CSER 2023

Corporate Social Environmental Responsibility



Introduction

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Introduction

Architecture has a significant impact on our environment and our society; it is one of the greatest levers for instigating positive change. At the same time, the construction industry has a major share in global carbon emissions and resource consumption. As an architectural firm, we thus bear great responsibility for more environmental justice through compliance with environmental standards.

This environmental report expresses our commitment to a sustainable corporate policy that complies with national and international standards regarding fair and equitable business practices while covering all stakeholders and taking the UN Sustainable Development Goals (SDGs) into account.

In this report, we focus on twelve SDGs that are particularly relevant to our work as an architectural firm.

We pursue a holistic approach to sustainability that considers both environmental and social needs. Conscious management of energy, resources and people is the basis of our architecture for a sustainable future.





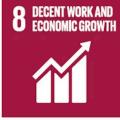




























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Our integrity

- 1.1. Human Rights
- 1.2. Supply chains
- 1.3. Equality and Diversity
- 1.4. Corporate culture
- 1.5. Combating corruption

Human Rights

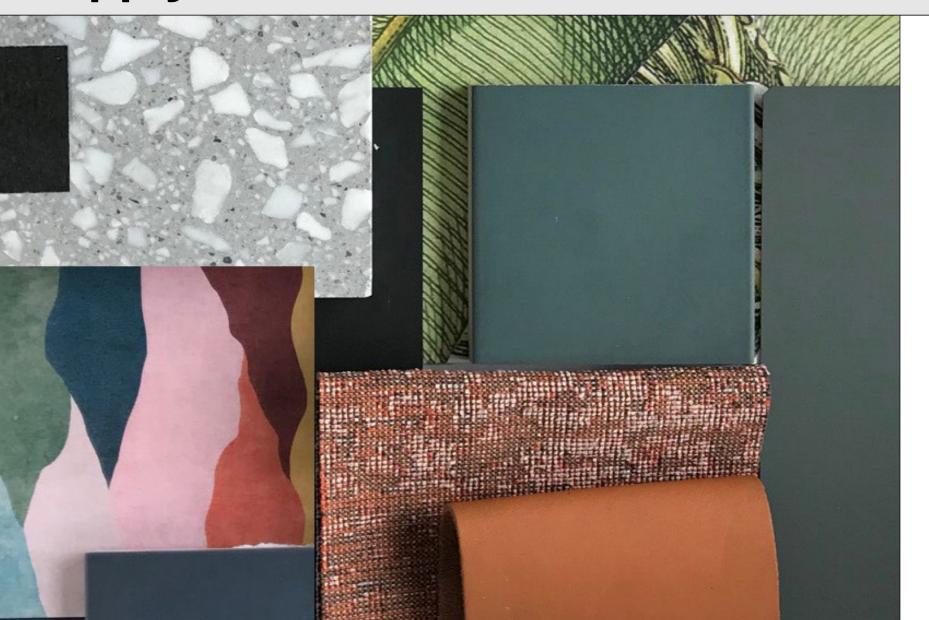
We firmly believe that respectful interaction between people is the cornerstone of any successful business. Respecting and upholding human rights is thus a core principle not only within our office, but also throughout our business operations. We expect our employees and business partners to adhere to this principle in their day-to-day dealings.

We support the United Nations Universal Declaration of Human Rights worldwide and commit to the principles of the United Nations Global Compact initiative.

Our principles and values are set forth in a Code of Conduct, which is included in every contract we enter into with third parties.



Supply chains



We rely on global production chains for the extraction of raw materials that are used in our buildings and outdoor facilities. These production chains are difficult to control for us as an architectural firm. However, through our Code of Conduct, we encourage all our contractual partners to ensure transparent, socially and environmentally responsible supply chains and respect for decent working conditions:

Henn GmbH expects its business partners to comply with the principles and values set forth in our Code of Conduct. They must thus ensure that their suppliers always fulfill their duty of care, which includes taking appropriate measures to prevent exploitation, slavery, child labor, or the financing of armed conflicts and, if necessary, to terminate relationships with such counterparties and to inform Henn GmbH thereof immediately. Duty of care considerations must always include the audit of the complete supply and value chain to be able to create value in a sustainable and equitable manner.

HENN Code of Conduct, 2022

Equality and Diversity

All staff members are employed at HENN solely based on their skills and talents and regardless of gender, sexual orientation, religion, or ethnicity.

Our own work processes and decisions are positively influenced by the diversity of cultures and give us a better understanding of the world in which we build and the people for whom we build.

Equal treatment of all employees is a fundamental principle of our corporate policy. No one may be disadvantaged, favored or excluded based on ethnicity, color, nationality, descent, religion, caste, gender, age, physical characteristics, or sexual orientation.

Harassment of any kind will not be tolerated. We expect our employees to be friendly, objective and fair in their dealings with colleagues and third parties.

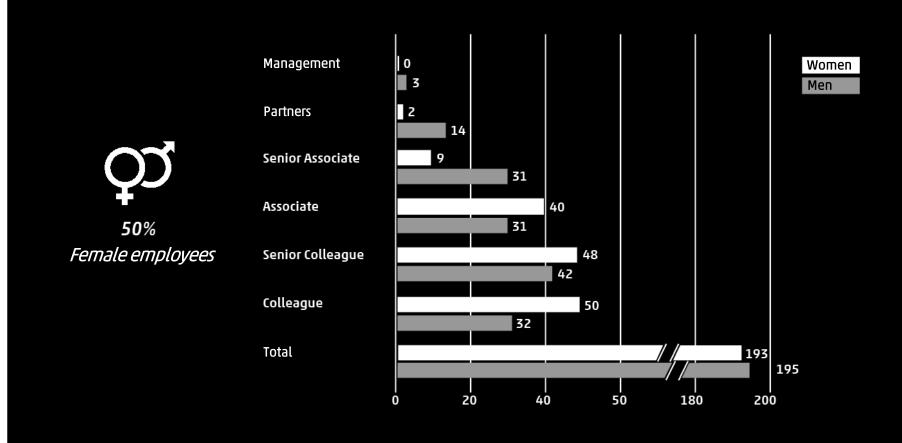


We respect the right to rest, leisure and family life in accordance with applicable legislation. To ensure a healthy work-life balance, we strive for flexible working hours and enable mobile working. All employees have the right to parental leave. If necessary, employees can reduce their working hours depending on their life situation.

We offer a fair and competitive remuneration. Our pay meets or exceeds local market conditions and ensures a decent standard of living for our employees and their families. We offer all employees equal pay for equal work. All forms of forced and compulsory labor are strictly prohibited.

In our study on the distribution of men and women on the individual hierarchical levels, we examine the reasons for existing imbalances and obstacles for overcoming them. We strive to create better conditions for women, particularly with respect to equal opportunities on senior management levels.

As of November 2022
(Only the total number of employees includes working students, EDLs and colleagues from China)





Corporate culture

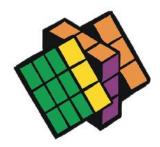
HENN is a third-generation architectural firm looking back to 75 years of experience. Projects as well as ways of working and thinking are subject to a continuous improvement process.

To embrace this change, employees held workshops on future development facilitated by Stephan Balzer, management consultant for innovation, cultural change and digital transformation. In these workshops, the firm's corporate culture and strengths and weaknesses were scrutinized, and improvement processes were initiated.

























Combating corruption

We support the United Nations Convention against Corruption worldwide.

We focus on fair and equitable relationships with our business partners throughout our operations and firmly believe that a cooperative approach results in mutually beneficial relationships.

We expect all stakeholders to pay particular attention to human rights, labor and health laws and to work tirelessly for a sustainable environment and a corruption-free, fair market.

Agreements and collusive practices by business partners and employees that improperly influence or restrain competition will never be tolerated.

Check out:

HENN Human Rights Position und Code of Conduct



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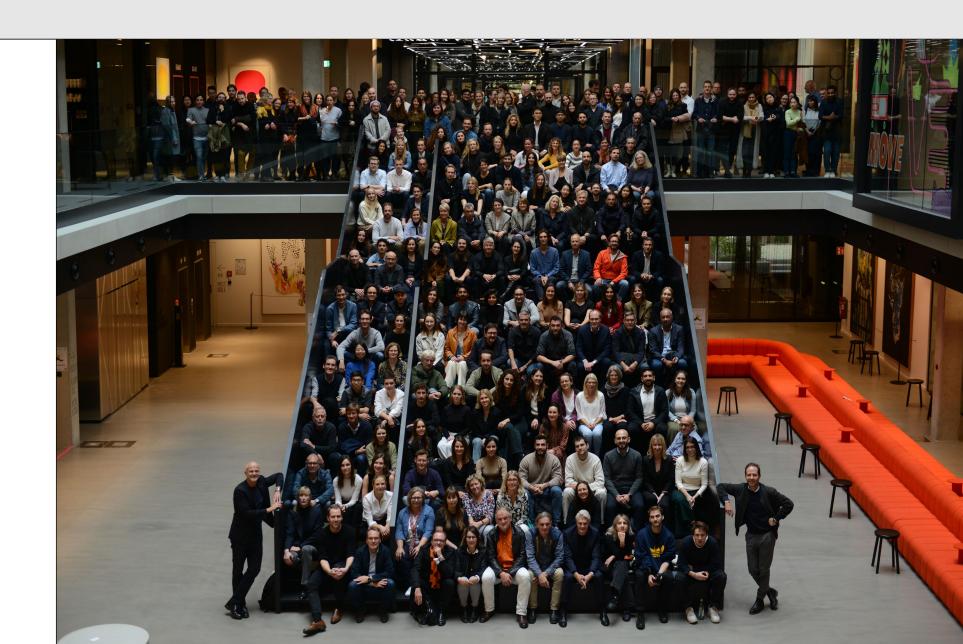
Our office

- 2.1. Team
- 2.2. 4 Offices
- 2.3. Health
- 2.4. New office space
- 2.5. Energy efficiency
- 2.6. Consumables
- 2.7. Wellbeing
- 2.8. Continuous professional development

Team

HENN employs an interdisciplinary team of about 400 people from more than 45 nations. Our aim is to use the specific expertise of our designers and planners to develop buildings and master plans that achieve both social and environmental goals in addition to design aspects.

This is why our solutions often deviate from the standard on our quest for pioneering design approaches.



2.2. Our office

4 Offices



- Berlin
 → 160 staff
- 2 Munich→ 185 staff
- 3 Beijing→ 31 staff
- 4 Shanghai
 → 9 staff

Health

Our work environments are platforms for collaboration and social exchange. They connect individuals and groups both physically and digitally.

Nowadays, people spend up to 90 percent of their time indoors. Thus, workplace quality and comfort are of crucial importance. We create proximity between the team workspaces in our offices through visual links, which are the basis for an effective and successful cooperation between all individuals involved.

All employees regularly receive ergonomic advice at their workplaces on optimal posture and the right distance from the keyboard and screen. Height-adjustable desks are also available on request.

Eye tests conducted by an occupational physician complement the range of services we offer to our employees. In the event of accidents at work, trained first aiders are available for help in our offices.



New office space

For many years, we have been working for our clients on the question of what work processes and the necessary work environments of the future should look like.

Likewise, we are continuously improving our own offices, most recently by adding sliding floor-to-ceiling pinboards, improving room layouts and kitchenettes, and remodeling outdoor areas and sanitary facilities.

We created new communication and teamworking areas in our Berlin and Munich offices. New meeting rooms with high workshop tables were added, kitchenette areas were equipped with café tables, and lounge areas and self-contained quiet work cells were created.

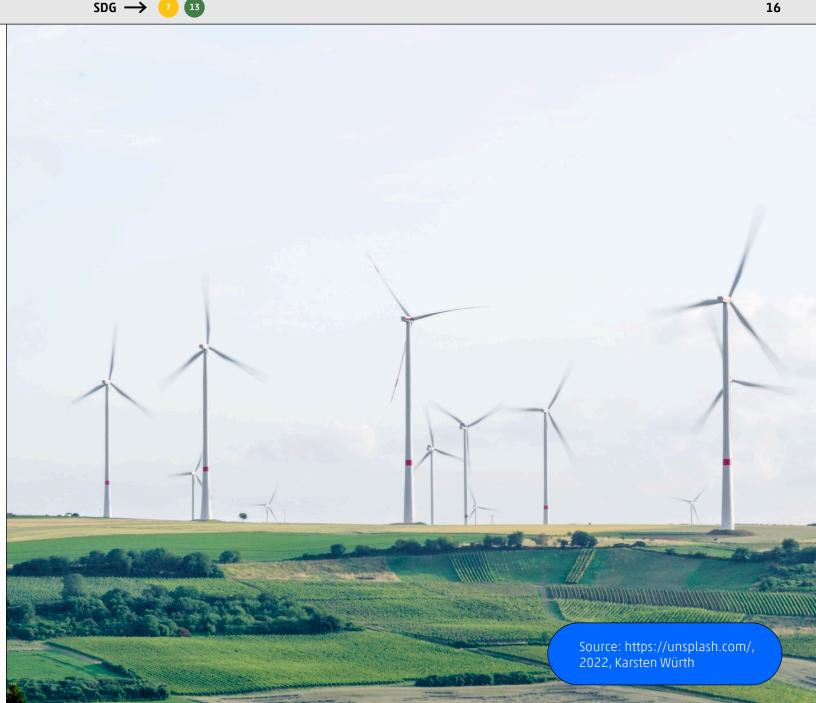


Energy efficiency

We are making a major effort to improve the energy performance of our rented office space, including the purchase of energyefficient IT equipment and LED lighting as well as efficiency upgrades to façade components and the complete renovation of our server room including installation of a more energyefficient air-conditioning system.

In 2021, we switched our electricity and gas supply to our Munich office to green alternatives. We now get 100% climateneutral electricity from renewable energy sources. The green gas is based on climateneutral, zero-carbon natural gas whose carbon emissions are offset by emission certificates. In 2021, we also installed an energy-efficient elevator at our Munich premises.

In our Berlin office, we are tenants in a large building complex. Here, too, we are lobbying the building operator to switch to renewable energy sources.

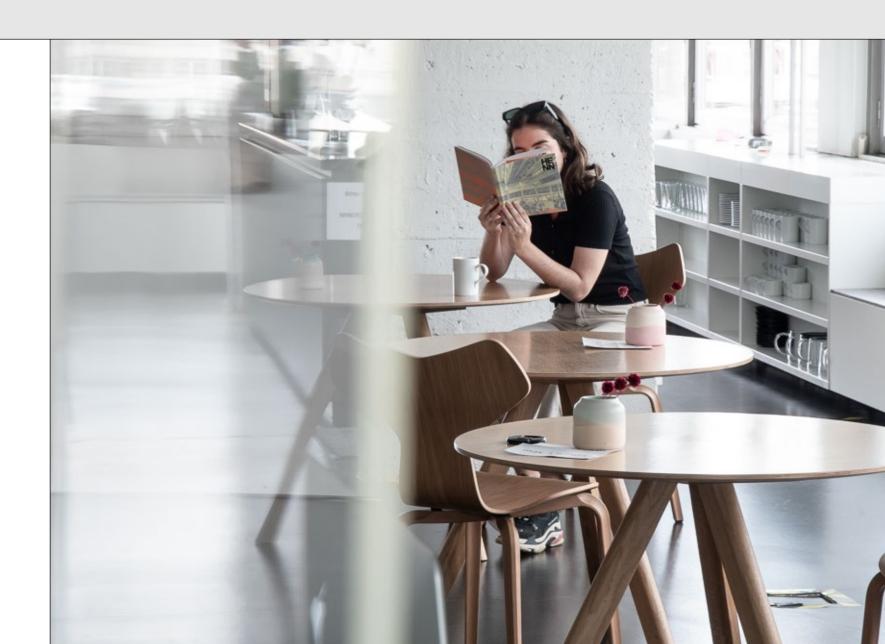


Consumables

Our goal is to switch consumables in our offices in Munich and Berlin, including tea, coffee, cleaning products and printer paper, to sustainable alternatives in 2023.

In 2021, we already switched to recycled paper in the sanitary facilities. Since 2022, we have been sourcing apples for our employees from regional, sustainable sources.

We separate waste in our office into recyclable materials (yellow garbage can), paper, glass, and residual waste. Still functional old devices and appliances, such as computers and monitors, are not disposed of as electronic waste, but are either passed on to employees for their personal use or donated to charitable organizations.



Wellbeing



HENN supports employees in participating in various sporting and cultural events.

This has enabled us to contribute to the physical, social and mental wellbeing of our people while strengthening the team spirit that is essential for our employees and goes beyond formal office structures.

Continuous professional development

As a business, we rely on the continuous advancement of our employees' skills. We are fully aware of the fact that continuous learning is necessary to master the growing challenges of our time.

Various internal programs implemented at our offices provide the opportunity for regular continuing education and training. In Berlin and Munich, we hold an in-house series of seminars for staff members to update their knowledge and skills and to retain their professional competence. In addition to these conventional training courses, we encourage team members to present and discuss new projects, research work or company-wide initiatives using the open Speakers' Corner format.

We have made sustainability in the construction industry the focus of our training series in 2022.



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Our mobility

- 3.1. Business travel
- 3.2. Electric bicycles

Business travel

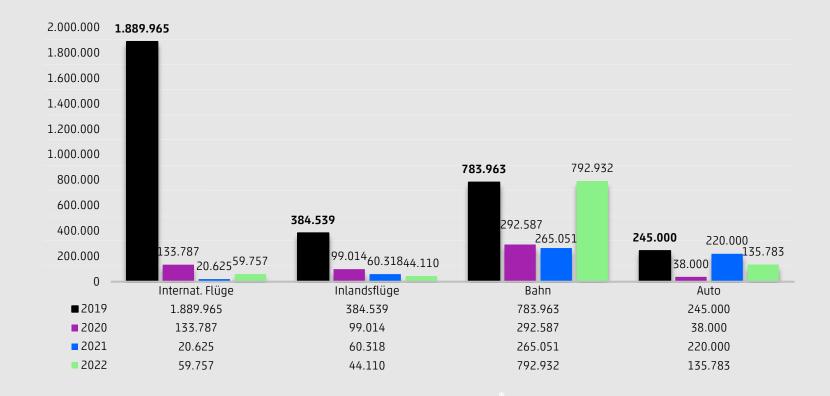
Since we are a firm with an international presence, work-related travel is our largest single source of carbon emissions. This is mainly due to the global nature of our work and the associated geographical spread of our projects.

We work closely with our travel agents and taxi companies to record emissions and use low-carbon transportation wherever possible. Our employees are encouraged to choose sustainable transportation options when travelling.

In addition, we are investing in video conferencing technologies and digital infrastructure to improve the quality and quantity of work that can be done remotely.

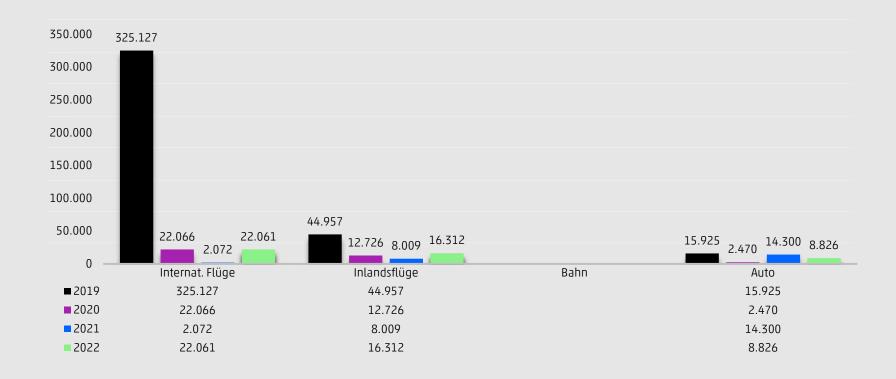


Passenger kilometers Munich and Berlin



^{*} Deutsche Bahn's long-distance services use 100 percent green electricity on ICE, IC and EC trains within Germany.

kg-Co2 Munich and Berlin



Electric bicycles

Since May 2022, two electric company bicycles have been available to HENN employees in Berlin and Munich for meetings on construction sites, at clients' premises, or for lunch outside the office.

This is how we provide a sustainable option for overcoming work-related distances that promotes physical activity and is fun at the same time.



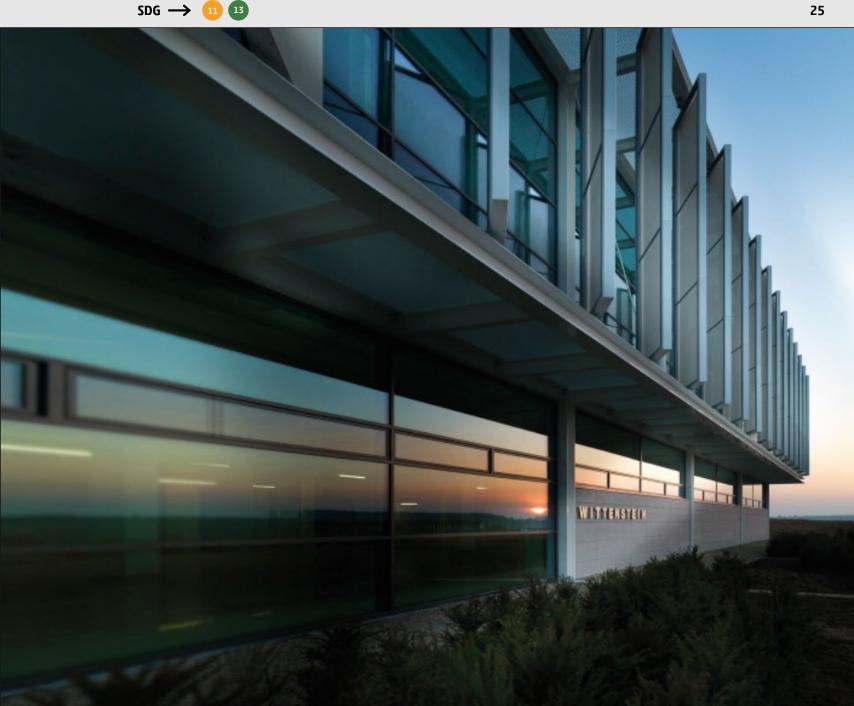
Our projects

- 4.1. Holistic approach
- 4.2. Certifications
- 4.3. Process
- 4.4. Carbon footprint
- 4.5. Life cycle
- 4.6. Environmental Analysis
- 4.7. Material Research
- 4.8. Networking
- 4.9. Sustainability in China
- 4.10. Looking ahead

Holistic approach

In our projects, we take responsibility for greater environmental justice, moving from a purely consumption-driven, linear approach to a circular mindset. We take a holistic approach to sustainability, considering its environmental, social, cultural, and economic aspects. Given the highly complex nature and constant evolution of this field, we always keep an open mind and develop innovative solutions.





Certifications

Certification systems such as LEED, DGNB or BNB also take a holistic view on sustainability. Key issues include the impact on the environment, the consumption of resources, and the focus on people.

Accredited auditors and experts supervise all our projects. For our clients, they are the first port of call when it comes to enhancing project sustainability, as well as for material circularity and the absence of harmful substances, and measures to achieve climate neutrality.

HENN has been a member of the German Sustainable Building Council (Deutsche Gesellschaft für Nachhaltiges Bauen; DGNB) since 2009.

- Centre for Photovoltaic.
- Auditor Dr. Trinius;
- 2 Siemens Healthcare, Forchheim Auditor Baumann;
- 3 HVB Tower. LEED Platinum 2016
- 4 Wittenstein Innovation.
- Harthausen Auditor HENN:
- 5 Nestle Kaffeefabrik
- Auditor HENN / Alpha EE:
- 6 Merck Innovation Centre, Darmstadt Auditor HENN;
- 7 Zalando Headquarter, Berlin Auditor Holdefleiss;
- 8 Knorr Bremse TCK2, München Auditor WSP:
- 9 Stryker Innovation Center, Freiburg Auditor HENN;
- 10 Martin GmbH, München Auditor HENN:
- 111 Covestro Office Building, Leverkusen Auditor HENN;
- 12 Gläserne Software Fabrik, Karlsruhe Auditor Züblin;
- 13 OVG The Pier, Hamburg Auditor Climaplan:
- 14 Zalando BHO-C, Berlin Auditor HENN / CBRE;
- 15 Baramundi, Augsburg Auditor HENN:

- 16 PGB 54 Revitalisierung, München Auditor alpha inside consultants;
- 17 Der Bogen, München Auditor CBRE:
- 18 Google Beach, Berlin
- Auditor CBRE: 7 ZISMED, Kiel-
- Auditor MNP Ingenieure;
- 20 MTU Entwicklungszentrum, München Auditor HENN;
- 21 Ausbau Apple, München Auditor HENN;
- 22 LUH Opticum, Hannover Auditor HENN:
- 23 High Fly-Jochen Schweizer, München Auditor EviroSustain GmbH:
- 24 HI Tron, Mainz.
- Auditor HENN:
- 25 Raiffeisen Landesbank RLB, Linz Auditor Dr.Pfeiler GmbH;
- 26 Deutsche Bundesbank, Frankfurt Auditor HENN LP 2-3;
- 27 Nollendorf Platz, Berlin Auditor CAALA;
- 28 Coros NA12 BfR Laborneubau, Berlin Auditor HENN:
- 29 Brainergy Hub, Jülich
- Auditor KEMPEN KRAUSE; 30 VW Sandkamp, Wolfsburg Auditor VW Immobilien



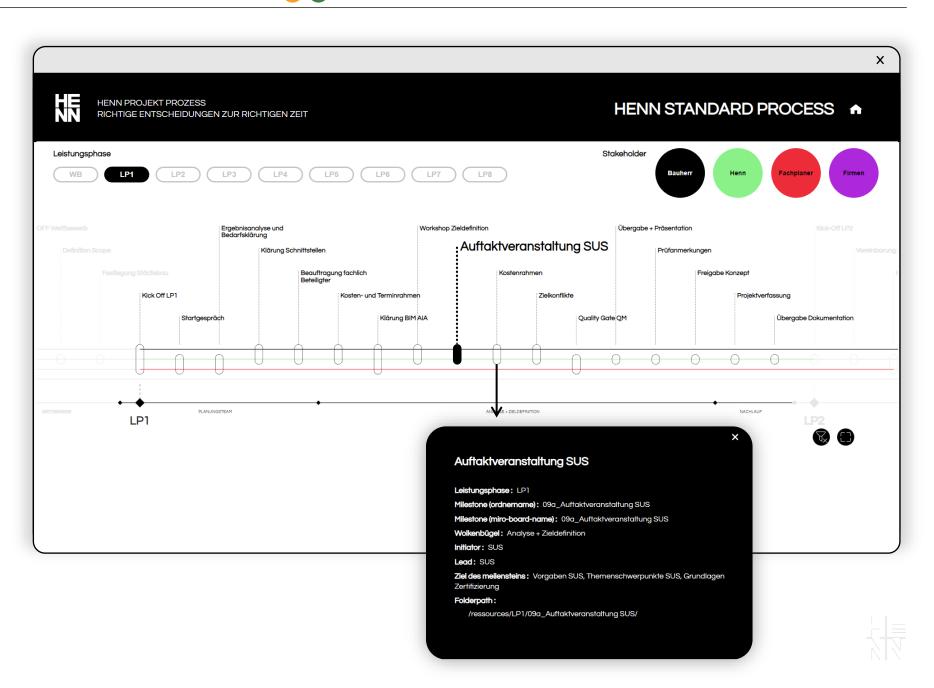
Process

Every project comes with specific sustainability requirements.

Assessments are used to scrutinize the specific project characteristics together with our clients and the users. Our project and process analyses serve as a starting point to devise an appropriate sustainability strategy.

Our professionals make sure that sustainability is addressed and made visible throughout the entire project.

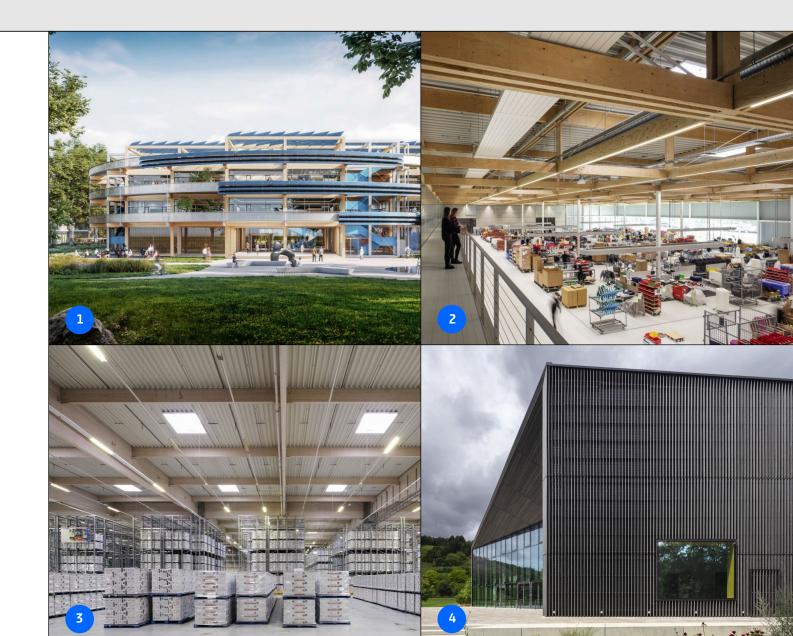
All process partners work closely together to ensure sustainable project execution. This requires thorough interaction between clients, involved design practices, and contractors and crafts businesses performing on-site work. For this purpose, we host a kick-off event to introduce the client and the project team to the topic, which is deepened continuously as the project progresses.



Carbon footprint

We aim to mitigate the environmental impact of emissions and the consumption of resources in all phases of the building's life cycle. Right from the project start, we critically review our design work in terms of material consumption and sufficiency. Life-cycle assessments make it possible to compare structural solutions and construction materials as well as energy requirements during operation. Optimizing the carbon footprint in the construction phase of the building is particularly important to us.

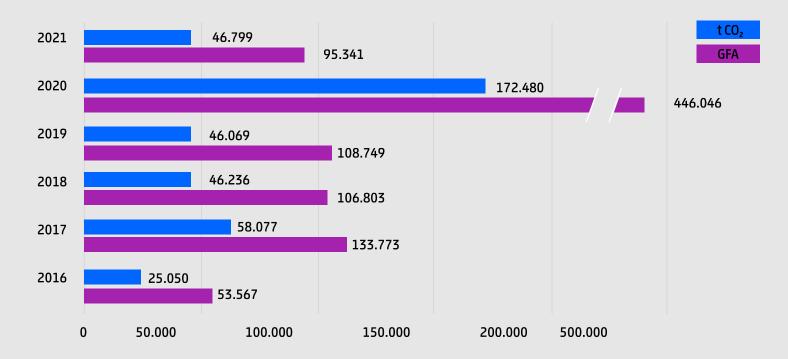
- 1 Brainergy Hub HENN 2022
- 2 Brunner Innovation Factory HENN 2018
- Nestle Kaffeefabrik HENN 2014
- 4 Tauber Philharmonie HENN 2019



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Carbon footprint of our building projects (construction)

in Munich and Berlin 2016-21 in t CO2 per year



The carbon footprint of our projects in their construction and operation phases is essential for determining their environmental impact. The biggest drivers in construction are the consumption of fossil fuels such as oil and gas and the use of concrete and steel. Our analyses disclose the consumption of energy, concrete and steel as well as their footprint and use this data in new designs to optimize projects.

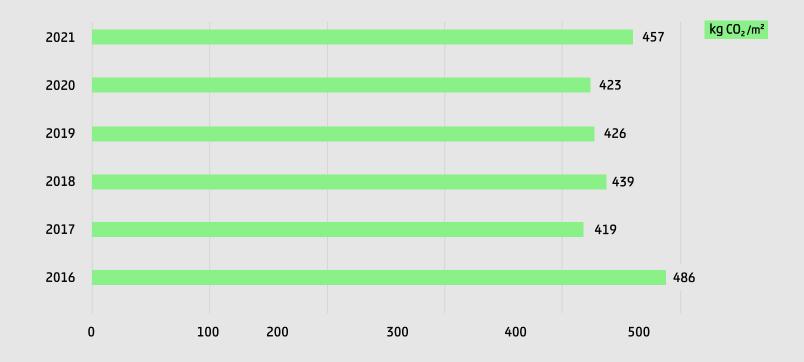
Carbon footprint

 $SDG \rightarrow$

In addition, the dynamic nature of the construction industry can mean that many projects are completed within a single year, which impacts our reporting. For this reason, we report CO2eq/m² in addition to total CO2eq figures since the former is a more meaningful indicator of the environmental performance of our projects.

Our projects (construction)

in Munich and Berlin 2013-21 in kg CO2/m² per year



Life cycle

Material ecology applies a circular approach to resources that includes recycling, renewable raw materials, and ideas for their end-of-life reuse.

We record material characteristics in a cadaster available to users and facility managers as essential information for maintenance and future conversion.

Life-cycle costs include the costs of constructing and operating the building until the end of its life. This enables clients to assess at any time whether the budget for the construction of the building will be met and whether its subsequent operation will be economical.



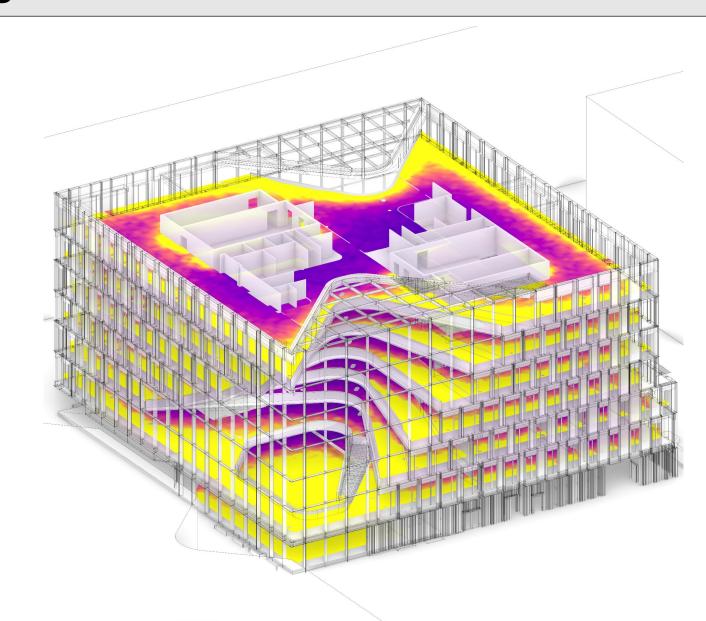


Environmental Analysis

The building envelope provides much more than just protection from the elements; it is a crucial component of the energy concept and design of any project. We create intelligent solutions for our buildings by considering the interplay of environmental influences and customized façade systems.

We first need to establish a thorough understanding of our environment to then design it sensibly. We use 3D-based analytics to determine how internal and external parameters influence our buildings. Strategic analyses of daylighting and solar radiation make it possible to link engineering challenges to user requirements and design aspirations for our buildings.

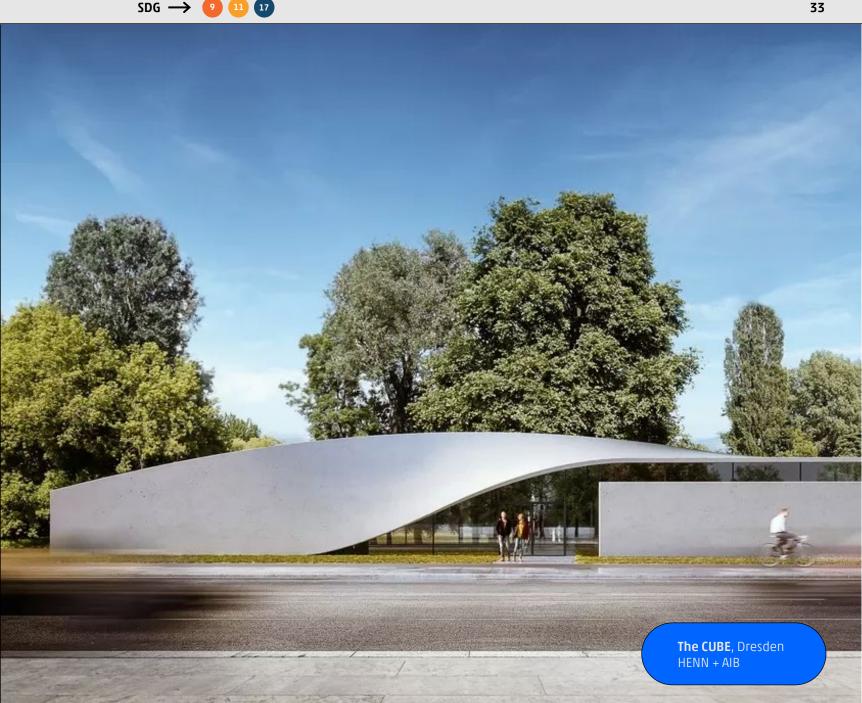
Using our in-house software and closely cooperating with external sconsultants, we conduct simulations of thermal comfort, daylighting and energy-efficient building operation. This method enhances user comfort and quality of stay in the building while mitigating the impact on our environment.



Material Research

Together with partners from industry, science and education, we conduct research into the development of new materials and façade systems. In doing so, we always pursue the common goal of developing ground-breaking, sustainable design and technology solutions.

In 2020, HENN developed the conceptual design for the world's first carbon-reinforced concrete building referred to as the Cube. This pilot for the use of carbon-reinforced concrete is a showcase project that forms part of the research on innovative construction materials entitled "C³ - Carbon Concrete Composite" funded by the German Federal Ministry of Education and Research. In this project, carbon-reinforced concrete is being researched and developed as an innovative combination of carbon and highperformance concrete. Its lightweight yet robust carbon fibers make the new material suitable for flexible and resource-efficient construction. Switching to this innovative material can reduce carbon emissions from the construction process by up to 50%. HENN conceived the Cube design as a major contribution to developing and implementing this pioneering construction method.



Networking

The aim of the [Phase Sustainability] initiative is to transform current planning culture [...] to make sustainable building the new normal. Instead of signing another climate manifesto, architects and planners commit themselves to promoting the most important sustainability issues of the Declaration of Sustainability in their discussions with clients.

(Source: https://www.phase-sustainability.today)

In 2019, HENN was one of the first signatories of the Phase Sustainability initiative launched by the German Sustainable Building Council and the German Chamber of Architects to encourage clients and owners to make their projects more sustainable. Specific working groups were established to drive innovative developments in fields such as BIM, material research, and the circularity of construction materials.



Sustainability in China

HENN operates offices in Beijing and Shanghai where a total of about 40 employees mainly cover the early design phases, while the detailed design is prepared by the respective local partner referred to as LDI (Local Design Institute).

Due to this setting, our influence is more limited than in Germany. Nonetheless, we are also striving for greater environmental justice in China and, as a German firm, are trying to lead by example.

We defined the following sustainability priorities for our Georgia Tech Tianjin University project in Shenzhen:

- 1. Certification of the building to the "Living Building Standard" (LBC)
- 2. Conscious integration of local conditions and surroundings
- 3. Minimizing earthworks and transport
- 4. Minimizing the building footprint, maximizing green spaces Tageslichtmaximierung
- 5. Utilizing wind conditions for natural ventilation, open courtyards, intelligent orientation of buildings
- 6. Maximizing daylighting
- 7. Ensuring scalability, flexible building typology
- 8. Preserving trees worthy of protection and integrating them into the design
- 9. Water management
- 10. Use of solar energy



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Looking ahead

- 1. We have begun to implement full lifecycle assessments as part of our standard design process. By the end of 2024, we aim to prepare a full life-cycle carbon budget for every new and ongoing project alongside a financial budget.
- 2. We encourage internal presentations and continuous training on the topic of sustainability for all our employees.



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