharing service for electric scooters is also planned.

By gradually equipping the Bildungscampus' public parking spaces with electric charging stations, we are also making an important contribution to promoting automotive E-mobility. Especially with regard to the use of car sharing services, this is a measure that extends far beyond the Bildungscampus.

Furthermore, from 2028 onward, we are planning to systematically monitor the mobility-related emissions of the Bildungscampus. This will allow us to assess the success of our measures in the area of mobility, and adjust them if necessary.









Goal	КРІ	Status	Progress
By 2026, 15% of our parking spaces are to be equipped with <b>electric charging stations</b> .	<ul> <li>Number of parking spaces with EV charging facilities</li> </ul>	In progress	• Current status: 2.9 %  → Goal 15 %
By 2030, we plan to erect an additional 2,500 bicycle parking spaces as well as six bicycle service stations on the Bildungscampus site.	<ul> <li>Number of newly erected bicycle parking spaces</li> <li>Number of newly erected bicycle service stations</li> </ul>	In progress	<ul> <li>Current status: 0         → Goal: 2,500 bicycle         parking spaces</li> <li>Current status: 0         → Goal: 6 bicycle         service stations</li> </ul>
By 2030, we want to have 200 <b>sharing vehicles</b> in at least three mobility categories.	Number of sharing vehicles and categories	In progress	<ul> <li>Current status: 62         → Goal: 200 vehicles</li> <li>Current status: 2         → Goal: 3 mobility categories</li> </ul>
From 2028 onward, we are aiming to systematically monitor the <b>mobility-related emissions</b> of the Bildungscampus.	Monitoring of mobility- related greenhouse gas emissions	( ) To do	Not yet recorded



# Sustainable Mobility on the Campus

Bicycles and sharing services already play a key role in terms of mobility on the Bildungscampus.

The bicycle has always been the favorite mode of transport for students, and this is still the case today - including for journeys into the neighboring city center. Therefore, expanding the infrastructure for this space-saving and climate-friendly means of transport is a key part of our mobility concept. By erecting more than 2,500 additional bicycle parking spaces, multiple bicycle service stations and a bicycle workshop, we are aiming to make cycling an even more attractive prospect around the campus.

With the Bike-sharing CampusRad solution and a car sharing solution, students and employees already have access to two vehicle sharing services on the Bildungscampus. We want to add an additional mobility category in the near future.

We also support Heilbronn University with research into autonomous, electric bus shuttles - an important milestone for the sustainable and flexible public transport of the future.





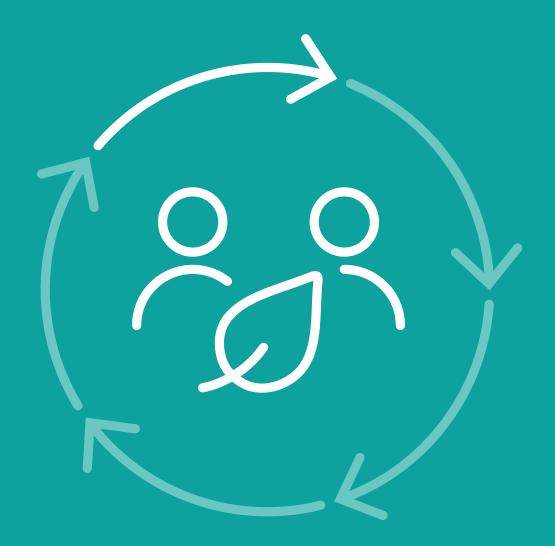
Climate-friendly mobility for traveling around and to the Bildungscampus is very important to us. That is why we are promoting sharing services and expanding the bicycle infrastructure.

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# People

#VisionBeingHuman

Supporting people in the best way possible during their education.



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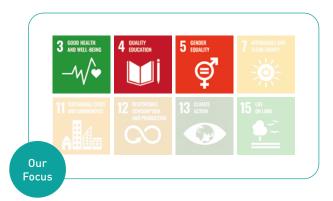
## Education as the Key

Values such as social justice, equal rights, diversity and health are becoming an important focus for more and more people. We at Bildungscampus also want to do our part in promoting these values - and we are focusing our efforts on people and ensuring that they get the best education experience possible.

In the future, we will be increasingly focusing on creating a lively and inviting campus - and we are taking lots of measures to create an even more pleasant and barrier-free environment at Bildungscampus. We are laying the foundations for this by creating and transforming recreational spaces that can be used all year round, in order to create an even more pleasant learning atmosphere and promote student interaction.

Another important topic is ensuring that our services and facilities are easily accessible and can be used by everyone. All of the areas of the Bildungscampus should be designed in a barrierfree way and should provide convenient access to the campus for everyone. After all, everyone is welcome at the Bildungscampus!

We also believe that it is very important for us to provide barrierfree updates about the steps we are taking and raise public awareness around the topic of sustainability.









Goal	KPI	Status	Progress
The Bildungscampus should be a barrier-free location for all people to learn and come together. By 2030, we want to achieve a value of at least 0.9 on the "barrier-free design" index of the German Sustainable Building Council (DGNB). Moreover, 75% of the articles published on Bildungscampus channels should be as accessible as possible.	<ul> <li>Value on the "barrier-free design" index of the DGNB</li> <li>Percentage share of Bildungs- campus articles, which are largely accessible</li> </ul>	To do	Not yet recorded
By 2025, more <b>recreational spaces and facilities</b> should be created to ensure a lively atmosphere on the Bildungscampus.	<ul> <li>Percentage share of students who do not feel that there needs to be more recreational spaces and facilities on the Bildungscampus</li> </ul>	In progress	• Current status: 39 %  → Goal 80 %
The <b>health</b> of our employees and campus residents is important to us. From 2025 onward, we want to offer at least ten health-related events per year on the Bildungscampus.	<ul> <li>Number of health-related events open to all campus "residents".</li> </ul>	In progress	<ul> <li>Current status: 7         → Goal 10 health- related events</li> </ul>
As a place of education and learning, Bildungs- campus should actively contribute to the discussion	Number of Bildungscampus articles covering the topics of	( )	Not yet recorded

sustainability, equality and/or

inclusion.

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around topics such as sustainability, inclusion and equal rights. From 2024, we will publish at least

four articles per year on our Bildungscampus website, and from 2025 onwards, this will increase

to at least 6 articles per year.





# A sustainable community

We want the Bildungscampus to be a lively and communityoriented place in which inclusion, equality and the promotion of health are not merely concepts, but actually a reality of daily life.

To this end, the institutions of the Bildungscampus have formed a health network with the goal of increasing the awareness of people on campus around the topic of health in general and ways that they can actively promote their own health. This includes access to free medical check-ups and lectures for the people on campus. An expansion of the existing activities is currently being planned.

Ensuring that our services and facilities are accessible is equally important to us. In addition to improving physical accessibility, the accessibility of our communication channels should also be optimized. The guidelines set to enter into force in 2025 that will require all websites to be barrier-free are already playing an important role - and this is why our central Bildungscampus website is currently in the middle of a transformation process. After all, we want to create a barrier-free campus for everyone right from the very first source of information!





We are convinced that each and every one of us can contribute to sustainability and that real change is only possible when we work together. That is why it is important to us to involve all institutions on the campus in the process of becoming more sustainable and motivate them to actively take part.









# $\longrightarrow$ Glossary

#### Circularity Passport

The Circularity Passport specifies the raw materials used in a building. It also utilizes a benchmark system to compare these raw materials in terms of sustainability categories with a defined standard building.

#### Corporate Social Responsibility (CSR)

The term Corporate Social Responsibility describes economically, socially and ecologically responsible corporate management.

#### Cradle to Cradle

The Cradle to Cradle principle describes an infinite circular economy approach. The raw materials needed for products are recycled according to the natural materials cycle. A technical cycle is thus created, which requires no addition of new raw materials.

#### **DIN 18040**

In its individual parts, DIN 18040 defines the requirements for barrier-free planning. In the European Union, this must be harmonized in accordance with the European Sustainability Reporting Standards.

#### European Sustainability Reporting Standards

The European Sustainability Reporting Standards (ESRS) are being revised and adopted within the framework of the Corporate Social

Responsibility (CSR) Guidelines of the European Financial Reporting Advisory Group (EFRAG) and the European Commission. These standards are mandatory for all companies that are required to issue a sustainability report. The aim is to harmonize reporting within the European Union with the aid of the ESRS.

#### Greenhouse gases

Greenhouse gases are the gases that have an influence on the energy balance of the Earth. Particularly relevant in relation to climate change are currently the following gases: Carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride (SF<sub>6</sub>) as well as nitrogen trifluoride (NF<sub>3</sub>).

#### Gross Floor Area (GFA)

The gross floor area is the sum of all usable floor areas within the floor plan of a building.

#### Key Performance Indicator (KPI)

Key performance indicator is a term emanating from business administration by which a figure is understood to describe progress toward or fulfillment of a goal.

#### Physiological Equivalent Temperature (PET)

The physiological equivalent temperature is a universal index to measure human thermal comfort. The PET is often used in urban climate studies. In this context, the PET can be defined for a random outdoor location as the air temperature at which the skin surface and core temperature as well as evaporation of perspiration equals that of a pre-defined reference environment. Empirically, the optimum temperature of sedentary people wearing typical indoor clothing is approximately 20 °C.

#### Scope 1/2/3 Emissions

Within the framework of the greenhouse gas balance there are several accounting standards. One of the most well-known standards is derived from the Greenhouse Gas Protocol (GHG Protocol): This divides emissions into three categories. Scope 1 emissions comprise all climate-damaging gases released by an organization directly. Scope 2 emissions comprise all climate-damaging gases released indirectly from purchased energy. Scope 3 emissions describe all climate-damaging gases released in the upstream or downstream supply chain.

#### Sustainable Development Goals (SDGs)

The Sustainable Development Goals were adopted in 2015 with the United Nations 2030 Agenda. They relate to 17 goals for sustainable development that are to be achieved by the world community by 2030.

#### The German Sustainable Building Council (DGNB)

The German Sustainable Building Council is an independent, non-profit association that was founded in 2007. The aim of the association is to change the status quo in the construction and real estate industry toward sustainability and climate protection. To this end, the council has developed its own certification system, which can be used to assess construction projects based on sustainability aspects.

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## → Legal Notice

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Subject to change.

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# This is our vision for 2030

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